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Freelance Translator Success and Psychological Skill:

A Study of Translator Competence with Perspectives from Work Psychology

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Abstract

This thesis is an investigation of freelance translators from the perspective of both Translation Studies and Industrial/Organisational (I/O) Psychology. In it, we look at descriptive and inferential statistics from two samples—one of 43 participants based in New Zealand, and the second of 92 participants based in various countries. We also conducted ten interviews, in which participants explain their own experiences in detail.

Purpose: The purpose is primarily to further understand the working lives of freelance translators, and secondly to understand how our theory of *psychological skill* relates to freelancers' success in their work (both in objective and subjective terms). *Psychological skill* is made up of evaluations of participant self-efficacy, locus of control, and attributions of both negative and positive events, all of which demonstrate adaptive skill in dealing with professional challenges. We propose that *psychological skill* is an important link in the model of the relationship between job ability and motivation, job constraints, and subsequent job performance in translation. The whole project is nested within further work in the field of translator competence, combined with aspects of I/O Psychology. We also aim to provide a quantitative, descriptive snapshot of the translation industry both in New Zealand and overseas.

Findings: We found that various key measures of professional success (e.g. income, job satisfaction, number of jobs per week) were positively correlated with key components of *psychological skill*. Furthermore, we were able to utilize ordinal regression models, containing a combination of work-related and *psychological skill* variables, to predict both translators' income and job satisfaction. The descriptive statistics and interview data revealed much of interest about translators' work profiles.

Originality and value: This is, to the best of our knowledge, the first research project to approach the study the career profiles of freelance translators from a methodologically rigorous, quantitative perspective, combining numerical results with rich interview data. Its value is in terms of both description of translation as a career and as an industry, and in terms of possible training and education for both new and future translators. Using methodology from I/O Psychology also contributes an understanding of translator competence, complementing and building on existing competence models.

Keywords: Freelance translators; Translation Studies; Industrial/Organisational Psychology; translation industry; competence; career success; *psychological skill*

Dedication and Acknowledgements

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Chapter One – Introduction

> "Translation is an activity of increasingly vital importance in the educational, political, economic, and cultural fields of human endeavors" (Al-Hamdalla 1998:36)

What makes a translator good? What makes a translator's work good? How and why? Why is the study of translation skill important?

The answer to the final question can be found within the essence of the quotation above, but the other questions are essential ones that have occupied an important area of Translation Studies in the last 20 years or so—this area of study being labelled *translator competence*.

Understanding translator competence, how it works, and in what areas translators[1] need to be trained to achieve it, is an important aspect of the development of translation as a profession. That profession has recently been rapidly changing in response to the requirements of the so-called localisation industry, an industry involved in adapting the linguistic and cultural aspects of products and services to meet the needs of international target markets. In this research thesis, using empirically-based quantitative and qualitative research methods, we want to look at the professional and psychological circumstances defining and influencing the working lives of modern translators in this increasingly globalized, automated, challenging, and competitive working environment. This is especially important given that freelance translators (in their working environment) are a distinctly under-studied group of professionals, particularly in comparison to other language professionals, such as teachers or writers.

In our work, we want to build upon and add to the study of translator competence, but also to look at it from a different angle—combining with Translation Studies the work done by Industrial and Organisational Psychology (*I/O Psychology* hereafter) in understanding work performance. Specifically, we will look at indicators of translators' work performance (such as the number of jobs per week, and income earned from translation) and investigate the relationships between these measures of professional success and the attitudes and beliefs held by our participants, which we label as "psychological skill". Our conception of "psychological skill" consists of three

1. Translation is here (and is generally) understood to involve text ["written target-language reformulation of a written source text" (Gile 2004:11)], while interpreting usually involves speech or sign language ["non-written re-expression of a non-written source text" (Gile 2004:11)].

indicators, being the classic psychological variables of *self-efficacy* (the attitude towards new challenges in one's life or work), *locus of control* (the expectation and perception that events are controlled by one's own actions, or by external forces in the environment) and *attribution style* (how the causes of life events are understood and explained). "Psychological skill"[2] we define as a positive psychological style that we expect should relate to professional success. By positive, we mean that people with high levels of psychological skill have explanations and understandings of work-related events that enable them to maintain feeling positive about themselves and have feelings of control over their work environment and a good level of professional self-confidence. All of these enable them to more successfully engage with the challenges of professional life (and they are able, as Sela-Sheffy says, to "make intensive use of self-promotional discourse in their endeavor to establish their profession as a distinctive source of cultural capital" (2008:609), among other skills).

This specific area of research, therefore, can be summarised as the study of freelance translators' beliefs and self-evaluations and whether, and if so how, they relate to translators' work practices and professional success levels. Given the increasing technical and time-related demands and pressures of the modern translation industry, we believe that it is important to show how these processes might affect or be related to translation work output.

In the next two sections, we look at how the translation industry has changed recently and what that means for practicing translators, and we also investigate the relevant Translation Studies research that links into the study of psychological skill, particularly research on translation competence.

1.1 Some relevant developments in the translation industry

Translation as an industry has undergone great changes in the last few decades, particularly since the 1980s. From its beginnings in antiquity as a rather artistic—

2. In previous work, we have labelled psychological skill as *psychological competence* (Atkinson 2007, 2009), although the prototype of our concept was first labelled as *psychological skills* in Atkinson (2008:4), which was written before our theory became more concrete. In the present work, it has been relabelled to reflect its nature as a skill, one that we believe can be learned, and as a term whose tone seems less judgmental and censorious than that of 'competence' (although competence can also be acquired). *Psychological competence* also had the potential to cause confusion for those working in law, as it refers there to the degree to which a person can be held responsible for their own actions—i.e. their capacity to stand trial. Finally, our definition of psychological competence was different from that of Umberto Eco (2001:13), which refers to specific cognitive skills used in the translation process itself.

Austermühl (2007:39) calls it "slightly romantic"—scholarly activity (e.g. translation of classical literary and philosophical works, the Bible, Buddhist scriptures, ancient texts, and so forth, in which quality, interpretability, or didactic value were prioritised over time-to-market), it has undergone great changes in the last few decades, to become a commercialised, market-driven, time-critical, and highly professionalised, increasingly standardised activity (O'Hagan and Ashworth 2002; Austermühl 2007; Gouadec 2007). The translation market has also reached a size and value almost inconceivable just a few decades ago. Research on the translation market in the European Union, for example, indicates that in 2008, in that region alone, the annual turnover value of the language industry was worth an estimated €8.4 billion[3], conservatively forecast to grow at 10% per annum to €16.5 billion by 2015 (Language Technology Centre 2009:20). Other estimates put the size of the global translation-localisation industry (here including translation, localisation, and interpreting) at US$31.438 billion in 2011, with growth estimates of 7.41% per annum (Kelly 2011).

The so-called 'localisation paradigm' (Esselink 2000; O'Hagan 2005) now dominates the international translation market (see Sandrini 2008 for a good overview of the techniques of localisation). This paradigm has had a huge effect both on the industry and on the academic study of translation. Localisation as a procedure has its origins in software translation in the 1980s (Esselink 2006), but now covers all consumer products and services that involve language—such as packaging, regional websites for multinational companies, appliance instructions and manuals, public health announcements, and so forth. Localisation is generally defined as the process of adapting a text to a locale—in other words, making it easily readable and culturally appropriate to the people in a particular region, and/or of a particular language community, who are going to use it (Austermühl 2007). It is a by-product of global trade and cultural interchange (i.e. globalisation) and of the desire of companies and organisations—and sometimes governments—to promote their products and services beyond their own local markets.

Localisation as an economic activity and as an opportunity for translators is very significant, and has had important effects on translators' work. Researchers at the Centre for Next Generation Localisation (2011) state that:

3. The language industry, by the definition of the Language Technology Centre, includes translation and interpreting, website globalisation and software localisation, valued at €5.675 billion, with language technology tools, subtitling and dubbing, language teaching and conference organisation making up the remainder.

> The amount of content that needs to be localised into ever more languages is growing steadily and massively outstrips current translation and localisation capacities. As a consequence, only a fraction of the content that needs to be localised is localised and usually only into a limited set of languages. Many business opportunities are missed […]

With such a growing corpus of material to be translated, time-to-market becomes much more significant, with deadlines becoming increasingly short due to the increase in the volume of work (van der Meer 2003), while content quality needs to be preserved—especially, for example, given the consequences of contingent liability for translators who make serious mistakes in technical documents (Kingscott 2002). Tight deadlines have also had an effect on the sub-discipline of terminology (creation of terminological databases for translation), as manifested in job advertisements (Bowker 2002). In summary, there are certainly many opportunities for freelance translators, and certainly many challenges also (both technological and professional).

One major by-product of the localisation paradigm is a process-oriented, time-critical, production-line approach to professional translation (Wilss 2004; Gouadec 2007), with the market being mainly controlled by large language vendors (and with industrial standards promulgated by organisations such as the Localization Industry Standards Association, based in Switzerland and, ironically, on standby at the time of writing due to insolvency). The language vendors, also known as language service providers (LSPs) offer clients a complete translation service, so that the clients' products and services can be marketed in other languages and cultures. Some focus on just one language combination, others cover many language combinations; some may offer cultural and advertising consulting also, resulting in a more 'complete' service. These language vendors currently wield a lot of power over individual translators and the shape of their work (García 2009).

In this business model, translation is only one part of the process of marketing and packaging of the product or service, and individual translators have, generally speaking, a relatively low profile within the system, and do not always have the full picture of what the particular job is all about. One of the side-effects on individual translators of this approach has been a feeling of isolation from the larger communicative processes of which they are an essential part (Pym 2003a; Austermühl 2006), with translators often being little consulted by industry leaders on how this isolation affects their self-concept. Pym (2006a) takes a particularly bleak view of localisation as it was in the mid 2000s, arguing that within the localisation industry, translation is "often marginalized as a non-

communicative phrase-replacement activity" (2006a:1). Venuti (2008 [1995]) is another with a somewhat despondent view of the translation profession, although his theory of the translator's "invisibility"—in other words, that they do not receive the recognition that they deserve—covers a longer period than just the last three decades. On top of these issues of industrial demands and negative perceptions, public perception of the translation profession is often fraught with misunderstanding, in addition to translators being frequently disregarded as true professionals (e.g. Leech 2005, who also discusses the education, by translators, of clients who may have misconceptions of the profession). Language professionals themselves have also had to adjust to suit different markets whose interrelations are defined by power and status. An example is translation and interpreting in Singapore, whose location has the advantage of being culturally and linguistically at the meeting of many roads, but whose local varieties of language are often considered non-standard, lower class, and therefore less marketable (St. André 2006). Thus one thread of thought is that translators are very much servants to demands of industry, rather than being any kind of masters within it.

Translation Studies itself has also had a difficult relationship with the localisation industry, in terms of trying to understand and document its fast-moving changes. Translation Studies has only recently taken the 'technological turn' (Chan 2007; Cronin 2010), even though the effects of this turn have been apparent for rather longer. Related to this increase in the use of communications technology, the idea of the *global village* was prevalent in the 1990s and early 2000s (although it was first popularised by McLuhan (1962)). The global village theory seemed to paint a broad picture of the changes that electronically-based globalisation would bring, in terms of making cultures more homogeneous, which was considered a by-product of easier international and intercultural communication. This theory was proposed by Snell-Hornby (1999) and others in terms of its effects on translation. However, authors like Zethsen (2010) have presented evidence against the idea of the global village, and suggested that the forces of globalisation have not necessarily made the translator's job easier due to any noticeable linguistic or cultural homogenisation. Others argue that translation demand has increased in spite of any 'global culture' considerations; one example being Pym (2004a), who states that (cf. the Centre for Next Generation Localisation's quote above):

> There is little evidence that a predominance of language learning (for example, of English) prohibits alternative modes of mediation (the numbers of translations in general have risen alongside the development of international English).

This, of course, is generally good news for the future of translation as a necessary activity, and for translators as necessary communicators within the global economy, although as we have already indicated, this demand has also placed increased burdens on translators. Pym (2006:750) also suggests that Translation Studies has been more reactive than active in engaging with localisation, and that the localisation industry itself has provided the terminology and concepts used to describe it. This represents his challenge to Translation Studies to increase the amount of research into the social aspects of globalisation, and how these affect translators within that system.

Leading into our own research, we believe that those with higher psychological skill will potentially find these industry challenges easier to deal with, and that, moreover, they are more likely to take active measures to lessen its effects on them, such as through client education, taking active measures to balance work and social life, and increasing their skills and qualifications to meet new demands.

1.1.1 Recent translation industry milestones

In the 1970s and early 1980s, translators often worked in-house—for government departments and large companies. These jobs were often stable, with a recognisable career path (Fraser and Gold 2001). But with the general business trend to outsourcing and specialisation that began in the 1980s (Mol 2002), the vast majority of these in-house jobs disappeared. Now the majority of translators are freelancers, working by advertising on websites (such as ProZ.com or TranslatorsCafe.com) and using the Internet extensively to do business. This direct approach with clients represents the other main method for translators to do business, as contrasted against the agency-based approach, in which translators get jobs periodically from agencies, who act as intermediaries. The direct-to-client method of marketing presents its own challenges; it means that there can be a high degree of competition for jobs, because people are tendering for work internationally. In this situation, freelance translators are required to be salespeople as well as translators—the service that they are selling is their ability to do a technically difficult translation job more quickly than their competitors, do it to a higher standard of quality but at a lower price, and to deliver it in a final form that is most convenient for their client. Consequently, translators are required to be able not only to do the job, but also to sell themselves in a confident manner, given that they are frequently faced with potential new clients who know nothing of the translator's skills

or work experience until they are informed about those skills through the translator's own advertising. Professional translators are often also selling themselves in the face of public and business ignorance of the complexity of translation and the skill required for it (with bilingual secretaries and employees often being used for translation (Dam and Zethsen 2010:200)), and sometimes in competition with barely-skilled 'cowboys' who undercut market rates and lower the reputation of the profession as a whole (Leech 2005; Katan 2009:130-133). Projecting a sense of professionalism and proficiency in this environment requires a certain degree of belief in one's own abilities and skills, assuming that those abilities and skills are already present. Furthermore, as stated previously, the recent proliferation of new translation-related software and procedures requires a confident approach to learning and to adapting work habits to suit new technology and new procedures (Austermühl 2001; Muñoz Sánchez 2006).

Another aspect of modern translation is the ubiquitous use of computers (inextricably linked with localisation processes), which has led to translation becoming "computer-mediated communication" between cultures (O'Hagan and Ashworth 2002). There are significant benefits brought about by the use of computerised translation tools. Some of these benefits are the creation and improvement of translation memories (which save the translator time by recognising words and phrases that have been translated previously), and localisation tools (which enable the easier translation of websites and software). Further, increasing quantities of digitally-based text help translators (e.g. dictionaries and electronic corpora for terminology search), which also provides opportunities to increase the number of translatable languages (e.g. Tanda 2002, who looked at the process of putting various non-written African languages into computerised text format).

However, computer usage also presents an additional demand on translators, in terms of learning and operation. Software is constantly changing, the computer coding within with the text to be translated is often embedded is shifting due to updating and obsolescence, and thus some translators may find it difficult to feel confident and to keep ahead when managing the changing demands of working electronically. Increased expectations of final product standardisation, brought about by the progressively more widespread use of translation memories and related tools, also reduce the amount of room for acceptable error and can amplify levels of personal pressure. Some cope well with these challenges, others do not. Part of this research is an attempt to analyse and highlight some of the differences in attitude that are related to successful mastery of, and adaptation to, technological challenges.

As an interesting side-point, Mossop (2006) carried out an investigation of the impact of computers on translation and concluded that their impact is not quite as great as it is often stated to be (2006:788):

> Computers have not, so far, directly affected the translation processes of interpreting the source text and composing a wording in the target language; in the main what they seem to have done is speed up the activities of editing and research.

He concludes that the past predictive record of technology futurists has been poor, and that the activity of translation has not been utterly changed so as to be unrecognisable. However, we would argue that the impact of computers has nonetheless been significant because computers have created the expectation of high-speed job turnaround and the associated pressures of quality and standardisation that have gone with it. Computers also require correct use, otherwise any time savings are rapidly used up in trouble-shooting and error correction.

This leads us logically to the impact of machine translation, and to questions concerning how this type of translation will affect freelance translators (e.g. see Austermühl 2011, for an overview of machine translation, crowdsourcing, and related areas). García (2010) found in his empirical study that although machine translation with post-editing was no faster than translating in traditional ways, the quality was no worse, but in fact rather better. Similarly, Fiederer and O'Brien (2009) found that machine-translated, post-edited texts were judged by experts as being better than traditionally-translated texts in terms of clarity and accuracy, although not in terms of style. Such results certainly challenge the image of machine translation often being far inferior in terms of quality (for example, the results in the early 2000s from BabelFish, based on SYSTRAN, were usually comprehensible but often laughable). In a related vein, O'Brien (2007) observed that machine translation with post-editing could produce a target text with less temporal and technical effort than that needed to translate the text using traditional methods.

Presently there is much work being done to improve the output quality of machine translation.[4] For example, work is being done to improve the output of statistical machine translation by using translation memories in conjunction with it (Dandapat et al. 2010), by hybridising rule-based and statistical machine translation and by incrementally improving quality with the aim of reducing post-editing (Thicke 2011), to increase possibilities for localising content into local sign-languages via machine

4. See the research list on the website of the Centre for Next Generation Localisation [http://www.cngl.ie/researchpub.html] as a good example of this.

translation (Smith, Somers, and Morrissey 2010), and to improve the standardisation, quality, and richness of metadata in electronic documents (Anastasiou 2010). These are just a few of the areas currently being worked on. Machine translation has enjoyed something of a renaissance in the last few years.

It is precisely the impact of machine translation that has lead García (2009) to write on what he sees as the future of translation—beyond the localisation industry as we currently know it. He says that the "strong re-emergence of Machine Translation (MT) in response to TM's [Translation Memory's] inability to cope with the increasing translating needs of today's digital age" (2009:199) is the driving motivator for change in this area. This relates quite closely with what the Centre for Next Generation Localisation states concerning the huge quantities of material that need to be translated. It is, quite simply, this sheer volume of text to be translated that causes the issue. As García further argues (2009:204):

> [T]ranslation needs are growing exponentially with the emerging 'Web 2.0' community, and even with state-of-the-art technology and processes the present paradigm is inadequate. This is because key tasks must still be performed by capable humans, who are slow and expensive in comparison to machines.

It is primarily the (lack of) speed of traditional translation that has encouraged the development of the next development affecting translation that we discuss here—crowdsourcing.

Crowdsourcing suggests quite a radical upset to the traditional ways of doing translation business. Crowdsourcing is where a text is translated, often one sentence per person, by 'the crowd', who may be the users of a website, or of a piece of software, or readers of a text (e.g. Wikipedia). The contentious issues are that the translation is often done for free, and that quality control is sometimes lacking (although an article by Zaidan and Callison-Burch (2011) discusses the use of Amazon's Mechanical Turk (a type of project management system) to crowdsource paid micro-translations and how quality control procedures can be used to clean up the results). Both the issue of competing translators doing free work and the issue of quality control affect professional translators and their public image.

Crowdsourcing can have positive manifestations (e.g. Munro 2010, a documentation of crowdsourced translation of emergency text messages after the 2010 Haiti earthquake), negative ones (e.g. Hosaka 2008, in which Facebook users were asked to translate for free, and some poor-quality translations ended up in the user interface), or outright

outrageous ones (American Translators Association 2009). In the Facebook case, the primary motivation for crowdsourcing was supposedly not money, but turnaround time, with the French version of the Facebook website user interface being translated in just 24 hours (Zetzsche 2009:45). The final case was particularly interesting. The American Translators Association in response issued both a press statement and a letter addressed to the CEO of LinkedIn, a professional networking website, which alleged that by listing only non-financial rewards in a survey of what would motivate their users to help translate their user interface, LinkedIn were bypassing and undercutting the work of professional translators (part of their own membership) and the professionalism that comes with them (see Bennet 2009 for a discussion of the event and some questions arising from it).

Closely related to crowdsourcing is localisation within the open-source software movement. This movement is one occurring within software and internet communities, in which increasing numbers of programs are being developed that are 'free', not necessarily cost-wise, but in terms of the free distribution and modification of the coding that is used within them (i.e. *libre* versus *gratis* in Spanish). Source-code bundles are often offered, which users can then modify and compile themselves.

To illustrate this concept, Microsoft Windows belongs, according to the End-User License Agreement, not to the user, but remains the property of Microsoft, and the internal coding cannot legally be changed. The wording of the Windows 7 Home Premium End-User License Agreement states that (Microsoft Corporation 2009:8):

> [t]he software is licensed, not sold. This agreement only gives you some rights to use the features included in the software edition you licensed. The manufacturer or installer and Microsoft reserve all other rights.

In other words, you can use the software, but you do not 'own' it, and also cannot fundamentally change it, or make more than one copy for backup.

Contrast this with open-source software, for example a Linux-based operating system called Ubuntu, which is just one of the many flavours of Linux-based operating systems, which have proliferated precisely because their coding is open to being changed as users see fit. Such software can also be freely copied. This recent resurgence of open-source software has resulted in a boom in required localisation, because translators and project managers are free to localise open-source software whenever user requirements (or simply personal interest) warrant it. Pure open-source software (i.e. containing no proprietary code) is often free of charge to users (but not always), and therefore those

translators who are localising are often doing it for love or experience, rather than for traditional commercial reasons such as market penetration. See Bergmann's (2005) article for a good overview of the history of open-source software and aspects related to its localisation.

However, does this proliferation of semi-professional and amateur localisation mean competition and undercutting for translator-localisers working in the closed-source localisation field? Is their reputation being cheapened by non-professionals doing a similar job, with either identical or only slightly inferior-quality results? These issues raise the need for translators to maintain their self-confidence and sense of self-worth as professionals in the face of situations that may challenge these very senses. For example, it might be easy to think that we don't really deserve to be paid when others are doing quality translations for free, even if they are just of one sentence each. After all, volunteering to translate a Wikipedia article would earn admiration in certain circles. It might also be easy to consider accepting reduced rates for similar reasons. Having a sense of control and self-confidence about translating as a paid activity are important in counteracting such feelings, which unfortunately are counterproductive to successful (read profitable) professional activity. Payment, after all, can be seen as a measure of the importance and value that a client attaches to the finished work, and lack of payment may sometimes be seen as representative of a corresponding lack of value or status attached to that work.

This leads us to a series of studies on status, conducted on Danish in-house translators and so-called "core employees"—i.e. those whose work is not primarily translation (Dam and Zethsen 2008, 2009, 2010). Some of the most interesting findings from the 2009 study, which investigated the views of these core employees and translators regarding professional standing, were that those translators who earned more tended to describe their job as higher status. Other findings were that non-translators in the company judged that translators with higher education levels produced better quality work, that translators with larger professional networks considered that their job was higher status than those with more professional isolation, and finally, that when translators felt appreciated, they felt that their jobs were higher status. In summary, these are very interesting observations, because they clearly link in with the possibility that self-efficacy is affected by (and will affect) views of professional status, both from others and within translators themselves.

Given the evidence that modern translation is a challenging and changing work context, it becomes increasingly important to find out more about how confidence and skill, as reflected in beliefs and attitudes, affects and influences translators' approaches to their work. That investigation is at the heart of this study.

1.2 Some relevant developments in Translation Studies

In this section, we take a look at some of the relevant research which has taken place in Translation Studies in recent times. We show how our concept of psychological skill is related to translation competence in its broadest sense, and yet is not comprehensively covered by the theoretical and practical work done in this area so far.

The topic of psychological skill has already been recently outlined in theoretical form by us (Atkinson 2009). Our review of the relevant Translation Studies literature at that time showed a noticeable lack of research on this topic. Thus, while there is a very significant amount of research in psychology on *self-efficacy* (e.g. Bandura 1997; Stajkovic and Luthans 1998) *locus of control* (Rotter 1966; Levenson 1981; Furnham and Steele 1993) and *attribution style* (e.g. Weiner 1986; Nathawat, Singh, and Singh 1997)—all established psychological theories—no study then or since then has been found that uses freelance translators as a population sample or dealt with translation as a field of work. Nor has mainstream Translation Studies contributed specifically to the area that we have been investigating.

Translation Studies, itself a relatively young discipline, has for the most part of the 20th century focused on areas such as linguistic theory, the internal organisation of Translation Studies (e.g. Holmes 1994), theories of equivalence, or, more recently, postmodern theories of translation as an activity influenced by cultural and social context. Translation Studies as an independent discipline only really began in the 1960s to move out of the shadow of linguistics and away from being an interesting by-product of second-language learning (Neubert 2005:249). As a maturing academic discipline, Translation Studies has recently arrived at what Tymoczko calls its *postpositivist* stage (2007:51):

> […] moving steadily away from positivist attitudes about [its] parameters, [while] acknowledging uncertainties and indeterminacies – including those pertaining to language, cultural difference, and meaning.

This movement into postpositivism has led to and encouraged a proliferation of approaches to the study of translation, from "linguistics, literary studies, philosophy, sociolinguistics, psycholinguistics, [and] cultural studies" (Schäffner 2004:5), to the translation of international news and its effects on reader perception of other countries and governments (Bielsa 2007). Due to the size of this research corpus, we have space here to review only the fields more or less directly relevant to our current research.

The first of these is the recent hybridisation of sociology and translation—the study of translators as people/agents within a specific cultural and social system (e.g. work in Pym 2004), which presents a research direction somewhat related to our study (even though some of the more theoretical work is rather removed from the analysis of day-to-day working aspects of translation as a business and marketing activity). To take an example of such research, Wolf's (2011) project recently took the step of implementing the French sociologist Bourdieu's work into what the author calls the "sociology of translation", by showing that Bourdieu's *field*, *capital* and *habitus* components can be used to describe the translator's interactions within the *field* of the translation industry. Applied to translation, translators use the *capital* that they possess, with *habitus* referring roughly to regular tendencies, particular behaviours and practices in translation. In this work, Wolf builds on the work of Holz-Mänttäri (1984), who formulated the model of 'actors' within the translation system—translation commissioner, initiator, translator, translation user, receiver, and so forth. Wolf states that "[t]he driving force behind these interactions [within the field] is the strive of each single agent to gain a maximum of — specifically economic and symbolic — capital" (2011:7). Our concept of psychological skill could also be regarded as a kind of psychological capital, which we have a certain amount of when entering the profession, and which can be augmented and/or reduced depending on the events which we encounter, and the ways in which we respond to those events. The psychological capital is then expressed through the translator's *habitus*, or personal disposition.

Further relevant sociological work includes a very practical review of the principles of sociolinguistics as they apply to translation (Sánchez 2007)—linguistic markers that indicate social class, geographical region, and gender become important parts of the meaning of texts, and present challenges when they are to be translated. This sociolinguistic approach comes largely from an amalgamation of techniques and theory from sociology and linguistics, and sheds much light on the variations in language within linguistic groups in the wider sense. Thus it has had strong effect on the recent

work of translation theorists, who realise that translators are necessarily affected by these situational factors.

There has also recently been an entire book published on the sociology of translation (Wolf and Fukari 2007), as well as a special issue of the journal *The Translator* (published in 2005) focused on Bourdieu's theory as applied to translation. This demonstrates that the sociology of translation is a field which is gaining in importance, because it helps to explain how translators do what they do.

Current research that could possibly be considered sociological (in its broadest sense) is a recent study of network theory as it applies to translation. In this case, the research consists of investigations into how translators (particularly freelance ones) organise themselves in relation to each other through a medium, usually the Internet (e.g. Mihalache 2008). Mihalache considered the linguistic construction of translator identity on SDL's website, and noted that SDL uses discourse in particular ways to create the network atmosphere of *providers* and *clients*, within a discursive world that it has fashioned, using verbal formulae and linguistic tools (software) that it has created. She indicates that translators are encouraged to think like the companies whose tools they are using.

In terms of translator networks, McDonough (2007) distinguishes between four different types: profession-oriented, practice-oriented, education-oriented, and research-oriented. As she states regarding the meaning of the term *translation network* (2007:794):

> The term *translation network* [italics McDonough's] is used to refer to a network composed of actors with a shared interest in translation and/or related activities, including interpretation, terminology, bilingual revision and globalization, internationalization, localization, translation (GILT).

This electronically-mediated networking has been a defining feature of freelance translators' work in the last few years, who, although they may be widely separated geographically, can meet and share through these networks.

Related work has investigated the roles of trust, loyalty, and social capital in freelance translator networks, and how these affect competition between freelance translators (Abdallah and Koskinen 2007). In the case of their findings, the authors conclude that excessive competition may be damaging in large-scale terms, because trust is eroded by this competition, and open communication can become degraded. Pym (2004a) also

argues that lack of trust increases the costs (including financial ones) of making transactions through the network.

As an aside, we consider that network membership would have a definite effect on translator's attitudes, because membership can affect beliefs and emotions, often for the positive (but not always). Network membership *per se* is not something that is explicitly central to this thesis, but is something that should certainly be included in future research, along with the effects of mentoring on new translators (see more on this in Chapter 6).

Other relevant research has looked at the links between translation and cognitive science (Tymoczko 2005), which is a particular focus of activity in Interpreting Studies, due to the high cognitive demands of such work (e.g. Liu 2008; Jin 2011). Think-aloud protocols (TAPs) are currently a popular method of gaining insight into the cognitive processes of translators at work (see further discussion in Section 2.1.1.2). Fundamentally, translators record their thoughts as they work, and this data is later analysed for patterns and indications of processes (Kussmaul 1995; Qvale 2003:252-253; Künzli 2009). This method of research can yield much rich data, but is largely focused on decision-making in terms of lexical, grammatical, and structural components of text translation, rather than attitudinal aspects.

Probably the closest material so far from Translation Studies to our current study has been research done in the relatively new field of translation-related competence, which consists of recent investigations into the various competences held by a "good" translator (e.g. PACTE 2000; Orozco and Hurtado Albir 2002; PACTE 2003; Gouadec 2007:149-158; Massey and Ehrensberger-Dow 2010, 2011; PACTE 2010, 2011). Other authors, such as Rothe-Neves (2007), discuss the methodological approaches of Translation Studies towards competence research, and point out the field's relative infancy in terms of consistent and rigorous research methodology. Incidentally, Rothe-Neves arrives at the conclusion that competence is not a prior 'thing' that causes good performance, but that rather good performance leads one to be labelled as 'competent'.

However, these studies tend towards analysis of actual translation skills, linguistic understanding of the languages involved, cultural competence of translators (in terms of understanding cultural norms that apply to language use), and translators' research/technical skills (e.g. documentary competence, Pinto and Sales 2008). While there is some overlap between these studies and our area of focus, we propose to extend the scope of competence research and the definition of translation/translator competence

itself to encompass those skills that are less directly related to the procedures of language production and comprehension and their associated competencies such as research and terminology management skills, adding instead research on the underlying attitudes which surround the whole activity of translation. Through the psychological skill model, which we outline more fully in the next section, we plan to show how this type of skill might affect translators in their work.

Aside from the work on competence, three other interesting studies were found which analysed translators' professional lives in depth. Two of these (Fraser and Gold 2001; Gold and Fraser 2002) focused on British translators; the authors conducted interviews and distributed surveys to freelance translators, and then analysed how and why translators became involved in their careers, as well as their satisfaction levels, workflow, and future prospects. But again, the authors of these studies did not touch on any kind of formalised psychological analysis of whether certain personalities and attitudes were conducive to or related to success.

The third study was an excellent descriptive and analytical overview of the global translation profession, with responses from over 1000 translators from over 25 countries (Katan 2009). This work has done much to provide an overview of professionals in the field, and shows a lot about their attitudes towards their clients, their work, and the differences between how translation theory sees them and how they see themselves. In terms of relationships with our own work, Katan did look at perceived autonomy and control (with some 40% of respondents indicating a medium level of control, and some 50% a high level of control). This points to possible internal locus of control results, which we have found in our research, but Katan has not used a validated scale to measure this, so any comparison is definitely tenuous. The construct of control as used by Katan may also be different. Additionally, he asked participants about their satisfaction with translation work, compared to what they expected when they joined the profession. Around 90% indicated that they were 'fairly', 'pretty' or 'extremely' satisfied. Given the results of our own research, the findings with satisfaction appear similar. However, we are measuring job satisfaction again using a validated scale with five items, rather than a one-item scale, so comparisons must be made carefully. Apart from these aspects, there is no direct mention of aspects of psychological skill that might be needed.

In a final comment on existing translation research, business-oriented models of globalised translation that dominate current discourse in the language industry tend to

investigate the organisational or workflow level, rather than the individual level, and focus on how business may be successfully conducted internationally (e.g. Sprung 2000; Aykin 2005). They tend to emphasise processes and organizational outcomes, with little focus on the individual translator, let alone how they may be coping. Translation is presented as but one stage in a larger process leading to an outcome, of which language and visual features are a means to an end—i.e. selling a product or service via communication. Thus, translators are far from being the central focus of such studies.

In summary, we can see that there is a gap between a number of related fields of research. The aim of this study will be to fill that gap, and to understand more about what attitudes and personality traits make a freelance translator successful in the competitive, challenging, and thoroughly technological globalised market that they find themselves in. Once we know more about this relationship between psychological skill and professional success, there will be an opportunity to feed the information gained back into translators' professional training and development.

In the following chapter, we will introduce the first stage, which is a discussion of the idea of competence in translation. We define what it means and explore some of the models of competence, in order to site the present research in relation to these models.

Chapter Two – Introducing the Idea of Competence

In this chapter, we introduce the idea of competence as it relates to Translation Studies, discussing both multi-component models and those that seek to reduce the notion of competence to a single component, as well as considering the difference between descriptive and prescriptive models. We also look at some recent translation process research. We consider what is present and what is missing from these definitions, and show how psychological skill fits into the overall picture of translation competence and into I/O Psychology concepts. We then go further into detail, explaining the components that make up psychological skill, and showing how they are relevant to and mesh with the professional activities of translators.

2.1 Translation competence in general

Beginning with a dictionary definition, *competence* in a general sense is defined by the Oxford English Dictionary as "suitable, fit, appropriate, proper", and (of persons) "possessing the requisite qualifications" (Oxford English Dictionary 1989).

The second part of the definition, in particular, is one of the central focuses of modern studies of competence in translator training. By qualifications, we do not necessarily refer only to academic qualifications (although these are increasingly found in translation due to institutionalisation and industrialisation of the profession (Kelly 2005:7-8)), but also to skills and abilities that translators possess. The aim of modern programmes is to suitably qualify translators so that they may adequately perform their work as translators; that is, that they may possess the "underlying system of knowledge and skills needed to be able to translate" (PACTE 2000:100), or the "capacity to transfer knowledge" (Pinto and Sales 2008:418). In other words, translators need the skills and competences to be able to meet the expectations of clients and of critics (particularly of those who are in a position to have critical input into—and power over—a translator's work). Montalt Ressurrecció and his colleagues go so far as to suggest that recently "the concept of translation competence has steadily gained acceptance up to the point where it has now become the most widely discussed issue in relation to translator training" (2008:1).

Modern translation is undoubtedly demanding, often not only in terms of the contents of the documents to be translated and the usually short time-frames involved, but also in

terms of quality, professionalism, and ability to use translation tools competently and confidently. To give a picture of the nature of the modern translation industry, here is an advertisement from 2008, posted on a well-known translation community website:

Fig. 2.1. Sample job advertisement

Job: European Union translation projects

Posted: 12:32 Oct 1 GMT
Vetting and notifications sent at: 12:34 Oct 1 GMT

Job type: Potential Job

Languages: German to Greek, English to Greek, French to Greek

Job description:

███ is looking for highly motivated and experienced freelance translators and proofreaders from English, German and French into Greek for a long-term cooperation. The project concerns translation of European Union-related documents.

Translate content for EU institutions. Translation for the European institutions concerns legislative, policy and administrative documents, which are complex and highly formal in form and content. In such translation, repetition and strict adherence to layout and stylistic rules are signs of good practice. Electronic translation support tools are very useful for this purpose.
Company description: ███ is one of the leading providers of multilanguage subtitling for broadcast and DVD. We also offer a variety of translation and other language-related services.

Service provider targeting (specified by job poster):

Required native language: Greek
Subject field: EUROPEAN UNION
Preferred software: SDL TRADOS, Other CAT tool, OmegaT
Quoting deadline: 5:00pm Jan 31, 2009
Additional requirements:
The ideal candidates will have completed a translation traineeship in one of the EU institutions and / or must have and submit full details of working experience in translating European Union-related documents. Candidates must be able to work with CAT tools.

Source: http://www.proz.com/job/284993. Accessed 03 October 2008.

Much has been written, from various angles, about the skills necessary to actually meet the demands of a job like this (e.g. Kiraly 2000; Robinson 2003; Sofer 2004 [1996]).

These skills include: the linguistic ability to translate effectively, the use of computer software (Jekat and Massey 2003), time management skills, communication skills, terminology management skills (Martínez and Benítez 2009), and so forth. There are also many other skills, which are not directly related to translational action itself, but relate to the surrounding business and interpersonal context in which translators find themselves. These are such skills as: chasing up late payment, looking for new clients, navigating multiple tax systems and paying tax, running a business, and negotiating with translation agencies about deadlines, payment dates, target text formats, and more (e.g. see Samuelsson-Brown 2004 for an excellent overview of the practicalities of working as a translator). These are the 'other' competences that mark out an effective freelance translator, as well as being able to actually translate. We will look at these later. First, we will take a look at some theoretical approaches to defining a competent translator.

2.1.1 Multi-component models

A number of recent works have analysed translation-related competence in a bid to define exactly, or at least generally, what makes a good translator. These analyses have been conducted largely with translator training in mind, the idea being that if one can pin down the skills of a good translator, then those skills can be propagated and taught to others. Another aspect of these models is to generate an understanding of what makes good quality translation output. They fall into two broad categories—descriptive (based on academic research), and prescriptive (based on the anecdotal observations of the model's author).

2.1.1.1 Descriptive multi-component models

These are the 'academic research' models, which are based on academic, research-based empirical observation of translator behaviour. One of the most important studies in this field comes from the Spanish-based research group PACTE (*Proceso de Adquisición de la Competencia Traductora y Evaluación* [Process of acquisition and evaluation of translation competence; our translation]), first put forward in full form in 2000 (PACTE 2000). In 2003, the group revised their model based on their findings (PACTE 2003), and have since gone on to perform further research to provide empirical and quantitative support for the various components of their model (PACTE 2008, 2010, 2011). The

important fact that their model is currently being researched, refined, and updated (by a collaborative team) makes it perhaps the most important model of translator competence proposed in recent years. This is also supported in a recent review of translation competence by Göpferich and Jääskeläinen (2009), who devote considerable attention to the PACTE model in their review of the state-of-the-art of translation competence research.

PACTE's model covers a number of different areas. *Translation competence* is the central and super-ordinate competence that includes all others; it is the ability to successfully complete a translational transfer from one language to another. To this, five sub-competencies are added, which are as follows. *Bilingual sub-competence* is about having the skills to communicate in two languages, and being able to fully express those two languages appropriately. *Extra-linguistic sub-competence* concerns the general and specific knowledge, outside of language, which "can be activated according to the needs of each translation situation" (PACTE 2000:101), e.g. subject knowledge, cultural knowledge, and so forth. *Knowledge about translation sub-competence* is understanding of aspects and processes of the translation process, and of the profession as a whole. *Instrumental sub-competence* is about skills related to use of translation technology, such as dictionary use, research, information management, etc. Finally, *Strategic sub-competence* is the ability to use planning and problem-solving strategies during the translation process, including choosing the best methods of translation, identifying problems, and using techniques to solve them. The *Psycho-physiological components* are mechanisms found in both physiological areas, such as memory, attention, and perception, and in psychological areas, such as "intellectual curiosity, perseverance, rigour, critical spirit, knowledge of and confidence in one's own abilities, the ability to measure one's own abilities, [and] motivation" (PACTE 2003:59). Creativity, logic, and analytical skills are also part of these components. It is in this final area that the present research project fits best.

Another model is that of Keen (1998, applied to Translation Studies in Rothe-Neves 2007), which presents competence as a section of five blocks—being *values* (or ethic; such as willingness and responsibility), *contacts* (social networks), *experience* (accumulation of learning), *knowledge* (knowing facts and methods), and *skill* (ability). This theory has been developed in the context of systems research and human behaviour within those systems, and is not a translation-specific theory. Nonetheless, it appears to be suitably explanatory when applied to translation competence. In the words of Rothe-

Neves, when she discusses the inductive rather than deductive approach of the model, "[a]s the product, and not the source of performance, competence depends on expert judgement" (Rothe-Neves 2007:135). In other words, we can (assuming that we are qualified to judge) observe competence as *output*, but are advised not to state *a priori* that certain features (deemed to be 'competences') must be present which will subsequently lead to quality translation. In using this argument, Rothe-Neves appears to be making a break from the category of translation models discussed in Section 2.1.1.3, and uses Toury's (1995) normative approach, which aims to describe translation phenomena as such-and-such ("equivalent", "good quality", etc.) when they are defined as being so by observers within the context. In other words, according to this model, competence is not an absolute, but is a norm-governed product, which means that competence can be defined differently according to social context and historical period. This model is flexible, as it allows for definitions of competence that are not predetermined in prescriptive fashion, like the models presented in Section 2.1.1.3. However, following such an approach too far can also lead us eventually into the theoretically-hazardous territory of radical relativism, with no absolute or unchanging criteria for competence.

A third model of competence is put forward by Christina Schäffner (2005:243), who lists six components of her multi-component model. The first is *linguistic competence*, the second *cultural competence*, the third *textual competence*, the fourth *domain/subject specific competence*, the fifth *(re)search competence*, and finally *transfer competence* (titles are fairly self-descriptive; see Schäffner's article for more details). Again, all of these competence components refer specifically to the processes of research, linguistic transfer, textual manipulation, and linguistic/cultural knowledge, and do not address the wider context of translation as a business operating within a network. Certainly, having these competences may produce a fine translator with a fine set of skills, but these may not be enough for freelancers working by and managing themselves. Other additional skills are most probably needed, unless the translator's client interaction is being done by an agent who then simply presents the translator with the text and the brief.

However, Schäffner (2005:242) does indirectly address the issue of this lack of focus on the wider context, by noting that classical (and indeed modern) translation theory itself does not often address these contextual issues:

> Translation theorists do usually not [*sic*] come up with answers to questions such as: What do I do as a translator if I do not like the client? Do I need to buy each new version of a

> software package? How do I best market myself? Do I get more clients if I use TRADOS? Neither have such questions been seen as highly important within TS, and one could indeed ask whether such concerns fall into the domain of TS at all.

This reflection on the lack of interest often shown in areas outside of classical translation theory is pertinent to us here, because we argue that it is part of the root cause of the lack of focus on the areas that include our concept of psychological skill. In other words, as we have been exploring, the idea of competence is often limited to the actual translation process, and largely ignores the vital but peripheral competences which make up the interface between translation as an activity and translation as a business within a network of other businesses, clients, and agencies.

There have been various other models of translation competence put forward in the last 20 years or so, and we briefly describe some of them here.

Kelly (2005:73-78), who has much experience and has done much work in the field of academic translator training, sets out her vision of translation competence, based on a didactic approach (in other words, that a good Translation Studies course should directly teach these competences, because these competences have been observed to be in demand in 'the real world'). Firstly she proposes *language competence*. Then we see *cultural competence* and *instrumental competence* (familiarity with tools, research, computers, etc.). *Professionalisation* is another competence that she suggests, and here it means that students get to practice simulations of doing translation as a business activity, such as meeting deadlines, decoding and implementing briefs, and business management. *Interpersonal competence* (currently being investigated by Huertas Barros 2011) reflects the need for a more interpersonal/collective approach to work as a translator, which Kelly contrasts with the traditional image of "sitting at home surrounded by books" (2005:76). *Subject-area competence* refers to the idea that a translator may need to specialise in a particular field or fields, without, of course, overspecialising. Finally, Kelly refers to *attitudinal competence*, which obliquely refers to the areas that we are investigating in this project. Attitudinal competence includes "self-concept, confidence, awareness" (2005:77). "Self-concept" may possibly relate to self-evaluation (Judge 2009), although it is difficult to be sure because the component is not discussed in detail, while it appears that "confidence" may relate to self-efficacy. "Awareness" appears to be a more general notion, perhaps of simply being aware and being able to monitor our own performance, and make changes as necessary.

There has been one outstanding resource in recent years devoted to discussion of competence in translators, and this is a collection of articles edited by Schäffner and Adab (2000). In this collection the contributors discuss their views on translation competence, ranging from defining it, to training for it, and finally, to assessing it. Possibly the article most relevant to our research is by Fraser, who issued a questionnaire to freelance translators, and partly from which she concludes that translator competence is "shorthand for the skills, expertise and judgement that a professional translator develops from a combination of theoretical training and practical experience" (2000:53). This could be argued to be a minimalist model, but does explicitly mention these three sub-components of *skill*, *expertise*, and *judgement*. In the article she also refers intriguingly to the idea of "self-confidence and a successful translator personality" (2000:52), which is unfortunately not further elaborated upon.

The idea of the "translator personality" has also been taken up more recently by Hubscher-Davidson (2009), who used a Myers-Briggs Type Indicator (a psychometric personality instrument) to broadly classify a group of student translators into different personality types, and then rate their performance on a translation task. The Myers-Briggs Type Indicator is alleged to contain four factors, each representing a continuum, which attempts to show personality as a mixture of 16 psychological types (based on four dichotomies: introversion-extroversion, sensing-intuition, thinking-feeling, and judgement-perception). The finding was the that those with personalities dominated by what is measured as the *intuitive* factor (perceiving relationships, big-picture possibilities) did the best, and those with personalities dominated by the *sensing* factor (immediate, fact-focused, realistic) did the worst. Intuition and sensing are alleged to be opposite ends of a single factor, so it appeared that this factor could be potentially important for work on the "translator personality". A caveat is the small sample of participants—only 20—which is not conducive to statistical stability. Hubscher-Davidson acknowledges this. However, it does present some interesting possibilities for future research. She concludes with this interesting comment (2009:188): "[R]aising awareness of the benefits of applying new psychological theories to the study of translation is a first step towards making TS a truly interdisciplinary field."

Related to Hubscher-Davidson's work is work done by Bontempo (Bontempo and Napier 2009; Bontempo 2009a; Bontempo and Napier 2011), focusing on personality in the field of interpreting, with perspectives of personality based on the "Big Five" model (Costa and McCrae 1992). Bontempo appears to take a trait approach, suggesting that it

is temporally-stable personality characteristics that are key criteria for competence, similar to Hubscher-Davidson. However, Bontempo also looked at self-efficacy in her dissertation, which focused on Australian Sign Language interpreters and how they demonstrated their competence (Bontempo 2009a).

The other article of particular interest in the collection by Schäffner and Adab (referred to above) was an explanation of Neubert's multi-componential model of competence (2000), containing *language competence* (i.e. the understanding of the languages involved, and the interlingual similarities and differences that exist between the languages), *textual competence* (understanding of composition and functions of texts), *subject competence* (understanding of the subject matter), *cultural competence*, and finally *transfer competence* (i.e. translation competence—skill in the actual process of semantic transfer from source to target text). Neubert's model is parsimonious and relatively conventional, with his aim being to "shape translation studies as a practical venture without losing oneself in a limbo of competences continually encroaching upon each other" (2000:16). This is a valid concern, and the results of many authors each formulating slightly different overlapping but competing models can be seen in this section.

Finally, one particular competence model of note is by Hansen (2008:274), who shows translation competence as a circular field, with four 'corners' akin to the cardinal points of the compass—these being 1) *knowledge*, *terminology*, 2) *languages*, *cultures*, 3) *translation technology*, and 4) *translation theories* (these are somewhat different to Hansen's (1997) earlier work on translation competence). Within this field, the sub-competences float, arranged spatially according to which 'compass point' they tend towards and with what strength they attach to the super-competence. Unfortunately there is no detail that we could find published in English that provides more information on this interesting model, which, while novel in its mode of presentation, is not immediately intuitive, because the terminology used to describe the sub-competences is relatively without context and therefore hard to decipher. Hansen only devotes one page to the model in the abovementioned article, which is primarily an empirical study of text revision processes.

2.1.1.2 Competence theory from translation process research

Recently, important work on understanding translation has been done in the field of process research (e.g. Danks et al. 1997; Tirkkonen-Condit and Jääskeläinen 2000; Shreve and Angelone 2010; Alvstad, Hild, and Tiselius 2011; O'Brien 2011). The fundamental aim of translation process research is to understand the cognitive processes involved in actual translation practice—to gain an insight into what is going on in the translator's mind as they translate. Process research uses methods such as think-aloud protocols (TAP), key-logging, eye-tracking, and various other methods (e.g. Enríquez Raído 2011), as well as brain-imaging and cerebro-electrical activity-measuring techniques taken from neuroscience (Göpferich and Jääskeläinen 2009:170). Process research has taken some steps to acknowledge the effects of emotion and attitude on the translation process, but these appear not to be central to the conception of translation competence as a whole.

To take one example, Shreve's (2006) work takes an approach to translation competence based in psycholinguistics, fundamentally arguing that translation competence is the manifestation of a cognitive process, consisting of declarative and procedural knowledge, that has the same fundamental characteristics that expertise in other fields shows. Shreve considers that there should be measurable differences in cognition patterns between beginners and experts. He presents four components which he defines as essential to the 'deliberate practice' of translation (defined as "regular engagement in specific activities directed at performance enhancement in a particular domain" (Shreve 2006:29)). Firstly, having *linguistic knowledge of at least two languages*; secondly, having *appropriate cultural knowledge*, including of specialised domains; thirdly, having te*xtual knowledge of source and target conventions*; and finally, *knowledge of strategies and procedures of actual translation*, which includes tool use and research. One important aspect that Shreve argues is that average competence in one domain can be compensated for by extraordinary competence in another, which can average out to a good-quality final result.

Another key model of translation competence, the TransComp model (Göpferich et al. 2011:59), takes as its inspiration Hönig's model of translation competence, which was proposed in 1991. One key feature of Hönig's original model is that translation competence is assessed as residing in the space that begins with a source text, and ends with a target text (as shown in Göpferich 2009:14). According to the model, the

resulting quality of the target text appears to be the primary determinant of the level of competence of a translator.

The components of Göpferich's (2009) model that most concern us here are as follows:

> [T]he translator's self-concept/professional ethos, on which the contents conveyed and the methods employed in theoretical and practical translation training courses have an impact and which form the component of my model where aspects of social responsibility and roles come in.
>
> […]
>
> [T]he translator's psycho-physical disposition (intelligence, ambition, perseverance, self-confidence, etc.). Translators' psycho-physical disposition may have an influence on how quickly their translation competence develops: a critical spirit and perseverance in solving translation problems may accelerate the development of translation competence.
>
> (Göpferich 2009:22)

Similarly to PACTE's model, the components of self-concept and psycho-physical disposition appear to influence and underlie the other components of this model.

Relating this to our own research, psycho-physical disposition, as defined above, may be complementary to psychological skill, as ambition and perseverance appear to sum together as motivation, while self-confidence may be analagous to self-efficacy. Although Göpferich points out that psycho-physical disposition will be monitored during the project ("[s]ince we will work closely together with our subjects for three years, we expect to be able to characterize their psycho-physical disposition, which may also have an impact on their development" (2009:30)) it is not made clear how this will be done otherwise than in terms of generalised observations. In summary, the definition is not as clear as it could be, nor are the potential effects. Our research aims to investigate this area further, while making it more concrete. While we are not measuring the direct effects of psychological skill on the quality of texts (this project is not based in the process research paradigm), we nonetheless look at other markers which should relate to quality text output, such as career longevity, income, workload, and so forth.

The notion of self-concept was labelled in German as *Selbstbild* in Göpferich's earlier work (2008:264-275), in which she issued a questionnaire to her research participants. Unfortunately, the questionnaire (and/or a detailed explanation of her version of the construct) does not appear to be available in English. Additionally, one of the problems with self-concept, at least as used in the social sciences, it that it is often poorly-defined, frequently conflated with self-esteem and related constructs (e.g. Heatherton and

Wyland 2003:220; Montgomery and Goldbach 2010:32). As Francis and colleagues (2010) argue:

> The self, however, remains an illusive [*sic*] and frequently poorly defined concept. The potential both for clarification and for further confusion has been provided by the generation of a range of compound self-related constructs. Strein (1993) in his review of the literature found at least 15 different 'self' terms used by writers, with terms such as self-concept, self-esteem, self-image, self-worth, and self-acceptance being used interchangeably and inconsistently. However, the two most widely used terms were self-concept and self-esteem. (Francis et al. 2010:553)

Until it can be confirmed exactly what area Göpferich's understanding of self-concept focuses on, we would argue that it should be considered as distinct from psychological skill (whose component parts *are* clearly defined and extensively researched), although it may share some features in common. Additionally, it appears that Kiraly's (1995:100-101) self-concept construct, upon which Göpferich's construct appears to be based, does not have much overlap with our construct of psychological skill, particularly as it is highly focused upon the translation itself, both as a process and as a product. Similar to Hönig's model, Kiraly's psycholinguistic model focuses on the area that begins and ends with source and target texts, with input from external resources along the way.

What we investigate with the concept of psychological skill are not just those factors directly involved in the production of a target text, but rather broader than that. For example: what happens to emotions when a translator is not translating, but thinking about the work-day that has just passed, or the day to come? Similarly, what about the case of emotions being too difficult to deal with and leading to an intention to quit the profession (intention-to-quit is an important area of research within I/O Psychology)? This becomes a case in which psychological skill may be not just a peripheral competence, but central to the continuation of a translator's career.

Here we also argue that the idea of 'cognitive-emotional efficiency'[5] is a significant part of pyschological skill; it is the idea that target text quality is one measure of competence, but that we should also consider how much emotional energy was spent getting that text, and how efficiently that energy was spent. Job satisfaction is partly a measure of this efficiency. In certain circumstances, there may be a disjunct between the quality of a text and the effort, job satisfaction, and general wellbeing of the translator who produced that text; this disjunct could be short-term or long-term. A long-term disjunct

5. Not Blau's (2001) model of "emotional efficiency".

is quite possibly correlated with issues such as career burnout. Thus the concept of psychological skill looks beyond self-concept and psycho-physical disposition as described previously. Perhaps we can draw a parallel with the modern understanding of *sustainability* (e.g. Hawken 1993), as used in economics, supply-chain management, agriculture, business, and related fields, which considers not only that a good product is available on the shelf of the shop, but also how much fuel and energy (i.e. the carbon footprint) was required to make it and to transport it to the point of sale.

As mentioned previously, translation process research has a vital role to play in understanding the translation process and its outcomes, but can additionally be supplemented by research such as ours, which does not focus directly on the translation process, but rather on areas that surround the process.

2.1.1.3 Prescriptive multi-component models

There is another category of models relating to translation, which are not research-based ones, but rather the kind of anecdotally-sourced and rather prescriptive skills lists that one can find in a number of publications on how to become a translator. Traditionally, such models were found in the prefaces of translated works and in treatises on the subject of translation by such important early translation scholars as Dolet, Cowley, Tytler, Schleiermacher (Munday 2001:18-28), and YAN Fu (严复) (Wright 2001). These usually involved a formula that the author suggested should be followed to achieve successful translation. Such models, put forward before the existence of Translation Studies as a formalised academic discipline, have usually been based on these author's personal observations and experience (often of themselves or perhaps of close colleagues at work), and contain the points that they consider are the most important in making a good translator or a good translation. Others have been formulated as a result of non-academic observation of modern translation practices. They have one major problem, as Lesznyák writes (2007:172):

> [M]ost translation competence models are not based on empirical research, and they are usually not tested empirically either (for exceptions see Stansfield et al. 1992; Campbell 1991, 1998; or the works of the PACTE Group 2003, 2005). In consequence, many concepts are simple speculations […]

Nonetheless, we will investigate a few of the more modern ones here, selecting just two that are relatively representative of these types of models.

One such model is put forward by Sofer (2004 [1996]), which contains ten components (there is also a variation on Sofer's model by Sibirsky and Taylor (2010:106)). These ten components are regarded by Sofer as the ten essential components that a professional translator must possess in order to be successful. *First*, there is knowledge of the source and target languages. *Second* is cultural familiarity, which is inseparable from linguistic ability, according to Sofer. *Third*, a translator must work to stay updated on linguistic changes in both languages. *Fourth*, a translator should translate into the language with which they are most familiar, unless they are truly bilingual, in which case translation in either direction is acceptable. *Fifth*, a translator should possess competence in two or more fields of knowledge specialisation, in which they will possess a thorough understanding of the structures, workings, and vocabulary of these fields. *Sixth*, a translator will speak and write well. *Seventh*, a translator will be fast enough in their work to provide quality results in a reasonable time. *Eighth*, a translator should have competence in research and sourcing of information. *Ninth*, a translator will be familiar with all the hardware and software tools needed to translate effectively. Finally, *tenth*, a translator will understand the market, and will position themselves in regions that offer most potential for their language combination. It is assumed, in this model, that possession of these competences is not absolute; that is, they are possessed to varying degrees. According to the framework, our perceptions of these varying degrees of competence possession in a translator should lead us (or a person in the position of assessing a translator) to state whether, and to what degree, a translator is competent in various areas of their work.

To add another perspective, we present another multi-component model of translation competence (Searls-Ridge 2000), in the same category of anecdotally-based models as the previous one by Sofer. *Firstly*, a translator must be fluent in at least two languages and their associated cultures (the foundational requisite of translation competence). *Secondly*, a translator must have good general knowledge and education (this provides them with knowledge and vocabulary related to their areas of specialisation). *Thirdly*, a translator must have very good writing skills in their target language (given that they are essentially rewriting the text in this language). *Fourth*, they must understand computer-based technology and be willing to stay up to date with and to increase that knowledge (technology is changing all the time). *Fifth*, a translator must be a good businessperson (selling, paying bills, marketing, time-managing). *Sixth*, they must get along with other people (they may work as part of virtual teams, even if they do not see other

professionals face-to-face very often). And *seventh*, they must know their limitations in all of these areas (in order to take advantage of strengths and to compensate for weaknesses).

We can see that this particular model is very much industry-focused, dealing not just with skills surrounding translational action itself, but also those 'peripheral' skills that relate to translators' interactions with their professional surroundings. While these skills (numbers 5 and 6 especially) are not the first to be thought of when someone asks "what makes a skilled and competent translator?", they are nonetheless considered vital for survival and longevity as a paid professional. Thus we appear to have a core of translational competence, surrounded by a 'peripheral competence'.

The difficulty with these models is that they are not research-based; rather, as mentioned previously, they are prescriptive and normative lists of behaviours that a good translator is supposed to have. Although they do arise from observation, they are usually, at best, based on the authors' anecdotal evidence and personal observations, and are frequently presented in a prescriptive and regulatory manner, as something that leads to competence, rather than necessarily being factors of observed competence. This is not to say that they have no importance or value (they obviously give guidance to new translators or to people considering joining the profession), but there is no firm evidence (certainly no research-based evidence that has been subject to scientific scrutiny) that these competences, or in these particular forms, are in fact necessary or desirable in the manner that they are presented. They represent norms which apply to the translation industry in the particular context in which they are formulated. As we have seen, this criticism can apply to some academic models also, which is why the empirical research performed on a model like the PACTE group's makes it so valuable.

2.1.2 Minimalist models

Another definition of the components of translation competence is that of Pym (2003). This one belongs to the family of minimalist models, which take a large-scale cover-all approach to translation competence, and which place themselves in opposition to more complex models. This particular model of Pym's has only two components, in contrast to the multi-faceted models proposed by PACTE and others. These are (Pym 2003:489):

> The ability to generate a series of more than one viable target text (TT_1, TT_2 … TT_n) for a pertinent source text;

> The ability to select only one viable TT from this series, quickly and with justified confidence.

As we can see, this definition of competence is a big-picture one, with no *explicit* mention of sub-components. Thus, it is able to explain parsimoniously and to cover all necessary skills that may arise during translational action, i.e. during the actual translation process, which, according to Pym, is about being able to create many possible target texts, and being able to select just one viable option.

However, one criticism of this minimalist approach is that it focuses on translational action; all other competences that surround and support translational action are implicit and assumed. Pym makes the comment that the real virtue of a minimalist definition "lies in the large number of things that it does not say", and that "[o]ur definition hopes to say quite a lot in very few words. It should be able to cover the most interesting parts of the many things that have been added in the multi-component models […]" (Pym 2003:490).

This is a fair argument in many ways. Indeed, the problem with precisely defining things is that the more precisely one defines, rather than just leaving things to individual interpretation, the more responsibility one has to cover all possibilities (something similar to the growing complexity of banking legislation and finance-related government statutes following the 2008 global financial crisis). Otherwise, vital parts are left out of theoretical models, and because of a strong focus on what *is* defined, attention is taken away from considering what is *not* defined. This is the weakness of multi-component models and the strength of single-component ones (if well-formulated). On the other hand, in single-component models, what is not defined can often be forgotten, or taken for granted, or left un-discussed due to lack of focus. If the essential components of translation competence are not stated, or are left implicit, some are simply assumed, while others are simply forgotten.

The component approach has both advantages and disadvantages, which can be illustrated using an example from translation teaching. The minimalist models allow 'room', so to speak, for students to come up with their own definitions and subjective understandings of competence, based on their own experiences and observations, rather than having them forced into preconceived ideas of what translation competence is and how to achieve it. On the other hand, systematically teaching, naming, and analysing the groups of skills that have been observed to be linked with good quality translation is undeniably helpful, so that students do not have to reinvent the wheel when discovering

those areas that they need to invest energy and focus in, in order to become good translators. Given that each student will have their own strengths and weaknesses, it seems desirable to give them an understanding of certain criteria by which they can judge their own performance. An analogy could be made here with exam study, in which a student is generally rather happier if they know roughly what is going to be in the exam, so that they can focus on these areas, rather than just being told to "study everything!"

Thus the argument here is that multi-component models are more descriptive, by attempting to precisely define the areas of competence. They also leave space for individual interpretation of their sub-competences, and in fact it is one of these spaces into which our present research fits. But they do specify what they cover with a much higher level of granularity than minimalist models. An analogy is that it is easier to see the subject of a digital photograph when the number of pixels per square centimetre is as high as possible (all other factors being equal), even though if we zoom in enough, a pixel is still a solid block of single colour. Conversely, if a photograph is reduced to just a few pixels, we find it increasing difficult to discern what the photograph is showing. Due to this descriptive power brought about by the multi-component models, and despite the possibility of leaving out important components of competence, we favour the multi-component models. This study is fundamentally an attempt to add another underlying component to them, in order build on them and to increase their descriptive power.

To add more context to the new component of psychological skill that we are formulating, we turn now to I/O Psychology.

2.1.3 Competence in the context of Industrial/Organisational Psychology theories of work

In this section, we consider translator competence in the context of one of I/O Psychology's theories of work.[6] This particular theory is both elegant and intuitive, and we believe that it goes a long way to providing a setting within which to place translator competence.

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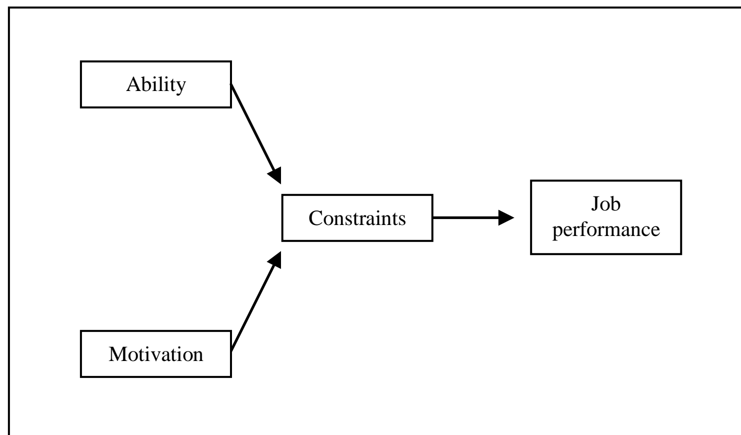
6. We believe that Translation Studies in the area of translator competence would benefit from the increased application of theoretical work done in I/O Psychology, given that I/O Psychology has a legacy of a century of research on the relationship between humans and their work output, including in the areas of competence and skill and how these are defined and measured.

Fig. 2.2. A model of the relationship between ability, motivation, constraints, and subsequent job performance (after Spector 2003:239)



The model in Figure 2.2 is a general model of the relationship between ability, motivation, and subsequent job performance, which is mediated by constraints (that is, difficulties or lack of resources which negatively affect performance in some way).

Ability is the area which the competence models in Translation Studies have focused most upon—ability to translate, ability to transfer information across a cultural-linguistic divide, ability to do terminological research, and so on. We are not especially concerned with it in this study, as we assume that it is already present in our participants to at least a moderate degree, given that the criterion for participation was set at six months minimum running one's own translation business. Nor do we focus on it much in theoretical terms, as the existing translation competence research is already doing plenty of work to explore and define it.

Motivation is sometimes included in translation competence models, but usually as a discrete aspect among other components, or often being considered as implicit and innate in translation competence. Motivation, according to psychological theory, is defined as "an internal state that induces a person to engage in particular behaviors" (Spector 2003:188), in order to achieve some kind of goal. Spector goes on to define motivation as influencing the direction, intensity, and persistence of goal-related behaviours. Direction refers to the range of possible behaviours, intensity refers to how much effort we put into whichever of those behaviours is selected, and persistence refers to how long those selected behaviours are continued before we either give up or reach our goal.

One of the major theories relating to motivation is *self-efficacy theory*. This is fundamentally the idea that having self-belief in our goal-related abilities motivates us to achieve our goals (Bandura 1997). Self-efficacy can also provide us with the confidence to be more creative in developing strategies to improve our abilities, in order to achieve better job performance (Millward 2005:209). In lay terms, self-efficacy is relatively synonymous with self-confidence and possibly with self-esteem (although Judge and Bono (2001:96) clearly indicate that self-efficacy does not include a concept of self-worth as a person). A certain degree of self-efficacy is, we would argue, essential for success as a freelance translator. It certainly has an effect on student interpreters and how they feel about their performance when working in their second language (Chiang 2009). Increased self-efficacy is generally correlated with increased task performance (Spector 2003:197-198). We will discuss self-efficacy in more detail in Section 2.2.2.

Constraints are those things that block, hinder, or reduce successful job performance in some manner. As Spector mentions, people can only do their jobs well if they have sufficient levels of both ability and motivation, but even with these present, constraints can reduce successful job performance (Spector 2003:239). In classical I/O Psychology, constraints refer to those resources (physical, informational, financial, environmental, etc.) available to employees in an organisational environment that help them to successfully perform their jobs. In other words, a lack of resources will create constraints. Additionally, resources are never fully available (i.e. almost all resources available to workers will be at least slightly limited in some way).

Adapting this with reference to freelance translators (who usually work extra-organisationally), examples of constraints could be that our website goes down, denying us some vital advertising that would have secured a good job with a client who was searching online for a translator, or that our translation agency's freelance selection criteria change and we are suddenly dropped from their books. Other examples may be that a client refuses to agree on a price, or aggressively negotiates an unreasonable timeline for our project, or that we lack the confidence to approach a particular organisation to ask if they have any work for us, or that we do not have translation memory software and so cannot accept a particular job that requires it, or, finally, that we mismanage our schedule and a project runs over-time. Further examples are that our computer gets a virus, or that an upgrade 'breaks' our translation memory software, or that there is a power outage. All of these constraints, in their many and varied forms, could either prevent successful job performance, or at least diminish it to some extent.

Some of these constraints are almost completely outside of our control, and there is effectively nothing that we can do about them. Others we can negotiate or modify the effects of. Yet others are almost completely under our control, and it is also quite possible that sometimes we even consciously or unconsciously *create* psychological and material constraints for ourselves.

Given this context, our beliefs can determine, to a large extent, whether we feel that we can influence certain constraints or not, independent of our actual degree of influence over them. This can, in turn, affect our behaviours towards removing or lessening constraints. This is where the importance of locus of control and attribution style can be seen. These are part of our personal expectations and explanations of possible constraints, and how they affect our work. Locus of control, in this context, defines whether we see the relationship between constraints and job performance as under our control to a degree, or whether we think that that relationship simply takes its own form, in spite of anything we might do to influence it. Attribution or explanatory style is a kind of filter that we use to explain the relationship between constraints and job performance outcomes—it is the way that we view the perceived causes of constraints and of job performance. Both locus of control and attribution style affect what we do to deal with constraints that get in the way of successful job performance. We discuss these two theories further in Sections 2.2.1 and 2.2.3.

In conclusion, one of the main questions of our research is this—assuming suitable levels of ability, how might beliefs, motivation, and attitudes affect freelance translators' job performance through the area of constraints? To help answer this question, we turn to the idea of *psychological skill*.

2.2 Introducing the idea of psychological skill

The aim of this research project is to extend the idea and the scope of translation competence research into an area that we are labelling 'psychological skill'. This skill reflects, fundamentally, the overarching attitudes that influence all other actions and related behaviours that form the background of translation as an activity. These are most often considered only implicitly, but here we want to introduce them and show how they relate to translators' professional contexts.

Psychological skill in this project will be measured by the use of three psychometric scales. Psychometric scales quantitatively measure psychological aspects: "*psycho-*,

'pertaining to the mind or mental processes,' *-metric*, 'measurement'" (Broerse 1999, emphasis ours). Thus, we will attempt to quantitatively measure the levels of particular factors that we consider are likely to indicate psychological skill, and relate them to various aspects of professional success.

As stated in the introduction, there are three components to our model of psychological skill: *attribution style*, *self-efficacy*, and *locus of control* (in the main study, we also measured *career motivation*, to obtain an idea of the degree of participant involvement with career, although this was not very successful). These components are the three major psychological theories mentioned in the model of work performance outlined in Section 2.1.3, and we believe that they influence the relationship between ability and motivation and subsequent job performance. They also link most closely with the PACTE group's *psycho-physiological components*, which are described as follows (2003:59):

> They include: (1) cognitive components such as memory, perception, attention and emotion; (2) attitudinal aspects such as intellectual curiosity, perseverance, rigour, critical spirit, knowledge of and confidence in one's own abilities, the ability to measure one's own abilities, motivation, etc.; (3) abilities such as creativity, logical reasoning, analysis and synthesis, etc.

Attribution style, self-efficacy, and locus of control relate most strongly to the attitudinal aspects section of the psycho-physiological components, as we will see in the description of each below. The advantage of our model is that it takes some of these components further, and adds to them. "Confidence in one's own abilities, motivation" appears to be essentially what we understand as self-efficacy, but the "etc." part mentioned in the quotation above nonetheless leaves more room for exploration. Therefore this particular aspect of PACTE's model is not descriptive enough by itself to explain all the aspects of psychological skill.

Neither is Keen's model (1998, in Rothe-Neves 2007), to take another example. Our vision of psychological skill touches on a couple of the competences mentioned in Keen's model (notably *experiences*, which involves learning from mistakes and successes, which is considerably helped by a positive attribution style, and *skill*, which, when applied to complex tools, is considerably mediated by self-efficacy). However, no room is made explicitly for psychological aspects that might affect translation outcomes, leaving a gap to be filled.

Finally, we see almost no aspects of psychological skill in Schäffner's (2005) model. None of the components directly address any skills beyond the essential ones needed to translate, and only the final component (*transfer competence*) hints obliquely at any competences in the area of psychological skill (Schäffner 2005:243):

> [T]he ability to produce target texts that satisfy the demands of the translation task; including the ability to negotiate and collaborate with other translators and subject matter experts to accomplish the task at hand, i.e. the social aspects of the translation event.

However, we can see here that these abilities relate more specifically to team-work with other translators and knowledgeable people rather than to clients or job providers (i.e. agencies). We argue here that the "social aspects" of the translation event go far beyond interaction with other translators and domain experts.

None of the other models mentioned in Section 2.1.1.1 contain elements that would likely include psychological skill (the potential relationship with the TransComp model has already been discussed in Section 2.1.1.2), although Hubscher-Davidson's (2009) work on the "translator personality" does take things in an interesting direction, in terms of investigating how psychological aspects can affect translators, and Kelly (2005) does refer to *attitudinal competence*, but in relatively generalised form. Her definition is not precise enough for us to be sure that we are talking about the same issue of psychological skill, although our concept would probably fit into her model.

Therefore, what is psychological skill as conceived of here, and what areas of importance does it cover that the more traditional competence theories miss out on? We will define and elucidate this in the next few sections.

Before going any further, however, we need to explain that the specific way that we conceive of psychological skill is not as an aggregated single numerical score of measures on all three of its components (attribution style, locus of control, and self-efficacy). We expect that there will be a correlation between them—in other words, that those participants who have a positive attribution style (defined below) will also have higher self-efficacy and a more internal locus of control regarding their work. However, numerically speaking, psychological skill cannot be regarded as a simple combined score, because a participant may theoretically score highly on scale A and low on scale B, and end up with the same average score as one who has the opposite profile (Spector 2008, pers. comm.). Thus, we will be looking at the correlation between participants' measures on the three scales, and will be looking for evidence among those correlations that the concept of psychological skill is a valid and coherent one, supported by the

results. Moreover, we expect to find moderate positive correlations between at least self-efficacy and locus of control, as it appears from research that there may be a common factor underlying them (e.g. see Judge 2009, who discusses them in the context of core self-evaluations – self-esteem, self-efficacy, locus of control, and low neuroticism).

In the following section, we will introduce the components of psychological skill, explaining the relevant details of each component.

2.2.1 Attribution style

Attribution style (or explanatory style) can be defined as how a person explains behaviour; specifically, what attributions they make for the causes of behaviour in themselves, in others, and in animals and objects (Malle 2004). Malle suggests that there are two broad components: finding the meaning of behaviour (in oneself and in others), and using attributions to manage behaviour in a social setting. He points to the example of using such attributions to reduce personal dissonance, during which a reason is sought for one's own unusual or outrageous behaviour (Malle 2004:65). He further argues that meaning brings a sense of pleasure, and lack of meaning contributes to a sense of displeasure—something that we have all observed in our lives at one point or another. The search for the meaning of things and of events seems to be a fundamental part of the human condition (e.g. as famously proposed by Frankl 1963).

Such explanatory processes are also used to explain the behaviours of other people and the perceived causes of events involving animals and objects. For example, a translation agency's project manager may make attributions concerning the reasons why a translator did or did not do a particular task to the project manager's satisfaction. On the one hand, the project manager may be unhappy with the number of errors that the editor had to fix, because they thought that the translator was simply getting careless. On the other hand, they may be more accepting of such errors if they know that the translator's father has recently died. The situation is identical (errors which need to be fixed), but the interpretation of the cause is entirely different, and this leads to an relatively different response in each case. The attributions that the project manager makes will influence whether the translator is used the next time for another job. To take the translator's point of view, Hansen (2008:261) writes:

> Giving and taking criticism is problematic for some translators and revisers. Also the thought of being constantly monitored seems to make translators particularly sensitive to criticism. Some translators contest the evaluation or do not like to hear about the revisions because they do not understand why so much has to be changed.

This uncomfortable reaction is explainable by attribution theory, and whether that discomfort even occurs in an individual can depend on that person's attribution style (that is, whether they tend to have a positive style or a negative one).

In an example from interpreting (Bartlomiejczyk 2007), trainee interpreters working between English and Polish, when listening to a recording of their own work, tended to be strongly self-critical of their own output:

> Both studies described here suggest that self-evaluation, especially focusing on negative aspects, is a natural activity for student interpreters. However, there remains a question as to how and to what extent this can be translated into actual improvement in the quality of students' interpretations. (2007:263)

Part of the key to *how* this criticism is used (i.e. for self-improvement or for self-flagellation) is found in how students explain the *causes* of the faults that they have made. This is the heart of attribution theory (and in the final chapter we investigate some ideas around training to respond in positive ways to translation feedback).

Further, freelance translators "may not receive any feedback on their work as a matter of course and may have to rely entirely on their own assessment of their work" (Thomson-Wohlgemuth and Thomson 2004:274). What processes do they use to assess their work, and how do they arrive at an overall emotional reaction to their work ('good', 'excellent', and so forth)?

To expound this more clearly, it is appropriate here to outline the components of Attribution Theory, and to see how they relate to actual behaviours and events.

2.2.1.1 Components of Attribution Theory

The following is an outline of the different components of Attribution Theory as applied to four "causal properties": *ability* (skill at doing a task), *effort* (energy put into doing that task), *task difficulty*, and *luck* (good or bad fortune influencing the outcome of a task). These causal properties are common attributions or explanations that people make for success or failure in a task, and represent the extremes of a continuum. We can see from Figure 2.3 that there are a number of components; a number of ways in which the cause of an event can be viewed (after Weiner 2006). There is the locus of control of the

cause, which is to a degree internal or external to the actor. Next, there is controllability of the cause, which is perceived as relatively controllable or uncontrollable by the actor. Finally, there is stability of the cause, which is to a degree stable or unstable.

It is perhaps unfortunate that Weiner uses the term *locus of control*, given that this term already applies to the similar but separate concept proposed by Rotter (1966). We use Rotter's definition in our research. Both Weiner and Rotter's terms essentially refer to the perceived cause of an event, but they have a different temporal focus, which will be explained in the locus of control section below.

Fig. 2.3. Weiner's theory of perceived causal properties of ability, effort, task difficulty, and luck

Causal Property:	*Ability*	*Effort*	*Task Difficulty*	*Luck*
Locus of Control:	Internal	Internal	External	External
Controllability:	Uncontrollable	Controllable	Uncontrollable	Uncontrollable
Stability:	Stable	Unstable	Stable	Unstable

To illustrate the theory more clearly, let us apply the theory to a translation situation, viewed from the translator's perspective. Let us suppose that a translator translates a job for a translation agency and is highly praised by the project manager. There are several ways that the translator can view the successful outcome.

Success can be seen as caused by *ability*, in which case the cause is seen as being internal (one's own ability), uncontrollable (level of ability—as distinct from actual performance—is not easily changeable), and stable (levels of ability generally do not change rapidly).

If success is seen as caused by *effort*, then the cause of success will be seen as internal (one's own effort and volition), controllable (the amount of effort invested is largely under one's own control), and unstable (levels of effort vary widely; in this case, the translator invested a lot of effort).

If success is seen as caused by the level of *task difficulty* (i.e. the job was an easy one), then the cause of success will be viewed as external (the easy nature of the job permitted easy success), uncontrollable (the translator had little control over whether an easy or difficult job was assigned to them), and stable (difficult or easy jobs will always be difficult or easy).

Finally, if the successful outcome is regarded as caused by *luck*, then the cause of success will be seen as external (luck comes from 'outside'), uncontrollable (again, the translator has little control over what job is assigned to them), and unstable (lucky events by definition occur unpredictably).

Another category, *globality*, is sometimes included in discussions of attribution theory. This is, simply put, whether a cause is considered to be global (e.g. lack of intelligence caused a failure) or specific (e.g. lack of practice with one particular activity caused a failure). However, Weiner (2006) contends that globality is not a consistent factor in attribution theory, and that, moreover, it is not cross-culturally substantiated, partly because a large proportion of attribution style work has been conducted in the United States (Weiner 2006:11). Thus, we will not consider it here.

The reader must bear in mind that these perceived properties of causality are not absolutes—they represent tendencies that have been observed. What is more, as we have just mentioned, they are not universal—cultural differences mean that people tend to interpret the causes of events in different ways. For example, one Canadian study found that Asian Indian and Caucasian children tended to interpret their own success and failure in different ways: Asian Indian children tended to make external attributions for success, but internal ones for failure, while Caucasian children had a tendency to make internal attributions for success and external ones for failure (Fry and Ghosh 1980). This means that Asian Indian children tended to see success as coming from outside forces, but failure as their own fault, while Caucasian children tended to see success as through their own ability, while failure was caused by outside forces. There are also differences in the approach to levels of effort, with one's own failure often being attributed, by Chinese students for example, to a lack of effort, an internal cause (Hau and Salili 1991). In the West, as a broad generalisation, failure is often attributed to external factors, perhaps in order to protect the individualistic ego from the unpleasant social and personal consequences of failure. Duval and Silvia (2002) in a U.S. study found that when people are particularly self-focused, they make internal attributions for their own success, and external ones for their own failure, although if they know or believe that they can improve, they tend to make more internal attributions (e.g. lack of effort) when failing a task. This is significant, as it shows that people can change their approach towards an investment of effort, which may have significant consequences for performance of work (job performance in the model shown in Figure 2.2). Consider the situation in which a new translator makes a choice between blaming

external factors for failing a translation test, and attributing that their failure was due to a lack of ability, leading to them subsequently investing more effort to increase levels of skill. The decision would be significant for their career.

Furthermore, attributions change depending on whether the actor or the observer is making them. A study of Korean and U.S. participants found a relatively strong instance of the *correspondence bias* (which also became known as the *fundamental attribution error* after Jones and Harris' (1967) seminal study), which is the tendency for observers to attribute causes of behaviours in others to others' personalities, rather than to allow for situational forces which also influence others' behaviour (Choi and Nisbett 1998). This bias seems to hold even across individualist and collectivist cultures (Krull et al. 1999), although some evidence suggests that it is stronger in individualist cultures and among older people (Blanchard-Fields et al. 2007). In contrast to judgements of others' behaviour, when individuals judge the causes of their own behaviour, they tend to allow for a much greater degree of external situational influence of their own behaviour—summed up in the phrase "the Devil made me do it".

Naturally, this affects how business relationships are conducted. Bernardin's (1989) study of supervisors and subordinates found that supervisors are apt to underestimate situational factors affecting their subordinates' job performance. However, he also showed that attributional style can be changed, and that supervisors can learn to make more balanced attributions, rather than unfairly attributing causes largely to a subordinate's personality.

One further aspect to consider is the difference between perceptions of *cause* and *responsibility* (and sometimes *blame*) for events. This can have an effect on the way in which the event is understood.

> A central and determining feature of the attribution literature has been the distinction between cause and responsibility or blame. Hence the paradox that although an *external* ascription can be made about the physical or psychological *cause* of an event, for example failure to achieve a goal, an *internal* attribution may be made concerning *responsibility* if the consequence could have been foreseen. (Furnham and Steele 1993:448) [italics theirs]

For example, a translator might fail to hand in a job on time. They might attribute the *cause* to an event (external—"snow brought down power lines") which was *responsible* for the delay (external—"the subsequent power cut meant that I couldn't do any work"), but they may still *blame* themselves (internal—"I should've bought more fuel for the backup generator sitting in the garage, but I foolishly didn't refill it with fuel during the

autumn when I had the chance"). Blame, although technically an emotionally-neutral action, is often considered as effectively synonymous with negative emotion, because emotion (often anger) is so often associated with laying of blame (Solan 2003:1010). In this sequence, analysis and perception of the cause comes first, followed by responsibility, and finally blame/culpability. Williams et al. (2006:618) summarise it as follows: "[C]ausal beliefs about an outcome influence perceptions of responsibility, which in turn influence attribution of blame and culpability".

In our study, we are more focussed on the emotional outcome of the perception of the whole package, which could be considered our personal emotional response to the perceived *summation* (the result of our cognitive algebra) of causality, responsibility and blame. Therefore, while we are aware of the differences between these components of attribution theory, and will refer to them when and if they appear, distinguishing between them is not the primary focus in this project. In other words, we are interested in the summation of perceptions of cause and responsibility, which is fundamentally what the attribution style questionnaire that we are using does.

Finally, it is worth noting that unlike self-efficacy and locus of control, which have a future orientation due to them being generalised expectations (see Sections 2.2.2 and 2.2.3), attribution style has a past-orientation, because it is part of the explanation and rationalisation of past events and behaviours.

2.2.1.2 Relationship between attribution style and depression

The attributed cause of success in our translation example mentioned earlier is important, because certain attribution styles are related with success, while other styles are related to depression.

For example, Anderson (1999) found that U.S. students showed the classical pattern of internal attributions for success and external attributions for failure, while simultaneously showing lower scores on depression and loneliness. In contrast, Chinese students showed a tendency towards external attributions for success and internal attributions for failure, representing the classical attributional difference between 'individualist' Western[7] and 'collectivist' Eastern cultures. Although Anderson (1999)

7. 'Western' is actually an overly loose term, given that many countries which are considered to exemplify the 'Western' construct are often incredibly diverse culturally and psychologically (e.g. United States), due to immigration. China, Japan, and Korea (often considered as typifying 'Asian' societies) are

makes the point that this self-serving attribution style of internal attributions for success and external attributions for failure is a Western phenomenon, he argues for cross-cultural validity of the results, and concludes that attributional style is an important mediating variable in loneliness and depression. He also collected evidence that Chinese students, because of a lack of a self-serving attribution style, suffered more from depression and loneliness (Anderson 1999).

With this in mind, we can see how a moderately self-promoting attribution style in a broadly Western context is potentially important for good professional performance and emotional self-management. In particular, the *Reformulated Learned Helplessness Theory* (Abramson, Seligman, and Teasdale 1978) predicts that certain attributional styles are more likely to encourage depression. As the authors state:

> When highly desired outcomes are believed improbable or highly aversive outcomes are believed probable, and the individual expects that no response in his repertoire will change their likelihood, (helplessness) depression results. […] The generality of the depressive deficits will depend on the globality of the attribution for helplessness, the chronicity of the depression deficits will depend on the stability of the attribution for helplessness, and whether self-esteem is lowered will depend on the internality of the attribution for helplessness. (Abramson, Seligman, and Teasdale 1978:68)

In other words, those with internal/stable/global attribution tendencies in their explanations of negative events are more likely to be depressed. This has been supported by a meta-analysis (Sweeney, Anderson, and Bailey 1986). In addition, the authors found a relationship between depression and attributions to external, unstable and specific causes of positive events. It is interesting to note that the dimension of control is not mentioned in the meta-analysis. This is perhaps because a lack of control tends to lead to blaming others or the situation, which tends to reduce depression and increase self-esteem, rather than the other way around (Sweeney, Anderson, and Bailey 1986:974).

2.2.1.3 Brewin and Shapiro's attribution scale and its subscales

In the present study, a number of attribution scales were investigated for possible use. Several of them had a number of problems which made them unsuitable, leading us to use a scale which focussed on how much participants took responsibility for positive

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relatively speaking far more culturally homogeneous, largely due to lack of any large-scale immigration. However, we will continue to use the term 'Western' here.

and negative outcomes, i.e. the locus of control and controllability factors that we saw in Figure 2.3.

The first of the problems with some of the scales was that they relied on a series of hypothetical situations; some positive, some negative. Each participant answered each hypothetical situation question using the same Likert-style questionnaire (which usually contained five to ten questions). The questionnaire was designed to tap into the different dimensions of attribution style.

One of the consistent weaknesses of this type of questioning is the internal reliability (or internal consistency) of the whole questionnaire (as measured by Cronbach's α [alpha]). Cronbach's alpha measures the degree to which question items tap consistently into a unifying underlying factor, being that construct that the questionnaire is attempting to measure (such as self-esteem, politeness, fear, and so forth). An alpha value of .70 or higher is often regarded as a signal of an internally reliable or consistent questionnaire (Peterson 1994), but most questionnaires of the type we are discussing did not surpass this criterion. D'Olhaberriague et al. (1996:2331) summarise the meaning of internal reliability in the following words:

> Internal consistency measures the variation within the assessment, ie, the degree to which the items measure one construct. It depends on the number of items in the scale and their correlation. Consistency is measured using the Kuder-Richardson formula or, when the number of responses is greater than two, with Cronbach's α (a correlation coefficient). Consistency is considered good if $\alpha > 0.8$ and excellent if $\alpha > 0.9$. Low values may indicate that more than one construct is present in the scale. High values may signify good internal consistency […]

Thus we can see that high reliability is a desirable quality to be found in a psychometric scale, because it shows that the different items in the scale are all measuring roughly the same thing, and that a lack of internal reliability adds uncertainty/error to the results of a questionnaire.

Another disadvantage of the 'hypothetical situation' type of attribution questionnaires is their length. For example, Furnham, Sadka, and Brewin's (1992) questionnaire contains ten hypothetical situations, each with nine questions applying. That equates to 90 questions for a respondent to answer. Similarly, Peterson et al's (1982) Attributional Style Questionnaire (perhaps the most widely used attribution style questionnaire of them all) had twelve hypothetical events, with five questions each, making a total of 60 questions to answer. It also suffers from relatively low internal reliability (Robins and

Hayes 1995). Based on these qualities, we decided that it would be easier to narrow the focus, in order to avoid the twin issues of low internal reliability and participant fatigue when dealing with such long questionnaires.

In summary, the weaknesses of the other attribution style questionnaires (excessive length and low internal reliability) that were investigated led to the use of the present scale, created by Brewin and Shapiro (1984). The scale focuses on the internal-external and controllability axes of attributional decisions, looking at how positive and negative outcomes are perceived in terms of internal personal responsibility or external 'other' responsibility. The scale contains 12 items, asking participants questions about how personally responsible they feel for particular positive and negative events in their lives. Six of the items are for positive events, and six for negative. They labelled the two factors that they found Responsibility for Positive Outcomes (RPO), and Responsibility for Negative Outcomes (RNO), and these are treated as two separate subscales in this study.

In the second administration of their test, the authors noted coefficient alphas of .72 for RPO, and .59 for RNO. These figures indicate that the scale is moderately reliable, but that RPO is measured more reliably than RNO. The test has been used subsequently (Bradley et al. 1992), although no coefficient alphas were reported. The low alpha value for RNO means that any result from it must be viewed with some scepticism. Nonetheless, the RNO value may provide a *general* indication of what is happening during negative event attributions.

This scale focuses on the *responsibility* component of attribution, which is potentially distinct from the *causal* dimension, although inextricably linked to it. In other words, participants are asked about where they see the locus of responsibility, which is often in the same place as the locus of causation, but not necessarily so. As mentioned earlier, in Section 2.2.1.1, we do not focus on distinguishing between causal locus and responsibility locus—instead we focus on responsibility locus as the ultimate outcome of an attribution process.

Fig. 2.4. Items in Brewin and Shapiro's (1984) attribution scale which represent the factors Responsibility for Positive Outcomes (RPO) and Responsibility for Negative Outcomes (RNO)

	RPO	RNO
Questionnaire items	Internal: c, d, e External: b, g, i	Internal: a, f, h, j, k, l

Figure 2.4 shows the two sub-scales that are present in Brewin and Shapiro's (1984) scale. Due to the fact that they represent two separate constructs, they will be treated as separate scales in the hypothesis section, and based on the evidence from the above study, in which the inter-scale correlation was r = .08, n/s (1984:46), we would expect to find no correlation between the two subscales (which in fact was what we found in both the pilot and main studies).

Note that items *b*, *g*, and *i* represent external responsibility for positive outcomes, while items *c*, *d*, and *e* represent internal responsibility for positive outcomes. Thus items *b*, *g*, and *i* were reverse-scored, which mean that higher values given on the questionnaire indicated greater RPO.

2.2.2 Self-efficacy

Self-efficacy is the second component of our psychological skill model. It can be defined as "belief in one's abilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands" (Wood and Bandura 1989:408). In other words, it is a measure of our belief in our own ability to do well in a particular situation. It is linked to locus of control (the perception of the relationship between action and result), because it is the confidence that we feel in being able to produce the appropriate action and thereby get the result we want (assuming that we have an internal locus of control and see a cause-effect relationship between our actions and the results). Intuitively, we can easily understand how fundamentally a belief in our own ability can influence the outcome of any task that we undertake. Self-efficacy is future-oriented, because it is our estimation of how we will do in a future situation.

Self-efficacy is an important predictor of actual performance on a task. For example, it has been found to have good predictive power in terms of job performance and job satisfaction. One meta-analysis of many different studies in the area found statistically significant correlations of .23 between generalised self-efficacy and job performance,

and .45 between generalised self-efficacy and job satisfaction (Judge and Bono 2001)[8]. Thus we would expect in the present research that significant correlations will be found between self-efficacy and the two job-related variables (and they were found).

One practical example of the application of self-efficacy theory is related to internet usage. One study investigated the relationship between internet usage and attitudes, and found that those with a low sense of self-efficacy surrounding internet use suffered from stress and self-disparagement when using the internet (Eastin and LaRose 2000). Of course, we should bear in mind that the internet was in its infancy at that stage, so general internet literacy was not nearly as high as it is at present. Another study (Tay, Ang, and van Dyne 2006) found that interview self-efficacy was positively correlated with interview success ($r = .23$, $p < .01$). In addition, in the same study, extraversion was also found to be related to interview self-efficacy.

In general terms, self-efficacy has been demonstrated to increase performance and motivation levels (Bandura and Locke 2003), and has also been linked to making more external attributions for failure (i.e. lower *responsibility for negative outcomes - RNO*) (Silver, Mitchell, and Gist 1995). Albert Bandura is the leading exponent of self-efficacy theory, so readers are referred to his book *Self-efficacy: The Exercise of Control* (Bandura 1997) for more information.

2.2.2.1 Chen, Gully, and Eden's New General Self-Efficacy Scale

In the pilot study, we decided to use the New General Self-Efficacy (NGSE) scale of Chen, Gully, and Eden (2001), which had two distinct strengths. The first was its high internal reliability (.86 and .90 on both of their tests) and the relatively low number of question items; just eight. Another study which used the same scale found an internal reliability of .82 (Chen, Goddard, and Casper 2004). These factors combined to form a good questionnaire for the current project, but another incidental factor in its favour was the number of works citing it (as at December 2008): 18 in PsychInfo, and 120 in Google Scholar. This was only effectively anecdotal, but it demonstrated that there was a level of interest in the scale, and that it had not become a research 'dead end'.

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8. The same principle appears to apply to self-efficacy as applies to locus of control: the more domain-specific the scale is, the better its predictive power within particular contexts (e.g. Pajares 1996). At the time of conducting the pilot study, we had not found a suitable work self-efficacy scale. Subsequent to the completion of the pilot study, we found a specifically work-oriented self-efficacy scale with good psychometric qualities, the Occupational Self-Efficacy scale (Schyns and von Collani 2002), which we used in the main study (see Section 4.2).

2.2.3 Locus of control

The third component of our concept of psychological skill is locus of control, which has its origins in the 1960s. Rotter (1966) took the view that how someone perceives, for example, a positive reinforcement for a behavioural action, depends on whether they see the reward as happening because of their own behaviour, or happening in spite of it. If rewards are viewed as happening because of one's own actions, then this indicates an *internal* locus of control. We might call such people *instrumentalists*, because they see their behaviour as instrumental to achieving the reward. If rewards are viewed as occurring in spite of any behaviour (including 'non-behaviour', i.e. 'doing nothing'), then this indicates an *external* locus of control. We might call such people *fatalists*, because they see the reward as happening in spite of anything that they might have done.

In somewhat technical terms, Furnham and Steele explain locus of control this way (1993:444):

> Locus of control is conceived of as a belief that a response will, or will not, influence the attainment of reinforcement. However, locus of control is not an expectancy concerning a particular type of reinforcement, but a 'problem-solving' generalized expectancy, addressing the issue of whether behaviours are perceived as instrumental to goal attainment […]

To put this into plain language, do I believe that what I do (my response) actually helps me (that is, is it instrumental) in receiving the goal (reinforcement) that I want? Readers will notice the response-reinforcement terminology, and should keep in mind that this theory was originally formulated at the height of behaviourism's influence on psychology (the classical *stimulus-response-reward/punishment* model of explaining human and animal behaviour).

Locus of control started out as a generalised concept, but some theorists have argued that it may be domain-specific, including Rotter himself (1975:60). Thus there is the suggestion that locus of control may vary depending on the area of life which is under focus. For example, a person may have an internal locus of control around matters of finance and money, but may be quite external (fatalistic) in matters of romance, seeing romantic success as essentially something that 'just happens' without being tied to any particular actions on their own part. In this case, they would perceive their dating behaviours as being largely unrelated to romantic goal attainment.

To illustrate this domain specificity further, we will look at Charlton's (2005) study, in which a computing control scale was created. One of the findings was that very few

participants had an external LoC when dealing with computers, largely because people have changed their attitudes towards computing in the last decade or so.

> [E]xperience appears to have taught most people that computing outcomes are usually controllable if one has a deep enough knowledge of computers, despite the fact that they may sometimes be faced with uncontrollable events such as crashing or hanging. (Charlton 2005:809)

A general LoC scale would probably not have caught this aspect. Life events have much more unpredictable outcomes in many respects. Thus a programmer with a highly internal locus of control regarding computers may quite conceivably have a highly external locus of control regarding other areas of life. As Charlton says:

> [C]omputers are objects upon which physical actions (e.g. pressing buttons and keys) usually have a demonstrable effect, and therefore if one knows which actions to perform one will be largely successful. This contrasts with the situation regarding life occurrences such as health, occupational progression etc. Here, the factors that influence outcomes can be unpredictable and unknown, are often demonstrably so, and experience and observation often tells people that, despite their best efforts at control, certain outcomes might occur. (Charlton 2005:810)

When reflecting on this issue, it can be argued that it is better to use as specific a scale as possible for measuring the area that one is working on. Conversely, we should be careful about generalising too widely from the results of a specific scale (Furnham and Steele 1993:445-446).

Finally, as mentioned previously, locus of control *is* indirectly related to attribution style (which also focuses on the perceptions of causation as internal or external), but there is one important difference: Locus of control (along with self-efficacy) focuses on future expectations of outcomes, while attribution style focuses on explanations of past outcomes (Furnham and Steele 1993:447). As they state:

> There is clearly overlap between the locus of control and attribution of cause literature. The major and very important difference between these two is that while attributional measures are concerned with the *causes of past events*, locus of control measures are concerned mainly with the *expectation of future events*. […] Locus of control is frequently associated with perceived cause but not responsibility (for future events), and it may be that the two operate quite differently. Locus of control beliefs are partially but not wholly the *product* of causal attributional beliefs about past events, and should be distinguished conceptually from both causal beliefs and responsibility beliefs, to which there is no reason to believe they should be related. (Furnham and Steele 1993:447-448) [italics theirs]

2.2.3.1 Spector's Work Locus of Control Scale and its subscales

In this light of the above discussion on domain specificity, we decided to use Spector's (1988) Work Locus of Control Scale (WLCS). Designed specifically for measuring locus of control in the general work context, this 16-item questionnaire also features high coefficient alphas (ranging from 0.75 to 0.85 with the six samples that he initially tested it with). It appeared to be the most suitable from among any of the other possibilities.

The scale has also been used by other researchers (Daniels and Guppy 1992; Macan, Trusty, and Trimble 1996). Daniels and Guppy (1992) considered that the scale might have a two-factor structure, which they labelled *external agents control* (external LoC due to outside forces) and *personal control* (due to one's own efforts); Spector's scale was originally considered to be uni-dimensional[9] (Daniels and Guppy 1992:321), although Spector himself (1992) conducted factor analysis and noted that there were two factors, which he called *internal* and *external*. However, Daniels and Guppy do suggest that because of the high coefficient alpha that they found with their professional sample (0.82), the scale may be acceptable as a uni-dimensional scale in professional contexts. Nonetheless, we have treated it here as a two-factor scale, and recent work suggests that at least two factors give the best fit; certainly better than just one factor (Oliver, Jose, and Brough 2006).

Macan, Trusty and Trimble's (1996) work with the scale also suggests that there are two factors—*internal* and *external*. For both the internal and external subscales, a three-sample study gave coefficient alphas of between 0.72 and 0.87, indicating good internal reliability. In a sample of undergraduates, they found a skew in the data towards internality, while in samples of MBAs and managers they found balanced data. This information will be considered in the analysis of our project's results.

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9. Dimensionality refers to how many axes a questionnaire measures. In this case, uni-dimensional would mean that the scale measures just one bipolar dimension. Bi-dimensional means that a scale measures two dimensions—in this case *internal* (high and low) and *external* (high and low). This means that a person could potentially score highly on both internal and external dimensions (Macan, Trusty, and Trimble 1996:356). Looking at the correlations in the results will tell us if this is so, and in fact we do have a bi-dimensional scale.

Fig. 2.5. Items in Spector's (1988) Work Locus of Control Scale (WLCS), showing items measuring the *internal* and *external* control factors

	LoC Internal	LoC External
Questionnaire items	1, 2, 3, 4, 7, 11, 14, 15	5, 6, 8, 9, 10, 12, 13, 16

Given that it is not within the scope of the present study to conduct factor analysis on scales, it will be assumed, based on the evidence previously mentioned, that the scale contains two factors—*internal* and *external* control—and that the two subscales each tap into one of these factors. The items making up the two subscales are shown in Figure 2.5.

For those readers who are interested, note that to achieve a complete locus of control score, items 1-4, 7, 11, 14, and 15 are normally reverse-scored if all items are being used as a single scale, and that higher scores equal more externality, consistent with Rotter (1966). However, we will be treating them as two separate scales, *LoC Internal* and *LoC External*. Macan, Trusty and Trimble (1996) and Spector's (1992) work indicates that we should expect to see either no correlation or a negative correlation between the two subscales (in fact we do not find a statistically significant correlation), thereby confirming that they indeed measure two separate constructs.

Chapter Three – Hypotheses, Design, and Methodology

In this section, we will introduce the design of the study and discuss the hypotheses that we expect to be supported. We also show and analyse the structure of the interview questions that will be employed.

We additionally present an outline of the methodology that we have used. It involved both quantitative and qualitative research and analysis methods. The quantitative methods were standard statistical analysis techniques, including analysis of descriptive statistics (means, percentages) and correlational and regressional techniques for analysing relations between variables. The qualitative techniques consist of thematic analysis of interview transcripts in a search of particular themes that are hypothesised to be present.

3.1 Hypotheses of the study

As we can see in Figure 3.1, there are a number of relationships that we predict will become apparent between various variables. This leads us to formulate a number of hypotheses that we expect to find between key variables representing their underlying constructs.

The key and overarching questions that we want to answer are: 1) *does sufficient evidence of a relationship between psychological skill and professional success show itself in the network of correlations that we expect to find*, and, further, 2) *can we use elements of psychological skill as a basis for predicting elements of professional success in translators* (using regression, in this case)? Additionally, 3) *do the interview data provide at least general support for the statistical findings that we expect to observe*?

Figure 3.1 shows the expected statistically-significant correlations for the pilot study (the letter being the hypothesis code, with + or – signs indicating the expected positive or negative nature of the correlation). There are also some hypotheses specific to the main study, which are discussed in Section 3.1.2. These networks will, we expect, provide some evidence for the degree of relationship between psychological skill, as defined previously, and various measures of professional success.

Fig. 3.1. Table of hypothesised correlational relationships between key variables

	Years in translation	Jobs per week	Hours worked per week	Percent translation work	Identity	Income	Percent International work	Advertising type count	Tool frequency	Tool skill	Tool confidence	Satisfaction	Self-efficacy	LoC External	LoC Internal	RNO	RPO
1) Age	A +	B +				C +							D +				
2) Years in translation					A +	B +							C +				
3) Jobs per week			A +	B +	C +	D +		E +	F +	G +	H +	I +	J +	K -	L +	M -	N +
4) Hours worked per week					A +	B +		C +	D +	E +	F +	G +	H +	I -	J +	K -	L +
5) Percent translation					A +				B +								
6) Identity						A +						B +					
7) Income								A +	B +	C +	D +	E +	F +	G -	H +	I -	J +
8) Percent Intl work													A +				
9) Advert type count													A +				
10) Tool frequency										A +	B +		C +	D -	E +	F -	G +
11) Tool skill											A +		B +	C -	D +	E -	F +
12) Tool confidence													A +	B -	C +	D -	E +
13) Satis-faction													A +	B -	C +	D -	E +
Self-efficacy														-	+	-	+
LoC External															-	+	-
LoC Internal																-	+
RNO																	-

3.1.1 Hypotheses applying to pilot study and main study

These hypotheses are shown visually in Figure 3.1. They are based on three main types of evidence: 1) prior research findings (meta-analyses where possible, and we should

bear in mind that these may be extrapolations from patterns observed for organisational employees), 2) simple logical reasoning (e.g. hours per week and jobs per week are highly likely to be positively correlated), and 3) anecdotal observations applied to some of the translation-specific hypotheses, given that there is effectively no prior psychological research on translators on which to formally base such hypotheses.

We will explore each hypothesis now. Each group corresponds to a row in Figure 3.1 (so that the expected relationships are presented only once), and each row is presented in the order that it appears in the table. With the exception of the **Group 9a** hypothesis, all hypotheses in this section apply equally to the pilot study and the main study.

Group 1: We expect older translators (***a***) to have generally worked longer in the industry, (***b***) to be busier, perhaps due to being more professionally established due to having been working longer, (***c***) to have more income (Ng et al. 2005), and quite possibly (***d***) to have higher self-efficacy, perhaps due to the accumulation of past successful experiences in their professional lives (Judge et al. 2007).

Group 2: For those translators who have been longer in the industry, we would expect them (***a***) to have a greater sense of identity as a translator, (***b***) to have more income due to being more established and commanding higher rates (Ng et al. 2005), and (***c***) to have higher self-efficacy (either as a result of their successes, or as itself a partial cause of their successes) (Judge et al. 2007).

Group 3: We expect those with a greater number of jobs per week (***a***) to be generally working more hours per week, (***b***) to have an increasing proportion of translation work rather than other types (simply because they are reporting *translation* jobs per week), (***c***) to have a stronger professional identity due to the amount of time that they are investing in the profession, (***d***) to have more income, (***e***) to have used more different types of advertising, (***f***) to use their translation tools more often, if they use them, (***g***) to be more skilled and (***h***) confident when they do use them, (***i***) to have generally greater job satisfaction, (***j***) to have higher self-efficacy, (***k*** & ***l***) to have a more internal locus of control, and finally (***m*** & ***n***) to take less responsibility for negative outcomes and more responsibility for positive ones (e.g. Seligman and Schulman 1986).

Group 4: We would expect those working more hours per week (***a***) to have a stronger professional identity as a translator, (***b***) to have more income (Ng et al. 2005), (***c***) to have used more different types of advertising, (***d***) to be using their translation tools more often and (***e*** & ***f***) to be feeling more skilled and confident in the use them, (***g***) to be

more satisfied in their work (generally speaking; someone doing a 50-plus hour week may not be particularly satisfied) (Ng et al. 2005), (***h***) to have higher self-efficacy, (***i*** & ***j***) to have a more internal locus of control, and (***k*** & ***l***) to take less responsibility for negative outcomes and more responsibility for positive ones (e.g. Seligman and Schulman 1986).

Group 5: We would expect those translators with a higher proportion of translation work (***a***) to have a stronger identity as a translator, and (***b***) to use translation tools more often.

Group 6: We expect those with a higher sense of identity as a translator (***a***) to have more income, and (***b***) to be more satisfied in their work as a translator.

Group 7: We expect those who earn more income from their translation work (***a***) to have used more different types of advertising, (***b***) to be using their tools more frequently, (***c*** & ***d***) to feel more skilled and confident in the use of them, (***e***) to be more satisfied in their work, (***f***) to have higher self-efficacy (Judge 2009), (***g*** & ***h***) to have a more internal locus of control (Ng et al. 2005; Judge 2009), and (***i*** & ***j***) to take less responsibility for negative outcomes and more responsibility for positive ones (e.g. Seligman and Schulman 1986).

Group 8: We expect that those who have a higher proportion of translation work from overseas (***a***) to have a higher level of self-efficacy.

Group 9: We expect that those who do a wider range of different types of advertising for their translation business will have (***a***) higher self-efficacy.

Group 10: We expect those who use their tools more often (***a*** & ***b***) to have higher skill and confidence with them, (***c***) to have higher self-efficacy (Deng, Doll, and Truong 2004), (***d***) to have a more internal locus of control (Charlton 2005), and (***e*** & ***f***) to take less responsibility for negative outcomes and more responsibility for positive ones.

Group 11: We expect those with higher self-ratings of translation tool skill (***a***) to have more confidence in using them, (***b***) to have higher self-efficacy (e.g. Deng, Doll, and Truong 2004), (***c***) to have a more internal locus of control (Charlton 2005), and (***d*** & ***e***) to take less responsibility for negative outcomes and more responsibility for positive ones (e.g. as explored by Turner, Turner, and van de Walle 2007, in their work on attributions with older people and technology).

Group 12: We expect those with higher self-ratings of translation tool confidence (***a***) to have higher self-efficacy (e.g. Deng, Doll, and Truong 2004), (***b***) to have a more

internal locus of control (Charlton 2005), and (***c*** & ***d***) to take less responsibility for negative outcomes and more responsibility for positive ones (e.g. Turner, Turner, and van de Walle 2007).

Group 13: Finally, we expect those with higher levels of job satisfaction ***a***) to have higher self-efficacy (e.g. as found by McNatt and Judge 2008, with organisational employees), (***b***) to have a more internal locus of control (Spector 1988; Macan, Trusty, and Trimble 1996; Ng et al. 2005), and (***c*** & ***d***) to take less responsibility for negative outcomes and more responsibility for positive ones (Furnham, Brewin, and O'Kelly 1994).

Psychological scales: We expect that the two scales that measure psychological 'low-skill'—being *Responsibility for Negative Outcomes* and *Locus of control External*) will negatively correlate with the others (*Self-efficacy*, *Responsibility for Positive Outcomes*, *Locus of control Internal*). We also expect that these last three scales will correlate positively with each other, due to the reasons discussed in Section 2.2.

3.1.2 Hypotheses applying to main study only

In this section, we discuss the hypotheses applying to the main study specifically, which are not shown in Figure 3.1. Group 15 involves the career motivation scale, which was new in the main study.

Group 14: We expect that those with enough work or too much work (i.e. with answers to Question 13 which indicated this situation) would (***a***) have increasing identity as a translator, (***b***) would be more likely to be satisfied with the hours they worked, or want fewer, (***c***) to have more income, (***d***) have higher satisfaction, (***e***) have higher occupational self-efficacy, (***f***) have lower locus of control external ratings, (***g***) have higher locus of control internal ratings, (***h***) have lower responsibility for negative outcomes ratings, (***i***) have higher responsibility for positive outcomes ratings, and finally (***j***) have higher career motivation ratings.

Group 15: We expect that those with higher career motivation ratings would (***a***) have more jobs per week, (***b***) be working more hours per week, (***c***) have a stronger identity as a translator, (***d***) have more income, (***e***) have more satisfaction, (***f***) have higher levels of occupational self-efficacy, (***g***) have lower locus of control external ratings, (***h***) have higher locus of control internal ratings, (***i***) have lower responsibility for negative outcomes ratings, and (***j***) have higher responsibility for positive outcomes ratings.

Regression hypotheses: We expect that regression models will be able to be created that will allow us to predict income, job satisfaction, work-hours dissonance, and translation tool usage. They should contain a mixture of work-related variables and psychological skill variables, and at least one psychological skill variable should make a statistically significant contribution to prediction. The models should be of suitable quality by the statistically-based quality control criteria which will be presented with their results.

3.2 Research design

The most fundamental elements of this research are that it has a pilot study, in which we test the methodologies and make sure that the results are of good quality, and a main study, which follows on from the improvements and observations performed on the pilot data. This two-part structure enables us to refine and improve the quality of the results (Moser-Mercer 2008).

The design uses a questionnaire for quantitative analysis, and interviews for qualitative analysis (see Section 3.4).

The quantitative section uses an observational/correlational cross-sectional single-measure design, using a 70-item questionnaire designed to measure participants' responses to a number of different factors, outlined below in tabular form. It is cross sectional because we are comparing individuals within a group, while 'single-measure' refers to the fact that we measure data from each participant only once (except for those who were interviewed).

Some of the variables were used in descriptive analysis only (see Sections 4.1.1 and 5.1.1), while others were used in a statistical analysis of their interrelationships in correlational form (see Sections 4.1.2.2 and 5.1.2.2).

Readers are reminded that participants were self-selecting (they chose to participate and were not randomly selected), and that interview participants were chosen by us to try to represent as wide a range of profiles as possible, even though we did not have a large pool to choose from. This could potentially introduce biases, but the arguments against problematic bias are careful participant selection and the fact that the interview data are not being used as the primary foundation of our psychological skill model. These data are being used mainly for descriptive purposes and secondary support.

Fig. 3.2. What the items of the study’s questionnaire measure

<table>
<tr><th>Item numbers</th><th>What the items measure as subgroups</th><th colspan="2">What the items may indicate as a composite</th></tr>
<tr><td>3, 4, 5, 6</td><td>Demographic information</td><td colspan="2"></td></tr>
<tr><td>10, 11</td><td>Professional identity</td><td colspan="2" rowspan="2">Focus towards translation as a career, focus towards full-time or part-time</td></tr>
<tr><td>12, 13</td><td>Professional intention (used to create work-hours dissonance, in main study)</td></tr>
<tr><td>7, 8, 9</td><td>Work experience and level of busyness</td><td rowspan="3">Externally-judged professional success</td><td rowspan="5">Professional success / job performance</td></tr>
<tr><td>14, 15</td><td>Income</td></tr>
<tr><td>16, 17, 18, 19, 20, 21, 22</td><td>Work-type profile and advertising</td></tr>
<tr><td>23, 24, 25, 26, 27, 28, 29</td><td>Translation tool usage and attitudes towards them</td><td>Technological professional success</td></tr>
<tr><td>30 (5)*</td><td>Job satisfaction</td><td>Internally-judged professional success</td></tr>
<tr><td>31 (8)*</td><td>Self-efficacy</td><td colspan="2" rowspan="4">Psychological skill</td></tr>
<tr><td>32 (16)*</td><td>Locus of control (work)</td></tr>
<tr><td>33 (12)*</td><td>Attribution style</td></tr>
<tr><td>34 (12)*</td><td>Career motivation (main study only)</td></tr>
</table>

** Numerals in parentheses refer to the number of items within the particular question.*

We can see that the measures form a number of groups, which can be broadly classified into three major groups—focus towards the career, professional success, and psychological skill.

Incidentally, the bold-italic formatting on some of the professional success questions indicates that they will be used in the statistical analysis as direct measures of success, while we suspect that several of the remainder are probably mediator variables, which may in some cases mediate the relationship between psychological skill and success. See Section 4.1.2.2 for further explanation of this difference. Some variables are also included to augment the descriptive statistics that we discuss in Chapters 4 and 5.

3.2.1 Rationale for focusing on freelance translators

The main reasons for focusing on freelance translators alone, rather than on a mixture of freelancers and in-house translators, are described here. The first of these was that the

potential isolation of freelancing exposes freelancers to the possible extremes of both emotional and experiential challenges (see, for example, Hesmondhalgh and Baker 2011:37-38). Isolation, problems with emotional self-management, the need for networking, and the lack of a clear feedback loop from clients/agencies can all have effects on freelancers, which could be argued to be more salient than those experienced by organisational members who belong to a clear 'team', often with formalised support structures in place. In terms of personality aspects, we see this described here in Section 5.2.2.8, where Participant 2M describes her desire (and that of other freelancers whom she knew) to share a work space, to reduce the effects of isolation. A further example is the situation discussed by Henninger and Gottschall (2007), who refer to the in-between situation that media industry freelancers find themselves in, in which the desire for both job and income security can tend to encourage a concurrent desire for collectivisation (even if only of the irregular or electronically-mediated type), in order to reduce the isolation of pure freelancing to a certain extent. As a related issue, they also refer to the potential problem of 'de-limitation' (2007:45) as the situation that can occur when the boundaries between work and the 'rest of life' become uncertain, arguing that this may have a negative effect on freelancers, who are sometimes (but not always) viewed as 'always working' (e.g. Sadler, Robertson, and Kan 2006).

Regarding the question concerning why the particular translators' organisations were chosen, the answer is that we made a decision to investigate freelancers in established and mature markets, which we felt were represented by New Zealand, Australia, Japan, Germany, Switzerland, and Spain. These are all industrialised, developed nations, using a variety of dominant languages, with mature translation markets that have been established for a number of decades. Additionally, they all possess established professional associations for translators. There was also the desire to collect data that could complement existing studies of the translation industry within those markets, particularly in terms of the descriptive work-profile data.

Having established the rationale for focusing on freelance translators, we will now look at the issues of research reliability and validity, before analysing each of the groups of variables in the quantitative section of the study.

3.2.2 Issues of reliability and validity

The issue of reliability and validity of research results has always been a concern to researchers, particularly those investigating human behaviour.

In our case, we address firstly the issue of reliability by making sure that we use psychometric scales that have been used previously, with published reliability results (see Sections 2.2.1.3, 2.2.2.1, and 2.2.3.1). Additionally, we have also performed our own internal reliability tests with each of the scales (in the form of Cronbach's alpha tests; see Sections 4.1.1.3 and 5.1.1.3), with reasonable results overall, despite some issues with the Responsibility for Positive and Negative Outcomes scales.

Validity is a more difficult issue to deal with, as it can sometimes be very difficult to know whether we are actually measuring what we set out to measure, rather than measuring something else. One of the most intuitive (but not always) of the validity types is *face validity*, which is simply a judgement of whether a scale looks like it will measure what it is supposed to measure. The degree of face validity can, however, be varyingly defined depending on whether one asks the general public, or someone with experience in psychometrics (Nevo 1985). Other methods for determining validity can be statistical, such as high correlations with closely related, already-tested scales (*convergent validity*), indicating that the scale of interest measures data in a similar area (e.g. Demerouti et al. 2003). There are various other types of validity in addition to these two (Brewer 2000). While there may always remain the possibility of doubt, the validity of the psychometric scales used in this research should be sufficient, based on the following evidence. Firstly, they were all designed by practising psychologists, with the theoretical knowledge and experience required for formulation of psychometric scales. Secondly, they have been used in at least one other study apart from the initial testing study, providing further opportunities to test their validity. Thirdly, we see statistically significant correlations (in the expected directions) in our own data, with what we consider are related constructs, lending evidence to the idea of convergent validity.

Lastly, there is the issue of *ecological validity* (and a closely-related cousin, *external validity*—the degree of generalisability of findings), which is the degree to which the findings of a particular piece of research are representative of the 'real world'; i.e. a representative set of observations of real participants in typical conditions (Brewer 2000:11-12). Although experimental studies have traditionally been criticised for their possible lack of ecological validity (see e.g. Banaji and Crowder 1991 for a brief but

lively discussion on this issue), it is also an issue which should concern any theoretical researcher. Epistemologically-speaking, there is no concrete method to 'prove' ecological validity, as the research setting is always subject to some biases, unquestioned foundational assumptions, over-specificity of findings (i.e. not generalisable to the degree that we hoped for), unknown factors, and so forth. In other words, there will always be a disjunct of some sort between the knowledge that is presented in a research project, and the degree to which that knowledge maps onto (or is descriptive of) 'reality'. Our aim is to minimise the possibility of this. Studies such as ours, using correlational and semi-structured interview methodology, generally allow for higher confidence in ecological validity than tightly-controlled experimental studies, but can nonetheless still be affected.

3.3 Structure of the questionnaire sections

In this section we will discuss the groupings (the hypothesised composites) that we consider each group of questionnaire items will be probably measuring.

One important aspect of our research design we will mention here. We remind the reader that in no way does a statistically significant *correlation* by itself indicate *causation*. Variable A may cause changes in Variable B, or vice versa, or it may be that some third known or unknown variable causes changes in both. In some cases, we can make guesses about causation due to the *temporal sequence* of events, in which we might say that A possibly causes B because A happens before B—see Sirkin (2006:22-25) for a good explanation of this. In our case, there is often no clear temporal sequence, so we are only making educated guesses as to what might be happening between the variables. More research will be required to uncover more detailed information, and here the interviews will be of some assistance.

We also have some overlap of data categorisation, meaning that the structure of dependent and independent variables is not always entirely clear-cut, as this project does not use experimental methodology. Our success variables are labelled for convenience as dependent variables, and psychological skill variables are labelled as independent (i.e. we believe that they probably influence the professional success variables), but some work-related variables are occasionally both.[10] Again, independent

10. The difference between independent (IV) and dependent variables (DV) is explained as follows: "The DV refers to the status of the 'effect' (or outcome) in which the researcher is interested; the independent variable refers to the status of the presumed 'cause,' changes in which lead to changes in the status of the

and dependent labels do not categorically represent cause and effect, although we may have some suspicions as to how the relationships might work.

3.3.1 Professional focus

Focus towards the career is the extent to which an individual desires to work as a translator. This can be measured in terms of the ideal number of hours that a person would like to work, and indicates either a full-time focus, or a part-time one. For example, home-based mothers or fathers may only wish to work a few hours every week, while leaving time for child-care. Those with a 'portfolio career' (Fraser and Gold 2001) may also wish to work just part-time, while working simultaneously on another career component. The idea of career being a full-time occupation has diminished to a great degree, and part-time work has become more accepted, for a wide variety of reasons, some involuntary, some voluntary (Maynard, Thorsteinson, and Parfyonova 2006). Thus there cannot be any consideration of levels of professional success (which are partly determined by the number of hours that a person spends working) without consideration of the number of hours that a person *wants* to spend working, and whether they consider that they have too little, enough, or too much work. By analysing the intention of participants, we can decide whether their part-time status might be voluntary or involuntary. The analysis of work-hours dissonance, in Section 5.1.2.13, gives more detail on this.

3.3.2 Professional success

In the present model, we can conceptually divide professional success into three subsections, which represent three sub-components.

3.3.2.1 Externally-judged professional success

The first component is externally-judged professional success. In summary, this is based on generalised social judgements of what would commonly be considered 'successful' when analysing or even casually considering someone's career. Common indicators are

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dependent variable […] any event or condition can be conceptualized as either an independent or a dependent variable. For example, it has been observed that rumor-mongering can sometimes cause a riot to erupt, but it has also been observed that riots can cause rumors to surface. Rumors are variables that can be conceived of as causes (IVs) and as effects (DVs)" (Rosenthal and Rosnow 1991:71).

income (which is a measure of recognition of the value of someone's work), hours of work and work output, as well as seniority, job title, responsibility and rate of promotion (although these are largely traditional organisational career success markers). In freelancing terms, the number of jobs that one is given per week is also an indicator—and bad quality work often means that this number would drop quite quickly as word gets around, so we expect it to represent (at least to a certain degree) a fairly consistent measure of success.

However, these external markers are not alone sufficient for a full and complete definition of success. In terms of separating these externally-observable markers from what people themselves feel about their career, Sturges points out that (1999:240) "career success consists of a subjective internal dimension, as well as the objective external perspective from which it is generally viewed". This indicates that success is more than simply being seen from the outside and judged by traditional criteria, and that they are distinct types of success, with their own interrelationships (e.g. Abele and Spurk 2009).

3.3.2.2 Internally-judged professional success

Professional success is not only the profile that others expect to see in a professional person (as in externally-judged professional success), but also how professionals themselves feel about what they have achieved and what they are doing. In these terms, it is not just about whether someone has more work and more money than they can handle, but about how satisfied they feel about this work, and about whether they have reached their own criteria for success. This is where the measure of job satisfaction helps us to decide how successful a person is [this has been labelled *subjective career success* (e.g. Dries, Pepermans, and Carlier 2008:254-255)]. This also relates to focus, in terms of individual freelancers having a career goal and achieving it. If, for example, a person only wants to work 10 hours per week as a freelance translator, and they achieve it with high job satisfaction levels, then we can fairly state that they are successful, at the very least as defined by themselves.

In our study, our measure of internally-judged success was job satisfaction, measured using five items from Brayfield and Rothe's (1951) *Index of Job Satisfaction* (items 4, 7, 13, 14, and 17, with very minor rewording), as used by Judge, Bono, and Locke (2000).

The authors noted a coefficient alpha of 0.89 (Judge, Bono, and Locke 2000:242), which indicates more than sufficient internal reliability for our purposes.

3.3.2.3 Technological professional success

This is the attitude towards and use of advanced translation technology. By advanced translation technology, we mean those translation tools that are not necessarily used every day (such as word processors, internet browsers, and email software), but rather those that improve productivity, broaden the scope of available work, and require a reasonably large investment of time and effort into learning how to correctly operate them. There is also a relationship here particularly with self-efficacy, because those with higher self-efficacy (at least in the domain of computer use (Wilfong 2006)) tend to be more adventurous about attempting to use tools outside of their immediate field of expertise, tools that will, nonetheless, often increase their productivity and output. In a related fashion, Translation Memory users with high levels of self-rated technological skill also rate Translation Memories as more useful to their work, in such areas as increased productivity (Dillon and Fraser 2006:74-75). In the present study, technological professional success will be practically measured through the frequency of translation tools usage.

It is important to note that we are not suggesting that those who do not use translation tools are not successful. It is rather that, as explored in the introduction, many areas of translation are becoming increasingly technologically-influenced, and it seems reasonable to suggest that translation tool usage reflects involvement in the localisation industry. Involvement in the localisation industry would be significant because it represents the subsection of the translation industry with the single largest volume of content to be translated, and because it also could be argued to represent the cutting edge of modern translation, in terms of technological involvement, complexity of procedures, and the professionalism required.

3.3.3 Psychological skill

As outlined earlier (Section 2.2), psychological skill is made up of a composite of three constructs: *attribution style*, *locus of control* and *self-efficacy*. The three scales used to measure these constructs are broken into five subscales, being *Self-efficacy*, *Responsibility for Positive Outcomes*, *Responsibility for Negative Outcomes* (both

measuring attribution style), *Locus of control Internal*, and *Locus of control External* (both measuring work-related locus of control). In the main study, we also included a scale on *career motivation* (see Section 3.6.1.2), in an attempt to show the degree to which our participants focused on and were involved in their translation career.

3.4 Interview design

The design of the interviews was semi-structured, the advantage being that there was a list of preset questions, which in the words of Drever (1995:18) is "important because it guarantees consistency of treatment across a set of interviews, which allows you to compare people's answers to questions which you have posed in the same way to everyone". This ensures that there is a measure of consistency, even though the participants and other external factors (such as the environment, participant and interviewer's moods, etc.) are variable.

This design meant that there was an interview schedule, with preset questions designed to elicit information on the areas of interest. The participant was asked each of these questions in turn, and was given the opportunity to speak freely. During each question period, unclear issues, terms, meanings, etc. were clarified by the use of subsequent probing and clarifying questions.

The interviews were an attempt not only to provide additional support to the findings of the quantitative section, but also to allow the participants to tell their own story in their own words. The methodology of the interviews is based on that of Rubin and Rubin (2005), using the tree-and-branch method, which allows for equal coverage of the different areas of focus (Rubin and Rubin 2005:146).

The procedure for coding the interviews was designed to be qualitative. This means that the data was analysed for the qualitative presence and strength of concepts as they appeared. A coding system was used, in which the presence of the concept was first identified, either if it appear as explicitly mentioned, or if it appeared as obliquely mentioned. As a measure to preserve validity, a conservative analysis was aimed for, meaning that if there was significant doubt about what a participant was referring to, then a particular concept would not be marked as present. After the concept was identified as present, a qualitative estimate was made in each case to indicate what might be the strength or nature of the particular concept in the participant.

No attempt was made to simulate a quantitative approach. In other words, it was not considered relevant if the concept appeared once or twenty times. We considered that to be the job of the quantitative analyses. The main focus of analysis was on the nature and subjective strength and effects of the concept.

The technique that we are using could be compared to some elements of the theoretical approach of radical behaviourism—we are essentially interested in what is observable, rather that digging too deep into discourse analysis. Radical behaviourism, as proposed by Skinner, posits that human cognition is essentially unobservable and therefore unmeasurable, and as such is of little scientific interest. Only behaviour itself is observable from the 'outside', so the study of humans, in Skinner's view, was reduced to observable (i.e. environmental) stimuli and observable behavioural responses to those stimuli (Graham 2007). Although radical behaviourism is rather out of fashion these days (particularly since the 1970s 'cognitive revolution'), nonetheless this particular paradigm influences us here. Therefore the approach that we take to analysis of the interview data is to try to avoid 'reading too much between the lines' of the dialogue that we have been given by participants, and to focus initially and primarily on the actual data apparent at the surface.

No qualitative methodology undertaken by a single researcher is foolproof, but we attempted to get the best-quality data possible by using this method, which we consider to be theoretically sound, even if not necessarily perfectly executed here.

3.4.1 Interview questions

The interview questions were designed to provide more detailed information about the psychological factors affecting participants.

The following questions were asked (as set out in Figure 3.3), with the expectation that they would tap into the indicated underlying constructs.

The questions were not intended to be grouped by type, but rather to occur in a 'natural' order that allowed the participants to tell their story more or less chronologically, beginning at the beginning and ending with a prospective look at the future. The order of the questions in Figure 3.3 is that order in which they occurred in the interview itself.

In addition, redundancy was built in, the idea being that one underlying construct would generally be approached by at least two questions. This, just like with the quantitative

scales, allowed some margin for error, in terms of compensating for possible participant misinterpretation of the question and thereby eliciting a broader response.

Fig. 3.3. Interview questions and what underlying construct they are aimed at

Number and wording of the question	*What the question attempts to investigate*
1) What made you first decide to do translation as a career?	Cause-effect sequence of beliefs and actions, background info
2) What aspects of running a translation business and doing translation do you find rewarding?	Job satisfaction
3) What aspects do you find challenging?	Job satisfaction
4) How did you feel about running a translation business when you first started?	Cause-effect sequence of beliefs and actions
5) How have your feelings about running your translation business changed over time?	Cause-effect sequence of beliefs and actions
6) A tough question! Would you consider your translation career/business successful?	Professional success
7) Why do you think it's been successful? Or not successful?	Attributions for success or lack of it
8) How much control do you feel that you have over your translation career?	Locus of control
9) How do you deal with isolation and loneliness in your translation career, if they are problems for you?	Social/work networking strategies/ job satisfaction
10) In your translation career, do you usually get the results that you want? Why or why not?	Locus of control
11) What do you think are the reasons for most of your successes in your translation career?	Responsibility for positive outcomes
12) What do you think are the reasons for most of any negative events that have occurred in your translation career?	Responsibility for negative outcomes
13) Do you enjoy using translation tools? What about them do you enjoy?	Attitude to translation tools
14) What things about using translation tools do you find frustrating or negative?	Attitude to translation tools
15) How confident do you feel about dealing with challenges in your translation career?	Self-efficacy
16) When in your translation career do you remember feeling confident and in control of things?	Cause-effect sequence of beliefs and actions
17) How much of your success do you feel is due to your own efforts, and how much is due to influences outside yourself? Why might that be, do you think?	Responsibility for positive outcomes
18) When there are problems in your work, do you tend to blame yourself or others?	Responsibility for negative outcomes
19) Where do you think your translation career will head to in the future?	Self-efficacy, goals

Another aim of the interview questions was to find some indication and participant perception of causal direction between beliefs and self-evaluations (i.e. psychological skill) and the behaviours and consequences that relate to them. We wanted to have an indication of whether the participants approached problems with certain beliefs which helped them in solving them, or whether the solving of problems increased their positive self-evaluations, and moreover how the participants describe those changes.

The results of the interview data analyses are given in Sections 4.2 and 5.2 for pilot study participants and main study participants respectively.

3.5 Methodology of pilot study

The methodology of the pilot study consisted of two parts: quantitative and qualitative.

The quantitative section consists of self-report data collection, using an online questionnaire. The questionnaire, as mentioned in previously (and see Appendix 1), contained a number of variables to be measured: attribution style, locus of control, self-efficacy, identity as a translator, work profile, translation tool usage, and satisfaction.

The questionnaire was hosted on the website www.surveymonkey.com, which specialises in hosting surveys, the data from which can be collected and then downloaded in various formats for analysis. Data collection was done using SSL (Secure Sockets Layer) 3.0 encoding, a security encoding which prevents third parties from accessing data that participants submit. SurveyMonkey charged a monthly fee for the survey hosting service. Upon completion, the data were downloaded in MS Excel numerical format, for statistical analysis.

3.5.1 Participant solicitation

Participants were invited to participate via the New Zealand Society of Translators and Interpreters[11], who sent out an invitation email to their members, using their database. The first email was sent in November 2008, which contained a URL link to the survey.

11. In early December 2008 Sarina Phan, then president of the Australian Institute of Interpreters and Translators (AUSIT), encountered our soliciting email through an NZSTI member, and offered to circulate it among AUSIT members. We considered this, but declined, due to the process requiring ethics committee approval. We felt that this would take too long, and would set the pilot study back too far. The main reason for concern about time was that the University of Auckland ethics committee might take up to two months to approve any changes (the submission date being late January 2009). Additional time for data collection was also a factor. However, we arranged that AUSIT members would be included in the main phase of the project.

This was followed by a reminder email in December 2008. At the end of November 2008, there were insufficient participants, at around 25 complete responses to the online questionnaire, out of a total of 45 recorded visitors. The follow-up email was designed to elicit participation by others who had not yet done so. A total of 80 participants responded. Of these, 64 provided usable data.

Mostly New Zealand-based participants responded, but there were several based overseas; of those based in New Zealand, the national origins were diverse (see Figure 4.8).

The reader should keep in mind that all participants were self-selecting; that is, they chose to participate. This may or may not have had an influence on the results of the study; it is always possible that the participants in our sample may not have been entirely representative of New Zealand translators at large. They were, for example, industry organisation members, they had a desire to participate (for a variety of potential reasons, ranging from curiosity to social desirability), and they had a certain degree of confidence and competence with computers (given that the questionnaire was in electronic format). Results should be moderately generalisable, but the relatively small size of the pilot sample should put the reader in mind that this was only a relatively small subgroup of the sum total of New Zealand's translators.

3.5.2 Pilot questionnaire period

The pilot questionnaire was opened on the 10th of November 2008, and was closed on the 31st of December 2008.

3.5.3 Pilot interviews with participants

Interviews with participants took place in February 2009. Three participants were interviewed, so as to test interview methodology and data collection procedures. Interviews were recorded using a digital recorder—an Olympus VN-5500PC.

The questions were taken from the list given in Figure 3.3, and were presented in the same order as shown in this table.

Interviews took place in a location of the participant's choice.

The recordings were in WAV format (being high quality and widely compatible), and were taken off the recorder and encrypted on the researcher's hard drive.

3.6 Methodology of main study

Emails were sent in mid-May 2009 to the following organisations, requesting that their membership be invited to participate: the Association Suisse des Traducteurs, Terminologues et Interprètes (ASTTI; Switzerland), Bundesverband der Dolmetscher und Übersetzer (BDÜ; Germany), the Japan Association of Translators (JAT; Japan), the Institute of Translation and Interpreting (ITI; United Kingdom), the Australian Institute of Translators and Interpreters (AUSIT; Australia), and the Asociación Profesional Española de Traductores e Intérpretes (APETI; Spain). The questionnaire was opened again at the same time.

ASTTI indicated that they could not send emails out using their database, but that we were free to search for participants on their database and solicit these individually. BDÜ were happy to place our invitation in their members' area, but again could not send out emails using their database, due to privacy practices. JAT and AUSIT were happy to send out the invitation through their email database. ITI indicated that they did not wish to request their members to take part in another survey at that point, indicating that there had recently been several given out to their members. APETI did not respond.

Again, in the same manner as with the pilot study, SurveyMonkey was used to host the questionnaire. The same security procedures were used (i.e. SSL 3.0 for submitting data). The data were downloaded in Excel format upon completion of the data collection period.

3.6.1 Changes to questionnaire in main study

On the basis of analysis and experience with the results of the pilot study, there were several changes from the original questionnaire used in it. These changes are outlined here.

3.6.1.1 Schyns and von Collani's Occupational Self-Efficacy scale

One of the important changes was to replace Chen, Gully and Eden's (2001) New General Self-Efficacy (NGSE) scale with the short form of Schyns and von Collani's (2002) Occupational Self-Efficacy (OCCSEFF) scale. The reason for this was due to domain specificity in scales, meaning that those scales which pose questions about the

particular domain (in this case, work) tend to be more effective in precisely measuring beliefs within that domain.

The short form of the OCCSEFF scale consisted of eight items (the same number as the NGSE scale used in the pilot study), of a work-related nature.

The OCCSEFF short form has good psychometric properties; coefficient alpha was 0.88, it contained a single factor, and correlated very strongly with the long form; r = .947 (Schyns and von Collani 2002:227). Therefore, it was considered a suitably robust scale to use for the main study.

3.6.1.2 Day and Allen's career motivation scale

We decided to include an additional scale of 12 items, despite some misgivings about the length that this would add to the whole questionnaire.

The reason for this addition was that we wanted to be able to tell more precisely how motivated towards their translation career were the translators in the sample. In the interviews, it came to light quite clearly that some translators were motivated towards other factors (such as organisational and family roles) as well as towards their translation career, and that this probably affected their level of engagement with translation work. Question 11 of the pilot questionnaire ("How strongly do you identify yourself as a translator?"), as well as the other questions relating to hours worked per week, and whether participants had the amount of work they wanted, provided an indication of focus towards translation as a career, but were not really precise enough by themselves. To rectify this, a shortened version of the career motivation scale was used, in order to be able to see more clearly and specifically how motivated the participants were towards their translation career, and thus what the relationship would be between motivation scores and measures of performance, as well as between psychological skill scores and measures of performance. In a manner, the career motivation scale is both a measure of an aspect of psychological skill (i.e. mental and emotional energy invested into a career) and a measure of simple career-related action. We treat it here as an additional measure of psychological skill, although, as the results of the main study show (see Figure 5.15) it was only significantly related to satisfaction and several of the other psychological skill variables, and was not the key new variable that we had hoped it would be. However, we did see a positive correlation with self-efficacy, which

suggests that the scale is measuring an aspect of general career motivation, as outlined in the work model in Figure 6.1.

The scale consisted of three sections, labelled *career insight*, *career resilience*, and *career identity*. We used only the *career resilience* and *career identity* sections. These contained a balance of items from two prior scales (Noe, Noe, and Bachhuber 1990; London 1993), with two items added by Day and Allen. These last two items ("I have volunteered for important assignments with the intent of helping to further my advancement possibilities", and "I have requested to be considered for promotions") relate to what the authors call the "desire for upward mobility subdomain" (Day and Allen 2004:79), referring to desire for hierarchical mobility within a traditional or semi-traditional business organisation. These two items do not really fit the freelance translator's profile, so were omitted on this basis, and were substituted with Noe, Noe and Bachhuber's (1990:348) item 11, reworded as a statement: "I have joined professional organisations related to my career goal". This refers in the translational context to translators' associations and similar organisations. A third item ("I have outlined ways of accomplishing jobs without waiting for my boss") was also removed, as it clearly related to organisational work, rather than freelance work.

The reason for using only the *career resilience* and *career identity* sections was that the *career insight* section contained items that were focused on the meta-level of career planning and career strategies, rather than career involvement and career attitudes, which the other two sections focus on. The major issue is that we consider that the questions in the career insight section relate more to traditional career paths, with their ideas of goal structures and promotions within hierarchies, whereas freelance translators, who may be nonetheless highly career-involved, may not relate to these questions, and may therefore not score very highly on them. This could possibly induce bias, suggesting a lower level of career involvement than is actually present. The solution was to remove the questions of the career insight section, with the additional benefit of keeping the questionnaire short.

In terms of psychometric properties, the career motivation scale in its original form had an alpha of 0.84, indicating high internal reliability. In one subsequent use (Byrne, Dik, and Chaiburu 2008), the scale was found to have an alpha of 0.93, which is excellent. It was also treated as a single-score composite scale by its authors, on evidence that this is a suitable procedure for the scale. We also treated it in the present study as a single

composite score of career motivation, which we expected to show similar high levels of internal reliability.

Day and Allen also found statistically significant correlations of r = .58 and r = .39 with career self-efficacy and subjective career success, respectively. There was also a statistically significant negative correlation with gender, indicating that male participants in the sample had generally higher career motivation than females, at least as measured by this scale.

3.6.1.3 Other changes and an oversight

A few other minor changes were made to the questionnaire as used in the main study. The wording of Question 20 (fields of translator specialisation) was adjusted to make it more precise and detailed. The range of income brackets was increased to allow for Japanese Yen (up to 7 million Yen, in 250,000-Yen brackets).

The oversight was that, unfortunately, Australian dollars were not provided for Australian participants. However, they were able to provide their income in other currencies, which were then converted as required.

3.6.2 Main study interviews

There were seven interviews conducted for the main study. These were done during October 2009, with one in Spain, four in Germany, and two in Switzerland. The questions were the same as for the pilot study, taken from the list given in Figure 3.3, but with Question 16 (“When in your translation career do you remember feeling confident and in control of things?”) removed. Based on the results of the pilot interviews, participants seemed unsure how to respond to this question, and when they did so, results were vague; therefore we decided not to present it in the main study interviews. The other questions were presented in the same order as shown in the table.

Interviews were recorded with a digital voice recorder, and these data files were in WAV format.

Chapter Four – Analysis and Results of the Pilot Study

In this chapter we focus on the analysis and the discussion of the results of the pilot study, looking at both the questionnaire data and the interview data.

In the first section, we report on the reliability of the psychometric scales used, present the descriptive statistics, and show the various relationships that occurred between the variables that were measured.

4.1 Pilot study questionnaire data analysis

The data were downloaded from SurveyMonkey in two formats: MS Excel *actual choice text* and MS Excel *numerical*. The numerical format allowed the importation and analysis of the data by SPSS, while the actual choice text allowed for analysis of long-answer questions and text-based information, such as feedback comments and country of origin.

4.1.1 Pilot study descriptive statistics

In total, there were 80 participants; 47 of these completed the questionnaire right to the end (including the three psychological scales). Of the remaining 33 participants, five completed some part of the body of the questionnaire, but did not reach the end of it; one reached the end but missed significant parts in the middle, and the other 27 did not get past the sixth question, concerning which country they were based in.

In terms of the data that were actually used, the following selections were made. Six cases were removed because the participants were not based in New Zealand, and from the remainder another 31 were removed due to high levels of missing data. Therefore the working data set consisted of 43 cases, which the following analyses are based upon.

In this section, we will discuss the data question by question, more or less in the order that the questions appeared in the questionnaire.

4.1.1.1 Missing values, errors, and outlier analysis

Prior to the data analysis, we did an analysis of missing values on the 43 cases selected for the pilot study. The results showed, through using Little's MCAR test

($\chi^2(71) = 69.62$, $p = .524$), that we can safely infer that data are missing completely at random (MCAR). This is an important prerequisite of data analysis—having confidence that there are no patterns or consistencies in missing data, which could distort results. Obviously, not all participants used translation tools, and so patterns of missing data were expected there (although these themselves were not considered significant by Little's test).

Outliers (extreme and extraordinary data points) were noted, but we could not be sure that they were due to error, so these were left in the data set. The only outlier removed was the highest number of jobs per week—at 48. We decided after analysis that this was an error (i.e. an extreme point probably entered by accident), as the number of hours per week (less than 10), the proportion of translation work that the participant did (80%), and the income earned from translation (less than $10,000) did not match this extremely high figure, which would work out at around NZD$4 per translation job, even assuming $10,000 income per year! Therefore, this value was removed from the analysis.

Two other odd values were noted, being extremely low ratings on translation tool confidence by two participants who used those tools very frequently and who rated themselves as highly and very highly skilled in the use of these tools. Lacking the knowledge of just why the participants had given such low confidence ratings, and having no clear evidence to suggest that they were the result of a mistake, we felt obliged to leave them in. However, they did affect the correlations between tool frequency and tool confidence, and between tool skill and tool confidence, making them statistically non-significant (see Fig. 4.14 and its analysis).

4.1.1.2 Results of general questions

In this section we present the results of the general questions, showing how our participants scored as a group, and discussing particular points of interest about our sample as they arise.

In terms of the statistics used, we reported the mean and standard deviation [12] for relatively normally-distributed data, but if the data are highly skewed or have many

12. Standard deviation is a measure of how variable data are (i.e. how widely they spread above and below the mean (arithmetic average) value, assuming that the data are distributed normally (i.e. have a bell-curve shape when displayed on a histogram or bar chart). Assuming a normal distribution, one standard deviation above and below the mean contains 68.2% of the data, two standard deviations contains 95.4% of the data, while three standard deviations above and below the mean contains 99.6% of

outliers, then we used the so-called five number summary (Moore and McCabe 1999:47-48), which includes the *minimum value*, the *first quartile* (at which 25% of the values are below, and 75% above), the *median* (at which 50% of the values are above and below), the *third quartile* (at which 75% of the values are below, and 25% above), and the *maximum value*. The five-number summary is much more useful than the mean and standard deviation in cases where the data are highly skewed[13] or where there are extreme outliers. The mean suffers from distortion when there is an extreme value; for example in the case of income, where one very high income can 'pull up' the mean, which then no longer reflects what most would consider to be the 'real average'. The median, range, and quartiles are more descriptive in this instance, so they will be used throughout where the data are highly non-normal. In some places, means and medians will be reported together, to show that there is slight skewness in the data.

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the data. In other words, with a perfect bell-curve, only 0.4% of the data points will have a value more extreme than three standard deviations above or below the value of the mean.

The actual value of the standard deviation indicates how variable the data are. If we have a sample with a mean of 100 and a standard deviation of 1, then 99.6% of the sample's data point values will be between 97 and 103; thus the standard deviation is quite small and the data are tightly clustered around the mean. On the other hand, if we have a mean of 100 and a larger standard deviation of 20, then 99.6% of the sample's data point values will be between 40 and 160, indicating that the data are more loosely clustered around the mean.

13. Skewness indicates how normally-distributed a data set is (i.e. the classic bell-curve shape), or whether the peak (i.e. the *mode* or most common value) occurs in the upper, middle, or lower part of the data range. Highly skewed data have a 'ski-jump' shape, with a gradual ramp on one side and a sharp drop-off on the other.

Fig. 4.1. Descriptive statistics of pilot study participant sample, by variables

Variable	Values			
(3) Gender [N=43][14]	Male: N=12		Female: N=30	
(4) Age	45.29 (10.32)*, N=41			
(7) Years worked	0.50/4.00/8.00/15.50/40.00^, N=43			
(8) Jobs per week	0.10/0.63/2.00/4.75/25.00, N=40			
(9) Hours per week [N=43]	*0-10* 51.16%, N=22	*11-20* 4.65%, N=2	*21-30* 13.95%, N=6	
	31-40 16.28%, N=7	*41-50* 9.30%, N=4	*+50* 4.65%, N=2	
(10) Breakdown of work types	*Translation percent* 3.00/10.00/62.50/ 95.00/100.00, N=30	*Interpreting percent* 0.00/2.00/5.00/ 42.50/95.00, N=21	*Other percent* 0.00/0.00/20.00/88.00/ 96.00, N=21	
(11) Level of identification	3.98 (0.91), median=4.00, N=43 *[range 1 (low) to 5 (high)]*			
(12) How many hours wanted [N=43]	*0-10* 6.98%, N=3	*11-20* 27.91%, N=12	*21-30* 34.88%, N=15	
	31-40 23.26%, N=10	*41-50* 6.98%, N=3	*+50* 0.00%, N=0	
(13) Amount of work [N=43]	*Too little* 44.19%, N=19	*Right amount* 37.21%, N=16	*Too much* 18.60%, N=8	
(14) Income [N=43] # *k* = thousand	*0-10k* # 55.80%, N=24	*10k-20k* 2.33%, N=1	*20k-30k* 9.30%, N=4	*30k-40k* 2.33%, N=1
	40k-50k 9.30%, N=4	*50k-60k* 6.98%, N=3	*Over 60k* 13.95%, N=6	
(17) Market worked for	*Domestic percent* 0.00/17.50/70.00/95.00/100.00, N=39		*Overseas percent* 0.00/5.00/50.00/90.00/100.00, N=41	

* *Throughout the chapter, means and standard deviations are reported in this manner, unless otherwise indicated.*

^ *Five-number summary, showing minimum, first quartile, median, third quartile, and maximum.*

Outlined in Figure 4.1 are the descriptive data from the pilot questionnaire. These show firstly that there were many more females in the sample than males. Secondly, the average age of the participants was in the mid 40s, with participants having worked an average of around 8 years in the translation industry (ranging from six months to 40 years).

On average, our sample was doing around two individual jobs per week, with some three quarters of the sample doing less than five jobs per week, and a top quarter doing

14. One participant did not provide their gender. There are also varying numbers of responses throughout the table due to missing data. See Section 4.1.1.1 above for further discussion.

significantly more, with a reported maximum of 48 (not included here),[15] and the second highest number at 25 per week. The majority of the participants were working less than 10 hours per week, with only two working more than 50 hours.

Among our participants, the median percentage of translation work (as distinct from other types of work) was around 63%, with only three who answered the question doing 100% translation, and one participant doing just 3% translation work. These figures indicate that most of the participants were working in other jobs also, with many doing some interpreting (a median of just 5% interpreting work), as well as unreported 'other' work (a median of 20% of this type of work).

On average, the participants identified themselves fairly strongly as translators, rather than as other types of professionals.

It was interesting to note that in terms of the hours per week that the participants would like to work, the most popular bracket was 21 to 30 hours per week, with 34.88% choosing this bracket as their preference. It is unclear from this data alone whether this indicates a desire for part-time work, or a desire for a 'portfolio' career, with other work types combining to make a full-time career. In terms of the amount of work that they had, the largest single section of participants (44.19%) stated that they had too little, while 18.6% stated that they had too much work! Given that a combined total of 13.95% indicated that they were working over 40 hours per week, perhaps this last finding is not surprising.

In terms of income, the single largest group by far were in the zero to 10,000 units-of-income bracket (all currencies not given in New Zealand Dollars were converted based on historical exchange rates at the time of questionnaire submission). However, the next largest group was 13.95% who reported earning over NZD$60,000.

Among the participants, a median of 50% of their work was for the international market, with a higher median amount of work for the domestic market (70%). However, the interquartile ranges indicate a wide variety of international/domestic work proportions.

15. See Section 4.1.1.1 above for an explanation of this data point.

Fig. 4.2. What kind of work pilot study participants are doing, and how much of their total work each kind includes (Question 16)

	Most important	*Second most important*	*Third most important*	*Don't do this kind of work*
Direct work [N=40]	45%, N=18	42.50%, N=17	-	12.50%, N=5
Agency work [N=42]	54.76%, N=23	23.81%, N=10	-	21.43%, N=9
In-house work [N=31]	3.23%, N=1	-	6.45%, N=2	90.32%, N=28

In Figure 4.2, we show the kind of work that the translators in our sample did. It shows that of those who did direct work, nearly half considered it their most important type of work, and that of those who did agency work, similarly just over half considered it their most important work type. Only a few worked in-house, with most not doing any in-house work at all. It can be inferred from this result that direct work with the end-client was the most important type of work for our participants, with only 12.50% stating that they never did this kind of work.

Fig. 4.3. How pilot study participants advertised their translation business (Question 18) [N=42]

Using social networks 45.24%, N=19	*Using own website* 23.81%, N=10	*Translators' website* (ProZ etc.) 47.62%, N=20	*Print advertising* 9.52%, N=4
Yellow Pages 21.43%, N=9	*Trade fairs* 4.76%, N=2	*No active advertising* 47.62%, N=20	
Other methods of advertising mentioned: Direct marketing, newspaper, flyers, talking to everyone I meet | contacting agencies directly | professional networking | contact translation agencies directly with CV | listing on government webpage of approved translators | promotional material (business cards, fridge magnets...) | NZSTI website | sending out numerous spontaneous applications | word of mouth [*x2*]			

Figure 4.3 shows how the participants of the study advertise their translation business. It shows some interesting features, the first of which is that a translators' website (such as ProZ) is the single most popular way of advertising among the 'pre-set' options listed. Using social networks and not doing any active advertising are also widely practised. Other methods that participants used are listed verbatim at the bottom of the table. Some participants said that they did no active advertising, but still mentioned other forms of advertising. However, it is worth considering that *no active advertising* and *word of*

mouth are not mutually exclusive, because they may take advantage of others' positive comments about participants' quality of work.

Fig. 4.4. Fields of specialisation of pilot study participants (Questions 20 & 21) [N=43]

Law 34.88%, N=15	*Medicine* 27.91%, N=12	*Business/finance* 44.19%, N=19	*Immigration-related* 65.12%, N=28	*Science & engineering* 30.23%, N=13
Literature 13.95%, N=6	*Entertainment* 13.95%, N=6	*Journalism* 18.60%, N=8	*Advertising & creative* 20.93%, N=9	*Tourism* 44.19%, N=19
General 72.09%, N=31	*Other fields (Question 21):* Biology, agriculture, horticulture |[#] agriculture, animal health | computer localisation | automotive, import/export, shipping, academic | waste management, energy, employee publications | agriculture | technical | marketing | sailing, aviation | certain types of medical equipment | art, philosophy, film | sport | development cooperation, environmental issues | academic research in archaeology, education, psychology, history, politics, literary criticism | academic documents | academic | humanities (history, philosophy, religion, etc.) | education			

[#] *Vertical lines separate individual participants' entries.*

Figure 4.4 is an analysis of the fields of specialisation in which our participants practise. It shows that the single most practised category from among the 'pre-set' options in the questionnaire is *immigration-related documentation*, at 65%. This shares a similar high percentage with *general*, which no doubt includes many of the areas mentioned at the bottom of the table, in response to Question 21. It must be noted that the pre-set list in the questionnaire is not particularly fine-grained, so such data as shown here give a general idea of fields of practice rather than being exact descriptions of work types. This allows for the fact that a single document may claim membership to several categories at once, and deciding in which one it primarily belongs can be both difficult and subjective. Nonetheless, the data are informative.

The second-most practised area is that of business and finance (44%), which is equal to tourism (also 44%), followed then by law (35%).

Fig. 4.5. Text formats used by pilot study participants (Question 22) [N=43]

Hard copy 60.47%, N=26	*MS Word* 97.67%, N=42	*Other MS Office formats* 44.19%, N=19	*PDF* 74.42%, N=32
DTP formats 11.63%, N=5	*HTML/XML* 27.91%, N=12	*.exe/.dll* 6.98%, N=3	

Figure 4.5 shows the details of text formats that our sample worked with. The data show that MS Word documents (.doc, .rtf) are a staple part of most translators' work, with 98% handling them at some time. PDFs were also very popular, at 74%, probably because they are an easy way for people to email photocopies and scans of original hard-copies (as well as PDF versions of other text formats), having largely replaced the fax in this regard. The text types least worked with by our participants were software texts (e.g. .exe, .dll). Given that New Zealand is a predominantly English-speaking country, and that a significant majority of localisation is done out of English into other languages, perhaps this is not surprising.

Fig. 4.6. Translation tool usage in the pilot study (Questions 23 & 24) [N=25]

SDL Trados suite 40.00%, N=10	*Déjà Vu* 16.00%, N=4	*STAR Transit* 4.00%, N=1	*Across* 4.00%, N=1
Wordfast 28.00%, N=7	*Foreign Desk* 0%	*Passolo* 8.00%, N=2	*Alchemy* CATALYST 0%
terminology management tools 8.00%, N=2	*open-source translation tools* 20.00%, N=5	*Percentage of total [N=43] using TMs* 39.53%, N=19	
Other translation tools being used (Question 24): MetaTexis |[#] OmniPage 16, Picasso | Denjikai Japanese CD ROM dictionary and on-line dictionaries | Trados 6.5 | local dictionaries, online dictionaries | Omega-T, Word | Dictionary: Eijiro			

[#] *Vertical lines separate individual participants' entries.*

Figure 4.6 shows the usage of translation tools among our sample. "Translation tools" has been interpreted fairly broadly, with electronic and online dictionaries being included. Most would not consider such resources as tools in the traditional sense, but rather as linguistic aids, or similar. Nonetheless, it shows that a reasonable proportion of our sample uses translation tools of some kind. Of the 25 participants (58% of the whole group) who indicated that they did use some kind of tools, 40% used the SDL Trados suite, making it the most-used tool from among the list's pre-set options. The next most-used was Wordfast, at 28%. Some of the reason for Wordfast's popularity is no doubt

because its makers provided it (at the time) for free with full functionality, with a limit of 500 translation units per memory, which is sufficient for most smaller jobs (Wordfast 2009). Another point of interest was that a reasonable number of participants (20%) used open-source translation tools, presumably because they are also often free-of-charge (but not always) and because they are legally modifiable by those with the necessary programming skill.

If translation memories are separated out from other translation tools, then we see that 39.5% of the entire pilot sample used them. The interesting thing to note is that Trados, Déjà Vu, and Wordfast users formed mutually exclusive groups. They had just one translation memory each, and did not run multiple packages.

Fig. 4.7. More details on translation tool usage in the pilot study

(25) Reasons for using tools [N=25]	*Client requires them* 44.00%, N=11	*Increase productivity* 88.00%, N=22	*Increase quality* 72.00%, N=18
(26) Purpose of tool usage [N=25]	*Simply translation* 100.00%, N=25	*Terminology work* 36.00%, N=9	*Project management* 8.00%, N=2
(27) Frequency of use [N=25]	*Every day* 12.00%, N=3	*Once every two or three days* 4.00%, N=1	*Once a week* 20.00%, N=5
	Once every two or three weeks 12.00%, N=3	*Once a month* 16.00%, N=4	*Just a few times a year* 36.00%, N=9
(28) Perceived skill	3.04 (0.98), median=3.00, N=25 *[range 1 (low) to 5 (high)]*		
(29) Confidence	3.36 (0.95), median=4.00, N=25 *[range 1 (low) to 5 (high)]*		

Figure 4.7 provides more information about translation tool usage by the participants. It shows that most use them to increase their productivity (88%), followed closely by aiming to increase quality (72%). Interestingly, a reasonable number of the sample (44%) used them because their clients requested or required that they be used.

All participants used tools simply for translation, but a significant portion of usage was also for terminology work (36%), while only two participants used translation tools for project management.

In terms of frequency of usage, 36% of participants used translation tools just a few times a year, while 20% used them once a week. A few (12%) used them every day.

Participants perceived their skill with translation tools as being *average*, with only two stating that they had a *very high skill level*, and only one stating that they had a *very low*

skill level. They stated their confidence at using those tools as being somewhere between *unsure* and *confident*, with one stating that they were *very confident*.

Fig. 4.8. National origin of pilot study participants (Question 5) [N=43]

Country of origin and number of participants originating	
Albania	1
Brazil	2
China	3
France	4
Germany	5
India	1
Japan	3
Korea	1
Mexico	1
Netherlands	1
New Zealand	12
Romania	1
Russian Federation	1
Serbia	1
Slovakia	1
Spain	1
United Kingdom	4
Uruguay	1

Given that the participants were solicited through the New Zealand Society of Translators and Interpreters, and that the sample was narrowed down to participants based in New Zealand, it comes as no surprise that members of the single largest group were born in New Zealand. However, the result shown above is good evidence of both the global origins and the mobility of freelance translators.

4.1.1.3 Internal reliability analysis of psychometric scales

Before discussing the results of the psychometric scales, we present the results of preliminary analysis of the scales themselves.

Item analysis was conducted on the three psychological scales and their subscales, in order to investigate how effective the scales' measuring properties were, bearing in mind that a reliability of alpha ≥ 0.70 is conventionally considered acceptable (Bland and Altman 1997). In other words, the scales were checked to see that all the questions appear to measure the same concept, which is observable by them all measuring closely-related values. This and all other statistical work was done using SPSS 16.0.

Job satisfaction: the satisfaction scale showed borderline-acceptable reliability with an initial alpha of 0.679. One item was removed (item 5) to improve reliability to 0.684.

Self-efficacy (NGSE): Chen, Gully, and Eden's (2001) NGSE scale showed excellent reliability, with an alpha value of 0.832. No changes were made.

Locus of control External (WLCS): this subscale had excellent reliability with an alpha of 0.845. No changes were made.

Locus of control Internal (WLCS): this subscale had a mediocre initial alpha of 0.639. With the removal of the item which corresponds to Item 4 in Spector's (1988) original format ("If employees are unhappy with a decision made by their boss, they should do something about it"), alpha was raised to 0.675. This was probably due to most translators not having a 'boss' as such, and so construing this question inconsistently.

Responsibility for Negative Outcomes (RNO): this subscale had only moderate reliability, at 0.644 initially. By removing item L ("When people have not liked me I have usually felt there was something wrong with me"), alpha was improved to 0.711.

Responsibility for Positive Outcomes (RPO): this subscale had borderline-acceptable reliability, with an alpha of 0.633. Alpha could not be improved by questionnaire item deletion.

These results concerning the responsibility scales are actually the opposite of what the original authors (Brewin and Shapiro 1984) found. They noted that the RNO scale was less reliable, but here we find the opposite.

4.1.1.4 Psychometric scale results

In this section we discuss the results of the job satisfaction, self-efficacy, locus of control, responsibility for positive outcomes, and responsibility for negative outcomes scales.

Fig. 4.9. Job satisfaction score for pilot study participants, from five-item job satisfaction scale

Satisfaction mean (standard deviation), and median *[range 1 (low satisfaction) to 5 (high satisfaction)]*	4.01 (0.56), median=4.00, N=42

These data show that the level of satisfaction among the sample translators is reasonably high. The low standard deviation also indicates that there are not many who are particularly dissatisfied with their work.

Fig. 4.10. Self-efficacy score for pilot study participants, from Chen, Gully and Eden's (2001) New General Self-Efficacy scale (NGSE)

Self-efficacy mean (standard deviation), and median *[range 1 (low GSE) to 5 (high GSE)]*	3.88 (0.48), median=3.88, N=43

These data indicate a moderately high mean level of self-efficacy among the participant sample, along with a small standard deviation, indicating that the members of our sample are all generally fairly confident in their ability to meet challenges in life and, by extension, in their work. The small standard deviation indicates that there are few extreme values either side of the mean level of self-efficacy.

Fig. 4.11. Work locus of control score for pilot study participants, from Spector's (1988) Work Locus of Control Scale (WLCS), showing its two subscales

LoC External mean, median, and standard deviation *[range 1 (highly internal) to 6 (highly external)]*	2.70 (0.78), median=2.71, N=43
LoC Internal mean, median, and standard deviation *[range 1 (highly external) to 6 (highly internal)]*	4.45 (0.56), median=4.43, N=43

Figure 4.11 shows the two parts of the *Work Locus of Control Scale*. The first part shows the *LoC External* mean and standard deviation, indicating that the participants on average sit slightly under the middle of this scale, indicating a moderate degree of perceived 'randomness' between their own actions and the outcomes of those actions in their work. The second part of the table shows the *LoC Internal* mean and standard deviation, and with their fairly high average score participants seem to perceive a high level of correspondence between their own actions and the outcomes of those actions in their work. The standard deviation of the *LoC External* result is also somewhat higher, indicating a wider range of responses than on the *LoC Internal* scale.

It is interesting to consider the possibility of scoring highly on both subscales, and being both a highly internal and highly external person at the same time. The evidence shows that the correlation between the subscales is negative (Spearman's $\rho = -.276$, $p = .073$). Although this is not statistically significant, it does provide some evidence that the two

scales are measuring separate constructs. Certainly, with this correlation, the reliability of the scale would be compromised if we were to put the two subscales together to form a whole. In summary, the negative (although non-significant) correlation indicates that those who respond 'internally' on the *LoC Internal* scale tend to respond 'internally' on the *LoC External* scale also.

Fig. 4.12. Responsibility for Negative Outcomes (RNO) scores for pilot study participants, from Brewin and Shapiro's (1984) attribution scale

RNO mean, median, and standard deviation *[range 1 (low responsibility for negative outcomes) to 5 (high responsibility for negative outcomes)]*	3.07 (0.57), median=3.00, N=43

Figure 4.12 shows a mid-level response (a score of 3 being in the middle of the scale) in terms of responsibility for negative outcomes. There is evidence that having too low or too high a responsibility for negative outcomes can be psychologically harmful. Having too high a responsibility for negative outcomes is associated with obsessive-compulsive disorder (Rhéaume et al. 1995; Ladouceur et al. 1996), perfectionism and other maladaptive behaviours. On the other hand, having too low a responsibility for negative outcomes is associated with a person being disliked by other people, because that person frequently blames others and refuses to accept and deal with negative consequences (Forsyth, Berger, and Mitchell 1981). Thus a middle ground is the ideal in this case, with a balance between accepting and facing problems caused by ourselves, and accepting that not all negative events that occur to us are our own fault.

Fig. 4.13. Responsibility for Positive Outcomes (RPO) scores for pilot study participants, from Brewin and Shapiro's (1984) attribution scale

RPO mean, median, and standard deviation *[range 1 (low responsibility for positive outcomes) to 5 (high responsibility for positive outcomes)]*	3.60 (0.47), median=3.67, N=43

Figure 4.13 shows the responsibility for positive outcomes scores that the participants gave, indicating a fairly high level of personal responsibility for their successes, which is generally regarded as psychologically beneficial, particularly in Anglo-American social contexts, although a slight self-serving bias (higher RPO, lower RNO) has also been found in East Asian contexts (e.g. Kudo and Numazaki 2003).

4.1.2 Inferential statistics and discussion of pilot study data

The analysis of the pilot data shows a number of interesting features, some of which support the hypotheses made, others of which do not. We will analyse and discuss these features here, after reporting on the statistical procedures undertaken and explaining the necessary statistical concepts that were used.

4.1.2.1 Preliminary normality tests of the pilot study data

Skewness for all the scales and subscales was within the range of -1.14 (*translation tool confidenc*e) to 2.13 (*jobs per week*), while kurtosis was between -1.83 (*domestic work*) and 3.93 (*jobs per week*).[16] These figures indicated a range of non-normally-distributed data sets, therefore providing insufficient evidence of data normality for these scales. Looking at the normal-QQ plots and the histograms confirmed that most were non-normal, which was further supported by the results of a Kolmogorov-Smirnov/Lilliefors normality test for all the variables of interest, and z-score tests for skewness and kurtosis. Therefore we elected to use Spearman's rank correlation coefficient for correlations between these scales, partly because of these non-normal distributions, partly because some of the data are ordinal anyway (e.g. identity as a translator, tool skill, tool confidence), and finally because in our case transforming the variables to achieve normality (e.g. by using a power or logarithmic function) makes them more difficult to interpret. To correctly calculate Spearman's rho (ρ) correlation coefficient we do not require either normally-distributed or scale data.[17]

4.1.2.2 Statistically significant correlations in the pilot study

Correlation tests between all the variables of interest were undertaken, and the results of the correlation test are shown in Figure 4.14. A number of statistically significant

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16. *Kurtosis* indicates whether the peak of the data set is flattened (i.e. lots of data widely spread out over the data range), or sharp (i.e. most data clustered tightly around the mode value of the data set). See Hair et al. (2010:71-74) for more information on skewness and kurtosis.

17. Normally, for correlations, Pearson's correlation coefficient (r) is used. However, this assumes that the data are normally-distributed and of an *interval scale* or *metric* nature (in which we can confidently say that A is twice the size of B, such as with age, jobs per week, number of years in business). Because of the large number of non-normal variables in our analysis, combined with the fact that a number of them are ordinal at best, we elected to use Spearman's rank correlation coefficient, which does not assume normally-distributed data, and is suitable for *ordinal* data (where A may be bigger than B, but we don't know by how much, such as with unstandardised psychological scales, single-item unstandardised questions such as level of professional identity, or income brackets). See Hair et al. (2010:5-7) for a good overview of measurement types.

correlations can be seen between the variables in the study. Spearman's ρ (rho) correlation coefficients are given, which vary from -1 through 0 to 1, along with the level of statistical significance.[18] Positive correlations indicate that both variables increase together, while negative correlations indicate that one variable increases while the other decreases, or vice versa. The closer the correlation is to -1 or 1, the stronger it is.

One of the problems with such large numbers of tests is that if the statistical significance level is set at 5%, then we can expect that a certain proportion of the significant results will be significant simply by chance, and will not indicate a real relationship. The more variables we do tests between, the higher the possibility of finding statistically significant relationships simply by chance (the *Type I error*). To counter the effect of multiple tests, we used a multiple-test correction, called the Benjamini-Hochberg correction for controlling the *false discovery rate* (FDR). The traditional Bonferroni correction controls the *family-wise error rate*, which is the increase of chance findings of statistical significance when we do a series of significance tests in a study (i.e. a *family* of tests). It works by creating a new, more restrictive cut-off statistical significance level (alpha) for the whole set of tests, which is then used as the new p-value criterion for achieving statistical significance. In other words, the relationship now has to be greater or the difference stronger to achieve statistical significance. However, the Bonferroni correction is rather conservative, and

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18. Statistical significance in terms of correlations can be explained as follows. If there are, say, three data measurements, there will often be a very strong correlation between them simply by chance, because there are a relatively limited number of possible data combinations. Thus, because the level of chance is so high, there is most probably little or no *real* relationship between the two variables being measured. In other words, we would probably see the relationship again simply by chance if we tested the same sample again. On the other hand, if there are 100 data measurements, the chance of there being a high correlation because of random factors is much less, and therefore it can be said with more confidence that there really is a statistically significant relationship between the two variables. This is partly why sample sizes need to be beyond a certain minimum to reduce the chance of this kind of false significance. However, if sample sizes are huge, highly statistically significant relationships can be observed where the correlation value between two variables is actually very small, and in fact there may be little real relationship (i.e. *practical significance*, as distinct from statistical significance). This is due to the *power* of the test, which increases with sample size.

Traditionally a probability or p-value of 0.05 or smaller has been considered statistically significant. This means that there is only a 5% or less chance of seeing a relationship or difference between two variables as extreme or more extreme than the one actually observed, assuming that the same data measurement was done again under the same conditions. This indicates that the hypothesis that there is *no* relationship between the two variables (the *null hypothesis*) can be fairly safely rejected, in favour of the hypothesis that there *is* a relationship or difference. The smaller the p-value, the more certain we can be that there is probably a real relationship, because it is less likely that the measured relationship occurred by chance.

In summary, we can say that in the case of a statistically significant correlation, the equation of the straight line that best fits all the data points (this line is our correlation coefficient) is unlikely to be due to chance, and furthermore explains a relationship between the two variables. See Tabachnick and Fidell (2007:33-37) and Hair et al. (2010:8-11) for further explanation of significance testing and power.

may make us reject many real relationships (the so-called *Type II error*). The Benjamini-Hochberg FDR correction procedure is more suitable, as it allows us to make a correction for multiple tests without rejecting too many real relationships. See Walsh (2004) for a good overview of the various methods, and Benjamini and Hochberg (1995) for a detailed explanation of the procedure and the mathematical proofs behind it.

The Benjamini-Hochberg correction is relatively simple to calculate. Firstly, the observed p-values from the correlation matrix are ranked from largest to smallest. Then we apply the following formula:

Corrected p-value = observed p-value × (total number of tests ÷ rank value of observed p-value)

This formula is applied to all p-values that are found to be significant in the initial correlation test, in order to arrive at a corrected p-value[19]. Therefore, in Figure 4.14, original p-values are given in rounded parentheses, while corrected p-values are given in square brackets for those p-values found to be significant in the first test.[20] Those correlation coefficients that remain significant after correction are highlighted in bold type.

What does this actually mean in practical terms? It means that we are trying to only uncover those relationships that are 'real'—in other words, we are trying to avoid too much *Type I error* (incorrectly accepting unreal relationships) while also avoiding too much *Type II error* (incorrectly rejecting real relationships). It essentially means that the relationships found to be still significant after correction are particularly worthy of close attention in the main study, while those that were significant before correction but not so afterwards are possible areas of focus in the main study. It will pay to bear this in mind as we explore the results that we found.

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19. The methodology is explained in plain language in an article by Silicon Genetics (2003). In genetics testing, because of the methodology of testing hundreds or thousands of correlational relationships at once, applying a correction to allow for the inflation of chance findings becomes particularly important.
See also *WWC Procedures and Standards Handbook 2.0, Appendix D* (Institute of Education Sciences 2008) for an alternative Benjamini-Hochberg formulation that achieves the same result. Finally, Sainani (2009) provides a good plain-language overview of the multiple-testing issue.

20. The reason that the formula works with uncorrected p-values that show as .000 in our results is because SPSS gives p-values to over 10 decimal places, but only displays them in the correlation matrix to three decimal places. Thus they are not actually zero, just very close to it.

Fig. 4.14. Table of correlations between variables in the pilot study, showing Spearman's correlation coefficients, original p-values (round brackets) and significant p-values after Benjamini-Hochberg False Discovery Rate correction (square brackets)

	Years in translation	Jobs per week	Hours worked per week	Percent translation work	Identity as translator	Income	Percent international work	Advertising type count	Tool use frequency	Tool skill	Tool confidence	Satisfaction	Self-efficacy	LoC External	LoC Internal	RNO	RPO
Age	.527** (.000) [.010]	.020 (.901)	.157 (.326)	-.030 (.881)	.238 (.133)	.234 (.142)	-.067 (.684)	-.163 (.316)	-.038 (.861)	-.239 (.262)	-.053 (.807)	.122 (.454)	.167 (.296)	-.102 (.526)	.389 (.012)	-.044 (.786)	.023 (.885)
Years in translation		.223 (.166)	.389 (.010)	.057 (.763)	.190 (.222)	.402 (.008)	.105 (.513)	.077 (.626)	.022 (.916)	-.012 (.954)	.052 (.805)	.307 (.048)	.441* (.003) [.036]	-.091 (.561)	.322 (.035)	-.148 (.343)	.032 (.837)
Jobs per week			.479* (.002) [.034]	.322 (.101)	.197 (.223)	.603** (.000) [.003]	.107 (.522)	.238 (.144)	.332 (.105)	.258 (.213)	.419 (.037)	.447* (.004) [.044]	.264 (.099)	-.431 (.006)	.288 (.071)	-.053 (.745)	.248 (.122)
Hours worked per week				.535* (.002) [.035]	.360 (.018)	.871** (.000) [.000]	.307 (.051)	.037 (.818)	.417 (.038)	.380 (.061)	.515 (.008)	.296 (.057)	.267 (.083)	-.358 (.018)	.204 (.190)	-.065 (.678)	.329 (.031)
Percent translation					.359 (.052)	.528* (.003) [.037]	.259 (.183)	.087 (.652)	.460 (.084)	.544 (.036)	.343 (.210)	.174 (.367)	.204 (.279)	-.472 (.008)	.282 (.130)	-.145 (.444)	.191 (.312)
Identity as translator						.502* (.001) [.013]	.333 (.034)	-.289 (.064)	.188 (.369)	.012 (.956)	.065 (.756)	.408 (.007)	.002 (.988)	-.252 (.103)	.023 (.882)	.053 (.735)	-.025 (.872)
Income							.319 (.042)	.008 (.959)	.466 (.019)	.377 (.063)	.350 (.086)	.349 (.023)	.323 (.035)	-.453* (.002) [.039]	.248 (.109)	.041 (.793)	.265 (.086)
Percent intl. work								-.001 (.996)	.568* (.004) [.041]	.220 (.302)	-.292 (.167)	.222 (.168)	.220 (.166)	-.064 (.693)	.229 (.151)	.380 (.014)	-.035 (.826)
Advert type count									.121 (.573)	.090 (.675)	.010 (.961)	.065 (.682)	.342 (.027)	-.158 (.318)	.257 (.100)	-.123 (.437)	.234 (.136)
Tool use frequency										.713** (.000) [.003]	.125 (.553)	.038 (.859)	.354 (.083)	-.309 (.132)	.004 (.983)	.059 (.780)	.055 (.794)
Tool skill											.359 (.078)	-.018 (.934)	.294 (.154)	-.282 (.172)	-.014 (.949)	.106 (.615)	.114 (.587)
Tool confidence												.443 (.030)	.169 (.420)	-.486 (.014)	.199 (.339)	-.234 (.259)	.665** (.000) [.009]
Satis-faction													.028 (.861)	-.399 (.009)	.242 (.122)	-.016 (.921)	.121 (.446)
Self-efficacy														-.115 (.463)	.280 (.069)	-.030 (.846)	.061 (.700)
LoC External															-.276 (.073)	.117 (.453)	-.545** (.000) [.006]
LoC Internal																.094 (.547)	.444* (.003) [.036]
RNO																	-.078 (.617)

Coefficients remaining significant after Benjamini-Hochberg FDR correction are shown in bold type; p≤0.05, two-tailed.
FDR-corrected p-values are given in square brackets.
One asterisk means coefficient significant at p≤0.05, two-tailed; two asterisks means coefficient significant at p≤0.01, two-tailed.

For easier comprehension, we decided not to reverse-score the *LoC Internal* scale. This means that a higher score on the *LoC Internal* scale results in a higher positive correlation, while a higher score on the *LoC External* scale results in a higher negative correlation, thus indicating that more positive correlations (with either of the two scales) indicate that the participant's locus of control is more internal.

In the following analysis, the variables have been divided into three separate groups: psychological skill variables, practice-influencing variables, and success-indicating variables.

1) The **psychological skill** variables include: *self-efficacy*, *LoC External*, *LoC Internal*, *RNO*, and *RPO*.

2) The **practice-influencing** variables are those that we consider influence professional practice in some way. Thus, while not directly suggesting causation, we would suggest that these variables are likely to influence translation practices and actual behaviours in various ways, as well as being influenced by these practices and behaviours (in some cases; e.g. identity). These variables include: *age*, *years working in translation*, *identity as a translator*, *number of different types of advertising*, *confidence with translation tools*, and *skill with translation tools*. They are what we could call the arbitrating or mediating variables between psychological skill and actual professional practice and results.

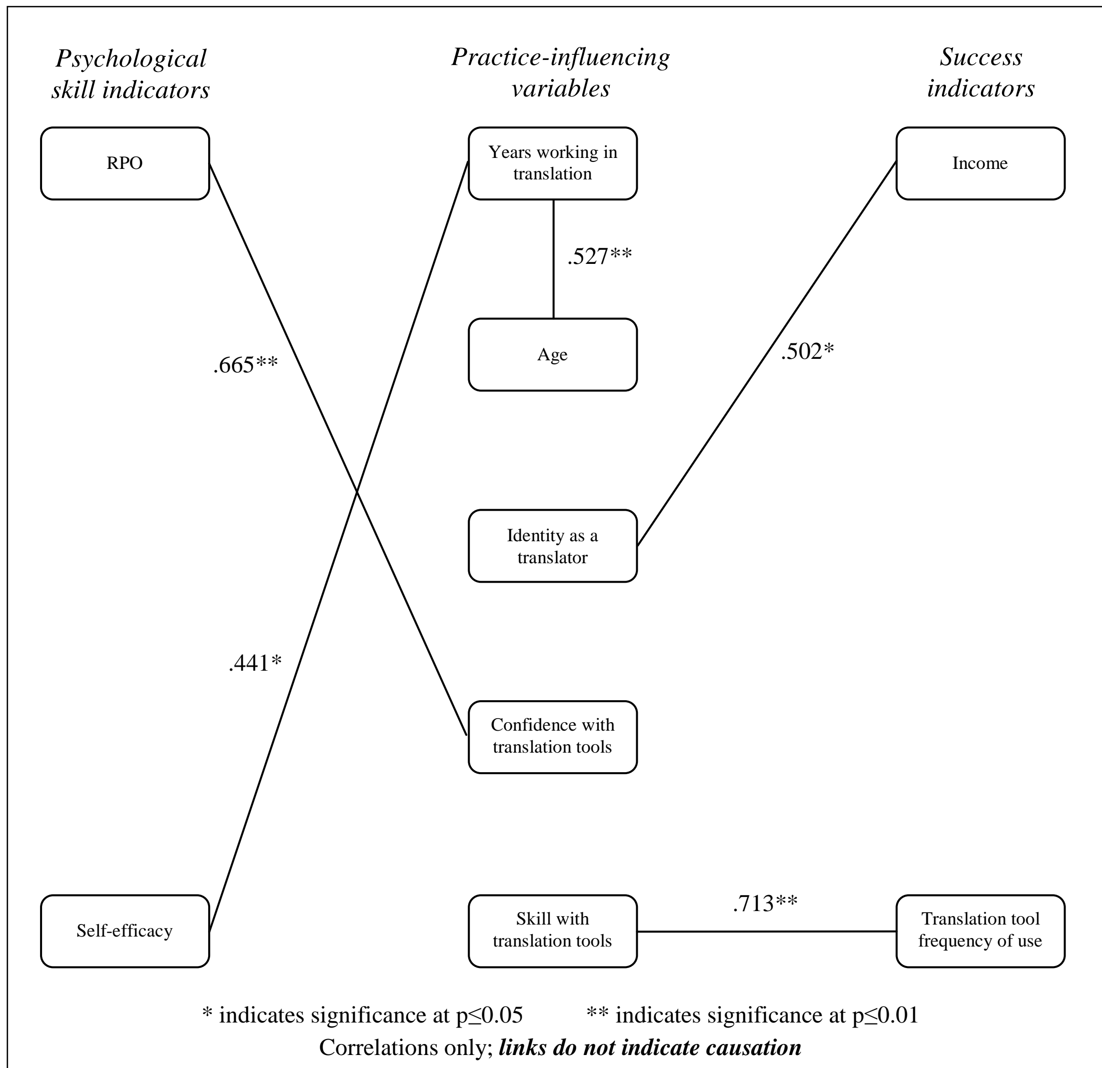
3) The third group includes the **success-indicating** variables—those variables that indicate professional success, including: *job satisfaction* (a measure of internally-judged professional success), *income*, *jobs per week*, *hours worked per week* (all measures of externally-judged professional success), and *translation tool frequency of use* (a measure of technological professional success).

The following two figures indicate the relationships between the variables. Figure 4.15 shows the relationships between the practice-influencing variables and the psychological skill variables, between the practice-influencing variables and the success-indicating variables, and among the practice-influencing variables themselves.

Figure 4.16, on the other hand, shows the direct relationships between the psychological skill variables and the success-indicating variables, and on the relationships within each of these two groups.

To make analysis clearer, only statistically significant correlations after Benjamini-Hochberg correction are shown in Figures 4.15 and 4.16.

Fig. 4.15. Statistically significant correlations (after Benjamini-Hochberg correction) between practice-influencing variables and psychological skill variables, and between practice-influencing variables and success-indicating variables



4.1.2.3 Analysis and discussion of significant correlations

We will start off with discussion of the relationships found between psychological skill variables and 'practice-influencing' variables, with an analysis of each significant relationship and assessment of what might be the major factors involved. In this analysis we will discuss what *may* have been the causal relationships between the two (and sometimes unknown third) variables, but will refrain from stating that these are undoubtedly the causes.

Analysis 1: ***Years working in translation*** (Question 7 in the questionnaire) shows two significant relationships in Figure 4.15.

a) The first is with *self-efficacy*, showing a moderate positive correlation. This is reflected in the experience that many people have of becoming more confident the longer they spend in their profession, probably due to accumulated experience making daily work decisions easier, combined with increased professional confidence due to the accumulation of past successful problem-solving experiences and overcoming challenges. This could also be due to those with higher self-efficacy 'sticking it out' longer in the profession without giving up or getting out due to dissatisfaction or other factors, such as career shocks (i.e. major negative events).

b) The second relationship is a fairly strong positive correlation with *age*. This is to be expected: the longer someone is in business, the older we would generally expect them to be, all other things being equal.

Analysis 2: *Age* (Question 4) shows one significant positive relationship.

a) This relationship is with *years working in translation* (see **analysis 1b** for discussion).

Analysis 3: *Identity as a translator* (Question 11). This is a measure of how strongly participants felt that they were translators, rather than interpreters or other types of professionals. It is a subjective measure of strength of identity as part of a particular professional group. A t-test confirms its utility as a measure, with those working over 50% of the time in translation having a significantly higher identity as a translator than those working less than 50% in translation ($t = 2.77$, $df. = 27$, $p = 0.025$, two-tailed).

a) There is a moderate positive correlation with *income*. Given that a major source of professional identity often comes from how much we earn in our profession, this correlation is hardly surprising. From anecdotal and observational evidence that most of us have, we know that when answering the question 'what do you do?', activities which earn us money (thus providing us with social status) are usually the first ones named in the answer. This is an indicator of the degree to which income-earning activity defines our professional identities.

Analysis 4: *Confidence with translation tools* (Question 29). Firstly it must be remembered that not all translators use translation tools (only 25 participants in our sample indicated that they were using some kind of translation tool), so these findings

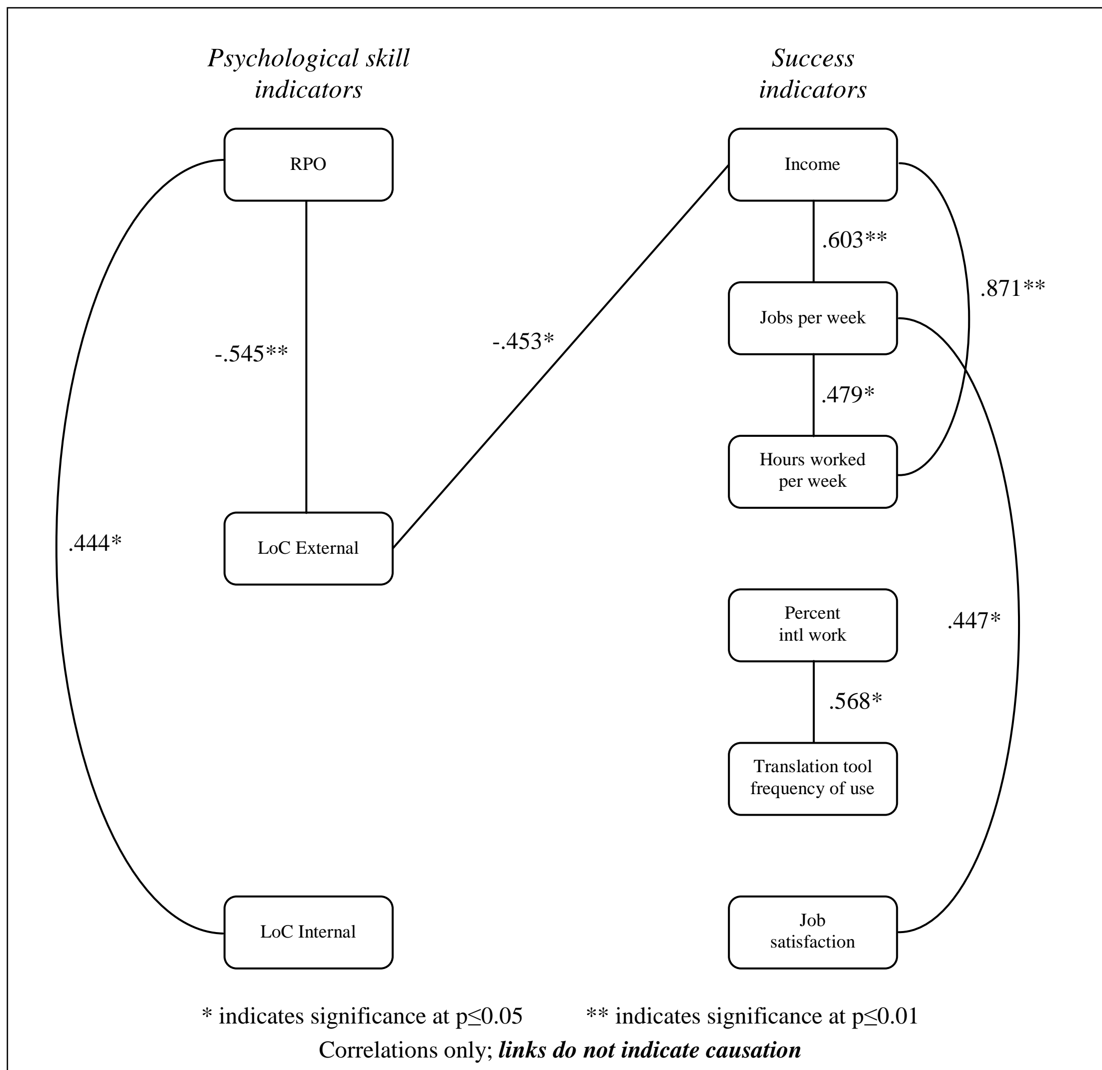
will not apply to all participants in the sample. Another issue in the analysis was unexpected data. On analysis, it was noted that two participants (including one whom the author knows to be a teacher of translation tool usage!) had responded that they were highly *unconfident* in the use of translation tools, despite indicating that they frequently used a wide variety of tools. Therefore their work profiles did not match their responses concerning their confidence levels. Because of the small sample size, these 'erroneous' results strongly affected the initial correlations, making them non-significant. See Section 4.1.1.1 for more detail on this.

a) There is a positive relationship with *Responsibility for Positive Outcomes* (RPO), with a fairly strong and highly significant positive correlation coefficient of 0.665. Given that RPO is a measure of positive attribution style (in this case taking credit for positive outcomes that happen to us), it would seem hardly surprising that it positively relates to confidence in the use of what is often highly specialised technology. In this case, it seems quite likely that some other psychological mechanism (i.e. a third unknown variable) would probably cause both the sense of responsibility for the positive outcome and the confidence to use the technology involved. Another explanation could be that the third variable is simply the successful completion of one or more jobs using translation tools, and the positive psychological benefits that we would expect from that.

Analysis 5: *Skill with translation tools* (Question 28). This question asked participants to give a subjective rating of how skilled they felt that they were with the translation tools that they use. On initial analysis, there was only one significant correlation with any of the other variables (this being translation tool frequency of use), which was somewhat surprising. Again, tool skill and tool confidence may well have been related, had it not been for the two unusual ratings mentioned in Analysis 4 above.

a) There was a highly significant and strong positive correlation coefficient with *translation tool frequency of use*. This indicates that increasing use and increasing skill go together, due to becoming familiar with how to operate the software packages, and thus feeling more confident about doing so (remember that our ratings of skill are subjective, and therefore are influenced by perceptions of confidence).

Fig. 4.16. Statistically significant correlations (after Benjamini-Hochberg correction) between and among psychological skill variables and success-indicating variables



The second section here looks at the relationships depicted in Figure 4.16. This figure shows the relationships between *psychological skill* variables and professional success variables. Again, as in Figure 4.15, those variables with no significant relationships have been omitted from the analysis. They are discussed at the end of the analysis section.

Analysis 6: *Responsibility for Positive Outcomes* (RPO; items *b*, *c*, *d*, *e*, *g*, and *i* of Question 33). This is the degree to which participants feel that they are responsible for the good things that happen to them. This variable had two significant relationships with others.

a) Firstly, there was a fairly strong and highly significant negative relationship with *Locus of control External*. This is expected, since *RPO* and the locus of control scales are measuring similar constructs. This negative relationship means that as people take more responsibility for the positive outcomes that happen to them, so they tend to also believe less that the consequences of their actions are outside of their control. This indicates that *LoC External* is a part of psychological 'low-skill', as distinct from *RPO*.

b) We noted a moderate positive relationship with *Locus of control Internal*. This means that as people feel more responsible for the good things that have happened to them, so they also feel more that the consequences of and the responses to their actions are under their control. This also provides evidence that *RPO* is measuring a part of the *psychological skill* construct, in that values in it increase in relation with other variables hypothesised to be a part of this type of skill.

Analysis 7: ***Locus of control External*** (items 5, 6, 8, 9, 10, 12, 13, and 16 of Question 32) had a number of significant and reasonably strong correlations with other variables. It was an important variable of psychological 'low-skill' (see footnote discussion earlier in this chapter), meaning that it was the only psychological skill variable to relate significantly and directly with measures of success.

a) The first correlation, fairly strongly negative and highly significant, is with *Responsibility for Positive Outcomes* (see **analysis 6a** for further discussion). This strong negative correlation adds evidence to the notion that internal positive attributions and external locus of control belong to two opposing elements, being psychological skill and 'non-skill' respectively.

b) The other correlation is with *income*, and it is moderately negative. This shows that those who earn less also feel that consequences happen to them in spite of their actions; in other words, they feel less in control of their work. Whether this is because lower income makes them feel so is uncertain—it is certainly possible. Fraser and Gold (2001) note that 75% of those translators in their sample who had dropped clients had done so over money issues. Those with less income quite likely feel less able to control their work, such as putting up with difficult clients and tight deadlines; certainly those with fewer clients felt less control (Fraser and Gold 2001:691). With the relationship observed here, the *coefficient of determination* is 0.205, meaning that around 20% of the variation in income can be predicted by the variation in *LoC External* scores, and that

the rest of the variation (*coefficient of alienation*—here 80%) needs to be explained by various other known or unknown factors. This indicates that *LoC External* scores may possibly be the best predictor of income among translators as a group.

Analysis 8: ***Locus of control Internal*** (items 1, 2, 3, 4, 7, 11, 14, and 15 of Question 32) is the next variable to be analysed here.

b) There was a positive relationship with *Responsibility for Positive Outcomes* (*RPO*; see **analysis 6b**).

Analysis 9: ***Income*** (Question 14). This measures income brackets of 10,000 income units each, with any non-New Zealand Dollars (NZD) converted to NZD.

a) The first very strongly positive and highly significant correlation is with *hours worked per week*. This (as would be expected) indicates a clear relationship between hours worked and income received. Such a strong correlation also lends support to the idea that the relationship between the two variables is relatively linear, and that substantial overpayment and/or underpayment from a mean level of payment are not particularly prevalent in the type of market that our sample is working in. It generally indicates that our sample is generally neither working long hours for little payment, nor working few hours for large payments.

b) The correlation is with *jobs per week*, and is strongly positive. This indicates that those who are doing more individual jobs per week are also earning more, on average. This could be related to the previous relationship with hours per week, given that there is also a significant positive relationship between jobs per week and hours per week (see **analysis 10c**).

c) There was a negative correlation with *LoC External* (see **analysis 7a**).

Analysis 10: ***Jobs per week*** (Question 8). This measures the number of jobs that, on average, the translators in our sample completed per week over the past year.

a) There was a positive relationship with *income* (see **analysis 9b**).

b) There was a moderate positive relationship with *job satisfaction*, which indicates that the more work our translators are doing, the more satisfied they tend to be with their work. Keeping busy and achieving our career goals are important when that career is

important to us, so we might venture that jobs per week could conceivably result in job satisfaction.

c) There was a moderate positive relationship with *hours worked per week*. This provides evidence that the translators in our sample are neither doing exceptionally long hours on few large jobs, nor doing many small jobs very quickly. In other words, as participants do more jobs, so their number of working hours also increases in a reasonably predictable fashion.

Analysis 11: ***Percentage of international work*** (Question 17). This asks our sample translators how much of their work is for domestic clients, and how much is for overseas ones. The idea of it being a measure of success is the professional prestige and probably superior income and work amounts coming from tapping into the international market.

a) There was a moderately positive correlation with *translation tool frequency of use*. This was expected, since New Zealand's market is relatively small, and is probably not as industrialised and technical as some other markets, such as Japan and Europe. Given that, we would expect more work requiring translation tools to come from outside of New Zealand. The correlation provides evidence of this.

4.1.2.4 Other relationships of interest

There were several other relationships and differences of interest, the results of which are reported here.

Amount of work. Another test was done on the difference in psychological skill scores among those who reported that they had too little work, enough work, and too much work (Question 13). A Kruskal-Wallis H test was done, which showed that *occupational self-efficacy* was significantly lower among those who had too little work (mean rank 16.92), than among those who had enough (mean rank 27.25) or too much work (mean rank 23.56), $H(2) = 6.08$, $p = .048$. *Locus of control external* scores were also significantly higher among those with too little work (mean rank 28.39) than among those with enough (mean rank 18.91) or too much work (mean rank 13.00), $H(2) = 10.06$, $p = .007$. A median test gave the result that only *locus of control external* was significantly different, giving the result of $\chi^2(2) = 7.31$, $N = 43$, $p = .026$.

Other psychological skill variables showed no statistically significant differences across these three brackets of work amount, either with the Kruskal-Wallis H test, or with the median test.

In terms of income, there were no significant differences across income brackets in terms of psychological skill variables (as tested by the Kruskal-Wallis H test), with the closest being *locus of control external*, $H(6) = 11.40$, $p = .077$, indicating that participants in lower income brackets tended to have higher *LoC external* scores, but not significantly so. The median test found no statistically significant differences either.

Source text format. We expected that those working with technically-demanding web-based and software text-types might have a more internal locus of control, and so this was tested with the Kruskal-Wallis H test. We found no statistically significant differences across the psychological skill variables in terms of those who worked with web-based/software text types versus those who did not, but there the closest result was with *locus of control internal*, $H(1) = 3.48$, $p = .062$, indicating that those who worked with web-based or software texts (mean rank 27.38) had a more internal locus of control than those who did not work with these text types (mean rank 19.67), but that this difference was not quite enough to be considered statistically significant. We noted no significant differences with the median test.

This relationship is not unusual; in such a delicate and highly-controlled area as web and software translation someone would tend to have a more internal locus of control, as someone feeling a low sense of control over their translation actions in such a technically-demanding environment would quickly find such a delicate process as web translation very frustrating, due to the lack of perceived relationship between their actions and inputs and the actual outcomes that they achieved in their texts. It would be interesting to measure locus of control in this context more specifically, such as by using Charlton's (2005) Computing Control Scale.

4.1.2.5 Non-significant and near-significant relationships of interest

This analysis is of those correlations that were significant at $p \leq 0.01$ before Benjamini-Hochberg correction, but not significant after. These were as follows.

Years working in translation was positively correlated with *income* ($\rho = .402$, $p = .008$ uncorrected). This indicated that the longer a translator had worked, the more they tended to earn. This observation seems intuitive, given that a senior professional tends

to be able to command higher rates of pay, and given the evidence that senior translators tend to work more hours per week the more years they have been in the industry ($\rho = .389$, $p = .010$ uncorrected).

Jobs per week and *LoC External* were negatively correlated ($\rho = -.431$, $p = .006$ uncorrected). This showed that as our translators did more jobs per week, so they felt that they had a more internal locus of control.

Hours worked per week and *translation tool confidence* were positively correlated ($\rho = .515$, $p = .008$ uncorrected), meaning that as translators worked more hours per week, so they also considered that they had more confidence in dealing with and using their translation tools. The probable reason for this correlation is the fact that generally those who work more hours will also be using their translation tools more often ($\rho = .417$, $p = .038$ uncorrected), and will generally have more opportunity to feel confident in their use.

Percentage of translation work correlated negatively with *LoC External* ($\rho = -.472$, $p = .008$ uncorrected), showing that as our sample indicated that they did a higher proportion of translation work (as distinct from interpreting or other work), so they felt that they had a more internal locus of control. This finding is interesting, as there is no particular reason why this relationship should exist, because it appears to indicate that translation as a job and internal locus of control are positively related, at least in our sample. There is no particular evidence to suggest that certain professions require more internally-oriented loci of control, and even if there were, there is no evidence to suggest that translation should be one those. Analysed in a different manner, the evidence here suggests that those who are doing more, say, interpreting would believe more that the consequences of their actions tend to be more outside of their control. At this point, there is no clear explanation for this finding, other than to suggest a) that it may represent an unexpected feature that needs to be explored further, or b) to consider that it may simply represent a random finding, exacerbated by our relatively small sample size and the increase that random effects and measurement error have on such a sample. This relationship did not replicate in the main study, so it is quite possibly spurious.

Identity as a translator and *job satisfaction* were positively correlated ($\rho = .408$, $p = .007$ uncorrected), which indicated that those who had a stronger identity as a translator were also more satisfied in their work. This observation seems at first

puzzling (why should those doing more translation be more satisfied than those doing other kinds of work?), much like the observation discussed in the previous paragraph. However, on closer consideration, job satisfaction is not measuring general job satisfaction, but rather translation-specific job satisfaction. This helps to explain why the correlation may be present.

The last relationship in our analysis here is between *job satisfaction* and *LoC External* ($\rho = -.399$, $p = .009$ uncorrected). This negative correlation shows that as our translators are more satisfied with their work, so they felt less that the consequences of their actions were out of their control.

These results all indicate relationships which *may* be real, but which show that there is rather too high a possibility that they are related only by chance. The main phase of the study, with its larger sample size, will show whether in fact these relationships prove to be strong enough to be significant, and whether they show themselves again under replication.

In terms of important non-significant variables, *Responsibility for Negative Outcomes* (*RNO*) did not correlate significantly with any other variables, nor was it particularly close to doing so (the closest relationship being with *percentage of international work*, ($\rho = .380$, $p = .014$ uncorrected)). This may be due in part to the reduced internal reliability of the scale which the authors noted (Brewin and Shapiro 1984:46-47), mentioning that it may require more work to refine it, although we noted that the internal reliability of the *RNO* scale was in fact higher than that of the *RPO* scale (alpha = .711 for *RNO* versus .633 for *RPO*). However, on the basis of this evidence, we could argue that it might possibly be best to leave the *RNO* scale out of the main study, as it has problems in one important aspect of construct validity—that of associations with other related variables, in this case particularly with *RPO*, which indicates that the scale may be measuring something other than what we expected it to. Construct validity here refers to the interpretation of information related to the internal structure, associations with other variables, consequences of use, test content, and response processes (see Furr and Bacharach 2008:168-190 for more information). However, we decided to keep the RNO scale in the main study, as the number of participants in the pilot study may be the factor that is affecting its apparent internal reliability.

Finally, it was interesting to note that *job satisfaction* did not correlate significantly with *income* ($\rho = .349$, $p = .023$ uncorrected), despite the common anecdotal view (and

research finding) that higher income and higher job satisfaction go together. Our result indicated a not particularly strong relationship between the two variables. There was an even weaker relationship between *satisfaction* and *hours worked per week* ($\rho = .296$, $p = .057$ uncorrected). Perhaps job satisfaction is derived more from other sources, such as feelings of accomplishment, enjoyment of challenge, problem-solving, work flexibility around the demands of family life, and so forth. The evidence for this is suggested by the strong relationship between satisfaction and number of jobs per week (see Analysis 10b above).

4.1.2.6 Support for hypotheses

In summary, a number of hypotheses proposed in Section 3.1 were clearly supported, by virtue of finding 12 statistically significant correlations. These were as follows:

Group 1: a

Group 2: c

Group 3: a, d, i

Group 4: b

Group 6: a

Group 7: g

Group 10: a

Group 12: e

Psychological scales: relationships between *LoC External* and *RPO*, and between *LoC Internal* and *RPO*. All others not supported.

A number of hypotheses were not supported, including all involving the variable *Responsibility for Negative Outcomes* (*RNO).*

4.1.2.7 Overall conclusions of quantitative pilot data analysis

In these last two sections, we take a brief look at the conclusions of the data analysis. A more in-depth discussion, plus what participants might do to change parts of their psychological skill profile, will be undertaken in the main study. These conclusions are the result of preliminary analysis only.

The data show moderate support for the idea of a construct of *psychological skill*, with a number of relationships between the psychological variables that were measured. *RPO* and *LoC Internal* had a positive relationship, while *RPO* and *LoC External* had a negative relationship. In all, *LoC External* was the most effective direct predictor of psychological skill and its inverse, psychological 'low-skill', with one moderate negative relationship with *income*, and with two negative near-significant relationships with two important success variables, being *jobs per week* and *job satisfaction*.

In terms of the relationships between the groups of success-indicating variables and the *psychological skill* variables, internally-judged success (*job satisfaction*) was negatively related (at marginal statistical significance) with *LoC External*. Externally-judged success variables (*income*, *jobs per week*, and *hours worked per week*) were again negatively related, in the case of *jobs per week* and *income*, with *LoC External*. Finally, technological success (*tool frequency*) was not significantly related with any of the psychological skill variables.

All in all, the data seem to provide moderate support for the idea of a network of underlying relationships that we consider together comprise psychological skill, and that psychological skill does appear to have at least some direct links with critical measures of professional success in translation (see Figure 4.16), even though a number of hypotheses were not supported by the statistical evidence. The results also showed that the *LoC External* scale was the only effective measure of psychological skill in this sample of translators. Part of the reason for the gaps in the evidence may have been because of the general nature of the psychological scales, which measured *general* self-efficacy, work locus of control in a *general* sense within the work domain, and levels of responsibility for *general* outcomes. It is possible that more specific scales, tailored either to work, or to translation work in particular, may have shown clearer results with the participant sample. Perhaps there could be an opportunity for specifically-tailored scales for the translation industry, which would firstly have to be formulated and validated (Gouadec (2007:157) does consider translation-specific self-efficacy in his self-evaluation scale for aspiring translators). Tailoring those scales to the technical, practical and social aspects of freelance translation practice could yield more finely-grained data. The consequence, however, would be the lack of direct comparability of results with other studies which have used the general scales. A suitable compromise could be to use a general work-related self-efficacy scale, such as the Occupational Self-

Efficacy scale (OCCSEFF) of Schyns and von Collani (2002). We used this in the main study (see Chapter 5).

As is often suggested, and which holds true here, more research is needed (with a larger sample) to see how the relationships hold together when tested again. Because of the relatively small sample size here, relationships may not be seen in their full strength (or lack of it) because smaller sample sizes are much more susceptible to data 'noise' (errors, missing data points, answers based on misinterpretations of the question, etc.). This occurred, for example, with the two abnormal responses to the question of *translation tool confidence* (see Section 4.1.1.1 for a discussion of this), and with a response which indicated a far higher number of jobs per week than seemed plausible, given that participant's income bracket and the number of hours worked per week. A larger sample size reduces the relative importance of these effects, allowing us to see the real picture more clearly.

One single statistically significant result in one study does not demonstrate anything in particular by itself. But the pattern of multiple results (as shown in Figure 4.14) provides us with sufficient evidence to say that there is an apparent relationship between psychological skill (as measured by the *LoC External* scale, which is by far the most effective predictor from among the psychometric variables) and externally- and internally-judged professional success. Therefore we can clearly state that those among our sample who are generally doing better in the New Zealand translation industry as judged by external success criteria are those who, generally speaking, have higher levels of psychological skill. By this we mean that those who are more externally successful in the profession (generally busier and with more income) have more internal perceived loci of control (i.e. they perceive a clearer connection between their actions and the outcomes of those actions, as measured by *LoC External*). Thus a link between psychological skill and externally-judged success is evident. More details of the link will be investigated in the next chapter.

4.1.2.8 A note about causal directions

One very important issue is the question of causality, given that we have explored causal possibilities in each significant relationship. Does a state of high psychological skill cause success-making actions, or is it the other way around, or is there a circular feedback relationship between them? Using the methodology that we have used so far,

there is no way of answering this with any certainty, because we are only investigating correlations, not causal relations. We have to base that answer on the findings of others, who generally propose that there is an interaction between task success and self-efficacy (Shea and Howell 2000), that work simulations in universities can increase work-related self-efficacy (Subramaniam and Freudenberg 2007), and that internal attributions for past successes affect self-efficacy when considering future success, which in turn affects future performance (Silver, Mitchell, and Gist 1995; Stajkovic and Sommer 2000). As Gecas (1989:298) states (referring to self-efficacy):

> While the determination of causality is never certain in social psychological research, we are on fairly firm ground in assuming the causal influence of self-efficacy as reported in these studies since most of this research is based on experimental or longitudinal designs. Still, in "real life" the relationship between self-efficacy and various psychological and physical states is undoubtedly reciprocal, e.g. feelings of inefficacy can lead to depression, and being depressed can contribute to one's sense of inefficacy.

This indicates that the relationship between belief, behaviour and performance is more complicated and uncertain than it seems. Shea and Howell (2000) noted that self-efficacy was maintained by task success, but that self-efficacy is only a strong predictor of task success at the beginning of a series of tasks, after which actual prior performance is a better predictor. Intuitively we understand that this makes sense, as it is at the start of a career when the most challenges are perceived and self-efficacy is most needed. Once successfully established, assuming there are no major failures or upsets, we tend to 'cruise' at fairly much the same level of confidence with slowly accumulating competence, because success in our last task tends to give us the confidence to tackle the next one.

Another finding related to the causal relationship between success and self-efficacy was that in one study, self-efficacy brought about by prior success, caused the next task to be perceived as easier, and participants set higher goals (David et al. 2007). In this study, intrinsic motivation was also found to be a factor, with those high in intrinsic motivation being less affected in their self-efficacy by prior successes or failures.

In terms of organisational employees, a study by McNatt and Judge (2008) observed that with financial auditors, an intervention (communications from their bosses) which raised their self-efficacy also affected their subsequent performance by improving their work attitudes and reducing organisational turnover due to disillusionment and reduction of initial enthusiasm.

It might also be noted that perceptions of locus of control affect depression levels, with those who have a more external locus of control and who thus see events occurring to them by chance tending to have higher levels of subsequent depression (Burger 1984). One of the side-effects of depression is a loss of interest in various activities, including work. On the basis of this evidence, we might suggest that a more external locus of control might be part of the cause of less successful work functioning (bearing in mind that by no means all people with an external general locus of control would be depressed).

4.2 Pilot study interview data analysis

The interview data consisted of three interviews with three participants in New Zealand, each of around 45 minutes to one hour in length. The following section deals with the profiles of the participants, and the analysis of the data that they provided.

4.2.1 Participant profiles

The participants, selected from among those available for interview, were chosen carefully from among those who wished to be interviewed, in order to represent a wide range of attributes, skills and levels of experience.

In the following section, we analyse the interview transcripts in order to obtain in-depth answers to important questions, such as how they describe their experiences, and how this might illustrate how their psychological processes affect them in their work.

The three participants were female, with an age range between the mid-30's and mid-50's. Participant 1 was born in New Zealand, and Participants 2 and 3 were born in Germany.

They reported their amount of translation work experience as two, six, and 29 years respectively, and their number of jobs per week as two, 0.25 (i.e. one job every four weeks), and 14 jobs per week, on average. The first two participants worked between 0-10 hours per week, while the third worked between 31 and 40 hours per week. The first participant reported 15% interpreting, while the other two reported 100% translation only. All identified themselves very strongly as translators. They reported that they would like to work 21-30 hours per week (P1), 11-20 hours per week (P2), and 31-40

hours per week (P3), indicating that only Participant 3 was satisfied with the amount of work that they were doing. This was supported by their answers to Question 13, with Participants 1 and 2 reporting too little translation work, and Participant 3 reporting the right amount of translation work.

Their annual incomes from translation were reported as between 0-10,000 for Participants 1 and 2, and between 50,000-60,000 for Participant 3, in New Zealand dollars. Participants 1 and 3 described work for agencies as their most important source, while Participant 2 did more work for direct clients. None reported doing any in-house work. Participants 1 and 2 did 90% of their work domestically, while Participant 3 did only 40% domestically, which we will show influenced her beliefs on the nature of the translation market.

In terms of advertising, Participant 1 did no active advertising, Participant 2 used her social networks, and Participant 3 used social networks, a translators' website (like ProZ, etc.), and had an ad in a major advertising directory. Participant 1 reported having an entry on a government-approved list of translators as another form of advertising.

Participant 1 reported translating immigration-related and general documents, Participant 2 translated medical, immigration-related, science/engineering and general documents, and Participant 3 translated legal, medical, business/economic/financial, scientific/engineering, advertising/creative, tourism, and general documents.

In terms of text formats, all participants worked with hard copies and PDFs, while Participant 2 also worked with MS Word documents, and Participant 3 also worked with MS Word documents, other MS Office formats, and web-based formats (HTML, XML, etc.).

For translation tools, Participant 2 used Wordfast, while Participant 3 used the SDL Trados suite; Participant 1 did not use any tools. Participants 2 and 3 wanted to increase productivity and quality through using the tools. Participant 2 used the tools for translation and terminology work, while Participant 3 used them only for translation. Participant 2 used them just a few times a year, while Participant 3 used them once every two or three weeks. Both participants considered that their skill level with the tools was low, and felt unsure in their confidence of use.

In terms of job satisfaction, the participants' scores were 4.6, 4.4, and 4.6 out of 5 respectively, indicating high levels of job satisfaction.

4.2.1.1 Scores on psychological scales

The three participants' *self-efficacy* scores were 3.13, 3.63, and 4.38 out of 5, indicating a positive (but not necessarily significant) correlation with age, experience and levels of work.

Scores on the *Locus of control Internal* subscale (higher scores meaning a more internal LoC) were 3.63, 3.63, and 5.00 out of 6, while scores on the *Locus of control External* subscale were 2.75, 2.63, and 2.00 out of 6, indicating that the senior translator of the three had a more internal LoC, as measured by both scales, and that none of the three had a particularly external locus of control.

Finally, scores on the *Responsibility for Positive Outcomes* subscale were 3.00, 3.50, and 3.50 out of 6, while scores on the *Responsibility for Negative Outcomes* subscale were 2.67, 3.67, and 2.00 out of 6.

These scores by themselves add some evidence to our theory that the more successful the translator (in terms of income, busyness, years in the business, etc.), the higher the levels of psychological skill as measured by the scales.

4.2.2 Pilot study interview analysis

The interview aimed to answer a number of key questions, which are set out in Figure 3.3. These questions supplement the questions posed in the quantitative section of the study (as measured by the scales), and also focus on some additional areas, such as how the participants handled their professional-social connections.

The questions were tested in the three pilot interviews, and revealed a number of interesting results.

4.2.2.1 Proposed cause-effect sequence of beliefs and behaviours

We wanted to obtain an idea from participants' experiences of the sequence of self-beliefs and associated behaviours, and what the participants themselves perceived this sequence to be.

Participant 1 appeared to need some external encouragement to begin translation:

> P1: Yes I got my, I sat the NAATI exams to get my translation accreditation in 2001 but I didn't actually start working as a translator ahm until a couple of years ago, and that, I started then, well I didn't start immediately because… ahm I had other work, I was doing

> other work and *I didn't feel completely confident about my language skills even though I did succeed at the NAATI accreditation exams*, ahm but a few years ago a friend of mine who I'd studied with did his exams and jumped straight into translation as a as a profession, and ahm so *I was very encouraged by this and started to advertise myself*

We can see from her response that positive self-evaluations came probably *before* rather than after the decision to start working as a translator, even though she had received accreditation. It was the increase in self-efficacy (brought about by positive evaluations from others) that seemed to encourage her to subsequently begin working in the profession that she wanted to join.

Participant 1 says more on the same topic:

> P1: …I'd done an honours year…
>
> I: Ah ok, yep
>
> P1: …during which my lecturer had been very encouraging about my translation abilities, so I was feeling…
>
> I: Right, so they they kind of gave you a push into translation
>
> P1: Well it was a ahm a validation that my skills were adequate

This is further evidence that, in this case, positive self-beliefs were the perceived trigger to subsequent actions.

As Participant 1 says about the growth of her confidence and positive self-beliefs:

> P1: [pause] I think it's grown, and I'm becoming more and more confident and in control, hmm
>
> I: So…
>
> P1: As I, as I said earlier I I didn't, *I was basically too shy to start work as a translator after I got my accreditation*, ah and I was, I was a bit timid when I started, and I'm still a bit timid, but I am feeling more confident
>
> I: What do you think ah reduced your ah timidity?
>
> P1: Experience
>
> I: Experience?
>
> P1: Hmm
>
> I: So experience being…?
>
> P1: Ahm hmm know, you know with more, from doing more and more work I'm more and more aware of my abilities and and I know that I know what I can do on whatever day, ahm I'm a good, although inexperienced, ahm relatively inexperienced, translator, ah so it ahm, yes, that gives me confidence

This appears to indicate that Participant 1 perceived that during the course of her career, there had been a continuous feedback loop at work between external successes and internal self-beliefs.

Participant 2 also indicates this process, whereby experience accumulates with the passing of time (i.e. encountering more experiences during one's career, thus reducing the unknown elements and the novelty of situations), which tends to lead to increased confidence:

> P2: And ah, although you know you have you have to become kind of a little bit of a business person, ahm so I mean, *I'm getting older and I'm becoming more confident*, things like that

> P2: Hmm, no, I mean you deal with them you know [laughs], and but I think if I was younger, I probably, you know I probably would have been daunted by some of those challenges

> P2: Yeah, I think as *I get more ahm specialised I'll probably become more and more confident*, for me a lot of jobs that I accept are are new jobs, I have to, you know, I start something new

Finally, Participant 3, in a much more advanced stage of her career, mentions that her self-beliefs are fairly stable, as one would expect at the mature stage of a career:

> P3: Well, kind of most of the time [laughs] sort of, yeah, I mean yeah as confident and in control of things as as I want to be, and of, yeah, confident as in oh yeah, because I'm a kind of happy-go-lucky kind of person, you know, and and so *the she'll-be-right confidence sort of thing*, and ah in control well, you know, well like I said before, I don't always feel that much in control, but *things usually sort of muddle along quite nicely*, hmm

In spite of this maturity and stability of self-evaluations, even Participant 3 indicated that things were difficult for her at the second beginning of her career when she first moved to New Zealand:

> P3: Hmm, but no, it was, it was quite hard ah to start, *I didn't really know where to start* and I didn't try that hard because I had the little children, so, hmm

Here she indicates that childcare was a limiting factor on her career development at that stage, presumably because of the time demands involved in childcare. We will explore the relationship between childcare and work later in this chapter.

In summary, the causal directions are not explicit here, but they seem to indicate that positive self-beliefs are at their most useful in the beginning of a career, when people are first starting out. Just as a seedling plant responds after water is applied by putting on noticeable growth (whereas applying water to a mature plant has less noticeable

effect), so positive psychological styles seem to provide the stimulus for successful work-growth most noticeably in the beginning of a career.

4.2.2.2 Satisfaction in work

There were several major reasons that participants expressed when asked about what they found satisfying in their translation careers. Given that satisfaction is regarded in this study as the key measure of subjective success, it is important to find out what these reasons are.

One major theme was a philanthropic one—that of helping people by doing work that would lead to positive outcomes for others. Both Participant 1 and 2 expressed this sentiment in quite clear and surprisingly similar ways:

> P1: Yes, and ahm [*pause*] in a way ahm, *it's an opportunity to help people* because a lot of my clients are ahm applying for their ahm qualifications or papers that will help them in their life in New Zealand
>
> P1: *…you're working but you're helping people at the same time…* yes... I'm not a doctor, I'm not a ahm you know one of, one of those recognised public service roles
>
> I: Yes, sort of classical professions
>
> P1: Yeah, but ah I *still feeling like I'm helping* in most cases, ah and I like that

> P2: Hmm, yeah it's nice to you know, because I do quite a lot of, when I work, I do quite a lot of ah work for ahm people who want to immigrate to New Zealand, you know
>
> I: Ah ok
>
> P2: And it's got, it's nice that, to see that you know, they are successful, you know *I've contributed to them being successful*, ahm you know being able to get work permits and things like that, I mean it's just small jobs, they're all small jobs that I do you know, but…
>
> I: You're kind of helping somebody to start a new life
>
> P2: Yeah, yeah

There were also more general reasons given for job satisfaction in freelance translation:

> P3: *I like the flexibility*, that I could see, you know, many years ago, before I even started, and that flexibility has materialised, umm it's interesting, it's varied, ahm *I still like working with language*, and so so *I really like sort of every side of it*, hmm
>
> P1: Because it was many years of study that went in ahm towards ahm building up the language skills, so *it is enjoyable to ah put them to use*

Here we can see that work with language itself is a source of satisfaction for the participants. That would be a key reason for being a translator! Participant 3 also indicated that the flexibility of being a freelance translator, as well as being satisfying, also made having a family easier in the days before paid maternity leave and family-friendly organisational policies.

Participant 1 also expressed the idea that collaboration and learning with a client or colleague in order to produce a quality final text was a satisfying process:

> P1: Ahm, and it's nice to put your mind together with somebody else's mind and experience to produce a good ahm document, to produce a good result
>
> I: In what way is ah that kind of… i- it's satisfying
>
> P1: Yes, yeah
>
> I: Is it the sort of, w- what part of the connection with the other person would you say is most satisfying for you?
>
> P1: Learning from them
>
> I: Ok
>
> P1: Having them put their energy into something which is important to me, which is making a good translation

In sum, the ideas put forward by the participants to explain their job satisfaction express the fact that there is more to job satisfaction than just earning money; there are other challenges and rewards for translation practitioners which are less tangible, more emotional.

4.2.2.3 Responsibility for positive outcomes (RPO)

Responsibility for positive outcomes is, based on the quantitative evidence, one of the key factors in psychological skill. Having sufficient responsibility is important for feelings of control and psychological wellbeing. RPO is a measure of how people explain past positive and pleasant outcomes and events.

Participant 1, as a beginning translator, at one point expressed a low level of RPO for a particular outcome:

> P1: Ah in terms of attracting clients to me, perhaps there are, I've just happened to use the ah, happened to advertise myself in the very places where people look, ah I think I was *quite fortunate* that an agency that I've done a lot of work for *happened to want somebody*

> *with my abilities* in language, ahm accreditation at the time when I approached them, *so luck*, that's just a theory
>
> P1: And sometimes *it's been surprising*, ahm that I've achieved what I've wanted to achieve

This seems to express the idea that she believed that being lucky was more important to the positive outcome than that she had particular skills that were in demand.

On other occasions, Participant 1 found that getting work was not as arduous as first thought:

> I: Do you feel that the work happened, or did you ahm actually go and get it for or make it for yourself, or collect it for yourself
>
> P1: Ah, I collected it for myself, but it didn't seem to take as much effort
>
> I: Ok
>
> P1: As ahm, as it could have

It is unfortunate that we did not follow up this particular line of thought in the interview, in order to find out what exactly was the perceived cause of getting work being easier. Some possibilities might be luck, or task ease, or clients being agreeable, or that Participant 1 herself was more competent at marketing than she first thought herself to be.

Interestingly, in terms of continued client satisfaction, Participant 1 expressed the idea that she was highly responsible for that satisfaction:

> P1: …on that third point of having clients happy with me, I am very, it is very important for me to do a good job, and I, *I strive very hard to do a good job*, ahm *and that pays off*, obviously there's human error, sometimes, ahm but I try to avoid that and I want the clients to be happy with the work, so I, *I do what I can to ahm make them happy*, ahm and even if that means putting myself out sometimes

Here the comments seem to show that continued personal effort and care is responsible for client satisfaction, the desired positive outcome in this case.

Participant 1 also sums up perfectly the idea that having a very high level of RPO is not always useful or adaptive in certain circumstances, and when asked about internal or external responsibility for her own success, she gave some concrete examples:

> P1: Yeah, I feel it's ah always a combination of the two, ahm I might be a top professional, but there might be no work out there, ahm, I might be a top professional but be advertising in the wrong place, ahm you do learn more and more as you go along, ahm about, just

> about how ahm, how the world works, it's not just about translation industry but how how it all works

In this comment, Participant 1 expresses the notion that responsibility for success is always at least in part due to external and uncontrollable influences. The major point here is that RPO is at a healthy level, not too high (so as to lead to disappointment when expectations are not fulfilled), and not too low (possibly leading to fatalistic thinking, depression, and lack of effort).

Participant 2, when asked about the causes of successful outcomes in terms of translation quality, took a fairly high level of responsibility for them, explaining them in terms of her own effort to do a good job and to have good relations with the client:

> P2: Yeah I mean, *the work that you put in, being thorough*, ahm, I mean it's usually *trying to understand what the client wants*, and ahm understanding the client as well, personality of the client, because, you know I've been told oh he's very difficult, you know he questions all your translations and then [*interviewer laughs*] ahm I've I've been trying to explain why I've translated things in a certain way or if I didn't know the translations for you know, I had to do a translation about doors and ha and things like that and how they were built and so I I've been going back and and I go back to the ahm client and say, I don't understand the construction of that door, can you explain it to me, could it be this and that and then I present options to him and, to the client, and you know *try to come to a solution with the client and they usually seem to be happy with that* rather than me putting in you know, providing a translation of which I'm not sure

> P2: Hmm, and ahm yeah, and then usually I get ahm ah thank ah thank you for your professional behaviour [*laughs*]

Participant 2 also had this to say about the cause of her successes, indicating that in terms of translation quality, she perceived that positive outcomes are mostly for internal reasons:

> P2: Oh I can, I can try, ahm I mean there's always work that I have to you know, I have to *I have to make an effort myself*, so ah, you mean ahm translation, there's different aspects as well, you know, I mean if you talk about translation quality, *it's ah mostly my own efforts*

Participant 3 also talked about the idea that both her skills (she expressed a high level of RPO regarding these) and client satisfaction (expressed a lower level of RPO) were the causes of positive outcomes:

> P3: Hmm, well in the end, *the ah people looking at the translations were obviously happy with them*, because somebody you know who's not happy will not come back, or at least not the second or third time

> P3: And ah, so in the end, it comes down to ah producing, have having a good enough output, sort of, there needs to be *a certain combination I guess of speed and and quality and ahm obviously that ahm measured up…*

Sometimes Participant 3 expressed the idea of a division between high and low RPO, depending on the area of the outcomes, with one reason for success being due to effort, while the other was due to external influences:

> P3: Ahm, yeah *so that is an effort that I can say I've made*, that I've gone out of my way, you know when you're interpreting and you go on Sundays and you go in the evenings and things and that's certainly efforts, and accepting jobs and working late

> P3: Well, some nice clients have come my way and *they just arrived* and when they came I said oh yes please, but ahm *they came just for whatever ahm random reason* like they do, hmm…

For Participant 3, sometimes she considers that her work created success, sometimes she attributes it to luck, being in the right place at the right time.

4.2.2.4 Responsibility for negative outcomes (RNO)

Responsibility for negative outcomes is the other component of attribution style as explored here, and expresses the notion of how people deal with and explain past failures and negative events.

Participant 1 appeared to express a fairly high sense of RNO regarding mistakes:

> P1: Ah, when I've made mistakes it's been because *I've perhaps been a bit overconfident and not checked my work as carefully as I should have*, ah and that could be due to other reasons, like being tired or just not having time to to do it, to do it as well as I could have and thinking you know in a tired thinking in a tired way that was all that I needed, *thinking in a sleepy-headed way that you know I'd done fine and that's good enough*

These comments indicate the degree to which Participant 1 takes personal responsibility for particular negative outcomes. Contrast these with those of more experienced Participant 3, whose comments indicate that it is often the client's 'fault' as much as the translator's, both in terms of quality of source text and expectations. Thus it appears that lower levels of RNO allow for protection of one's self-image and also that these lower levels tend to come with experience and confidence.

Participant 2 expressed a high level of RNO for bad-quality work, which matched her high level as measured by the scale:

> P2: Yeah, I usually tend to blame my- myself you know

I: Can, can you think of an example?

P2: Yeah when I when I got that paragraph number and house number mixed up I should have done that better, aye, you know it's you know I could have said yeah this this woman really put me under pressure, she didn't give me enough time but I thought of this, and you know, and yeah, *should have spent more time doing what I did and being more thorough and concentrated*, so

I: So would you say there was an element of blaming the situation as well, how you just took it all on yourself?

P2: Ah probably an element of blaming the sit-, justifying, you know you justify, you blame yourself but you try to justify what happened, yeah it was the situation, if the situation had been different I probably would have got done it better, so, but [inaudible] that that holds you back as well you know, *because you think you're not good enough you know*, you're not… hmm

I: Hmm, I know what you mean

P2: Hmm, it would be good if I could just say oh well, I made a mistake there, ahm try better, try again next time, I'll do better next time, but yeah, *it takes me a long time to get over things like that*

Participant 2 expresses the idea that the after-effects of an RNO-inducing event are almost as hard to deal with as the event itself. These effects persist and seem to affect her emotionally and cognitively.

Participant 3 showed a seasoned view of responsibility for negative outcomes, suggesting that with experience, one can learn to accept a reasonable level of responsibility for negative events, rather than taking it all on oneself (she showed the lowest level of RNO on the scale):

I: Do you ever catch yourself being self-critical?

P3: Well, you can read your text afterwards and think, oh I made a mistake there, oh *I shouldn't have done that*, or oh I could have said so much better, *but you know, it's just, just happens*, sort of thing

I: Not really a big thing

P3: You have to move on, no no, unless somebody comes and sues you, which, touch wood, hasn't happened yet [*both laugh*] *you just have to move on* yeah

Participant 3 also expressed the idea of RNO another way, when discussing problems with client satisfaction:

P3: Let's take that, well I'd look at the problem and you know there might be a ahm small error in it or ahm or there might have, there might be other reasons that, if the ah, I find actually if the source text is bad, the source text is badly written, the effort to make it a

> good translation is far greater [both laugh] so a bad source text will not necessarily produce a good translation, and then the client might complain and then of course you can say well, your source text was bad and he's not going to like to hear that
>
> I: Right, right, I imagine so
>
> P3: Hmm [*laughs*] and he may in fact not accept that
>
> I: As an explanation
>
> P3: Yeah
>
> I: [*inaudible*] or not accept the job
>
> P3: Not accept, no not accept that *that his source text was bad*

In this statement, Participant 3 clearly indicates that sometimes the blame for a negative translation outcome plainly lies externally, in this case with the client's source text. A bad source text will not lead to a good target text, in her view; thus the problem is largely not hers.

Lower levels of RNO, as mentioned earlier, tend to protect the ego and provide a padding effect from the shocks of failure and negative events. On the other hand, very low levels of RNO could indicate the failure of a person to actively deal with problems that result from their own work output. A healthy balance seems best, on evidence.

4.2.2.5 Self-efficacy

Self-efficacy, as previously mentioned, is important as an indication of how people consider that they will deal with future challenges.

Participant 1 expressed the idea of it being 'liberating' working for oneself and dealing with challenges on one's own:

> P1: There's something about working by yourself that's ah liberating, in a way, so yet I do feel you know, if there's a problem that comes up, it's my problem, and I've got full responsibility to deal with it
>
> I: And you're comfortable that you can?
>
> P1: Yes, yes
>
> I: Usually? Ok
>
> P1: Yes, most *most times*

Here, she seems to express a fairly high degree of self-efficacy, and appears reasonably confident in her ability to deal with various challenges as they arise, although focusing rather on the notion that the problem belongs to her, that she 'owns' the problem (see

RNO). This could possibly link in with responsibility for outcomes, considering that if outcomes were negative, Participant 1 may feel largely responsible for it.

She responded, when questioned, that:

> P1: I can't think of anything that I haven't been able to deal with

Her response further indicates that, so far, there have been no events which were not manageable for her, and that she appears to have a reasonable level of confidence about similarly managing foreseeable future events.

The following comments also indicate the process by which she perceives her self-efficacy to have increased:

> P1: [*pause*] I think it's grown, and *I'm becoming more and more confident* and in control, hmm
>
> I: So…
>
> P1: As I, as I said earlier I I didn't, I was basically too shy to start work as a translator after I got my accreditation, ah and I was, I was a bit timid when I started, and I'm still a bit timid, but I am feeling more confident
>
> I: *What do you think ah reduced your ah timidity?*
>
> P1: *Experience*
>
> I: Experience?
>
> P1: Hmm
>
> I: So experience being…?
>
> P1: Ahm hmm know, you know with more, from doing more and more work *I'm more and more aware of my abilities* and and I know that *I know what I can do on whatever day*, ahm I'm a good, although inexperienced, ahm relatively inexperienced, translator, ah so it ahm, yes, *that gives me confidence* [*pause*]

The message from Participant 1 here seems to be that actions have preceded self-evaluation and thus self-beliefs. Thus it appears that technical and translational competence, combined with the absence of major negative events, has given rise to increased psychological skill. This is in contrast to Participant 1's comments analysed earlier in the *cause-effect sequence of beliefs and behaviours* section, in which we considered that she felt that increased psychological skill came first, before actual action.

Participant 2 discusses self-efficacy in response to challenges in a different way. Part of her concern is the cultural differences which occur, and which affect how negotiation processes in business are conducted:

> P2: Ah I think I've got some experience now, you know for instance to deal with ahm terminology and things like that ahm ahm sometimes yeah intimidated when you have to deal with people you want to get work from in the future, but you know yeah as I said before, that cultural aspect that I ahm don't know how far I can go you know, am I polite enough, ah am I too demanding, should, is it my right to ahm complain about something or should I just be quiet and wait, mm?
>
> I: And does that affect your sort of confidence about dealing with that kind of negotiation, thinking about those issues?
>
> P2: Ahm, it's always better once you're in the conversation you know, but beforehand it can tricky, and I'll, you know *I'll face it now*, *whereas before I would probably have thought, oh better keep quiet* [*laughs*]

Participant 2 indicates an increasing level of self-efficacy in dealing with clients, which appears to have come about through increasing experience with New Zealand business culture. Her greater familiarity with norms of negotiation appears to have led to more confidence in dealing with situations in her work which require interpersonal negotiation. When asked about her level of confidence (i.e. self-efficacy), she said:

> P2: Ahm, yeah, ah maybe not overly confident, but I'm not you know going to hide under the table you know [*laughs*]

Again, Participant 3 expressed again a seasoned view of dealing with challenges, demonstrating a high level of self-efficacy. She says succinctly:

> P3: Oh hmm, no, usually I somehow get there yeah, with challenges, hmm

This indicates that it is highly likely that she would hold a greater expectation for future success in dealing with similar challenges (given that self-efficacy is future-focused).

In terms of more specific challenges, she indicates that the more prosaic ones are now relatively easy to deal with, while the unusual (such as outstanding client debts) are somewhat difficult:

> I: So taking for example *textual challenges*
>
> P3: Yeah, well I usually go to some sort of great lengths to fix them, and and I'm usually fairly happy with my solutions in the end
>
> I: Right, ok, drawing on your experience and…
>
> P3: Yeah, and with the internet these days, and skills and yeah, or asking colleagues or whatever, but *with a whole range of strategies that one has*, ah I'm usually sort of more or less happy with what I find
>
> I: What ahm about other challenges, like for example, dealing with agencies or dealing with ah clients?

> P3: I don't usually have problems with agencies, and I don't of- often have problems with clients either, that's ah, yeah I had one client last year, or one where I worked… what are we now, February or so, so more than a year ago, where I did the work in November-December and I finally got paid in the end of May
>
> I: Ah ok
>
> P3: And I'd just about written that off, and and if in that time somebody had phoned me like people sometimes do, debt-collecting agencies [*both laugh*] and I always say to them no sorry I don't need you, and if anybody had phoned sort of there last February onwards or so I might have actually ah given them a job, but ah in the end I did get paid so, but yeah *that was a bit of a challenge where I didn't quite know what to do and I probably was more patient than I should have been*, but ah…

Perhaps the reason for the difficulty in dealing with this outstanding debt is that the situation is unusual, and there are somewhat fewer established norms for dealing with it, thus requiring more self-efficacy for creating a new 'script' to reach a satisfactory solution. Again, we encounter the idea that self-efficacy is particularly important when dealing with novel situations.

Finally, Participant 3 expresses a desire to get into literary translation (one of the major attractions of translation for her in the first place), but is not hopeful, probably referring to reasons (specifically to do with the field of literary translation) other than her actual translational competence:

> P3: It's so hard to get into, that *I see little chance for that*, but again, I will keep my eyes open and ah, I have in fact, ah been involved in publishing a little volume of poetry ah ah translation, just very recently, but you never know what what will develop and what will not and, so *I would continue what I've always done and sort of keep an eye out for the options and take the chances as they come*

In this summary, Participant 3 appears to take a philosophical view of her possibilities, again indicating that there is more to what transpires than the actions that one decides to take; other forces influence outcomes so that self-efficacy is only one of the influences that affect an outcome.

In terms of technology and her relationship with it, Participant 3 expresses a moderately high level of self-efficacy in dealing with a rather challenging technical issue that affected her work, which is worth repeating in full here:

> P3: It has happened a couple of times, I had ah one example where ah you know how Microsoft they update automatically occasionally, and after one of those updates, or even when I first bought Trados, I first bought it, I noticed that my Word, the new Microsoft Word, before, it would open, you know you click on Word and it would just shuuk be there,

and since I have Trados, it it'll open sort of the blue background, and then sit there for a few seconds, not for a huge long time, but for a few seconds, until at the top it'll say 'not responding', each time, that that that's ah, and then as soon as it says 'not responding' it comes up, so it's just not as instant as it was before, but that's not a problem because it doesn't take very long and it just is like that every time, and then after one of those updates, I realised oh the updates they must have done something because now it comes up again immediately, and then the next time, when, was it when I wanted to use Trados, or for for one reason or another, I suddenly realised oh my Trados tab has completely disappeared!

I: Oh! So that was why Word was coming up so quickly

P3: Exactly! And I couldn't now, because I don't use it so often, I couldn't now remember how, you know, when when exactly that was, and it had it had something to do with a a ahm fairly sort of major crash, where everything kind of crashed, and then I, this update came along and then it all seemed to go fine again, and ah yeah and suddenly I realised the tab has completely gone, and so ah hmm, and then I asked the person where I bought it, and they says oh, I've never heard of this problem before, you know, and well I've asked the IT guys and they said ahm uninstall it all, reinstall it all, and then it should be all sweet, so I did that, and of course that's a sort of a fairly major exercise

I: Yeah

P3: And and it still wasn't there, and so I went back to them and said I've done that, what now, because it still hasn't reappeared, and they said oh that's very strange, no idea [*both laugh*] and my son said have you asked Google? And I said well, no, and he said ask Google, Google knows everything! [*both laugh*] And and so I asked Google, and and that came up with, I had looked on the ProZ website before, but I couldn't really find what I was looking for but when I asked Google, one of the answers sort of was to do with ProZ, so I said oh yes a good place to go and look, so I went and looked there and yes it had actually happened before to other people

I: Ah ok

P3: And what what has also happened to other people is that you suddenly have two tabs for Trados rather than just one [*both laugh; word inaudible*]

I: …Zero

P3: And they sort of pointed, they didn't quite, because they didn't say what to do with Windows Vista and Vista is different, but they still sort of pointed me in the direction sort of where to fish around and look for an answer and I actually found it under the disabled add-ons, under Word, where it had been sin-binned because it had been, caused a crash

I: Ah, I see, automatically

P3: *That major crash, and so I could actually manually enable it again, I was very proud of myself* [*laughs*]

I: I should think so!

> P3: But ah, yes these these things happen and they take a lot of time and ah so…

The process of dealing with technical issues is sometimes long and complicated for those with a moderate level of technical skill, and in the absence of high skill levels which enable the problem to be solved immediately, self-efficacy becomes a very important psychological skill to have. It enables someone to attempt to solve the problem rather than just throwing their hands up in the air in helpless frustration. That is not to say that someone with higher levels of self-efficacy might not eventually resort to this—we all have our limits somewhere. But higher self-efficacy levels generally mean that this limit is somewhat higher, and that there is more tolerance for finding workable solutions in unfamiliar, difficult, and frustrating situations.

4.2.2.6 Locus of control

Locus of control was a relatively difficult construct to access through these particular interviews, so there was not much interview data to work with specifically concerning it.

Participant 1 expresses through her answers that she has an internal locus of control, when asked whether she usually got the results that she wanted:

> P1: I'm trying to think of some examples, where I've… [*pause*] *I would say yes*

Making a conceptual link here, we suggest that if she fairly consistently gets the results that she wants, then these are more likely to be perceived as being more due to her own efforts, rather than occurring largely by chance. Thus this indicates that she has a generally internal locus of control, with the expectation that outcomes will be due to her own efforts.

Participant 1 also responds with this comment, when asked about the amount of control that she thought she had over her translation career:

> P1: …and ah so *I have the feeling that I could attract more work if I wanted to* and therefore I have, have a lot of control but ahm I'm also aware that I haven't experienced that, so I don't really know how it would go

Participant 2 expressed her perception of having an intermediate locus of control, in that she did not always or even nearly always get the results that she expected based on her efforts:

> P2: Hmm, hmm, so yeah it's, you don't you don't always get the re-, exactly what you want to get, hmm

> P2: Yeah not always, you know, I I've noticed that I have made mistakes, noticed it afterwards, and it's one problem of working on your own, I mean I get someone I trust sometimes to ahm proofread whatever I've done, especially when I have to translate into English, which is not my mother-tongue
>
> I: Right
>
> P2: Ahm, but I find, yeah *sometimes I miss out things* and that doesn't make me happy and ahm also I mean yeah, you've got the financial aspect, *that you end up working for a really low rate, which you didn't want to*
>
> P2: Hmm, I don't think I'm really completely in control of things, it's just still happening to me you know, ahm ahm I mean I'm getting to the stage now that I've ah, *a few types of documents I've translated often enough so that I know that I'll be able to trans- to produce something very quickly*, ahm but all in all I'm not specialised enough yet to say you know in in that side of, that, that I'm you know really confident, hmm

Participant 2 indicates that the perceived cause-effect linkage between her translational actions and a quality outcome (in terms of a target text produced in particular subject areas), is still not that entirely predictable, thus indicating that she has a somewhat external locus of control in terms of these particular outcomes. She also indicates that the relationship between hard work and payment is not always perceived as under control. In other words, payment is controlled by the perceived value of the job as decided by the payer.

At the beginning of the interview, Participant 3 expressed a rather external locus of control in the business domain, in terms of where her career led to:

> P3: And where exactly that takes you, well that, *that is not really really your own decision*

This comment is indicative of an external locus of control, in which Participant 3 sees little relation between her intentions in translation career and where it ends up. She expresses again in this segment the idea that success just arrived, with no particularly strong cause-effect relationship between goals and outcomes:

> P3: Yeah well I have, maybe I've taken the long way [*inaudible*] because you know some years ago I would have said oh I would like some some overseas clients or sort of expand my bases a bit, and I didn't really do a great deal about it I can say, but sort of again keeping my eyes and ears open mainly, but not, *I didn't really do a great deal of active promotion, but it still sort of somehow happened* [*laughs*], and yes, so I I did get what I wanted there, yes, in the end, hmm, but *maybe because I haven't been so proactive about things, maybe I've taken longer than I needed to* or I see [*inaudible*] some other colleagues

> who've sort of, yeah sort of gone more straight to their goals and and ah, whereas that's just not my way…

Participant 3 also mentions in this segment that there was little relationship between her levels of business promotion and the subsequent amount of work that came in. As she says, "it still somehow sort of happened". This is one case where having a tendency towards an external locus of control, which is indicated here, is not necessarily a negative issue in itself. In other words, if success happens without really trying, or in response to activities that we think will probably not bring success, does this make it any less desirable as a result?

4.2.2.7 Family and work balance

The final item under analysis here is how the three participants dealt with the balance between their family demands and their work.

All three were mothers, with Participant 1 having one toddler, Participant 2 having young children, while Participant 3's children had grown up. All three mentioned at various stages in the interviews how they had been required to be flexible in their career to allow for the requirements of raising their children.

Participant 1:

> P1: *…because I've been in full care of my son for the past eighteen months*, *I haven't been able to do that much work*, ahm, and sometimes it's felt like I could do more, but ahm I certainly haven't had time to ahm fit you know, to to advertise myself any more than I do already, ahm so *I could probably do a bit more work but not very much more*, ahm I'd like to do more, but ahm at the moment I can't…

Participant 1 expresses the difficulty most clearly in the following statements, which reflect the demands of childcare and family-raising:

> P1: Yes, that's true [*laughs*] ahm, ah, I would, I would like to have more time to work, ahm but I also want to have a child
>
> P1: Ah, not the balancing, I mean, not the act of balancing, but the *running after a little person is very tiring*, and ahm you know the early period when you're up much of the night ah, there I was for quite a while on adrenaline [*clears throat*] I've been told [*clears throat*] that that's it's explained by ahm adrenaline, that I would get up at, he'd wake up at 2:30 or something, and I'd feed him, and he'd go back to sleep, and I'd do a few hours work and go back to bed at 5:30, that sounds like adrenaline!
>
> P1: It has actually been quite difficult working, and that has been, when I have, you know, if there are times when I want to work and I've got work to do, that I can't because baby

> refuses to go to sleep, or or something like that, which happens quite often, I don't know if he's feeling my attention or something like that

Participant 2:

> P2: Yeah, I don't know, it's difficult to ahm you know, *it's difficult to coordinate* ahm yeah I can understand why people wouldn't employ me again if I if I say I can't meet your deadlines, and, and it's, that's why, and *it's easier to do it when you're working for people who know you and when it's word of mouth because they usually know your background*, and you know next week I'm most likely to have a job from an accountancy firm, and there's an accountant in that accountancy firm and *she knows that I've got two children and you know she's she's got a similar background* and that works and you know the first jobs were for a mother of two children and she knows that
>
> I: So that kind of empathy
>
> P2: Yeah, yeah, but if you work for a translation company they don't care [*both laugh*]
>
> I: Yeah, just want the job done!

Participant 2 makes quite a clear argument about why her translation business has not yet been successful, citing family demands as one major reason:

> I: No? That's ok, can always add something later if necessary. Ahm, here's a tough question: hmm would you consider your translation career has been successful? This is also very open-ended
>
> P2: No, not yet
>
> I: Not yet
>
> P2: No [*laughs*]
>
> I: This leads on to the next question: why do you think it's not been successful?
>
> P2: Because *I haven't invested enough time in it*, and I'm not ah always, I haven't been as available for ah you know ah to to fulfil my tasks you know as I should be, you know *very often you get jobs and they tell you, can you finish this by this afternoon, but I have to do kindy pickups, school pickup, I have to help out at school* you know, and yeah *so I have to say no, and if you say no three or four times in a row, yeah, that's it, no more, no more work*

These comments show quite clearly how demanding it can be for those freelance translators who are trying to be reliable in their work output but who may have competing demands on their time. Participant 2 states, when asked about her professional future aims as a translator:

> P2: Ah, it'll never be ahm you know, I'll never run a big successful translation you know business, ahm *my aim is just to ahm be able to run the family and the business together* and I I only see myself as a part-time translator you know

On the question of career and family, Participant 3 expressed one particular motivation that helped her decide on translation as a career:

> P3: And one other aspect, *it actually that it seemed like it might be compatible with having a family*

However, the tendency towards lower incomes in freelance translation has meant that Participant 3 found that despite the flexibility of freelance translation as a career, the income was a disadvantage, which perhaps ultimately worked against the flexibility. As she indicates, the ultimate balance of advantage and disadvantage would depend on other sources of income—in her case from other jobs or from her husband.

> P3: Well, *until fairly recently*, I mean fairly, when I say fairly recently, I mean maybe the last ten years, or sort of earlier than that, ahm *I would not have been able to live on the proceeds of it*
>
> I: Ah ok
>
> P3: Ah if if something happened to say my marriage, I would have had to go out and either get some other job or some- something steady, because ah, but then the other side of that is *while the children were little*, ahm when there's not that much work, ahm *you can combine it*, but if you're the main breadwinner, or the only breadwinner, that can be a problem

Again, Participant 3 mentions the double-sided issue of freelance flexibility versus the lack of 'steady' income from freelancing.

4.2.3 Brief summary of pilot-study interview findings

The interview findings paint an interesting picture of our participants, bearing in mind that the data from three participants are not necessarily representative of freelance translators as a group. Some particular features stand out.

Firstly, the tension is quite apparent between the flexibility of freelance translation in terms of early childcare and the problem of the lack of consistent income, which often becomes even more important during the potentially expensive phase of a child's first few years. This lead a couple of participants to comment that they thought that freelance translation alone would not be enough to pay their bills.

Secondly, we observed that experience appeared to be a major factor in increasing participants' professional self-efficacy over time. Assuming that participants got over any shocks in their career, their self-efficacy increased and appeared to give them confidence to do more challenging work. As Hönig (1993:89, in Fraser 2000:60;

Fraser's translation from German) mentions: "[s]elf-confidence is the basis for effective and successful translation performance. The professional translator can develop self-confidence through success in his [sic] work".

Satisfaction was also noteworthy, as it was made up of a mixture of doing quality work, helping others, and overcoming challenges in work. As mentioned previously, participants made it very clear that satisfaction was much more than just about how much money they earned.

Finally, responsibility for positive and negative outcomes showed that, on the whole, our participants tended to take responsibility for positive outcomes. With negative outcomes, they tended to be somewhat self-critical, and felt that quality issues were strongly their own responsibility. We suspect that translator training tends to encourage self-criticism as a measure of quality control, and that this can combine with a translator's personality to sometimes heighten responsibility for negative outcomes. There also appeared to be a relationship with experience, with Participant 3, who had the most experience, showing the lowest strength of responsibility for negative outcomes, and clearly showing that sometimes a bad quality text really is due to external factors, often the quality of the source text. We would suggest that this change would come with experience of many different cases, whereas the less experienced translator may be in doubt about causes, and find it easier to ascribe responsibility to themselves in the absence of good evidence to the contrary.

Chapter Five – Analysis and Results of the Main Study

5.1 Main study questionnaire data analysis

In the same manner as in the pilot study, the data were downloaded from the SurveyMonkey questionnaire hosting website in two formats: MS Excel *actual choice text* and MS Excel *numerical*. SPSS 16 was again used for statistical analysis, as well as SPSS 18, along with Microsoft Excel for some descriptive statistics.

Both descriptive statistics and inferential statistics were collected and analysed, and the results of these analyses are presented below.

5.1.1 Main study descriptive statistics

Participants who commenced the questionnaire totalled 146, and of this number, 92 completed the questionnaire to its end and provided relatively complete data-sets. This number, like that of the pilot study, means that we are able to consider the sample as a *large sample* (i.e. N>30 (e.g. Urbano, Hodapp, and Glidden 2006:103; Wisz et al. 2008:763)). The following statistical analyses are based on this set of 92 cases. These were not filtered by any particular grouping.

5.1.1.1 Missing values, errors, and outlier analysis

The data were analysed for missing values, after the most obvious cases were manually removed from the data set to arrive at the 92 cases mentioned previously. Within the remaining 92 cases, missing data were found with translation tool-related questions, as expected, given that not all participants were using them. In terms of data missing where they were expected, the income and amount of translation work questions showed some missing data, with income missing 15 values and percentage of translation work missing 24 values. The question related to percentage of interpreting work had 54 missing values. The income question was presumably not answered due to sensitivity, and the percentage of translation question perhaps because the participants considered it obvious that they were doing 100% translation work. However, we could not fill in these missing values based on this assumption, because it may have been incorrect. As regards the percentage of interpreting work question, missing values can be explained by the simple fact that not all our participants were additionally doing interpreting.

Finally, Little's MCAR test ($\chi^2(68) = 51.71$, $p = .929$) gave a result which suggests that we can infer that data were missing completely at random.

Next we looked at problem values. One problem noted was that a participant who was 39 years old indicated that they had been working for 75 years, and another who was 36 years old indicated that they had been working for 65 years! These were clearly errors, and so these values of years worked were removed from the analysis. Quite possibly 7.5 and 6.5 years respectively had been intended, but there was no way to be sure of this, as it is vaguely possible that they actually had been working for this long, and had entered a mistaken age instead. However, based on the likelihood of each, we considered that it was a better bet to remove the *years worked* data, and so prevent error in that section.

Examination of the relationship between *jobs per week*, *income*, and *hours per week* showed nothing particularly unusual, although a couple of participants seemed to be doing a fairly large number of small jobs (25 per week) in a short time (spending less than 10 hours per week on them), while doing only around 10 percent of their work as translators, all for relatively low reimbursement. Nevertheless, these values were plausible, so we did not remove any of them from the analysis.

5.1.1.2 General questions results

In this section we present the descriptive results, in tabular form, of a number of important questions about our sample. Again, as in the pilot study, some counts (N=) are different between questions due to missing data. Means, standard deviations, and medians are presented where appropriate, along with percentages of participants falling into each category. The five-number summary, as described in Section 4.1.1.2, is also used where appropriate.

Fig. 5.1. Descriptive statistics of main study participant sample, by variables

<table>
<tr><th>Variable</th><th colspan="6">Values</th></tr>
<tr><td>(3) Gender [N=92]</td><td colspan="3">Male: N=31</td><td colspan="3">Female: N=61</td></tr>
<tr><td>(4) Age</td><td colspan="6">42.24 (12.48)*, median=40.00, N=92</td></tr>
<tr><td>(7) Years worked</td><td colspan="6">0.50/5.00/10.00/18.50/48.00^, N=90</td></tr>
<tr><td>(8) Jobs per week</td><td colspan="6">0.01/2.00/3.00/5.00/50.00, N=90</td></tr>
<tr><td rowspan="2">(9) Hours per week [N=90]</td><td colspan="2">0-10
14.44%, N=13</td><td colspan="2">11-20
22.22%, N=20</td><td colspan="2">21-30
18.88%, N=17</td></tr>
<tr><td colspan="2">31-40
24.44%, N=22</td><td colspan="2">41-50
11.11%, N=10</td><td colspan="2">+50
8.89%, N=8</td></tr>
<tr><td>(10) Breakdown of work types [N=68]</td><td colspan="2">Translation percent
5.00/30.00/80.00/ 95.00/100.00, N=68</td><td colspan="2">Interpreting percent
0.00/1.00/5.00/12.50/ 80.00, N=38</td><td colspan="2">Other percent
0.00/10.00/25.00/ 70.00/90.00, N=45</td></tr>
<tr><td>(11) Level of identification</td><td colspan="6">4.20 (0.82), median=4.00, N=92
[range 1 (low) to 5 (high)]</td></tr>
<tr><td rowspan="2">(12) How many hours wanted [N=92]</td><td colspan="2">0-10
7.61%, N=7</td><td colspan="2">11-20
15.22%, N=14</td><td colspan="2">21-30
28.26%, N=26</td></tr>
<tr><td colspan="2">31-40
35.87%, N=33</td><td colspan="2">41-50
9.78%, N=9</td><td colspan="2">+50
3.26%, N=3</td></tr>
<tr><td rowspan="2">Work-hours dissonance [N=90]</td><td>Want 4 brackets less
1.11%, N=1</td><td>Want 3 brackets less
0%</td><td colspan="2">Want 2 brackets less
4.44%, N=4</td><td>Want 1 bracket less
17.78%, N=16</td><td>Want same bracket
51.11%, N=46</td></tr>
<tr><td>Want 1 bracket more
13.33%, N=12</td><td>Want 2 brackets more
7.78%, N=7</td><td colspan="2">Want 3 brackets more
3.33%, N=3</td><td>Want 4 brackets more
1.11%, N=1</td><td></td></tr>
<tr><td>(13) Amount of work [N=92]</td><td colspan="2">Too little
27.17%, N=25</td><td colspan="2">Right amount
60.87%, N=56</td><td colspan="2">Too much
11.96%, N=11</td></tr>
<tr><td>(14) Income (converted to NZD)</td><td colspan="6">1.00/2.00/6.00/8.00/14.00, N=77</td></tr>
<tr><td>(17) Market worked for</td><td colspan="3">Domestic percent
0.00/40.00/80.00/95.00/100.00, N=88</td><td colspan="3">International percent
0.00/5.00/20.00/60.00/100.00, N=85</td></tr>
</table>

* *Throughout the chapter, means and standard deviations are reported in this manner, unless otherwise indicated.*

^ *Five-number summary, showing minimum, first quartile, median, third quartile, and maximum.*

Shown in Figure 5.1 are the descriptive statistics for our international sample of freelance translators.

Firstly, as with the pilot sample, female translators make up some two-thirds of the sample. In terms of age, the mean age was in the early 40s, and participants had worked about ten years on average, with a maximum of 48 years in the industry.

In terms of the average busyness of our participants, they did an average of around 6 jobs per week, but the high standard deviation indicated a wide variety. In fact, the minimum and maximum numbers of jobs per week were 0.01 (i.e. one job every 100 weeks, or every two years) and 50 jobs per week, with most on the lower part of this range. Hours per week contained two largest categories, being 11-20 hours with 22% of participants, and 31-40 hours with 24%. The 21-30 hours bracket contained the third-ranking percentage of our participants' hours worked per week, at 19%.

The median percentage of translation work from our sample was some 80%, and 12 participants did 100% translation work, with others doing varying combinations of translation, interpreting, and other work. A number of participants did not provide details of their work breakdown. This could be because they were doing 100% translation and felt that the question was redundant, or because they did not wish to answer the question for some other reason—the final reason is not clear.

Our participants identified themselves quite strongly as translation professionals; in fact, slightly stronger than the average of the New Zealand-based participants in the pilot study.

The participants were also asked how many hours per week that they would like to work, and the results were interesting. The brackets 31-40 and 21-30 were the most popular, at 36% and 28% respectively. Some 3% of career-focused participants also indicated that they would like to work more than 50 hours per week! By comparison, the most preferred bracket for the pilot study sample was 21-30 hours per week.

A new variable was calculated for the main study, which was *work-hours dissonance*. This was calculated as the number of hours wanted, less the number of hours actually worked, to create a measure of how many time-brackets participants were away from their goal of more or less hours per week. In other words, someone who worked 21-30 hours per week and wanted to work 31-40 hours per week would be in the *one bracket more* category. Participants had goals that went both ways—i.e. some wanted to work more, some less, and many were happy with the time bracket that they were in. A number of participants working in the 41-50 and 50+ hours per week brackets wanted to work less, presumably due to overwork, approaching retirement, or family commitments.

Looking next at income, the reason for not including income figures organised by groups is that it was a very difficult variable to make entire-group comparisons with, for

the following reasons. Firstly, because the group was an international one, income was given in a number of different currencies. Although these are easily convertible to a common currency (say New Zealand Dollars, which is given in Figure 5.1 for descriptive purposes) using historical exchange rate calculations, this does not solve the second problem, that of income equivalence. To achieve income equivalence precisely, we would have to have access to the mean and standard deviation of translation income in each national market, which data was not available at the time of writing. The income figures for each participant could then have been converted to place them on a scale, being above or below the mean income by a certain value. As they are, income figures are not directly comparable because of the lack of this information. Therefore, we give income here in New Zealand Dollars. This was converted by using the median value of each bracket (e.g. 15,000 in the 10,000-20,000 bracket) and multiplying by the average exchange rate over the month that the response was given in, with the resulting figure being placed in the bracket within which the calculated value lay. Of course, this is not a perfect method, given the changing nature of exchange rates, and the uncertainty as to whether we are placing the calculated value in the correct bracket. This was a particular issue when the calculated value was close to some multiple of 10,000, and so could possibly fall into either bracket. Nonetheless, averaging over 77 cases in which income figures were provided, it offers a general indication of the level of income. The income average value of 6.00 given in Figure 5.1 should be interpreted to be in the $60,000 to $70,000 NZD bracket, with a fairly wide range, and it shows 75% of our participants earning in the $80,000-$90,000 NZD bracket or lower. This lower-grade data is the price to pay for having bracketed questions, which we considered tend to make participants more willing to provide details, as distinct from asking for exact income figures. Asking too directly may deter some participants due to lack of memory, lack of desire to dig out old income records, and/or possible feelings of privacy invasion.

Finally, in terms of the market worked for, a median of 20% our participants' work was domestic, while some 60% was for international clients. As with the pilot sample, the ranges indicate a wide variety of work combinations.

Fig. 5.2. What kind of work main study participants are doing, and how much of their total work each kind includes (Question 16)

	Most important	Second most important	Third most important	Don't do this kind of work
Direct work [N=92]	47.83%, N=44	44.56%, N=41	-	7.61%, N=7
Agency work [N=88]	47.73%, N=42	35.23%, N=31	4.55%, N=4	12.50%, N=11
In-house work [N=77]	7.79%, N=6	2.60%, N=2	7.79%, N=6	81.82%, N=63

Figure 5.2 shows some basic details about who our sample translators work for. Of those who do direct work, just about half (48%) consider that it is their most important type of work. A similar proportion who do agency work consider it their most important type, and of those few who do in-house work, just 8% rate it as their most important type of work, while some 82% of our sample participants do not do any in-house work at all.

Fig. 5.3. How main study participants advertised their translation business (Question 18) [N=92]

Using social networks 53.26%, N=49	*Using own website* 42.39%, N=39	*Translators' website* (ProZ etc.) 48.91%, N=45	*Print advertising* 2.17%, N=2
Yellow Pages 20.65%, N=19	*Trade fairs* 9.78%, N=9	*No active advertising* 23.91%, N=22	

Other methods of advertising mentioned:
Acquiring translation agencies as clients by means of mailings (résumés, actualization notices etc.) | ATA website, JAT list of translators | attendance at networking events, conferences | business cards and flyers | contact prospective clients directly | contacting local businesses | diligent work - my name appears on certified translations submitted to higher courts - I tell students that your completed work is your business card | direct mailing | direct mailing to potential clients | directly approaching translation agencies or potential direct clients | embassy website, translation organisations in Australia | entry on 3 websites (2 professional association + 1 accreditation body) + official list of local [*nationality removed*] consulate | get a lot of work through profile at JAT | having my name on American Translators Association member list | listing in translation association directories | listings and business databases on the Internet free of charge, I pay only for one of them | local newspaper – Australia | looking up prospective clients in my areas of specialization | mailing | my own flyer | NAATI directory | NAATI website (National Accreditation Authority for Translators & Interpreters, Australia) [*x2*] | NAATI website, word of mouth | NAATI/AUSIT directories | Polish community media | professional organisation | translator associations such at the ATA, JAT and NCTA | word of mouth in person and online, Google Ads | Yellow Pages online

The results here, as displayed in Figure 5.3, show that using social networks is the most popular form of advertising used by our sample translators, with 53% using this method,

followed closely by using a specialist translator's website (49%). Many other methods were listed, and notably very few used traditional print advertising (2%). Social and electronically-mediated methods seemed to be the most popular. Many participants also mentioned that the database of their translation association was a place that they advertised themselves. Many and varied methods were also mentioned in the 'other methods' section, ranging from local newspapers to simply good quality work and its organically-spreading reputation.

Fig. 5.4. Fields of specialisation of main study participants (Questions 20 & 21) [N=92]

<table>
<tr><td>Law
40.22%, N=37</td><td>Medicine
33.70%, N=31</td><td>Business/finance
53.26%, N=49</td><td>Immigration-related
34.78%, N=32</td><td>Science & engineering
54.35%, N=50</td></tr>
<tr><td>Literature
13.04%, N=12</td><td>Entertainment
15.22%, N=14</td><td>Journalism
14.13%, N=13</td><td>Advertising & creative
30.43%, N=28</td><td>Tourism
32.61%, N=30</td></tr>
<tr><td>General
57.61%, N=53</td><td colspan="4">Other fields (Question 21):
Applied linguistics | art exhibition catalogues (essays/bios), cookbooks | art, art history | automotive industry | aviation | balances and annual reports | biology | certified translations | construction & property | contracts, menus, press releases | documents (certified translations) – court expert in translation | education | energy, LCD and hard disk manufacturing | engineering, software | European projects (and project deliverables) | gastronomy | Hindi language teacher | information technology (hardware, software, networking technologies, peripherals) | insurance | IOs, international relations & human rights, academic | IT and software | IT, software localization | IT, telecommunications, food safety, oenology | making of wooden toys (local industry) | martial arts | music | musicology | nutrition and diet | patents | patents, litigation related documents, contracts | pharmaceutical industry | software localisation | software localization, patents | software, user manuals and help files | technical manuals</td></tr>
</table>

These results shown in Figure 5.4 indicate the wide range of topics worked with by our participants. The largest area of work from among the 'pre-set' options was *general*, with 57% working in this area, followed very closely by *science and engineering* (54%). *Business* and *finance* followed closely behind at 53%. Question 21 shows the wide variety of fields that are covered by freelance translators, and represent just a small fraction of those fields covered in the profession.

Fig. 5.5. Text formats used by main study participants (Question 22) [N=92]

Hard copy 41.30%, N=38	*MS Word* 98.91%, N=91	*Other MS Office formats* 66.30%, N=61	*PDF* 78.26%, N=72
DTP formats 10.87%, N=10	*HTML/XML* 32.61%, N=30	*.exe/.dll* 8.70%, N=8	

The data here in Figure 5.5 show that MS Word documents are by far the most common type of text worked with by our participants (99%), with only one participant not working with them (this participant actually only worked with hard copy source texts). PDFs were also widely used (78%), probably because they are a convenient method of encoding many formats in a stable manner (i.e. texts cannot easily be accidentally edited), and also because they are a good format for transmitting photocopies of original hard copies, as we mentioned in the pilot study. Software was worked on by only a few participants (9%), indicating the specialist nature of this type of translation and the investment in tools and technical skill needed to do this successfully.

Fig. 5.6. Translation tool usage in the main study (Questions 23 & 24) [N=66]

SDL Trados suite 66.67%, N=44	*Déjà Vu* 13.64%, N=9	*STAR Transit* 9.09%, N=6	*Across* 21.21%, N=14
Wordfast 25.76%, N=17	*Foreign Desk* 0%	*Passolo* 3.03%, N=2	*Alchemy* CATALYST 3.03%, N=2
Catalyst 0%	*terminology management tools* 16.67%, N=11	*open-source translation tools* 6.06%, N=4	*Percentage of total sample [92] using TMs* 68.48%, N=63
Other translation tools being used (Question 24): Client specific tools (usually developed by the client) | corpora management tools | dictation | Dragon Naturally Speaking [x2] | Idiom [x2] | Idiom Desktop Workbench, proprietary tools by specific LSPs | Logiterm | MAC Transer (Japanese) | Metatexis | *no! only over my dead body!*[21] | OmegaT | OmegaT, Bit2Text | online dictionaries | SDLX | technical dictionaries | TextCount | TOM 8 | TransAssist | trialling Felix as well as Déjà Vu – undecided which to use | voice recognition (DNS)			

Figure 5.6 shows how our participants used translation tools—if they did so. Of the total of 92 participants, 66 (72%) used translation tools of some kind, ranging from simple online dictionaries to full translation memory systems and software localisation tools. Of the ‘pre-set’ options, the SDL Trados suite was by far the most-used, with 67% of participants who used translation tools using this set of software packages. Wordfast

21. Presumably, this participant has some antipathy towards computer-assisted translation!

was the next most-used, at 26%, presumably for the same reasons posited in Section 4.1.1.2, in other words, that the free version of Wordfast is fully functional, but with a limited number of translation units, which nonetheless make it viable for smaller jobs. One participant (who was trialling Felix and Déjà Vu) had not been using translation tools so far, but seemed to be making an assessment of relative merits before committing themselves to one package or another. This would be considered natural, given that committing to a specific package can be a significant investment in both training time and financial outlay. Unlike the pilot study participants, the main study participants often used several translation memories (or at least indicated that they possessed them). One user had four TM packages, while another four users had three packages each.

Other tools mentioned included various specialist packages (including corpus management tools), and also a wider understanding of tools, which included electronic and online dictionaries. This was similar to the pilot participants, who also understood electronic tools as including dictionaries.

Fig. 5.7. More details on translation tool usage in the main study

(25) Reasons for using tools [N=64]	*Client/agency requires them* 57.81%, N=37	*Increase productivity* 78.13%, N=50	*Increase quality* 62.50%, N=40
(26) Purpose of tool usage [N=64]	*Simply translation* 92.19%, N=59	*Terminology work* 62.50%, N=40	*Project management* 12.50%, N=8
(27) Frequency of use [N=66]	*Every day* 42.42%, N=28	*Once every two or three days* 18.19%, N=12	*Once a week* 6.06%, N=4
	Once every two or three weeks 6.06%, N=4	*Once a month* 6.06%, N=4	*Just a few times a year* 21.21%, N=14
(28) Perceived skill	3.29 (0.92), mode=3.00, N=66 *[range 1 (low) to 5 (high)]*		
(29) Confidence	3.80 (0.92), mode=4.00, N=66 *[range 1 (low) to 5 (high)]*		

The data in Figure 5.7 showed that the main reason cited for using translation tools was to increase productivity, with 78% of tool users agreeing with this, while quality was right behind, with 62% using tools for this purpose. Over half of the tool-using participants also used their tools because their clients and/or the agencies they worked with required them to do so. Almost all used their tools for translation (92% of tool

users), but terminology work was also a major area, with 62% using some kind of software for this.

Around two-fifths of the tool users used their tools every day (42%), and this figure rapidly tapered off, although the final bracket of users who used their tools just a few times a year came to 21%.

In terms of self-assessments of skill and confidence, users scored in the higher part of the possible range, with mean skill ratings falling into the middle part of the *average skill level* category, while mean confidence ratings fell into the upper part of the *unsure* category, towards *confident*. Incidentally, the mode values for perceived skill and confidence show the most common value—that is, the level at which the single largest group of participants rated themselves as belonging. These ratings by themselves are not terribly informative (although they are both slightly higher than those of the pilot study participants); what is more interesting are the correlations between them, which we explore subsequently in Section 5.1.2.

Fig. 5.8. Country in which main study participants are based (Question 6) [N=92]

Country based, with number of participants in each	
Australia	22
Belgium	1
Canada	1
Germany	30
Japan	11
Netherlands	1
New Zealand	5
Portugal	1
Spain	12
Switzerland	2
United Kingdom	3
U.S.A.	3

The largest groups were from Germany, Australia, Spain, and Japan, with various other nationalities being represented. This result shows that our sample is a global one, although in an ideal research project, there would be more representation from those nations outside of the Anglo-European cultural sphere (i.e. the African continent, the People's Republic of China, South Korea, the Arabic and Farsi-speaking world, and the Indian subcontinent, to name a few possibilities). Nonetheless, we feel that based on this sample, the results should be generalisable to most translators in developed markets.

5.1.1.3 Internal reliability analysis of psychometric scales

As with the pilot study, we are going to analyse the reliability qualities of the psychometric scales first, and present the data on them. Here we simply present the data. For more information on the concept of internal reliability and Cronbach's alpha, see Section 4.1.1.3. All reliability analysis was done in SPSS 16.0.

Job satisfaction: This scale showed an acceptable reliability with an alpha value of .710, which could not be improved by item removal.

Occupational self-efficacy (OCCSEFF): This scale showed an excellent reliability of .900. This was improved to .915 by removing item 7 ("I meet the goals that I set for myself in my job"). Based on this reliability evidence, this scale should be used for any future work in this area.

Locus of control External (WLCS): This subscale showed very good reliability at .857, which was improved to .860 by removing item 1 ("Getting the job you want is mostly a matter of luck").

Locus of control Internal (WLCS): Here we found fair reliability at .787 initially, which we improved to .797 by removing item 4 ("If employees are unhappy with a decision made by their boss, they should do something about it"). This may have been due to the reference to classical organisational employment, which may have confused our participants slightly. This same item was removed in the pilot study also, indicating that the item is not suitable for using with a freelance translator sample.

Responsibility for Negative Outcomes (RNO): This scale showed borderline-acceptable reliability at .673, which could not be improved by item removal.

Responsibility for Positive Outcomes (RPO): We found relatively poor reliability with this scale, at .594 initially, which we improved to .649 by removing item G ("Most of my successes have happened without my really trying"). These results suggest that the RNO and RPO scales probably need more work before they are suitable for use in future research. Nonetheless, they do give a general indication of the relationships that we are looking for.

Career motivation: This scale showed good reliability at .772 initially, which was raised to .783 by removing item 10 ("I have taken courses toward a job-related qualification").

5.1.1.4 Psychometric scale results

The following section shows the descriptive statistics results of the psychometric scales, mainly presented for comparison with the pilot study participants' scores, and to show how the main study participants scored given the range of possibilities available to them. Each scale is presented with mean, standard deviation, and median scores, along with the number of participants completing the scale's questions.

Fig. 5.9. Job satisfaction score for main study participants, from five-item job satisfaction scale

Satisfaction mean, median, and standard deviation *[range 1 (low satisfaction) to 5 (high satisfaction)]*	4.26 (0.54), median=4.40, N=92

The score shows that our participants are, on average, fairly highly satisfied with their work as translators. In fact, they are slightly but significantly more satisfied than those participants in the pilot sample ($t(132) = 1.74$, $p = 0.042$, one-tailed), who scored a mean level of satisfaction of 4.01, and a median of 4.00. The relatively small standard deviation here indicates that most participants have not scored much differently from the average.

Fig. 5.10. Occupational self-efficacy score for main study participants, from Schyns and von Collani's (2002) Occupational Self-efficacy scale (OCCSEFF)

Occupational self-efficacy mean, median, and standard deviation *[range 1 (low OCCSEFF) to 6 (high OCCSEFF)]*	5.21 (0.71), median=5.29, N=92

The data here show that our participants have, on average, a high level of occupational self-efficacy, and that there is not a particularly wide variation of scores. Although not directly comparable with the General Self-Efficacy scores taken in the pilot study (because the two scales have different wording and therefore elicit different responses), it is worth noting that the mean here is slightly closer to the maximum (at 87% of the maximum possible score) than that of the pilot study's measure (at 78% of the maximum possible score).

Fig. 5.11. Work locus of control score for main study participants, from Spector's (1988) Work Locus of Control Scale (WLCS), showing its two subscales

LoC External mean, median, and standard deviation *[range 1 (highly internal) to 6 (highly external)]*	2.59 (0.95), median=2.43, N=92
LoC Internal mean, median, and standard deviation *[range 1 (highly external) to 6 (highly internal)]*	4.40 (0.75), median=4.43, N=92

In terms of locus of control, our main study participants were similar to those of the pilot study, with LoC External scores here being slightly under midway through the possible range, and LoC Internal indicating a fairly high level of internality. These results indicate that our participants in general see consequences occurring because of their actions, rather than in spite of them. In other words, they appear to have a balanced level of perceived control, neither excessively high nor excessively low.

Fig. 5.12. Responsibility for Negative Outcomes (RNO) scores for main study participants, from Brewin and Shapiro's (1984) attribution scale

RNO mean, median, and standard deviation *[range 1 (low responsibility for negative outcomes) to 5 (high responsibility for negative outcomes)]*	3.15 (0.57), median=3.17, N=92

Figure 5.12 shows the RNO data from the main study participants. These data indicate that participants lie slightly above the mid-point (3.0), indicating a fairly balanced approach to attribution of negative events. As discussed in reference to Figure 4.12 (in Section 4.1.1.4), having a balanced approach seems to be psychologically healthy. Our participants in the main study have a very slightly higher rating on this scale than those from the pilot study (mean = 3.07, median = 3.00).

Fig. 5.13. Responsibility for Positive Outcomes (RPO) scores for main study participants, from Brewin and Shapiro's (1984) attribution scale

RPO mean, median, and standard deviation *[range 1 (low responsibility for positive outcomes) to 5 (high responsibility for positive outcomes)]*	3.53 (0.58), median=3.60, N=92

Here in Figure 5.13 we can see the scores from the RPO scale, which show that our participants have a fairly high perception of responsibility for good events that happen to them. As mentioned in reference to Figure 4.13, and in Section 2.2.1.1, this is also considered psychologically beneficial, especially in the Anglo-American sphere. The

scores here were very similar to those of the pilot study participants (who achieved mean = 3.60, median = 3.67).

Fig. 5.14. Career motivation scores for main study participants, from Day and Allen's (2004) career motivation scale

CMS mean, median, and standard deviation *[range 1 (low career motivation) to 5 (high career motivation)]*	4.05 (0.43), median=4.00, N=92

Finally, the scores on the career motivation scale show a fairly high level of average career motivation, indicating that our participants are, on the whole, fairly involved and active in their careers and with their training.

5.1.2 Inferential statistics and discussion of main study data

In this section, we look at inferential statistics created by analyses of the main study data. Specifically, we look at the correlations between the variables, discuss how the psychological skill variables differ across income, work-hours dissonance, amount of work wanted, and satisfaction; and we create ordinal regression models to predict income, work-hours dissonance, and satisfaction by using work-related and psychological skill variables in combination.

5.1.2.1 Preliminary normality test of main study data

The main study data were tested for normality. Results of normality tests (a Kolmogorov-Smirnov/Lilliefors test) on each variable showed that none of them could be considered particularly normal. The closest was *age*, with $D(92) = .094$, $p = .045$. There is therefore good evidence that non-parametric tests are more appropriate to use with the main study's data-set, given that mathematically transforming the variables to achieve normality is not always the best option, as this can make them hard to interpret (Garson 2009a).

Fig. 5.15. Table of correlations between variables in the main study, showing Spearman's correlation coefficients, original p-values (round brackets) and significant p-values after Benjamini-Hochberg False Discovery Rate correction (square brackets)

	Years in translation	Jobs per week	Hours per week	Percent translation	Percent interpreting	Identity as translator	Work hours wanted	Work amt. wanted	Income	Percent intl. work	Tool use frequency	Tool skill	Tool confidence	Satisfaction	Occ. self-efficacy	LoC External	LoC Internal	RNO	RPO	Career motivation
Age	.774** (.000) [.000]	.170 (.109)	.283* (.007) [.029]	.228 (.061)	.131 (.433)	.167 (.112)	.141 (.181)	.226 (.031)	.454** (.000) [.000]	-.089 (.400)	.254 (.039)	.032 (.797)	.073 (.559)	.264* (.011) [.045]	.382** (.000) [.001]	-.316* (.002) [.012]	.139 (.185)	.093 (.380)	.227 (.030)	.043 (.686)
Years in translation		.233 (.029)	.221 (.039)	.251 (.042)	.199 (.237)	.124 (.243)	.062 (.560)	.170 (.110)	.482** (.000) [.000]	-.065 (.543)	.143 (.255)	.010 (.935)	.053 (.673)	.157 (.139)	.396** (.000) [.001]	-.248 (.019)	.171 (.108)	.171 (.107)	.171 (.107)	.118 (.267)
Jobs per week			.530** (.000) [.000]	.191 (.121)	-.060 (.723)	.184 (.082)	.289* (.006) [.025]	.221 (.036)	.390** (.001) [.004]	.074 (.489)	.360* (.004) [.018]	.345* (.005) [.024]	.335* (.007) [.029]	.020 (.848)	.294* (.005) [.023]	.024 (.820)	.032 (.765)	-.071 (.508)	.036 (.739)	.197 (.063)
Hours per week				.616** (.000) [.000]	-.079 (.644)	.365** (.000) [.003]	.595** (.000) [.000]	.437** (.000) [.000]	.689** (.000) [.000]	.141 (.185)	.499** (.000) [.000]	.248 (.048)	.315* (.011) [.045]	.118 (.267)	.192 (.070)	-.126 (.236)	.122 (.252)	.001 (.990)	.142 (.183)	.073 (.497)
Percent translation					-.354 (.029)	.341* (.004) [.021]	.575** (.000) [.000]	.061 (.622)	.576** (.000) [.000]	.288 (.017)	.229 (.131)	.032 (.835)	-.020 (.896)	.008 (.948)	.027 (.829)	-.107 (.386)	.101 (.412)	-.165 (.180)	.041 (.738)	-.010 (.937)
Percent inter-preting						-.289 (.079)	-.190 (.253)	-.072 (.670)	-.002 (.991)	-.249 (.132)	.224 (.282)	-.098 (.640)	-.124 (.553)	.397 (.014)	.349 (.032)	-.036 (.829)	.220 (.184)	-.025 (.882)	.353 (.030)	.296 (.071)
Identity as translator							.411** (.000) [.000]	.083 (.432)	.323* (.004) [.020]	.062 (.557)	.324* (.008) [.033]	.149 (.233)	.188 (.131)	.316* (.002) [.012]	.188 (.072)	-.224 (.032)	.216 (.039)	-.130 (.215)	.176 (.094)	.198 (.059)
Work hours wanted								.022 (.837)	.451** (.000) [.000]	.044 (.674)	.230 (.064)	.136 (.275)	.128 (.306)	.013 (.902)	.016 (.877)	-.019 (.855)	.131 (.214)	.098 (.355)	.098 (.354)	.071 (.499)
Work amount wanted									450** (.000) [.000]	.104 (.322)	.413** (.001) [.004]	.225 (.069)	.297 (.015)	.247 (.018)	.137 (.191)	-.237 (.023)	.075 (.478)	-.034 (.748)	.120 (.256)	.190 (.069)
Income										.215 (.061)	.481** (.000) [.001]	.206 (.125)	.180 (.181)	.315* (.005) [.024]	.431** (.000) [.001]	-.223 (.051)	.336* (.003) [.015]	.058 (.613)	.158 (.171)	.215 (.060)
Percent intl. work											-.086 (.493)	.003 (.982)	-.078 (.532)	-.067 (.525)	.018 (.864)	-.182 (.083)	-.037 (.724)	-.073 (.490)	.133 (.206)	-.018 (.863)
Tool use frequency												.526** (.000) [.000]	.561** (.000) [.000]	.193 (.121)	.214 (.085)	.034 (.788)	.158 (.206)	-.060 (.630)	.053 (.675)	.130 (.298)
Tool skill													.815** (.000) [.000]	.003 (.984)	.367* (.002) [.013]	-.097 (.438)	.176 (.157)	-.172 (.167)	-.017 (.891)	.277 (.025)
Tool confi-dence														.017 (.894)	.304 (.013)	-.065 (.605)	.130 (.298)	-.195 (.117)	-.081 (.519)	.123 (.326)
Satis-faction															.443** (.000) [.000]	-.400** (.000) [.001]	.395** (.000) [.001]	-.043 (.683)	.329** (.001) [.008]	.338** (.001) [.006]
Occ. self-efficacy																-.301* (.004) [.018]	.404** (.000) [.001]	-.020 (.851)	.355** (.001) [.004]	.437** (.000) [.000]
LoC External																	-.225 (.031)	.141 (.182)	-.376** (.000) [.002]	-.226 (.030)
LoC Internal																		.137 (.193)	.502** (.000) [.000]	.343** (.001) [.005]
RNO																			.141 (.179)	.037 (.724)
RPO																				.343** (.001) [.005]

Coefficients remaining significant after Benjamini-Hochberg FDR correction are shown in bold type; p≤0.05, two-tailed. FDR-corrected p-values are given in square brackets. One asterisk means coefficient significant at p≤0.05, two-tailed; two asterisks means coefficient significant at p≤0.01, two-tailed.

5.1.2.2 Statistically significant correlations in the main study

Figure 5.15 above shows a table of Spearman rank correlation coefficients with their p-values, both original and with Benjamini-Hochberg FDR correction (explained in Section 4.1.2.2) for those that remained statistically significant after this correction was applied. The table shows the relationships between the variables of interest in the main study.

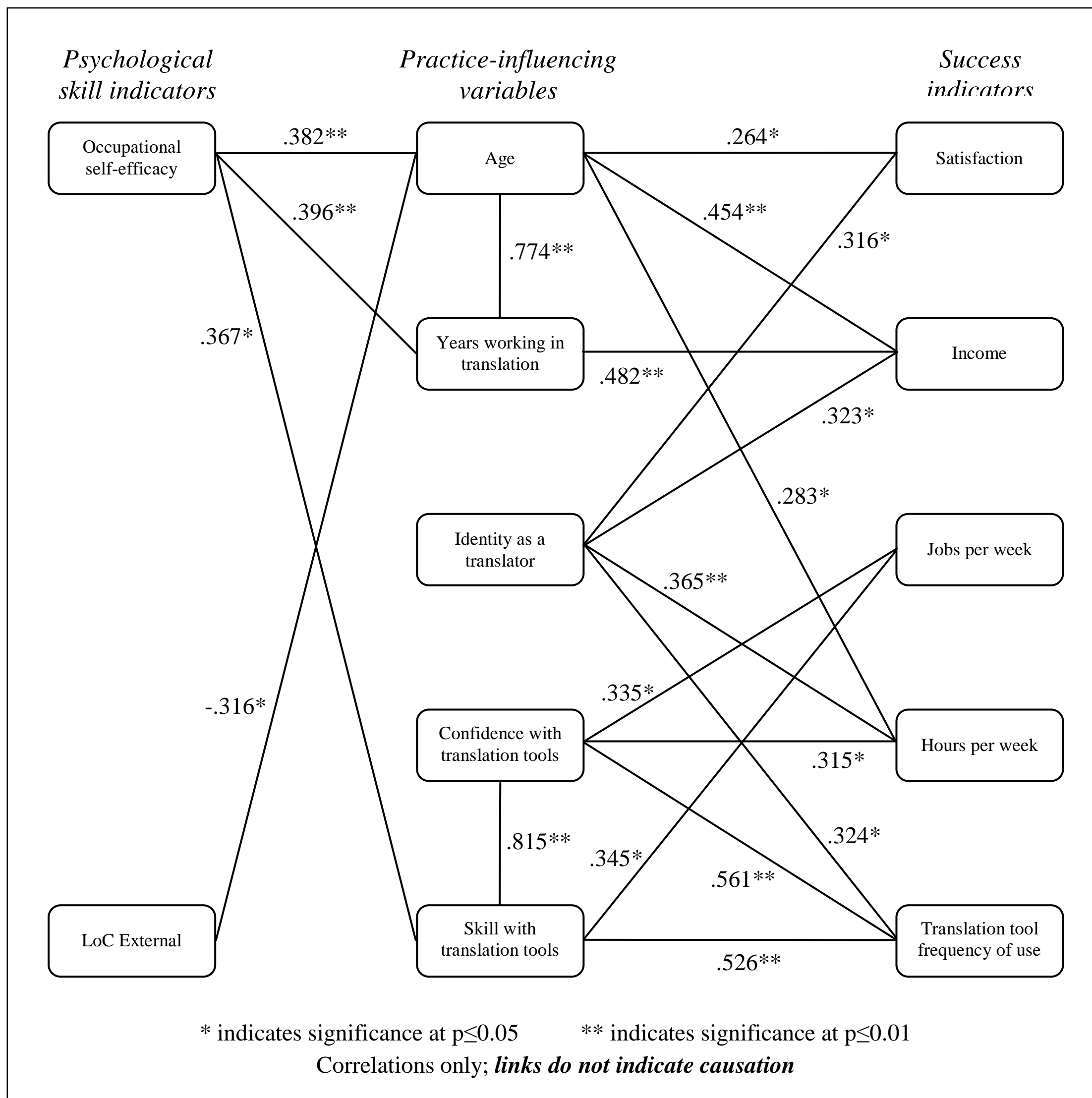
5.1.2.3 Analysis and discussion of significant correlations

As with the pilot study, in this section we begin by discussing the relationships found between psychological skill variables and 'practice-influencing' variables, with an investigation of each significant relationship and assessment of what might be the major factors involved. As with the pilot study, we will make hypotheses as to what the causal relationships *might* be, but these are *not* in any way definitive.

One question that the reader may ask is why there are more statistically significant relationships here in the main study than in the pilot study. The answer is due to the effect of a larger sample size on the power of statistical tests. With a given level of alpha (our p-value that we hope will be as small as or smaller than $p = .05$), a larger sample size increases the ability of our statistical tests to detect differences or relationships (i.e. the *effect*) if they are there. In other words, it makes those tests more sensitive (Hair et al. 2010:10). This is most likely the main reason why we see more statistically significant relationships in this section. Of course, there could be other factors causing this, such as more real differences that are being detected among a wider range of participants.

In the same manner as Figure 4.16, Figure 5.16 below shows the relationships between the practice-influencing variables and the psychological skill variables, between the practice-influencing variables and the success-indicating variables, and among the practice-influencing variables themselves.

Fig. 5.16. Statistically significant correlations (after Benjamini-Hochberg correction) between practice-influencing variables and psychological skill variables, and between practice-influencing variables and success-indicating variables



Analysis 1: ***Age*** (Question 4). This shows six significant relationships with other variables.

a) We can see a moderate positive relationship with *occupational self-efficacy*. It appears that as our participants become older, their levels of *occupational self-efficacy* increase correspondingly. This could be due to experience dealing with challenges in the past, leading to a general future expectation that future challenges will also be successfully dealt with.

b) There is a moderate negative relationship with *external locus of control*, indicating that older participants score lower on this scale (i.e. they have a more internal locus of control).

c) We note a high positive relationship between age and *years working in translation*. Obviously, older translators tend to have spent more time in the business.

d) There is a relatively weak but still important positive relationship with *hours worked per week*, indicating that older participants are working longer hours. This is quite possibly due to becoming more established in their business over time (see **analysis 1c** above), and therefore doing more work-hours.

e) We observed a moderate positive relationship between age and *income*, indicating that older translators in our sample are generally earning more. Like **analysis 1d** above, this relationship may also be mediated by years worked, with those older participants being more established in their businesses through having worked longer in the business, and thus increasing their working hours, leading to more income. Alternatively, seniority may enable them to command higher rates of pay.

f) Finally, there is a relatively weak positive relationship between age and *job satisfaction*, which indicates higher levels of satisfaction with increasing age.

Analysis 2: ***Years worked in translation*** (Question 7). This looks are the relationship between the number of years worked as translator and other variables in the questionnaire. There were three relationships of note.

a) There was a moderate positive relationship with *occupational self-efficacy*, indicating that those participants who had worked longer as translators tended to also have higher occupational self-efficacy. Similar to **analysis 1a**, we propose that this may be due to increasing age and accumulation of past successes that gives rise to greater future confidence.

b) There was a strong positive relationship with *age* (see **analysis 1c** above).

c) There was a moderate positive relationship with *income*, indicating that those who have been working longer as translators earn more, generally. See **analysis 1e** for discussion of possible reasons for this.

Analysis 3: ***Identity as a translator*** (Question 11). Identity as a translator is a measure of how strongly our participants considered themselves to be translators, as distinct from interpreters or other types of professionals. Four relationships are under analysis here.

a) The first relationship is with *job satisfaction*, in which we observed a weak positive relationship. In other words, as identity as a translator gets stronger, so does satisfaction. Perhaps, in this case, increased identity and satisfaction represent an increased positive-type involvement in one's career, which participants might find rewarding and which could simultaneously increase identity.

b) We also observed a weak-moderate positive relationship with *income*, indicating that those with a stronger identity are also generally earning more. As we proposed in Analysis 3a of the pilot study, identity and income may be linked because our sources of money are often considered very important; they often define us a great deal as people in or outside of our actual work-time. The link between these two variables was not as strong here as in the pilot study.

c) There was a weak-moderate positive relationship with *hours worked per week*, which indicates that as our participants work more hours as translators, so their identity as translators increases. Perhaps, similarly to that proposed in **analysis 3b**, increasing investment of time also increases the sense of identity—i.e. "I am what I spend most of my time doing".

d) Finally, we observed a weak-moderate positive relationship with *translation tool frequency of use*. This may be because of the mediating effects of hours worked per week (**analysis 3c**), as participants working longer hours are more likely to use translation tools (in which we observe that there is, in fact, a moderate positive relationship).

Analysis 4: ***Confidence with translation tools*** (Question 29). In this question, participants are asked about how confident they feel (subjectively) about using their translation tools.

a) There was a weak-moderate positive relationship with *number of jobs per week*, which meant that our participants have more jobs per week when they also had more confidence with their tools. This could well be due to the intervening variable of

experience, as more jobs means more opportunities to use tools, thus providing opportunities to increase familiarity and confidence with those tools.

b) There was also a weak-moderate positive relationship with number of *hours per week*, indicating that as our participants worked more hours, so they also had more confidence about using their tools. Similarly to **analysis 4a**, more hours possibly means more opportunities to develop confidence.

c) We noted a moderate positive relationship with *translation tool frequency of use*, indicating that as our participants used their tools more often, so they were also more confident with them. It seems quite possible that this is the mediating variable between tool confidence and the previous two variables, as more work means more opportunity to practice and become confident.

d) Finally, we observed a strong positive relationship with subjective ratings of *tool skill*, indicating that confidence and skill ratings increase together. Anecdotally, we can often see these two characteristics going together, and often confidence will come with the accumulation of skill, in that seeing the results of our skill via feedback loop of some nature will often inspire us to higher levels of confidence for the next round of action in which our skill is required. In other words, we may come to rely on the consistency of our skill, and on that consistency applying to future events, which could be argued to be one definition of confidence.

Analysis 5: ***Skill with translation tools*** (Question 28). This question asks our participants how they rate their skill in the use of their tools.

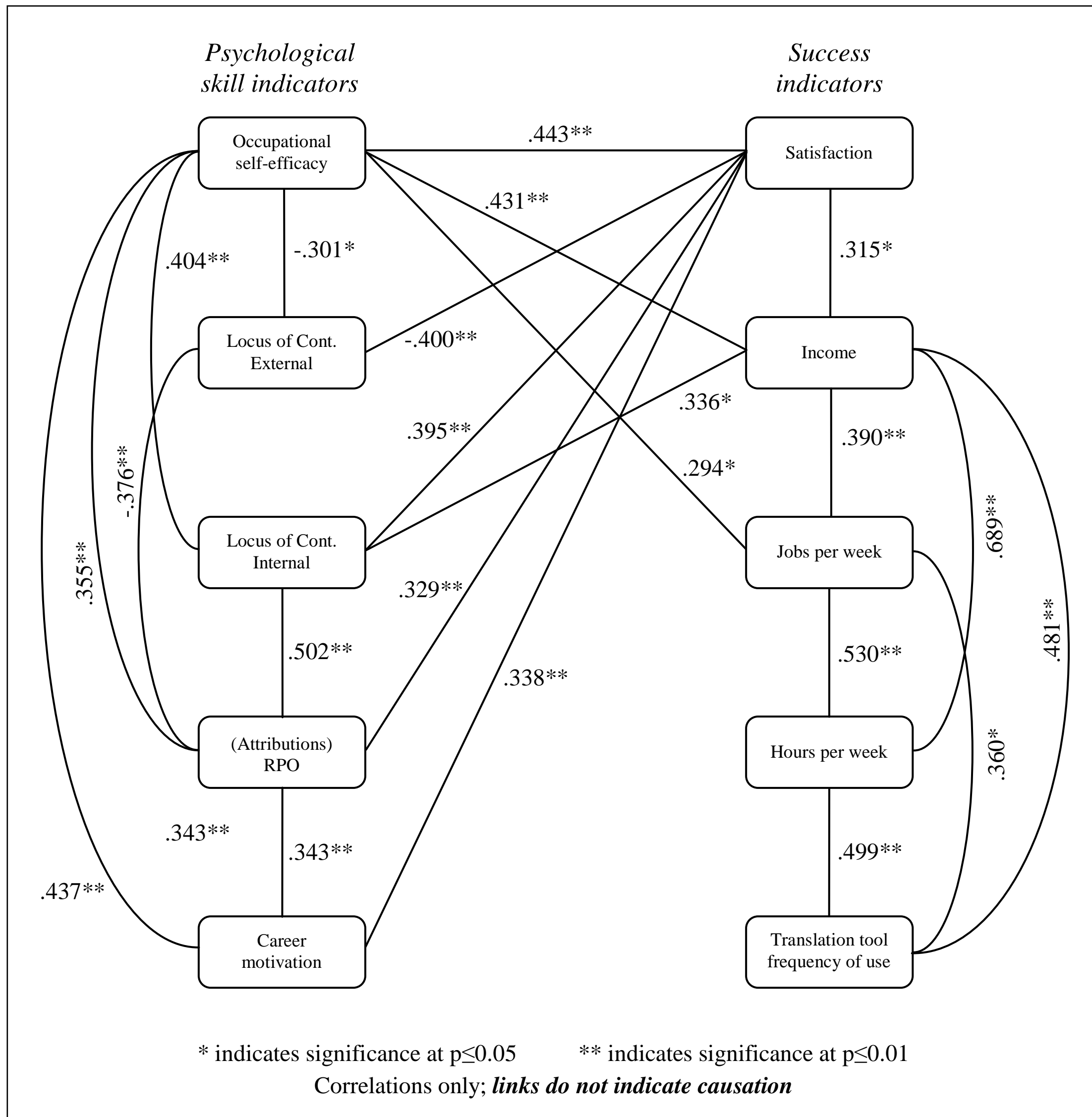
a) Firstly, we observed a moderate positive relationship with *occupational self-efficacy*, indicating that those who rate themselves as more skilled in the use of their tools also have higher levels of occupational self-efficacy.

b) Secondly, there was a strongly positive relationship with *tool confidence* (see **analysis 4d**).

c) We noted a weak-moderate positive relationship with number of *jobs per week*, indicating that those who worked more jobs also indicated higher skill levels with their translation tools.

d) Finally, we saw a moderate positive relationship with translation *tool frequency* of use. This indicates that as participants use their tools more often, they also rate themselves as more skilled in the use of their tools.

Fig. 5.17. Statistically significant correlations (after Benjamini-Hochberg correction) between and among psychological skill variables and success-indicating variables



The following paragraphs are an analysis of the relationships depicted in Figure 5.17. This figure shows the direct relationships between *psychological skill* variables and professional success variables. As with the previous figure, those variables and relationships that are not statistically significant are omitted from this particular analysis.

Analysis 6: *Occupational self-efficacy* (Question 31). This question measures the degree of participants' self-efficacy and self-confidence related to their work.

a) The first relationship we look at is a moderate positive one with *career motivation*, in which we see that as occupational self-efficacy increases, career motivation does so also. This is quite possibly due to the apparent fact that they overlap in their area of measurement—i.e. they possibly measure some similar concepts.

b) There is a weak-moderate positive relationship with *responsibility for positive outcomes* (RPO). This indicates that when occupational self-efficacy increases, so does the level of responsibility for positive outcomes that happen to our participants. This indicates that an ego-enhancing attributional style is paired to a certain extent with increasing self-confidence regarding work.

c) Next, we see a moderate positive relationship with *locus of control internal*, indicating that as work self-efficacy increases, so does the strength of the view that the relationship between our work-related actions and their outcomes is under our control.

d) We can see a weak negative relationship with *locus of control external*, indicating that as work self-efficacy increases, so the strength of the view that the relationship between our work-related actions and their outcomes is under our control *decreases*.

e) There was a weak positive relationship with number of *jobs per week*, showing that those with higher occupational self-efficacy also had a higher number of jobs.

f) There was a moderate positive relationship with *income*, which showed that those with higher income also had higher levels of occupational self-efficacy.

g) Finally, we observed a moderate positive relationship with *job satisfaction*, showing that those with higher occupational self-efficacy were also more satisfied in their work.

Analysis 7: *Locus of control External* (items 5, 6, 8, 9, 10, 12, 13, and 16 of Question 32). This question investigated the degree to which participants saw no particular relationship between their work-related actions and the outcomes of those actions.

a) We observed a moderate negative relationship with *responsibility for positive outcomes* (RPO), indicating that as participants saw less control over the relationship between their work-related actions and outcomes, so they also tended to feel less responsible for positive outcomes, attributing them to something outside of themselves.

b) There was a weak negative relationship with *occupational self-efficacy* (see **analysis 6d**).

c) Finally, we observed a moderate negative relationship with *job satisfaction*, indicating that those who saw less relationship between their work-related actions and outcomes were also less satisfied with their work.

Analysis 8: ***Locus of control Internal*** (items 1, 2, 3, 4, 7, 11, 14, and 15 of Question 32). This question measured essentially the opposite of that measured in Analysis 7—i.e. it showed the degree to which participants saw a relationship between their work-related actions and the outcomes of those actions.

a) There was a moderate positive relationship with *occupational self-efficacy* (see **analysis 6c**).

b) There was a weak-moderate positive correlation with *career motivation*, which showed that as participants saw more relationship between their work-related actions and the outcomes of those actions, so their career motivation levels also increase in concert.

c) We see a moderate positive relationship with *responsibility for positive outcomes* (RPO), indicating that as our participants see more relationship between their work-related actions and the outcomes of those actions, they also feel more responsible for any good things that happen to them.

d) We have a weak-moderate positive relationship with *income*, indicating that those who see more control over the relationship between their work-related actions and the consequences of those actions tend to earn more.

e) Finally, we see a moderate relationship with *job satisfaction*, showing that those who see more control over the relationship between their work-related actions and the consequences of those actions were also more satisfied in their work.

Analysis 9: ***Responsibility for positive outcomes*** (***RPO***; items b, c, d, e, g, and i of Question 33). This variable measures the degree to which participants feel personally responsible for positive outcomes that happen to them.

a) There was a weak-moderate positive relationship with *occupational self-efficacy* (see **analysis 6b**).

b) There was a moderate positive relationship with *locus of control external* (see **analysis 7a**).

c) We observed a moderate positive relationship with *locus of control internal* (see **analysis 8c**).

d) There was a weak-moderate positive relationship with *job satisfaction*, indicating that as participants felt more responsible for good things that happened to them, they also felt more satisfied with their work.

e) Finally, there was a weak-moderate positive relationship with *career motivation*, and this indicated that as our participants felt more responsible for the good things that happened to them, they also had higher levels of motivation and involvement in their translation career.

Analysis 10: *Career motivation* (Question 34). This question set asks participants about their commitment, level of involvement, and motivation towards their career (i.e. translation).

a) There was a moderate positive relationship with *occupational self-efficacy* (see **analysis 6a**).

b) There was a weak-moderate positive relationship with *locus of control internal* (see **analysis 8b**).

c) Next, we observed a weak-moderate positive relationship with *responsibility for positive outcomes* (see **analysis 9e**).

d) Finally, we saw a weak-moderate positive relationship with *job satisfaction*, which indicated that as our participants showed higher levels of motivation towards their career, they also showed higher levels of satisfaction in their work.

Analysis 11: *Job satisfaction* (Question 30). This question measures the degree to which participants are satisfied with their translation career.

a) There was a moderate positive relationship with *occupational self-efficacy* (see **analysis 6g**).

b) There was a moderate negative relationship with *locus of control external* (see **analysis 7c**).

c) There was a moderate positive relationship with *locus of control internal* (see **analysis 8e**).

d) We observed a weak-moderate positive relationship with *responsibility for positive outcomes* (see **analysis 9d**).

e) We also observed a weak-moderate positive relationship with *career motivation* (see **analysis 10d**).

f) Finally, there was a weak-moderate positive relationship with *income*, indicating that as participants were more satisfied with their job as a translator, they also earned more income as translators. This could either be a direct link, or through an intervening variable such as career involvement or hours per week.

Analysis 12: ***Income*** (Question 14). This measured participants' income in brackets of 10,000 units. One important aspect that we will discuss here, and which has already been referred to in Section 5.1.1.2, is the issue of currency. When we first looked at the correlations table, involving uncorrected income versus New Zealand Dollars, we noted that New Zealand Dollars did not correlate with very many other variables at all, while unconverted income did. The apparent reason for this, as analysed by scatterplot, was that some translators from Japan were earning very high sums (by NZD standards, due to generally higher wages and cost of living in Japan), but were not above average on any other variables, such as number of jobs per week, translation tool usage, or occupational self-efficacy, to take some examples. This distorted the scatterplots, meaning that correlations became non-significant due to the wider distribution of data points caused by these large income distributions.

This leads to the central problem of income—*absolute* income is not important (whether it is measured in U.S. dollars, Argentinean pesos, or any other currency). Neither is the problem solved by calculating equivalent consumer purchasing power within a national economy or regional set of economies (because in some places, translators tend to be low-paid, while in others, they would often earn an average wage). What matters when making international comparisons is *relative* income—what a professional translator can *expect to earn* in their own market, and, within that market, what would be considered a low income, a mid-level income, or a high income, *for a translator*. What would be considered a low income (in terms of 'dollar value') in one market (e.g. Germany) might be quite high in another (e.g. Argentina), and simple conversion to a

single currency does not reflect this association of income and the probable level of buying power and social status paired with it. What would be needed would be up-to-date market data for each national group, showing the ranges of these income brackets. Then each income data point could be classified into a system of low, middle, and high groups, or perhaps a system with a larger number of ranked numerical categories, such as deciles. Unfortunately, this was not possible, as there are no consistent, up-to-date market data that provide this kind of information. Even government statistics showing average incomes for translators are not helpful (when available), as they do not show how those averages actually summarise the different levels of income that are found. Another possibility would have been to create our own levels, based on the distribution of income given by participants from each market. But we would need many more participants from each market than we had (e.g. three participants based in the U.S. and one in Belgium were included in the final analysis—plainly insufficient to construct a profile of national income levels, and also insufficient to create a realistic average income figure).

In the absence of such information, we decided to use unconverted income units (i.e. the raw income rank data, irrespective of currency) in our analysis, despite the diffusion effect that it would have on the results, and to leave out incomes provided by Japan-based translators, for the reasons mentioned above. Based on historical exchange rates at the time, late 2009, the maximum ratio between the remaining incomes was roughly three to one (this was between British Pounds and New Zealand Dollars), which would create a moderate level of diffusion in our data. Given this context, we expect that the results presented here are weaker versions of what could be found if we were able to transform income to represent the standardised earnings of individuals in each market.

With this in mind, let us analyse the statistically significant relationships between income and other variables in the study, remembering that here, and in the subsequent tests for difference and in the regression models, income is a rank, not an actual value.

a) There was a weak-moderate positive relationship with *locus of control internal* (see **analysis 8d**).

b) There was a moderate positive relationship with *occupational self-efficacy* (see **analysis 6f**).

c) There was a weak-moderate positive relationship with *job satisfaction* (see **analysis 11f**).

d) There was a moderate positive relationship with *translation tool frequency* of use, which indicated that those participants earning more also used their translation tools more frequently.

e) There was a moderate-strong positive relationship with *hours worked per week*, which indicated that higher income was earned when more hours were worked in a week.

f) Lastly, we observed a moderate positive relationship with *number of jobs per week*, indicating that as participants worked more jobs per week, they also earned more income.

Analysis 13: ***Jobs per week*** (Question 8). This measures the average number of jobs per week over the last year of work.

a) There was a weak positive relationship with *occupational self-efficacy* (see **analysis 6e**).

b) We noted a moderate positive relationship with *income* (see **analysis 12f**).

c) We observed a moderate positive relationship with *translation tool frequency* of use, which indicated that as participants had more jobs per week, they also used their translation tools more frequently.

d) Lastly, we see a moderate positive relationship with *hours per week*, which indicates that as participants had more jobs per week, they also worked more hours per week.

Analysis 14: ***Hours per week*** (Question 9). This measures which 10-hour bracket participants find themselves in, in terms of how many hours they work per week on average.

a) We saw a moderate positive relationship with *jobs per week* (see **analysis 13d**).

b) We observed a moderate-strong positive relationship with *income* (see **analysis 12e**).

c) Lastly, we observed a moderate positive relationship with *translation tool frequency of use*, which indicated that as participants used their translation tools more frequently, they also worked more hours per week.

Analysis 15: *Translation tool frequency of use* (Question 27). This question asked translators how often they used their translation tools. Note that this is not a linear scale (in other words, the possible answer values do not represent equal-interval points).

a) We saw a moderate positive relationship with *hours per week* (see **analysis 14c**).

b) We observed a moderate positive relationship with *jobs per week* (see **analysis 13c**).

c) Lastly, we observed a moderate positive relationship with *income* (see **analysis 12d**).

5.1.2.4 Other relationships of interest (including near-significant)

In this section, we analyse other relationships of interest that we observed from our table of correlations.

Analysis 16: *Percentage of work as interpreter* and ***job satisfaction***. There was a positive and marginally significant correlation, albeit moderate, between percentage of work as an interpreter and job satisfaction (.397, $p = .052$; corrected). This indicated that as participants worked more as interpreters rather than translators, they were also more satisfied. We were surprised to find this, as there was no corresponding relationship between increasing percentages of translation work and satisfaction—in fact there appeared to be no relationship at all. Is this an indication that interpreters are perhaps more satisfied? Or perhaps that those with a well-balanced mixed career were more satisfied? Only subsequent research will answer this question.

Analysis 17: *Work hours wanted* (Question 12). This question measured the hours per week bracket that our participants wanted to work in, as distinct from the bracket that they actually worked in. The difference between these two values also enabled us to calculate another variable called *work-hours dissonance*, which indicated whether participants had too few hours, the right amount of hours, or too many hours per week (see Section 5.1.2.6 for analysis of this).

a) We observed a weak positive correlation with *jobs per week* (.289, $p = 025$; corrected). This showed us that those who wanted to work more hours also had more jobs per week.

b) We noted a moderate positive correlation with the actual *hours worked per week* (.595, $p = .000$; corrected), which showed us that as participants want to work more

hours per week, they tend to actually work more hours per week. It also showed us that clearly not everyone gets what they want (otherwise the correlation coefficient would be 1.0).

c) We observed a moderate positive correlation with *percentage of translation work* (.575, p = .000; corrected), and this indicated that as participants want to work more hours a week, they also do more translation work. This is intuitive, as we are measuring hours per week doing translation work, so as the percentage of translation work increases, we would expect that our participants want to increase the hours per week spent doing translation. However, the correlation does not approach 1.0 most probably because not all translators want to be equally involved with their work, in terms of the time that they invest into it. For example, one participant may be doing 50% translation and want 30 hours per week, while another may be doing 100% translation, but not want to be very busy, wanting only 20 hours a week.

d) We see a moderate positive correlation with *identity as a translator* (.411, p = .000; corrected), indicating that as participants want to invest more hours in translation, their identity as translators also increases.

Analysis 18: *Work amount wanted* (Question 13). This question asked participants about the amount of translation work that they wanted, as distinct from the amount of hours that they wanted to invest in doing translation work.

a) We observed a moderate positive correlation with *hours worked per week* (.437, p = .000; corrected), which showed that as participants indicated that if they were happy with the amount of work they had, or even had too much work, they also tended to work more hours per week. We would expect this, given that the satisfied or overworked person is more likely to be working higher numbers of hours per week than the person who wants more work.

b) We noted almost no relationship between the amount of work wanted and the amount of *work hours wanted* (.022, p = .837; uncorrected). This is noteworthy because it indicates that some participants may have wanted more or fewer hours, but also indicated contradictorily that they wanted less or more work. This could be due, perhaps, to wanting to do more jobs, but not wanting to invest more time in translation work, or to conflicting demands between the need for more income and the desire for more leisure or family time. This relationship could also describe those with a career in

transition, where the desire was to work more in some other professional field, but financial needs made more translation hours desirable. The sum of it is that the hours per week that were wanted were not related with the amount of work wanted, probably because the two questions had different levels of meaning for participants.

c) We observed a moderate positive correlation with *income* (.450, $p = .000$; corrected), which showed us that as participants had enough work or too much work, they also earned more income.

d) Finally, we found a moderate positive correlation with *tool use frequency* (.413, $p = .004$; corrected). This indicated to us that as participants had enough or too much work, they also used their translation tools more frequently.

In summary, these findings indicate some points of interest, particularly regarding the relationship between the number of working hours that were wanted, and the actual amount of work that was wanted. It also uncovers the possibility that interpreters were more satisfied than translators, or perhaps that those with a mixed career that included both translation and interpreting were more satisfied.

In the next few sections, we look at key differences in the psychological skill variables across key measures, and also set about constructing ordinal regression models with which to attempt to predict key success variables.

5.1.2.5 Differences in psychological variables by income bracket

We tested the psychological variables (*occupational self-efficacy*, *locus of control external*, *locus of control internal*, *responsibility for negative outcomes*, *responsibility for positive outcomes*, and *career motivation*) to see if there would be any significant differences across the seven income brackets. Given that our data are relatively non-normal and are independent (i.e. participants are randomly selected—in statistical terms, even though they were self-selecting—and did not influence other participants with their scores, nor are we doing repeated measures longitudinally), we opted for a non-parametric ANOVA (analysis of variance), using the Kruskal-Wallis H test and the median test. The Kruskal-Wallis H test works by ranking all the values to be tested, and then showing us whether the mean ranks of each category of the independent variable are the same or different across each dependent variable. If there are significant

differences, we should expect to see scores from our dependent variables clustered systematically according to the groups of the independent variable. If there are no differences, scores from our dependent variables will be more or less scattered throughout the rank order (Carver and Nash 2006:253), and the independent variable's mean rank groups will not be significantly different from each other. In this and in the following analyses, when there is a significant difference between at least two mean ranks across the dependent variables, we report the dependent variables' two mean ranks with the largest distance between them.

When the Kruskal-Wallis test was used to test whether *occupational self-efficacy* levels were significantly different across different income brackets, it gave a result of $H(6) = 18.77$, $p = .005$, while the median test gave a result of $\chi^2(6) = 16.66$, $N = 77$, $p = .011$. These results indicated that there were significant differences between some self-efficacy levels. As the Kruskal-Wallis test does not itself show *which* means were different, we have to conduct a post-hoc test between two means that we suspect represent the statistically significant difference, and to do that we use the Mann-Whitney U test. Applying the same principle as we have done with our multiple correlation coefficients (see Section 4.1.2.2), we need to make sure here that if we do several post-hoc tests in a cluster (Field 2009:565), we do not allow chance results to inflate the Type I error rate (incorrectly accepting unreal differences). Therefore we apply the Benjamini-Hochberg FDR correction to the significance tests of the Mann-Whitney results in this section, as well as to those in Section 5.1.2.8. The results of the Mann-Whitney test showed that *occupational self-efficacy* was significantly different between the first income bracket (mean rank = 12.59) and the seventh income bracket (mean rank = 24.33), $U = 24.00$, $p = .002$ (corrected; two-tailed). This means that translators in the highest income bracket had significantly more occupational self-efficacy than those in the lowest.

When *locus of control internal* was tested for differences across income brackets, the Kruskal-Wallis test gave a result of $H(6) = 13.11$, $p = .041$, and the median test showed $\chi^2(6) = 13.70$, $N = 77$, $p = .033$. This also indicated that there were significant differences in *locus of control internal*. The Mann-Whitney results showed that locus of control internal was significantly lower among those in the first (lowest) income bracket (mean rank = 12.80) than in the seventh (highest) income bracket (mean rank = 23.83), $U = 28.50$, $p = .004$ (corrected; two-tailed). In other words, those earning less had a more external locus of control.

All other psychological variables showed no significant differences when compared across income brackets.

5.1.2.6 Differences in psychological variables by work-hours dissonance

Here we tested the psychological variables for differences according to the categories of dissonance between the hours per week that our sample translators worked, and they hours that they wanted to work (indicated in Question 12 of the questionnaire). There were three categories, these being *want to work fewer hours*, *happy with current hours*, and *want to work more hours*. There were no significant differences among any of the psychological variables across these groups, either by the Kruskal-Wallis test, or the median test.

5.1.2.7 Differences in psychological variables by work amount wanted

Again we tested the psychological variables for differences according to the results of Question 13, which asked our main sample participants whether they would like to work less, were happy with their current levels of work, or would like to work more. The Kruskal-Wallis H and the median test were used.

None of the differences were significant, although *occupational self-efficacy* was almost so at $H(2) = 5.96$, $p = .051$, as was *locus of control External* at $H(2) = 5.39$, $p = .067$, both results from the Kruskal-Wallis test.

5.1.2.8 Differences in psychological variables by satisfaction

Finally, we tested the psychological variables for any differences across job satisfaction (Question 30). Here we found that all the psychological variables showed significant differences, except for *RNO*.

To conduct a post-hoc test here, with the continuous variable that job satisfaction was measured as, we had to recode it into a categorical variable. Four categories were created, with 1.00 to 1.99 becoming *category 1*, 2.00 to 2.99 becoming *category 2*, 3.00 to 3.99 becoming *category 3*, and 4.00 to 5.00 becoming *category 4*. With this transformation, the Mann-Whitney test could handle the satisfaction scale data. The majority of the data ended up in categories 3 and 4, so these were the ones that were chosen for post-hoc comparison using the Mann-Whitney test.

Occupational self-efficacy was significantly different across satisfaction levels, with the Kruskal-Wallis test giving a result of $H(3) = 16.99$, p = .001, while a post-hoc Mann-Whitney test showed that those in satisfaction level three (mean rank = 27.66) had significantly lower occupational self-efficacy than those in satisfaction level four (mean rank = 50.27), $U = 335.50$, p = .003 (corrected; two-tailed). *Locus of control External* was significantly different, $H(3) = 11.68$, p = .009, with LoC External being significantly higher in category three (mean rank = 59.55) than in category four (mean rank = 41.74), $U = 407.50$, p = .008 (corrected; two-tailed). *Locus of control Internal* was also different, $H(3) = 18.07$, p = .000, with category three locus of control internal (mean rank = 25.58) being significantly lower than category four (mean rank = 50.83), $U = 296.00$, p = .001 (corrected; two-tailed). *Responsibility for Positive Outcomes* (*RPO*) was significantly different, $H(3) = 12.29$, p = .006, and with category three responsibility (mean rank = 30.16) being significantly lower than that of category four (mean rank = 49.61), $U = 383.00$, p = 005 (corrected; two-tailed). Finally, *career motivation* showed a significant difference, $H(3) = 18.10$, p = .000, with category three motivation being significantly lower (mean rank = 30.13) than that of category four (mean rank = 49.61), $U = 382.50$, p = .004 (corrected; two-tailed).

All of these differences support the correlations found and shown in Figure 5.15, and are in the expected direction.

5.1.2.9 Predicting income with psychological variables

In the next three sections, we will progressively build an ordinal regression model with which to predict our participants' income rank (not actual income brackets in any particular currency) from a combination of psychological skill variables and work-related variables.

The reason for using ordinal regression, rather than ordinary least squares regression (OLS), is that ordinal regression, in order to achieve a stable and valid model, makes fewer demands on the data being supplied to it. Two aspects of data which are critical to the quality of an OLS regression output are data type and normality. Our data are mostly ordinal data (A is bigger than B, but we don't know by how much), whereas OLS should use continuous data (Garson 2009a). The second, and most critical assumption for OLS is that data be normally-distributed. With our dataset, we do not even have univariate normality for each independent variable (cf. Section 5.1.2.1).

Having established the reasoning behind the use of ordinal regression, we start off by predicting income from psychological skill variables alone (this section), then predicting income from work-related variables alone (Section 5.1.2.10), and finally combine the best predictors into a combined model, which we then evaluate for its predictive accuracy and general quality (Section 5.1.2.11). All ordinal regression models were created using PLUM (**Pol**ytomous **U**niversal **M**odel) in SPSS 18.0.

Therefore, firstly, we used ordinal regression to predict participants' income bracket using the psychological skill variables. Of these, only *occupational self-efficacy* made any significant contribution to the predictive power of the model, making this the best psychological skill predictor of income. The general effectiveness of *occupational self-efficacy* was observed throughout the various models that we explore here.

Fig. 5.18. Ordinal regression parameter estimates for income predicted by psychological skill variables, with pseudo-r^2 values for model

Link function: Logit *N*=77		*Estimate*	*Std. error*	*Wald*	*Df.*	*Sig.*	*95% conf. int.*	
							Lower bound	*Upper bound*
Threshold	[Income = 1]	7.821	2.997	6.813	1	.009	1.948	13.695
	[Income = 2]	8.351	3.014	7.677	1	.006	2.444	14.259
	[Income = 3]	8.839	3.033	8.496	1	.004	2.896	14.783
	[Income = 4]	9.753	3.068	10.104	1	.001	3.739	15.767
	[Income = 5]	10.659	3.098	11.836	1	.001	4.586	16.731
	[Income = 6]	11.248	3.115	13.039	1	.000	5.143	17.353
Location	Occ. self-efficacy	1.269	0.425	8.936	1	**.003**	0.437	2.101
	LoC External	-0.280	0.251	1.246	1	.264	-0.772	0.212
	LoC Internal	0.158	0.333	0.225	1	.636	-0.495	0.811
	RNO	0.261	0.400	0.427	1	.514	-0.523	1.046
	RPO	0.054	0.483	0.012	1	.911	-0.893	1.000
	Career motivation	0.317	0.578	0.301	1	.583	-0.815	1.450
Pseudo-r^2 values:		Cox and Snell = .221		Nagelkerke = .227			McFadden = .068	

Looking at Figure 5.18 above, we can see that occupational self-efficacy (*Occ. self-efficacy*) makes the only significant contribution from among all the psychological skill variables, with a regression coefficient of 1.269 ($p = .003$), which means that with a one-unit increase in occupational self-efficacy scores, there is a 1.269 increase in the log

odds[22] of participants' income being in a higher category, while other variables are held constant. This is cumulative as we increase the predictor variable by another unit, and it predicts the possibility of the dependent variable (*income*) being in a higher bracket, in addition to being in any of the lower brackets (i.e. we have a *descending cumulative odds* model). In our model, the predictive contribution of *occupational self-efficacy* was confirmed when we ran the model again (results not shown here) without including it—the results showed that none of the other psychological skill variables make a significant contribution to predicting income.

The pseudo r-squared values above indicate a moderate effect size. Note that r-squared values associated with ordinal regression do not have the same interpretation of variance explanation as they do with least-squares regression (Garson 2009; UCLA Academic Technology Services 2009), which is more familiar to most. However, they provide a general indication of the predictive power of a model and the strength of association between predictor variables and the dependent variable (Norušis 2010:81).

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22. The log odds estimate can be converted to an odds ratio estimate by exponentiating (e^x) the independent variable's estimate as given in the parameter estimate tables. This is because the logit link, used with this particular model, uses the link formula *log (probability of event occurring/probability of event not occurring)*, and exponentiating is the inverse of this formula. Odds ratio values go from zero to infinity. With *decreasing* odds ratio values between 1.0 and zero, an event is increasingly *unlikely to occur* as its odds ratio value approaches zero. With an odds ratio of 1.0, an event is equally likely to occur or not occur. With *increasing* odds ratio values of between 1.0 and infinity, an event is increasingly *likely to occur* as it approaches infinity (O'Connell 2006:11-12). In our case, *occupational self-efficacy* in Figure 5.18 gives a value of $e^{1.269} = 3.56$ when converted to an odds ratio. This indicates that as *occupational self-efficacy* increases in value by one unit, it provides a good degree of prediction (i.e. an increasing odds ratio of 3.56, this being significantly better than chance, i.e. 1.0) of *income* also being in a higher category, when the effects of other variables are held constant.

Fig. 5.19. Ordinal regression: Income predicted by psychological skill variables—model quality results

Model fitting information				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Intercept only	284.106			
Final	264.850	19.256	6	.004
Goodness-of-fit				
	Chi-square	*Df.*	*Sig.*	
Pearson	449.974	450	.491	
Deviance	264.850	450	1.000	
Test of parallel lines (proportional odds test)				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Null hypothesis	264.850			
General	223.401	41.449	30	.080
Link function for model:	Logit			

These results indicate that the model quality is good, with a statistically significant result at $p = .004$ with the model fit, the goodness-of-fit test[23] non-significant at $p = .491$, and finally the parallel lines test all indicating a non-significant result (albeit narrowly), leaving us with just enough evidence to suggest that the regression coefficients of the psychological predictor variables have the same value (i.e. slope) across every category of income, given the use of a logit link in our model. In total, all the data show that the assumptions of model quality have been met, and that it is likely that we can trust the results of it, although it would be ideal if the parallel lines test significance level was a bit larger and therefore further away from .05 than we observe it to be.

23. The goodness-of-fit test is not always particularly reliable with continuous predictor variables, as the number of cells (combinations of a particular level of the predictor and dependent variables) with zero in them can often be quite high, which *can* be a problem for the chi-square test (Norušis 2005:78-79). The PLUM algorithm will almost always give warnings about high numbers of empty cells when continuous covariates are used in the model. However, the goodness-of-fit test is the best evidence we have in this situation.

5.1.2.10 Predicting income with work-related variables

In this section, we create an ordinal regression model that we use to predict income categories from work-related variables that we considered to be most likely to have predictive value, based on analysis of the correlations in Figure 5.15.[24]

Fig. 5.20. Ordinal regression parameter estimates for income predicted by work-related variables, with pseudo-r^2 values for model

Link function: Negative log-log *N*=73		*Estimate*	*Std. error*	*Wald*	*Df.*	*Sig.*	*95% conf. int.*	
							Lower bound	*Upper bound*
Threshold	[Income = 1]	3.019	0.585	26.598	1	.000	1.872	4.167
	[Income = 2]	3.677	0.637	33.372	1	.000	2.430	4.925
	[Income = 3]	4.353	0.686	40.290	1	.000	3.009	5.697
	[Income = 4]	5.167	0.750	47.473	1	.000	3.697	6.636
	[Income = 5]	6.040	0.820	54.247	1	.000	4.432	7.647
	[Income = 6]	6.621	0.862	59.019	1	.000	4.932	8.310
Location	Years worked	0.041	0.014	8.050	1	**.005**	0.013	0.070
	Hours per week	0.645	0.139	21.702	1	**.000**	0.374	0.917
	Work-hours wanted	0.292	0.165	3.140	1	.076	-0.031	0.615
	Percent intl. work	0.009	0.004	3.861	1	**.049**	2.116E-5	0.017
Pseudo-r^2 values		Cox and Snell = .583		Nagelkerke = .598			McFadden = .237	

The results in Figure 5.20 show that when it comes to predicting income by work-related variables, using ordinal regression, *hours per week* (regression coefficient .645, p = .000), *years worked* (regression coefficient .041, p = .005), and *percentage of work for international clients* (regression coefficient .009, p = .049) are the best predictors in

24. With SPSS' PLUM (the ordinal regression algorithm that we are using here), there are no statistically-based procedures for entry of variables into a model as there are in least-squares or logistic regression models created using SPSS (e.g. using *stepwise entry*, which allows the statistical software to calculate, from the assigned set of predictor variables, those variables which contribute the most to the predictive power of the model). This means that we must here enter the variables based on theoretical and practical reasoning rather than based simply on criteria of statistical significance. Moreover, this process is recommended by some authors as being good research practice (e.g. Garson 2009a; and Tabachnick and Fidell 2007, who state (with reference to OLS regression) that "[the answer to the question of which variables to include] can be provided by theory, astute observation, good hunches, or sometimes by careful examination of the distribution of residuals" [p.122]). The lack of automated entry procedures with PLUM helps to make the specification problem an important issue here (i.e. choosing the right variables, so as not to over- or under-fit the model, as well as avoiding variable collinearity). We cannot just enter them all as candidates and simply let the software sort out which are the most important for a good model! Chen and Hughes discuss this further, referring specifically to ordinal regression (2004:6).

this particular model.[25] *Work-hours wanted* also makes a contribution to the model, but it is not a significant one, at p = .076. Finally, the pseudo r-squared values show a moderate effect size for the whole model.

Note that, unlike with the previous model, we have used a negative log-log link here. This gave a better fit to the data than the logit link used in the test described in Section 5.1.2.9. The logit link [*log (probability of event occurring/probability of event not occurring)*] is used when the dependent variable is evenly distributed, while the negative log-log link [*–log (–log (probability of event occurring))*] is used when the dependent variable is skewed towards lower categories of its distribution, which means that it has an asymmetric distribution. When we attempted to use the logit link with this work-variable regression model, it violated the parallel lines test (in other words, the regression coefficients could not be assumed to be the same across all categories of the dependent variable: *income*), which meant that the negative log-log model fits better. This makes sense, given that the lower income categories have more participants in them than the higher categories.

Unfortunately, regression coefficients calculated using the negative log-log link are rather harder to interpret, not lending themselves to the calculation of odds ratios, unlike those under the logit link. This is due to the different formula and asymmetrical nature of the link, which means that there is no direct interpretation in terms of odds ratios (Chan 2005:265; Hardin and Hilbe 2007:173; Helgesen, Nesset, and Voldsund 2009:39). In spite of these issues, looking at the regression coefficients as presented in Figure 5.20 we can see that *hours per week* makes a highly significant predictive contribution, with an increase in hours per week predicting an increase in income. *Years worked in translation* also made a significant contribution to predicting increasing income, as did *percentage of international work*.

The results of the model quality tests shown in Figure 5.21 indicate that the model meets the quality requirements, with the model fitting result being highly significant,

25. Note that there are no standardised regression coefficients (beta-weights) in ordinal regression outputs as provided by PLUM (Garson 2009), so the size of each regression coefficient may be different due to its units of measurement. Therefore, we cannot be sure that they would have the same coefficient size if they were standardised. Coefficients show directionality (positive or negative) and statistical significance, but do not directly show effect size.

Note also that coefficients' relative contributions to the overall predictive power of the model, as with least squares regression, vary according to what the other predictor variables in the model are. See Tabachnick and Fidell (2007:122-123) for further discussion of the issue of variable inclusion or exclusion, with reference to least-squares regression. The same principles apply in our present case.

and the goodness of fit and parallel lines test results indicating non-significance, which a good model should indicate.

Fig. 5.21. Ordinal regression: Income predicted by work-related variables—model quality results

Model fitting information				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Intercept only	269.987			
Final	206.068	63.919	4	.000
Goodness-of-fit				
	Chi-square	*Df.*	*Sig.*	
Pearson	436.158	428	.382	
Deviance	206.068	428	1.000	
Test of parallel lines (proportional odds test)				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Null hypothesis	206.068			
General	184.479	21.589	20	.363
Link function for model:	Negative log-log			

5.1.2.11 Predicting income with psychological and work-related variables

In this section, we use *occupational self-efficacy* (the most effective predictor of income from among the psychological skill variables), combined with the work-related variables used in the previous model, to create an ordinal regression model that predicts income.

Fig. 5.22. Ordinal regression parameter estimates for income predicted by psychological skill and work-related variables, with pseudo-r^2 values for model

Link function: Negative log-link *N*=73		*Estimate*	*Std. error*	*Wald*	*Df.*	*Sig.*	*95% conf. int.* Lower bound	Upper bound
Threshold	[Income = 1]	6.374	1.674	14.506	1	.000	3.094	9.654
	[Income = 2]	7.021	1.711	16.846	1	.000	3.668	10.373
	[Income = 3]	7.695	1.748	19.373	1	.000	4.268	11.121
	[Income = 4]	8.555	1.791	22.808	1	.000	5.044	12.066
	[Income = 5]	9.469	1.835	26.622	1	.000	5.872	13.066
	[Income = 6]	10.058	1.859	29.267	1	.000	6.414	13.701
Location	Years worked	0.033	0.015	4.805	1	**.028**	0.003	0.062
	Hours per week	0.610	0.140	19.079	1	**.000**	0.336	0.883
	Work-hours wanted	0.301	0.167	3.252	1	.071	-0.026	0.628
	Percent intl. work	0.009	0.004	4.157	1	**.041**	0.000	0.018
	Occ. self-efficacy	0.666	0.301	4.887	1	**.027**	0.075	1.256
Pseudo-r^2 values:		Cox and Snell = .609		Nagelkerke = .625			McFadden = .254	

The results in Figure 5.22 show that the overall model is improved by combining psychological skill and work-related variables. Those participants with more *hours per week*, followed by *occupational self-efficacy*, were more likely to have a corresponding increase in income bracket.

It also shows that adding the predictive power of *occupational self-efficacy* improves the pseudo r-squared values by about 4% to 5% over a model containing just work-related variables. This provides a good degree of evidence that psychological skill components do make an important contribution to predicting income.

In summary, the model is parsimonious (i.e. it explains a good deal while using the simplest possible model structure) and meets the quality criteria, as shown in Figure 5.23.

Fig. 5.23. Ordinal regression: Income predicted by psychological skill and work-related variables—model quality results

Model fitting information				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Intercept only	269.987			
Final	201.359	68.628	5	.000
Goodness-of-fit				
	Chi-square	*Df.*	*Sig.*	
Pearson	401.719	427	.805	
Deviance	201.359	427	1.000	
Test of parallel lines (proportional odds test)				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Null hypothesis	201.359			
General	170.995	30.364	25	.211
Link function for model:	Negative log-log			

Fig. 5.24. Ordinal regression model with psychological and work-related variables: Classification or confusion matrix for predicted income bracket by actual income bracket, showing (in brackets) percentage correctly predicted

		Predicted income bracket							
		1	*2*	*3*	*4*	*5*	*6*	*7*	*Total*
Observed income bracket	*1*	**20 (95%)**	0	1	0	0	0	0	21
	2	4	**2 (28%)**	1	0	0	0	0	7
	3	3	0	**0 (0%)**	4	1	0	0	8
	4	1	1	2	**5 (41%)**	2	0	1	12
	5	0	0	2	5	**2 (18%)**	0	2	11
	6	1	1	0	0	2	**0 (0%)**	1	5
	7	1	0	0	3	1	0	**4 (44%)**	9
Total		30	2	6	17	8	0	8	72

True positive rate = 33/72 = 45.8%
False positive rate = 39/72 = 54.2%

The data in Figure 5.24 show the classification rates according to the regression model with both occupational self-efficacy and work-related variables in it. The percentages (in bold) on the diagonal show the percentage of correct category predictions made by the regression model for that particular level of income bracket. The values in the off-diagonal cells show incorrect predictions made by the model.

In this case, we want as many values as possible on the diagonal, which gets us closer to 100 percent accuracy, indicating correct predictions by the model. For this particular model, categories 1 and 7 had the best hit-rate, while categories 3 and 6 (which were not predicted at all), showed the poorest hit rate, both at zero percent. We also show the true positive and false positive rates for the model, in terms of the correct and incorrect proportions of classification estimates.

However, we are more interested in the general level of association (i.e. coefficients and r-squared values) between the predictor variables as a group and the dependent variable of income, rather than the rate of correct prediction, so the fact that the model does not correctly predict some income levels is not too concerning for us here (although in some cases, such as in medicine, the highest possible rate of correct category prediction is very important). Correct classification rates can, in any case, be influenced by category size, to a certain extent independently of the overall model fit (O'Connell 2006:43-44), which is why we end up with the highest accuracy rate for income bracket 1 in Figure 5.24 above, which is the largest group, with 21 participants in it.

5.1.2.12 Predicting income of the German group with psychological and work-related variables

The problem of income (see Section 5.1.1.2, concerning the discussion of general results) was one that we wanted to test with the largest national group in our whole sample. In other words, we wanted to know whether a similar result would be found with a group who had all measured their income in the same currency, and who all worked in the same national market. However, the German participants, despite being the single largest group, still only numbered 30 (of whom one was removed from the regression model due to incomplete data on one of the variables). This gave a total of 29 participants, rather smaller than ideal for a regression model. As is stated regarding ordinal regression (e.g. Garson 2009; UCLA Academic Technology Services 2009), these types of models do need a larger sample size than ordinary least-squares (OLS) regression, as the prediction methodology (maximum likelihood estimation) is different.

Using the sample size equation often applied to OLS regression, 104 + *number of independent variables* (here there are 5) = 109, we have a sample size that is distinctly under what would be normally considered acceptable. Even considering Garson's comment regarding OLS, that "[f]ewer than 5 cases per independent variable is generally considered unacceptable, even for exploratory research" (Garson 2009a), which would equal 25 for us, we are right on the border of statistical acceptability. In other words, results *can* become highly unstable with small samples. Nonetheless, we will present the results here, with the proviso that the reliability of the model is possibly in doubt, and that it may not replicate. With this in mind, let us take a look at the results of the regression model, predicting income among just German participants, and compare this with the results that we found for the whole sample.

Before creating the ordinal regression model with the German participants' data, we decided to run internal reliability tests with the *occupational self-efficacy* scores from their sample. This was done using SPSS 18.0. The results were similar to the reliability tests run for the *occupational self-efficacy* scores for the whole main sample (see Section 5.1.1.3). For the *occupational self-efficacy* scale, we removed item 7, which gave us a final Cronbach's alpha of .839. The item removed from the OCCSEFF scale here was the same as that removed when working with the scale measuring the whole of the main sample, so we are comparing like with like.

As we can see in Figure 5.25 below, *occupational self-efficacy* made a significant contribution to predicting income among German participants.

Fig. 5.25. Ordinal regression parameter estimates for income of German participants, predicted by psychological skill and work-related variables, with pseudo-r^2 values for model

	Link function: Complementary log-log *N*=29	*Estimate*	*Std. error*	*Wald*	*Df.*	*Sig.*	*95% conf. int.*	
							Lower bound	*Upper bound*
Threshold	[Income = 1]	5.545	2.623	4.470	1	.035	0.404	10.685
	[Income = 2]	6.126	2.646	5.358	1	.021	0.939	11.312
	[Income = 3]	6.621	2.676	6.123	1	.013	1.377	11.866
	[Income = 4]	7.729	2.791	7.667	1	.006	2.258	13.200
	[Income = 5]	8.314	2.840	8.572	1	.003	2.748	13.880
	[Income = 6]	8.451	2.849	8.798	1	.003	2.867	14.035
Location	Years worked	0.042	0.026	2.680	1	.102	-0.008	0.092
	Hours per week	0.562	0.228	6.069	1	**.014**	0.115	1.010
	Work-hours wanted	-0.201	0.243	0.683	1	.408	-0.677	0.275
	Percent intl. work	0.001	0.008	0.015	1	.902	-0.015	0.017
	Occ. self-efficacy	0.974	0.489	3.970	1	**.046**	0.016	1.932
Pseudo-r^2 values:		Cox and Snell = .909		Nagelkerke = .933			McFadden = .659	

The results show a similar pattern to those of the model that we used in the previous section, providing some comforting evidence to support its validity, despite the proviso of the small sample size mentioned previously. Here, unlike in all other analyses of income in this chapter (as discussed in Analysis 12 in Section 5.1.2.3), the income brackets in this particular analysis represent real brackets of €10,000 each. In spite of the fact that the two most important predictors appear to be the same as those in the whole-sample model (being *hours per week* and *occupational self-efficacy*), there are fewer statistically significant predictors in this model, presumably due to the small sample size and the lower statistical power caused by this. In spite of this, the overall model appears to show an excellent fit, with high r-squared values (better than those of the whole-sample model). This indicates either that the diffusion of income measurement has probably lowered the predictive power of the whole-sample model, and that if we were able to remove this diffusion, the model would probably fit the whole sample very well, or that the present model is over-fitted by having too high a ratio of predictor variables to participant numbers. Given the small sample size, over-fitting is a distinct possibility. However, very high parameter estimates and/or standard errors (as well as failure by the software to converge on a solution) are often indicators of over-fitting (Tabachnick and Fidell 2007:442), and none of the parameter estimates

or standard errors in Figure 5.25 are unreasonable, so over-fitting may not be a problem here after all.

The other interesting point about this model is that the link is complementary log-log [*log (–log (1 – probability of event occurring))*]. This is usually used when the independent variable is skewed towards higher values, but the histogram of German participants' income showed relatively even distribution, slightly skewed towards lower values. Yet none of the other links (cauchit, logit, negative log-log, probit) provided a model that fitted; even the logit and negative log-log links did not do so, despite the fact that we would have expected them to be the most likely to work. Naturally, the relative lack of stability of a model with so few participants' data in it perhaps explains this situation.

However, the results in Figure 5.26 indicate that the model is of suitable quality by the criteria that we have set for it.

Fig. 5.26. Ordinal regression: Income of German participants, predicted by psychological skill and work-related variables—model quality results

Model fitting information				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Intercept only	105.454			
Final	35.988	69.465	5	.000

Goodness-of-fit			
	Chi-square	*Df.*	*Sig.*
Pearson	167.154	163	.396
Deviance	85.519	163	1.000

Test of parallel lines (proportional odds test)				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Null hypothesis	35.988			
General	6.771	29.217	25	.255
Link function for model:	Complementary log-log			

5.1.2.13 Predicting work-hours dissonance with psychological and work-related variables

In this section, we attempt to predict the dissonance between the hours that our participants wanted to work per week, and the hours that they actually did work. We called this variable *work-hours dissonance*, and it has three levels. The first contains those who worked more hours than they wanted (i.e. wanted fewer), the second contains those who were satisfied with the working hours they had, and the third contains those who worked fewer hours than they wanted (i.e. wanted more).

Fig. 5.27. Ordinal regression parameter estimates for work-hours dissonance predicted by psychological skill and work-related variables, with pseudo-r^2 values for model

Link function: Logit *N*=88		*Estimate*	*Std. error*	*Wald*	*Df.*	*Sig.*	*95% conf. int.*	
							Lower bound	*Upper bound*
Threshold	[Work-hours dissonance = 1]	-5.028	1.723	8.520	1	.004	-8.404	-1.652
	[Work-hours dissonance = 2]	-2.561	1.649	2.413	1	.120	-5.792	.670
Location	Age	0.002	0.025	0.007	1	.934	-0.047	0.051
	Years worked	-0.039	0.032	1.533	1	.216	-0.101	0.023
	Occ. self-efficacy	-0.627	0.315	3.973	1	**.046**	-1.244	-0.010
Pseudo-r^2 values:		Cox and Snell = .103		Nagelkerke = .118			McFadden = .053	

The results of Figure 5.27 above show that the category of *work-hours dissonance* that participants find themselves in is predictable largely by their level of *occupational self-efficacy*, which is the only significant predictor in the model.

The negative coefficient indicates that with a one-unit increase in scores of *occupational self-efficacy*, there is a -0.627 increase in the log-odds (i.e. an odds ratio of $e^{-0.627} = 0.534$, a bit less than 50/50 chance, which would give an odds ratio of 1.0) that participants will find themselves in a higher category of *work-hours dissonance*. Alternatively, we can say that for a one-unit increase in *occupational self-efficacy* scores, there is a 1/0.534 = 1.872 increase in the odds ratio that participants will be in a lower category of *work-hours dissonance*. In plain language, as our participants' *occupational self-efficacy* scores go higher, this predicts that they are more likely to have either a sufficiency of work hours (category 2) or, with increasing occupational

self-efficacy scores, a surplus of work hours (category 1), rather than a deficit (category 3).

Consequently, we can predict from this model that those with higher occupational self-efficacy scores are more likely to have enough or too much work rather than too little. This does not, of course, mean that occupational self-efficacy *causes* work-hours dissonance, but simply that, if we only had access to a participant's occupational self-efficacy score, we would, all other things being equal, then be able to predict what work-hours dissonance bracket that participant would be likely to be in.

However, one thing to bear in mind here is that the r-squared values are rather small, so this particular model is probably, in overall terms, not of high *practical* significance (i.e. actually useful for predicting real-world classifications, rather than simply showing a statistically significant relationship or difference), as there is simply not much association between the predictor variables and the dependent variable (work-hours dissonance). Therefore, we may not be able to predict the work-hours dissonance bracket with a high degree of accuracy.

The model quality results in Figure 5.28 show that model is of acceptable quality by the expected criteria.

Fig. 5.28. Ordinal regression: Work-hours dissonance predicted by psychological skill and work-related variables—model quality results

Model fitting information				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Intercept only	181.350			
Final	171.748	9.601	3	.022

Goodness-of-fit			
	Chi-square	*Df.*	*Sig.*
Pearson	170.079	171	.506
Deviance	171.748	171	.470

Test of parallel lines (proportional odds test)				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Null hypothesis	171.748			
General	165.815	5.933	3	.115
Link function for model:	Logit			

5.1.2.14 Predicting satisfaction with psychological and work-related variables

In this section, we attempt to create an ordinal regression model that predicts *job satisfaction* (our marker of internally-judged professional success). We want to be able to show what variables predict whether our translators will be more or less satisfied with their work.

Fig. 5.29. Ordinal regression parameter estimates for job satisfaction predicted by psychological skill and work-related variables, with pseudo-r^2 values for model

Link function: Logit *N*=73		*Estimate*	*Std. error*	*Wald*	*Df.*	*Sig.*	*95% conf. int.*	
							Lower bound	*Upper bound*
Threshold	[Job satisfaction = 2.00]	18.196	6.883	6.988	1	.008	4.705	31.686
	[Job satisfaction = 3.00]	22.891	7.287	9.867	1	.002	8.608	37.174
Location	Age	0.089	0.109	0.666	1	.414	-0.124	0.302
	Years worked	-0.177	0.121	2.154	1	.142	-0.414	0.060
	Hours per week	-0.213	0.677	0.099	1	.753	-1.539	1.113
	Identity as translator	1.664	0.761	4.785	1	**.029**	0.173	3.155
	Income	-0.013	0.396	0.001	1	.974	-0.788	0.763
	Occ. self-efficacy	1.978	0.878	5.071	1	**.024**	0.256	3.699
	LoC External	-0.789	0.577	1.866	1	.172	-1.921	0.343
	LoC Internal	2.396	0.880	7.423	1	**.006**	0.673	4.120
	Work-hours dissonance = 1	-2.144	2.100	1.042	1	.307	-6.260	1.972
	Work-hours dissonance = 2	-0.176	1.313	0.018	1	.893	-2.750	2.397
	Work-hours dissonance = 3	This parameter is set to zero because it is redundant.			0			
Pseudo-r^2 values:		Cox and Snell = .463		Nagelkerke = .682			McFadden = .548	

Here we have used a recoded satisfaction variable, which created four categories of satisfaction. Category 1 satisfaction (the lowest) had no participants in it, so the relationships are analysed across categories 2 (N=2), 3 (N=12), and 4 (N=59). We used the logit link with this model, which fitted perfectly well, and allows greater interpretability of the coefficients, as mentioned previously.

The results show, from among the work-related variables, *identity as a translator* is the most effective predictor, and that, from among the psychological variables,

occupational self-efficacy and *locus of control internal* are the most effective predictors. (It could be argued that *identity as a translator* is itself a psychological variable, rather than a work-related one, but we have classified it as work-related as we consider that it directly measures an attitude towards translation specifically, rather than being a more general measure of work-related attitude).

We are using a logit link here, so we can now analyse the coefficients in terms of odds ratios. Specifically, we see an $e^{1.664} = 5.280$ increase in the odds ratio of being in a higher satisfaction bracket when *identity as a translator* is increased by one unit, with all other variables held constant. We also observe an $e^{1.978} = 7.228$ increase in the odds ratio when *occupational self-efficacy* is increased by one unit. Finally, we see an $e^{2.396} = 10.979$ increase in the odds ratio of being in a higher satisfaction bracket when *locus of control internal* is increased by one unit, with other variables kept constant. These, as mentioned in the previous paragraph, are the strongest predictors of increased job satisfaction as a translator. Interestingly, *income* has almost no power to predict job satisfaction in this particular model, with this particular combination of predictor variables.

One question that we might ask here is why income in this model is one of the predictor variables, when in previous models it was the independent variable. The reason is that we suspect that satisfaction is partly a *result* of income earned and of job performance, not a *cause* of them (Spector 2003:229). In other words, the hypothesis is that satisfaction is more likely, in a causal chain of events, to come after income earned. In this case, we are justified in using all potentially 'temporally prior' variables to help predict satisfaction, which is classed here as a 'temporally subsequent' variable (see model in Section 6.1.1).

Finally, we see relatively good levels of association (in the form of the pseudo-r^2 values) between our predictor variables and the dependent variable, indicating that the overall model has reasonably good predictive power.

The model quality results shown in Figure 5.30 indicate that the model is of good quality.

Fig. 5.30. Ordinal regression: Job satisfaction predicted by psychological skill and work-related variables—model quality results

Model fitting information				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Intercept only	82.847			
Final	37.486	45.362	10	.000
Goodness-of-fit				
	Chi-square	*Df.*	*Sig.*	
Pearson	58.753	134	1.000	
Deviance	37.486	134	1.000	
Test of parallel lines (proportional odds test)				
Model	*-2 log likelihood*	*Chi-square*	*Df.*	*Sig.*
Null hypothesis	37.486			
General	34.979	2.506	10	.991
Link function for model:	Logit			

Fig. 5.31. Ordinal regression model with psychological and work-related variables: Classification (or confusion) matrix for predicted satisfaction bracket by actual satisfaction bracket, showing (in brackets) percentage correctly predicted

		Predicted satisfaction bracket				
		1	*2*	*3*	*4*	*Total*
Observed satisfaction bracket	*1*	**0 (0%)**	0	0	0	0
	2	0	**2 (100%)**	0	0	2
	3	0	0	**7 (58%)**	5	12
	4	0	0	4	**55 (93%)**	59
Total		0	2	11	60	73

True positive rate = 64/73 = 87.6%
False positive rate = 9/73 = 12.3%

The classification matrix shown in Figure 5.31 demonstrates a good level of accuracy, with all correct predictions for each category being over 50% (chance level). The true (i.e. correct) positive rate of 87% percent is good evidence that the model has good predictive power regarding freelance translator's job satisfaction.

5.1.2.15 Summary of statistical findings and support for quantitative hypotheses

In the previous few sections, we have shown that key measures of job performance can be predicted, using ordinal regression models, by a combination of work-related and psychological skill variables, the fundamental psychological skill predictor being *occupational self-efficacy*. Specifically, *occupational self-efficacy* was the best psychological skill predictor (when combined with work-related predictors) of income (both sample-wide, and in a sub-sample of German participants), of job satisfaction, and of the dissonance between hours that were worked and hours that were wanted.

There were no direct relationships between any of the psychological skill variables and technological professional success as measured by translation tool frequency of use, although *occupational self-efficacy* can be used to predict one element of technological professional success (as defined in Figure 3.2), and this was rating of translation *tool skill* (see Figure 5.16). However, this may possibly be because of the relatively small subset of participants who were using translation tools (N=66), and it may also be because tool usage was not defined as clearly as it perhaps could have been. In other words, if we define tool usage as including only translation memories, localisation software, and other ‘high level’ tool types, rather than also including electronic dictionaries and other more ‘regular’ tools, we may see a clearer relationship.

All together these findings, to remind readers again, do not mean that these things *cause* successful job performance, but that, all other things being equal, if we measured the psychological skill variables at the start of a career, and then applied the model containing psychological skill variables as presented in Section 5.1.2.9, we might predict with a certain degree of accuracy how likely it will be that the translator will go on to be successful, in this case with their income. Such an approach (using regression models) is often used in the educational field, with secondary school results on various tests being used to predict subsequent university performance, for example. Regression is also used in many other fields—such as engineering (e.g. predicting time-to-failure of a piece of machinery, given certain conditions) and business (e.g. predicting amount of goods sold, given certain conditions such as customer type, season of the year, economic indices, etc.). Of course, our model and its components all need further testing, revision, and improvement to become good diagnostic tools. However, the results indicate that we have a good start here. Undoubtedly, however, there is also the negative side of pre-career or early-career testing, as we discuss in the next chapter.

This important result provides evidence that indeed it is more than just classical translation competence that relates to translators' job performance and success. Based on the evidence, psychological skill seems to have an important role to play here, and this will be discussed in more detail in Chapter 6.

In terms of the hypotheses predicted, a number of hypotheses proposed in Section 3.1 were clearly supported, by virtue of finding 43 statistically significant correlations, all in the expected directions. These were as follows:

Group 1: a, c, d

Group 2: b, c

Group 3: a, d, f, g, h, j

Group 4: a, b, d, f

Group 5: a

Group 6: a, b

Group 7: b, e, f, g

Group 10: a, b

Group 11: a, b

Group 13: a, b, c, e

Group 14: c

Group 15: e, f, h, j

Psychological scales: we observed significant relationships between *occupational self-efficacy* and *locus of control external* (negative), between *occupational self-efficacy* and *locus of control internal* (positive), between *occupational self-efficacy* and *responsibility for positive outcomes* (positive), and between *occupational self-efficacy* and *career motivation* (positive). We also observed significant relationships between *locus of control external* and *responsibility for positive outcomes* (negative), between *locus of control internal* and *responsibility for positive outcomes* (positive), between *locus of control internal* and *career motivation* (positive), and finally between *responsibility for positive outcomes* and *career motivation* (positive). These, and all the other hypothesised relationships, were all in the expected direction. We will go on to discuss the implications of these in the next chapter.

Three of the four regression hypotheses were also supported—we can predict *income*, *job satisfaction*, and *work-hours dissonance* using a mix of psychological and work-related variables. A good quality regression model could not, however, be made to predict translation *tool frequency* of use (as an indicator of technological success).

In summary, the findings provide good initial evidence that there is a relationship between psychological skill and translators' professional success. We further discuss the implications of this in the final chapter.

5.2 Main study interview data analysis

This section is a continuation of the work done in Section 4.2 on the participants in the pilot study, and uses similar methodology. Here we discuss interviews with seven participants of various nationalities, based in three different markets in Europe. These markets were in Germany, Spain, and Switzerland. Four of the interviews were with German-based participants, one with a Spanish-based participant, and two with Swiss-based participants. In this section, we analyse their profiles in terms of their work patterns and types, and in terms of their scores on the psychological scales. Subsequently, we look at the presence of psychological skill as it manifests itself in their self-descriptive and narrative discourse, which we analyse. Unlike with the pilot study participants, we have not transcribed the whole text of each interview; instead we take the most relevant sections and show these as quotations.

We have used a similar methodology to the pilot study interviews—a semi-structured approach in which we presented identical questions to the participants and recorded their responses. If any particular items of interest arose during each answer, we asked supplementary questions to follow these up. In this manner, each participant went through more or less the same procedure, and thus different answers can be more readily attributed to personal differences and experiences, rather than being attributed to the interview's structure.

In this sense, the results of the main study's interviews can be compared with the pilot study's interviews, by those who are interested in analysing what differences there may be between New Zealand and European-based translators, in terms of their experience of their work.

5.2.1 Participant profiles

As mentioned previously, there were seven participants. We label them in the order in which the interviews were done, so that the participants' titles (for the purposes of this research) will be Participant 1M, 2M, etc., to 7M. Here, the suffix M signifies that the participant took part in the main study, in order to avoid any possible confusion with the pilot study participants' numbering.

The participant group was made up of two males and five female translators. They are presented here in the order in which they were interviewed (in October of 2009). They also represent a mix of fully freelance translators and those who are simultaneously doing varying amounts of academic work in Translation Studies (i.e. teaching and/or research).

Participant 1M was born in and based in Spain. She was 33 years old and had worked as a translator for some eight years. She worked in the 10-hours or less bracket, with an average of five jobs per week, and did 25% translation, 5% interpreting, and 70% other work (Translation Studies academic work). Her identity as a translator score was 3.0. She wanted to work in the 11-20 hours per week bracket (the next bracket up from her actual bracket), and she indicated that she would like more translation work. Her translation-derived income was in the under-10,000 Euro bracket. Working for agencies was her most important source of translation work, followed by working for end clients and working in-house respectively. She did 30% of translation work for the domestic market, and 70% internationally. She used translation tools on average every day and rated herself as having an average skill level, and an 'unsure' confidence level, in their use. Her scores on other aspects were as follows: job satisfaction 4.20, occupational self-efficacy 4.57, locus of control external 3.88, locus of control internal 3.75, responsibility for negative outcomes 2.17, responsibility for positive outcomes 2.83, and career motivation 3.64.

Participant 2M was born in and based in Germany. She was 36 years old and had worked in the translation industry for seven years. She worked in the 0-10 hours per week bracket, with an average of five jobs per week, doing 10% translation work and 90% other work (Translation Studies academic work). Her identity as a translator measured at 4.0. She wanted to work 0-10 hours per week doing translation (the same bracket as she was in), and indicated that she had the right amount of translation work. Income derived from translation was in the 10,000 Euro or under bracket. She worked for end clients and did not do any other types of work. 100% of her work was for the

domestic German market. She used translation tools once every two or three weeks and rated her translation tool skill and confidence as both very high. Other scores were as follows: job satisfaction 4.00, occupational self-efficacy 5.38, locus of control external 2.50, locus of control internal 4.13, responsibility for negative outcomes 2.67, responsibility for positive outcomes 3.17, and career motivation 4.00.

Participant 3M was born in the United Kingdom and was based in Germany. She was 48 years old and had 15 years of experience in the translation industry. Her working hours were in the 31-40 hours per week bracket, and she completed five jobs per week on average, with 98% of her work being translation and the remaining 2% being interpreting (although she indicates in her interview that the proportion has been increasing towards interpreting, and was approximately 90% translation to 10% interpreting at the time). She indicated her identity as a translator at 4.0. She wanted to work in the 31-40 hours per week bracket (the same one that she actually worked in), and was satisfied with the amount of work that she had. Her income from translation fell into the 40,000-50,000 Euro bracket. Her primary source of work was from agencies, her secondary from direct clients, and she did not do any in-house work. Some 75% of her work was for the German market, and the rest was international. She did not use any specialist translation tools. Her other scores were as follows: job satisfaction 4.40, occupational self-efficacy 6.00, locus of control external 2.25, locus of control internal 4.63, responsibility for negative outcomes 3.33, responsibility for positive outcomes 3.50, and career motivation 3.92.

Participant 4M was born in the United States and was based in Germany. He was 36 years of age and had worked for 12 years in the translation industry. He worked in the 11-20 hours per week bracket, and completed one job every two weeks on average. 20% of his work was translation-related and the remainder was other work (Translation Studies academic work). He reported his identity as a translator as 4.0. He wanted to work in the 0-10 hours per week bracket (one bracket lower than he actually found himself), but was happy with the amount of work that he had. His translation related income was in the under-10,000 Euro bracket. He only worked for end clients. 90% of his work was for the German market. He used no translation-specific tools of any kind. His other scores were: job satisfaction 4.40, occupational self-efficacy 5.63, locus of control external 2.38, locus of control internal 4.38, responsibility for negative outcomes 3.50, responsibility for positive outcomes 3.83, and career motivation 3.75.

Participant 5M was born in and based in Germany. She was 30 years old and had worked in translation for five and a half years. She worked in the 11-20 hours per week bracket, doing three jobs per week on average, and did 20% translation work and 80% other work (Translation Studies academic work). She reported her identity as a translator score as 4.0. She wanted to work in the 11-20 hours per week bracket (the same bracket as she was actually in), and also indicated that she had enough work. Translation-related income was in the under-10,000 Euro bracket. She worked for agencies as her primary work source, and for end clients as the secondary work source, and did not do any in-house work. 20% of her work was for the German market, and the other 80% was for overseas clients. She used her translation tools about once a month, and rated her skill level and confidence in their use as *high skill level* and *confident* respectively. Other scores follow: job satisfaction 4.00, occupational self-efficacy 5.00, locus of control external 2.88, locus of control internal 4.88, responsibility for negative outcomes 3.33, responsibility for positive outcomes 3.83, and career motivation 3.92.

Participant 6M was born in the United Kingdom and was based in Switzerland. She was 56 years old, and had been working in translation for 18 years (the longest of our interview participants). She worked in the 21-30 hours per week bracket, doing an average of three jobs per week, and did 60% translation work and 40% other work. She indicated her identity as a translator as 4.0. She wanted to work in the 21-30 hours bracket (the same as she was currently working in), but indicated that she would like to have less translation work. Her translation-related income was in the 40,000-50,000 Swiss Francs bracket. She worked primarily for end clients, and less for agencies, and did not do any in-house work. 50% of her work was for the Swiss market, and the remainder was international. She did not report using any translation-specific tools. Her other scores were: job satisfaction 4.40, occupational self-efficacy 5.25, locus of control external 2.25, locus of control internal 4.63, responsibility for negative outcomes 3.67, responsibility for positive outcomes 3.50, and career motivation 3.83.

Participant 7M did not provide any data for the questionnaire, but there are several main points in his profile, which we outline here. He was born in the United Kingdom and was based in Switzerland, and was in his 40s. He worked around 80% of the time as a freelance translator and the remaining 20% as a Translation Studies lecturer. He had formerly worked in the finance industry for quite a few years (although he considered freelance translation just after finishing his education) and was planning to work almost

full-time as a freelance translator. He was also planning to specialise in financial translation, which linked with his finance industry experience.

5.2.2 Main study interview analysis

In this section we present the results of the interviews with the main study's seven participants. The data is ordered by topic or theme, and we present the quotations that are richest in data, both for supporting our hypotheses and in terms of their descriptive contents and interest for the reader. The quotations are briefly introduced, and we try to let the participants say as much about the topic as they need to in order to paint the picture. Each quotation is then followed by a brief analysis of the main point of the quotation, in order to highlight the main points and to guide the reader, while also trying not to present the participants' meaning in a rigidly pre-determined manner.

In terms of theoretical approach, we approach the data from an angle influenced by thematic analysis—that is, simply analysis by themes. Thematic analysis is commonly used as an inductive technique, in which themes emerge from the dataset (Braun and Clarke 2006:80). Here we are not using it in such a manner. We already have the themes that we have chosen to analyse, which we have derived from psychological and translation theory, and which have been measured using the psychological scales. Here analysis of the themes is by use of a deductive approach, in which the data is approached by theme, in order to see what it has to say about each theme, and whether what it has to say supports the theme or not. We are not developing theory at this point, as it has already been developed using 'conventional' hypothetico-deductive methods. As Braun and Clarke (2006: 84) point out:

> [A] 'theoretical' thematic analysis would tend to be driven by the researcher's theoretical or analytic interest in the area, and is thus more explicitly analyst-driven. This form of thematic analysis tends to provide less a rich description of the data overall, and more a detailed analysis of some aspect of the data.

Such an approach is what we are taking here, in which we focus on the areas of particular significance, despite the potential loss of big-picture scope that this may mean. However, we have listened to the whole dataset, and in doing so have attempted to avoid cutting out data that might not support the hypotheses.

Having established the theoretical basis of this work, we will now look at the data, organised by the following themes: Satisfaction, responsibility for positive outcomes,

responsibility for negative outcomes, self-efficacy, locus of control, family and work balance, conceptions of success, family and work balance, personality characteristics of freelance participants, the proposed cause-effect relationship between beliefs and behaviours, technology, and career paths. The reader should keep in mind that because the data is 'organic', there are some areas of overlap between some themes, although we have tried to keep this to a minimum.

5.2.2.1 Satisfaction in translation work

In this section, we look at participants' perceptions of satisfaction in their work, and how these relate to attitudes towards their work, their clients, and the demands of life outside of work. We look at what kinds of events or outcomes bring our participants satisfaction, and how these may contribute towards maintaining their motivation in their translation work. Additionally, we look at sources of dissatisfaction and annoyance for our participants.

One of the major themes was problem-solving, that idea of translation being like a puzzle that presents particular problems to be solved, so that the final product can be made accessible to the target readers (the idea of accessibility being another related theme).

Participant 1M says:

> When you read a text and you find that there are some problems and some doubts that you have there and you have to discover what's the meaning, and for me that's very ahm that's really nice to to come into the text and ahm solve the problems little by little
>
> […]
>
> It's like a challenge, you know
>
> [...]
>
> When you have finished and you can see that the meaning of the original text is the same to the target text *it's really really nice*

Participant 1M expresses the idea of the satisfaction of problem solving, but she also mentions the idea of making interlingual understanding and accessibility a possibility, something which did not exist before the translation occurred:

> Also thinking about how people reading the Spanish can read a text or understand a film or something like that that originally was written in another language, and *you are making possible this understanding, it's really rewarding*

The translator as an interlingual and intercultural facilitator (i.e. as an active agent, not a passive 'machine'), and the satisfaction that derives from that self-perception, seems to be the key theme here.

Participant 5M also expresses a similar idea.

> And I really like this approach of actually using language to mediate between different people and cultures who otherwise couldn't communicate
>
> […]
>
> Well I do quite s-, I do quite a bit of work as a freelance translator, and ahm, w-, *rewarding, if you get good feedback from your customers, that's rewarding of course*, if ah people are happy with the work you've done and ah how you translated things, so all the surrounding like ah communication around the actual job or deadlines and stuff like that, *if the clients are happy, that's rewarding*

In her comments, Participant 5M conceives of her satisfaction as being due (at least in part) to the intercultural facilitation that translators do, as well as the satisfaction of receiving positive feedback from clients.

Participant 3M also discusses satisfaction in terms of a number of specific points:

> So *I enjoy the definitely the flexibility of time*, *being my own boss*, not having to answer to anybody, I can get up from my desk and take three weeks off to go to Thailand at Christmas if I if I feel like it, I just send an email out to my established clients, send an email out and say "look, I'll be back on January the 12th", ahm, that I enjoy, *I also enjoy dealing with clients as well*—having dealt with a bunch of lawyers for ten years, I can tell you clients are easy! [*both laugh*]

We can see that the two main points here are more related to the operations of the business—these being the flexibility of self-management, and the satisfaction of dealing interpersonally in a business context. This presents a counterbalance to the isolation that sometimes affected some of our participants.

Participant 3M also talks about satisfaction in her work in a general sense:

> It's great! Ahm once I've decided not to worry ahm *ah I can enjoy the freedoms and I do enjoy the freedoms*. I decided to go freelance at the worst possible point in time, when there was a recession coming on ahm but ah I must confess I'm enjoying it much more than I thought I would, I feel much more self-confident now, when when I go to things ahm when I go to a reception or something, sort of "oh I run my own business, run a small business" ahm *I'm just enjoying it thoroughly I must confess*

Here we see that once Participant 3M had consciously decided to put aside the worries associated with the uncertainties of freelancing, the whole process of working as a

freelance translator became much more satisfying for her. Here, it seems that work satisfaction and self-efficacy have paired themselves together. It is possible that lack of self-efficacy was masking the enjoyment that she might otherwise have felt (i.e. "how can I enjoy the present job when I don't know exactly how I'm going to manage to find the next job?").

Participant 4M does translation and has an academic career in Translation Studies, so his view on the satisfaction of doing translation appears to be somewhat influenced by his academic work.

> [*The satisfaction of translating is about*] *the lifelong learning*—ahm I've translated texts on so many different topics that ah I've learned things about neurology, you know neuroscience, physics, ahm medicine, just *all these these insights you get*

The idea of continuous learning through the contents of texts that we translate is one of the powerful ideas associated with the translation profession, and can be a source of intellectual stimulation for many translators. Both Douglas Robinson (2003:34) and Geoffrey Samuelsson-Brown (2004:60) allude to this learning in their discussions of enjoyment and lifelong learning within translators' work environments.

On the other hand, Participant 4M also mentions a point of dissatisfaction about freelance translation—that of payment rates:

> It *it's not always the most lucrative work*, ah I've been lucky to get pretty good rates ahm to earn a pretty good amount ah per word, but ahm there are times when I feel like I've settled for too low of a rate, and then *it's almost like slave labour* [*laughs*], you know, you could make yourself do a large job, and and the text never seems to diminish

The issue of payment rates is one that quite probably the majority of freelance translators would have run into at some stage in their career, and those who inhabit the cut-price market may be dealing with frustratingly low rates all the time. However, none of our interview participants were in the cut-price market, so we cannot confirm this. Perhaps those who work there may simply accept the low prices paid to them, particularly if translation is not their primary activity.

Participant 4M also mentions the issue of income tax as a source of dissatisfaction for him:

> *Also tax concerns*—I mean if if you're working on the side as I do, as a translator, then ah the *the tax agency tends to take a pretty big chunk*, unless you're very good at working out your own taxes, which I'm not [*laughs*]
>
> […]

> When you do your normal taxes, there are a certain number of deductions and things you're getting, right, and ah they don't, it doesn't seem, you don't feel the money being taken away as keenly as you do if you just earned a few thousand dollars or Euros, an- and you know, a fourth or something or a fifth disappears

This can be one of the disadvantages under some tax systems of having secondary or tertiary income sources (e.g. in New Zealand, where there was a slightly higher tax rate for secondary or tertiary sources of income. In other words, if you had three jobs, the single job with the largest income would be considered your main job, even if all income combined reduced it to less than half of your total income. All other income sources were taxed at the higher secondary tax rate).

Participant 6M discusses her vision of satisfaction in the following terms:

> Ahm *I enjoy a, translating a well-written paper*, ahm I get a lot of originals that frankly the German or the French is not so good to start with, ah but if I get a well-written paper on a topic of interest, then I really enjoy translating that, for example I have done a lot of work over the last few years with a colleague from the institute of legal medicine in [*city name removed*] and he wrote most of the papers on the ahm end-of-life issues, which you may know that [*city name removed*] has ah a reputation now as as sort of suicide tourism, for physician-assisted suicide, and he did a lot of studies on that, and *I enjoy translating those because it is a interesting topic*, which is of current interest, so that is one example, that is the sort of thing I enjoy doing. I do a lot of ah bread-and-butter work which are are sort of clinical reports or clinical trials, which for me are not so interesting, but…
>
> *Interviewer:* But you don't find them boring, as such?
>
> Rarely, rarely, ah because [*laughs*] it sounds a little immodest, but *I'm now at a stage where I can actually turn down stuff I don't want to do, so I can pick out the more interesting ones*. I also quite enjoy ahm m- pure medical reports, patient reports, just out of interest on the subject, ahm, just to see how the patient is is, presents, how they're treated in Switzerland or Germany, ah the investigations that they're doing these days because things change in more modern approaches

Participant 6M, of all the participants, most emphasises the idea of being interested in the subject that she is translating, as well as finding the process itself satisfying. Perhaps this is because of the close link between her original training, in the medical field, and the subject matter that she works with. She also puts forward the idea that satisfaction is linked to not having to take every job, no matter how boring it may be, in order to survive financially. This increased ability to be selective probably not only gives a greater feeling of control, but also maintains motivation due to the more interesting nature of the materials that Participant 6M can select. She also mentions that the actual subject matter is beneficial to her medical knowledge, given the interlinking of her

medical and translation work. In this case, knowledge benefits both strands of her work, rather than just adding to the encyclopaedic knowledge of medicine as a subject within translation.

Participant 6M also discusses the aspects of translation that she finds dissatisfying.

> The things I don't like are keeping my accounts, handing out invoices, doing the [*both laugh*] the financial, which are very necessary, but I don't much enjoy them [*laughs*], *I'd rather actually do the translation than sit down and work out costs* [*laughs*]
>
> […]
>
> The boring things, ahm
>
> *Interviewer:* Which you alluded to earlier…
>
> Which I mentioned earlier, which, ok at the beginning you do far more of the boring things because you have to get a name, a reputation, clients built up, and now I *I know which of my clients I really enjoy working for, so I take their stuff, in preference*, and when I get offered through an agency yet another package insert to translate, then I can say "that's completely boring, won't[*?*] do that"

Participant 6M is quite candid about the fact that some work is simply not interesting to her, and that some parts of running her business are less satisfying to her than other parts. For her, the actual process of translation is more satisfying than the necessary administrative matters essential to running a freelance business. She also mentions the idea of increased self-efficacy giving her the confidence to drop work that she doesn't want to do, and that in the beginning of a career, most freelance translators feel obliged to accept essentially all jobs that are offered to them, because they need the material to build up a reputation, and of course because they need the money. This is investigated in more detail in Section 5.2.2.4.

Participant 7M explores the idea of satisfaction being about personal and professional mobility:

> Because of ahm computers and the internet, ahm *working as a freelance translator is actually a very attractive ah proposition because you are not ahm required to stay in one place*, you can travel quite easily

This is quite possibly most relevant to him because of his previous experience in an in-house job in the finance industry, and that the contrast between that and the potential freedom of freelancing was what attracted him, in terms of work style. As Participant 7M goes on to say:

> And I I was keen to ahm yeah I was keen to travel a bit more, I was keen to ahm yeah to ha- to *be a little bit more master of my own destiny, and that was why I then decided to go into translation*

Participant 7M also discusses satisfaction in terms of client relationships that are built up due to the extra service that he provides:

> The satisfaction that you get from the job itself I would say is ahm… with clients who have quite a lot of ahm ahm ah work ahm, you should, you know, you'll find that that you you *you sort of develop a a a quite a strong working relationship*, because, in particular if the things that you are translating for them ahm appear, are published in both the source language and the language into which you're translating the text, especially if they appear simultaneously, because ahm, and that- quite that, that's the case with quite a lot of work, not all of it, but the advantage is that you can, because you have to be very- you have to be a little bit careful how you do this, but but you can point out, first of all you can ahm, translating the source language document is effectively, it's another proofreading that it's getting, so any sort of non sequiturs or or stylistically ahm dubious ahm stuff that you come across in the original text you can point, I mean provided you're reasonably diplomatic about it, you can point out to the client, and they they usually appreciate that, I mean some of them don't, but then, most of them do, ahm and then you can notice that then you , you ahm, you are being ahm ahm, you know, you're regarded as being a a a you know, a, *people value the services you provide, and you can you can measure that by, you know whether they ask you to do extra work*
>
> […]
>
> The fact that they're satisfied that *you're providing good service, which is satisfying in in and of itself*

Participant 7M considers that clients are happy with the extra proofreading which their texts receive. The basic concept is similar to that mentioned by Participant 6M in Section 5.2.2.2, in which she mentions that her clients also benefit from extra service. We can also observe from his comment that he seems to find that satisfying clients is something that makes him feel intrinsically satisfied (in other words, social pressure or income or some other external motivators do not appear to be the primary cause of his satisfaction). He goes on to say:

> Seeing texts which are published, and you feel that, you know, ahm that they are, ahm beneficial to the image of the of the of the of the client, you know simply because they're well put together, is also I think quite satisfying

This also indicates a source of satisfaction for Participant 7M, and again, the source of it appears to be based around his clients, rather than himself.

5.2.2.2 Responsibility for positive outcomes (RPO)

In this section, we look at what our participants have to say in terms of how they attribute the positive outcomes that they perceive. Are they attributed internally (i.e. something that they themselves have done), or are they attributed externally (i.e. something that has an external cause)? Of course, we do not expect to see a clear dichotomy. In terms of responsibility for positive outcomes, most would recognise that there are components of these responsibilities can be divided into some ratio of internal and external.

Participant 1M, for example, discusses attributions for her success in this way:

> *On the one part, it's related to your effort and your experience and your knowledge* and all that stuff *and your mood* and and *on the other part, it's related to other things, like time, colleagues or friends, client that gives you explanations* or something like that: 50-50, or sometimes 60-40, or sometimes 30-70, it depends on the commission [*i.e. job*]

She indicates clearly that her perception is that a successful outcome depends on a number of factors, perceived to be both internal and external, and that it largely depends on the individual context of each translation job.

Sometimes participants explicitly refer to external causes for their success. Participant 2M discusses her early advertising efforts, which were made in a group, through a website, and attributes their early successes largely to luck, rather than to any particular qualities of the website or the clients' perceptions of the skills of the translators involved.

> It was actually, *we were pretty lucky* so we actually received a lot of jobs through this website and people just found us on the internet, they were just looking for a translation business in [*city name removed*] or I don't know what they looked for, so we ahm actually got some really interesting jobs ah website translations, mainly, at the beginning, which was interesting, because it was like nine years ago or more than nine years ago, ten years ago

It is perhaps natural to consider that prospective client behaviour is outside of our control, but nonetheless, the nature and content of our advertising can have powerful effects of the subsequent behaviour of prospective clients. However, here Participant 2M attributes early success largely to luck (an external and uncontrollable cause).

Participant 2M also has the following to say when asked what might be some of the perceived causes of some positive highlights in her translation career:

> Ahm well the big translation project was ahm that friends of mine just said "ok I know", they were asked by the company, "do you know anyone who could do the translation?" and

> they recommended me *so it was pure I mean luck* [*laughs*] yeah I *I didn't really do anything*. The ah software localisation is I mean they got to know me, and, I don't know obviously they appreciated my work so and this is why I got the job for the localisation and it's something that's regularly, so it's usually twice a year

The one perception for these positive events is highly external—i.e. luck—while the other is partly external (appreciation by others who are in a decision-making position), and partly internal (the quality of Participant 2M's own work). Here, in summary, we see perhaps a stronger explicit emphasis on the external (i.e. the other party's decision to give the participant work).

Participant 2M also commented on what actual proportion of responsibility for her positive outcomes might be attributed to internal versus external causes:

> Maybe half-half [*laughs*], so ahm, well my, *the only thing I can do myself is probably deliver good quality or to deliver something the customer is satisfied with* and then, ahm yeah they will send me jobs again or recommend me to other people, so this has happened and ah so this is probably what I can do but ah, what also happened is that either friends who worked as translators, but also other people like that, who you know through university or my other job as a [*title removed*] that ahm they recommended me just to people who asked them and so I mean this is nothing I I can really influence I I mean I know these people and ah I'm ah they probably like me otherwise they wouldn't recommend me, but it's something that I couldn't influence, I mean you can't influence that somebody just asks this person and they ask me, so I would say yeah 50-50

Her perception is that the quality of her work is an internal cause, but that other causes are external and largely unable to be influenced, and that the balance is essentially half-half. It is interesting that she feels that individuals in her network essentially cannot be influenced to recommend her to others. Some business books on networking conversely claim that this is an effective marketing strategy and that people in our network can actually be influenced to 'market on our behalf' by using referrals, whereby customers or friends tell their friends about our services or products (e.g. Burg 2006; Cates 2004; Sittig-Rolf 2009). The efficacy of these methods may sometimes be overemphasised, however.

In terms of her attributions for positive outcomes (in this case her professional success as a translator), Participant 3M demonstrates strongly internal ones.

> Well *the reason that I'm successful as a translator, I would say, is that I'm a, I am a good translator*, with a very good understanding of German, and a very good understanding of German law, which I have acquired over a long period of time, ahm I would say accuracy in the translation, *ahm I adhere to completion dates, religiously, I am reliable*, I'm usually

> at my desk, and those are the things you, that are quite essential, or or I answer from my Blackberry if I'm not at my desk, I'll answer I'll answer from from my Black- Blackberry, whether I'm in Spain on holiday or on the terrace of the golf club, I try and be as reliable as possible

All of her attributions for her professional success given here are internal (and controllable, in this case); in other words, she names the skills that she has developed and improved, rather than attributing success largely to luck or to client judgement (although we could possibly infer that she ultimately considers that client judgement is the main cause, and that it is affected by her availability and professionalism in negotiations). On the other hand, Participant 3M also attributes, in part, her success in freelance translating to external factors:

> So he [*Participant 3M's husband*] *has acquaintances and friends who I was able to write to get myself started* on a wider basis, so I would say that of course that plays a role, I mean I'm not stupid, *I realise that plays a role*, if somebody knows him and I write to them and say by the way, then he will say at a meeting of his law firm, "by the way, we have a new translator who we we know her" and whatever, so then the entire law firm, or two or three from the law firm might now have contacted me, which has been the case. *On the other hand, there's no way, you you can't do it without without your own effort*, so I put my my own effort into it, and will continue to do so, so then I would say I ascribe that to myself, but of course it's always, there are always more factors than one involved

Here Participant 3M sets out her perceived balance of factors that she attributes to becoming successful in her freelance translation career, making both internal and external attributions for this success. She considers that her husband's connections and his marketing on her behalf have made a difference to the number of jobs that have come her way, but also explicitly mentions her own effort, one of the classical internal attributions (e.g. see Weiner 2006).

Participant 4M mentions a number of reasons why he has positive outcomes in his work.

> Well I *think I have an aptitude for ah translation because ah I don't know, certain verbal-linguistic aptitude that ah enables me to parse and understand ahm language really well and and to grasp the meaning* even when there's potential for ah missing a nuance or ah when there's ambiguity, I think somehow I I'm good at ahm working those things out and ahm that shows through in the in the target text
>
> […]
>
> Well *I'm a hard worker, diligent*, and willing to spend a lot of time ahm verifying my own hypotheses, ah researching terminology, ah ahm finding even those rare ah parallel texts online that that can ahm supply you with the most apt ah terms for a given passage

We cannot be entirely sure whether the first quotation indicates an innate skill, or something that was acquired and refined by hard work, suffice to say that Participant 4M considers that the positive outcomes of his translation work are to a large extent due to internal causes (i.e. his skill, whether developed or innate). In the second quotation, he also mentions internal causes for his success, but these are more to do with effort and investment of energy.

Participant 5M considers that the largest part of her positive outcomes are due to her own efforts; note that she formulates her comments in more general terms, rather than referring to her own specific point of view.

> I think the largest part is ah own efforts, because ahm if you have, for example, a university degree but don't move to find a job, to find, if it is ah in a company or if it is as a freelancer, you need to move to to get people to know you, to get people to know what, your good work, ah *I think in every job it's the largest percentage is own effort* and *then of course there are always ah things that just happen to you, your your mother, who knows somebody who needs this ah ah translation and you do it and then the person is ah so happy and asks you all over again* and you earn a lot of money, and this can happen of course, this happens, *but ahm, I think it's, yeah, mainly it's your own effort*, in general, for every profession, I would say

The general impression from this particular discussion is that Participant 5M has a highly internal locus of responsibility for positive outcomes, which coincides with her *responsibility for positive outcomes* score, which, at 3.83, was the highest (along with Participant 4M's score of 3.83) from among all the participants who were interviewed. The data appears to indicate that Participant 5M would probably have a fairly consistent internal responsibility for positive outcomes across many situations.

Participant 6M makes interesting attributions for her professional success in translation; she attributes them partly to being able to participate in a particular niche market (somewhat external attribution), and partly to her skills and the service that she offers (internal attribution).

> I'm in a niche where accuracy and competence and expertise are at a premium, you cannot do a good medical translation if you don't know what you're talking about, it's no good being able to pick up the words from the dictionary, because you don't know which one to choose in the context, so you have to understand what you're writing about, and *I think that's helped me tremendously ah because I've perhaps extended the boundaries of pure translation with some of my clients, in that I comment and edit*. So they send me a paper for translation, and I translate it but I will then discuss with them how it could be improved or I will say things like "look, this is very interesting, but your figures don't add up", you know,

> ah which is extending the boundaries of translation, this is not the job of a translator, the job of a translator is to translate what is there, but because many of my clients are colleagues, medical colleagues, and their aim is to publish their paper in an English-speaking German because– ah English-speaking journal, sorry, because the English journals are much higher impact than the Swiss or the German medical journals, ahm so they want to get published, and if they send a paper, no matter how well it's translated, if it's not particularly well-written to start with, you can't make more of it that it actually is, they going to get it sent back, saying "you have to review this and you have to review that your figures don't add up, and why have said this three times when you really didn't need to say it more than once", so when saw that that was actually what was needed, I could say to them, "ok the paper's fine, but you could shorten that bit and your figures there—you, you've got, you're supposed to add approximately 100%, and you've only got 95, what's happened to the 5%?", you know, some reviewer is going to pick that up, so I picked that up earlier, they can sit down and rewrite it before they send it off, and they actually appreciate that, and I realised that, and so I've said to one or two new accounts, who've come by word of mouth from the others, ah "do you want me to comment, or do you want a straight translation?" and they've all come back and said "no, please comment, please comment"
>
> *Interviewer:* So you're doing editing service as well…
>
> So I'm doing editing service as well, ah which, first, it's successful because that's what the people here need because the papers actually get published
>
> […]
>
> And we'll batter it out between us, it's not me saying "this is how you say it", it- we have a discussion, and ahm I think that's appreciated

Here it becomes apparent that Participant 6M's attributions for her professional success fall into two distinct categories. The first is the demands of the particular niche market that she has focussed on. Papers are being written in German and there is a need to translate them into English to reach a wider audience due to English-language medical journals having wider circulation. The writers are not native speakers of English, and so in many cases they probably do not have (or feel that they do not have) the ability to translate their own work to quite a high enough standard to have it accepted. Thus there is a specific demand for Participant 6M's services, as a native speaker of English with an in-depth medical knowledge from her training. This source of demand is external to Participant 6M and is largely uncontrollable by her, and thus she attributes this part of her success externally. The other component is the service and skills that Participant 6M offers, which she attributes to internal causes, even though these have external effects (i.e. they influence the clients to provide her with work). She feels that her medical

background speaks for her, in giving trust and confidence to her clients, and that the extra services that she offers (editing and restructuring the translated articles) add value to the articles and are appreciated. As she says:

> Because I have a medical background, my comments are valued
>
> […]
>
> *Some of my 'success', in inverted commas, ahm comes from my giving a little extra service on the medical side, rather than just a straight translation*

The implicit idea would seem to be that translation may not be enough by itself to necessarily achieve client satisfaction, but that providing a 'niche' service sets Participant 6M apart from other translators. In this particular case, where journal articles are to be published, translation acts as another proofreading, which benefits the text and therefore the future of the text in terms of being published and looked upon as good quality. This may not be quite so critical in other areas, such as online advertising texts, manuals, etc., because these can often be published even if they are not of good quality, as the peer review and feedback processes for them are either non-existent or much more removed than they are for refereed journal articles.

Participant 7M mentions several perceived causes of his own success in his translation work:

> Well without wishing to sound th- th- unduly arrogant, *I think the quality of th- th- th- the work I deliver, the consistency with which it's delivered, the fact that ahm, the fact that ahm I do stick to deadlines*, ahm I would say probably those three things, and and also that I'm prepared to be fairly critical about the, about the ahm source text

Work quality seems to be perceived by Participant 7M largely as largely internally-caused, because he makes a comment about not wishing to seem 'unduly arrogant', which appears to have been designed to deflect any criticism that might be directed at the comment. He does not wish to appear to be boasting too much about the fact that he considers his success to be due largely to internal causes. Consistency of delivery and keeping to deadlines are not explicitly attributed to either internal or external causes of success, but given the lead-in comment, we could perhaps argue that they may tend more towards being internal.

5.2.2.3 Responsibility for negative outcomes (RNO)

Here, we consider how our participants explain the negative events that happen to them. In the same fashion as RPO in the previous section, we are interested in whether the participants tend to explain negative events as having an external cause or an internal cause. In general, our participants tended to be moderately self-critical, particularly of their own work, but they also recognised external causes (one of the major ones being a lack of client understanding of what translation really is).

Participant 1M had the experience sometimes of reviewing her own work and finding that this stimulated specific self-criticism of it.

> So it has happened, sometimes, that after ahm after giving giving my translation work, I take it again, I don't know why, maybe because I'm using it for my classes, for example, at the university, and I said "*oh my God, how could I translate this word or this sentence in this way, it was horrible*" or it doesn't sound natural or ahm the word order is not the most appropriate or something like that

This kind of self-criticism for negative events or internal RNO can be either constructive or destructive, depending on its specificity (and on the way in which it is used). If used to help create specific improvements the next time, it can be considered constructive, but if used in a more general way simply to self-criticise, there is the potential for wider negative effects (i.e. the feeling that *everything* is wrong with our translation technique, which does not provide a specific point on which to begin remedial action—with this, we tend to feel overwhelmed and depressed).

Participant 1M also mentions an external cause that sometimes leads to perceived negative outcomes in terms of text quality:

> *Maybe you you don't have ahm the time you need* for translating a text, ahm maybe, for example, the proofreading …

Here she indicates that a lack of proofreading, due in turn to a lack of time, may be responsible for a sub-standard text, which appears to indicate a tendency towards externalising the responsibility for negative outcomes—i.e. if we do not have time, then 'time' (an external cause) is, at least to a certain extent, considered to be responsible for errors or sub-standard choices that we might make in our translation.

Participant 2M also discusses the same issue of time being a cause of negative events—i.e. poorer quality:

> Sometimes you just get where you you know *you deliver just not good quality because you have to deliver it pretty quickly*

…as does Participant 5M:

> If you're translating something, and you do have a short deadline, and you need to turn it in, you need to send it to your client at let's say, this afternoon at five, and you don't have time to read it over and over again or to show it to somebody, or to ahm look up all the terms a second time, you need, then sometimes it can happen that you're delivering work, a text with which you're not totally satisfied, but I guess that's ah, that's, that's a thing that can happen in all professions, *you're short on time, the ahm result or the work, might not be a hundred percent ah complete or perfect*, yeah

While critics might argue that the 'time attribution' could be either genuine or simply an excuse for bad time management, at other moments apparently external causes are often very clearly external.

For example, client perceptions and misconceptions of the translation process can create situations where a client's understanding of the translation process is not realistic, leading to unworkable demands or expectations, which often mean that clients expect work to be done either faster than is realistic or more cheaply than is warranted. These situations can create negativity when they are either challenged by the translator, or when the translator simply decides to put up with the demands, despite thinking them unreasonable and feeling displeased. Participant 1M discusses this:

> One big problem for translators in Spain, hm hmm, I don't know in other countries or in Italy it's the same as in Spain, is that ahm people don't know ahm don't know what translation is, translation process, so they think that if you know two languages you can translate from one language into another and you don't have to do any effort, it's like automatic, something automatic, you know, and *so many times you have to explain to clients, not so, not agencies because they are hmm, but private clients, that it's not an automatic thing, that you have to take your time to do good work*; and ah that's a very negative thing

Participant 1M indicates that this explanation and client education process can create negativity for her, and is a particular source of negative outcomes, which she places externally, at the client.

Participant 2M mentions a very similar negative event type that sometimes occurs for her:

> *The biggest challenge you have as a translator is just to be confronted with people who have no idea of your job*

Participant 2M goes on to talk about clients' unrealistic demands in terms of time:

> Just from the customer's side as well so they always or they often ask you to do translations very quickly, so I mean they, I have the impression that sometimes they develop a new product and they develop all the documentation and finally say "oh, we need a translation, so but we want to go on to the market tomorrow, so we need it translated so within 24 hours" so *they really ask you to do translations very very quickly and then you can't really deliver good quality* so what do you do? Do you talk to them, say "no I don't do it", because there will always be someone who can do it or they share it between people or translators

Again, this kind of situation can raise client expectations and lead to difficulties when those client expectations are not met. Participant 2M seems to perceive this as a largely external cause of negative outcomes—i.e. it arises from the behaviour of clients.

Sometimes, participants could only guess at what might be the causes of negative events in general. Participant 2M:

> Bit hard for me to think of [*the causes*]… probably the quality ahm well I know I mean I I receive translation jobs from companies and they never send any job again, I mean it could be because it's that they weren't happy with the quality they received or it could be that they never had any other translation job again, I don't know, I mean ahm for example, this ahm there there was a customer who I mean that's it's it's hard because sometimes if you have a new customer maybe they send you a translation job because the usual translator or translation agency they work with are not available, they're looking for someone else but with the next job they go back to the other translator again, and, so you never know bec- is- I think what is really negative about the translation business is you never get not really much feedback from people, from external people so you don't know, I mean the whole communication is via email, you don't know the people on the other side and so it's ahm sometimes it's just a bit hard to to to know, so it's just, I assume, could be the quality, and I know that we delivered not really good quality sometimes [*in the earlier stages of our careers*]

It is in situations of uncertainty and lack of clarity that the general pattern and tendency of our explanations has so much potential power to influence our subsequent attitudes and behaviours. Participant 2M has a fairly analytical attitude towards possible causes, and considers a range of possibilities, some largely external (the agency never had another translation job), and some largely internal (her work could have been better). She is prepared to consider several possible causes, while not sticking to just one.

> *I mean if I received the feedback that the translation wasn't good I didn't blame anyone else, so I mean it was my fault because it was my translation* so, ahm I didn't really have any problems where I could say that I could blame someone else for it, I have to say, no

Here, Participant 2M indicates that if there is clear evidence that quality was somehow less than ideal, she finds it easy to accept that this is so, and she will want to learn from the experience in order to do better in the future.

Participant 3M has also had an issue with quality (as a negative outcome) in a particular area of discourse, this being banking-related topics:

> *There are occasions when ah you don't get the result that you want*, ah I know where that is, *there are certain areas where where I'm not good, that's figures, figures, anything with banking tends to confuse me and I now try and avoid it*, to be quite honest, because *I know it's not my thing*

She attributes that negative outcome to herself (i.e. an internal responsibility for negative outcomes in this particular area, due to a lack of skill with numbers), and has apparently found this state of internal RNO sufficiently uncomfortable that she has decided to remove this discomfort by removing its source (i.e. try to stop doing banking-related translations).

Despite demonstrating highly internal attributions for successful outcomes related to work, Participant 3M demonstrates some largely internal attributions for negative events as well:

> *Negative events ahm have been ahm certainly in part due to to my personality and to the fact that my personality might not gel with somebody else's personality*, or due to the fact that I might have *produced a hurried or not very good translation*, which can happen for certain reasons, ahm or due to the fact that I was not, so that that I was too what I would call 'fluffy' on the telephone, ah which can happen sometimes if they [*clients*] catch you on your left foot or with whatever, ahm that I wasn't so well-prepared for for something, an enquiry that came by telephone, I should have [*unintelligible*] prepared, things like that

As well as mentioning her telephone manner and how that might affect the outcome of an assignment, she also mentions a similar issue to other participants, that of job quality, although in this case she does not elaborate on whether job quality is affected by perceived internal or external causes.

Participant 3M talks more about the issue of attribution of responsibility for a translation that was not liked by a client:

> *I don't go in for the blaming thing*, ahm I try and work through them and overcome them, and then think about the blame question afterwards, so if a translation hasn't worked out properly then of course ah I will I will look it up, or that section look it up and say "was *I imprecise, or does my client not like my choice of words?*"

Looking further at the issue of style versus genuine mistakes, Participant 3M says:

> Because one has one's style of writing, I would have just said it it's a shame that it didn't work out, *if I make a mistake of course, then then of course it's my fault and I will try and work through it*, and *correct the passage and then kick myself in in the foot for being so stupid*

A situation like this is often finely balanced in terms of the attributions that will be made. When confronted with a client who dislikes a part of (or all of) our target text, our general attribution style or tendency can often be the major influence affecting the way we perceive this kind of situation—we can see it as our genuine mistake, or as simply our translation style, which the client is entitled to dislike, but we are equally entitled to like, and is not actually wrong.

Participant 4M mentions one negative outcome being the unrealistic expectations and demands of some clients (in a similar vein to that mentioned previously).

> Part of the time the negative experiences like the ones I mentioned where the clients *[Interviewer:* break off], criticised, yeah, I think part of it is because th- *there's a fundamental misunderstanding of what translators do*, ahm, I think *some clients don't understand that ah it's more than just ahm repeating the author's words in the other language*, it's it's this whole transformation, often from a world-view or from ah information structures that need to be rearranged and and made more idiomatic and ahm, so sometimes maybe they're expecting your target text to be more ah refined and ahm elegant than even their source text was, which is maybe not realistic on their part because ah if if you are going to ahm, well it takes a certain amount of work just to translate a text where it's comprehensible and and coherent, but then to go beyond that and make it so stylistically refined that ah you've you've corrected any shortcoming of their own source text, that's that's sometimes more than they're paying for

Here we see that this expectation and the negative consequences of it are perceived by Participant 4M as an external cause, possibly one that can be controlled, but nonetheless a cause external to himself. It does bring to light one of the fundamental problems of working in the translation industry—that of dealing with the expectations of first-time clients, in particular, who do not understand the translation process, nor what it involves in terms of effort and output. There is a chance for client education, but Participant 4M also implies that the ego of some academics (some of his clients) can sometimes get in the way of real communication and understanding! This can mean lost opportunities that would have led to a greater understanding of translation on the client's part. Admittedly, misunderstanding on the part of the client can happen in many industries, but we believe that it is particularly prevalent in industries in which the work procedures are not considered to be 'esoteric'. In other words, not too many people

would pretend to be able to design a bridge or a cargo ship or fix an aircraft engine if they were not engineers, but as using language is a faculty that we all possess in some form or other, so translation feels 'closer to home' and we often feel more able to comment on it and influence it ourselves (see Participant 5M's first comments below). This can lead to clients thinking that they know more about translation than they actually do.

In one very interesting series of comments, Participant 4M actually mentions that making external attributions for negative events was a conscious strategy that he decided to use at one point in his career.

> Well ah I understand psychologists talk about a couple of different ahm ways of dealing with setbacks, you can either, now what's the word? ah, *you can do internal attributions or external ones* and ah *at some point I think I decided I'm going to ah attribute all my failures to external causes, it's someone else's fault* [*laughs*], or ahm, no I mean I think I I want to be open to self-criticism, ah ah where it's justified, ahm if you're just working with ah clients or or partners who are under-informed themselves, and in translation they're often under-informed simply because they they don't ahm know the target language as well you, I mean if they did, they'd probably do the translation themselves, so I've often had ahm clients ah trying to ah evaluate the work I'm doing when it's an L2 [*second language*] for them, and ah that's part of why I don't let it get to me too much, because I know that, ahm either they they're not ah initiated into the work of translation, or they're non-native speakers of English

Participant 4M elaborates on this explicit external RNO strategy, when asked whether he would blame himself or others for negative events that happened to him in his translation work.

> Others! [*both laugh*] Yeah, like I said ah, well, I mean w-w- *translation is kind of a lonely, solitary task, often, and if you were sitting in your little work-room as a translator, blaming yourself every time ah someone questioned the quality of your work, you quickly would lose confidence I think, and you'd be paralysed by that*, so you have to, I think you have to maintain a certain faith in your own abilities, and, I don't know, keep trying … so blame other people! [*both laugh*]

Although this is presented humorously, nonetheless it represents a strategy that all of us will probably use at least occasionally, by way of defending our egos against negative events and preventing a potentially paralysing lack of self-efficacy which could negatively affect our motivation to face the challenge of the next translation job. One of the interesting points here is that Participant 4M actually mentions by name the

psychological theory that he bases his strategy on, thereby articulating one of the main points that this thesis is attempting to investigate and understand.

Participant 5M discusses the specific issue of lack of client understanding around the translation process, and of translation as a profession.

> Maybe what's more frustrating is that ah some people think "we don't need a professional translator", because everybody, well, there is a general ahm way of thinking that people believe that everybody who learned a foreign language can do good translations, so ahm "why should I pay for a professional translator if my son who took German four years in school can do it just as good" [*both laugh*], ahm that's sometimes frustrating, but it's yeah it's more about people who don't know what the profession is about, it's not the work itself
>
> *Interviewer:* Have you run up against that?
>
> Sometimes, yeah, ah-ha, [*Interviewer: How do you usually…?*] if you ask for a price for your work, which is absolutely appropriate, and then people wonder why you're charging so much because the work is nothing special, and you sometimes think that people who, I don't know, work in a car shop earn more even though they're, they didn't go to university, and they they do have a good, necessary profession, but they are trained in a different way, so ah *sometimes yeah that's ahm, unwillingness to understand that good work of high quality needs to be rewarded*, yeah
>
> *Interviewer:* How do you usually ah deal with a situation like that, if you…?
>
> Ah I try ah explain to those people ahm that we do have a ahm university curriculum which takes about four to six years to train good translators, that it's not only about ahm learning a language, having a good understanding of the language, that that because there's much more to it, but you just need to explain that to the people … and hopefully they understand, and if not … [*both laugh*]

Participant 5M makes external attributions for this kind of problem, indicating that again, as we have seen previously, that unrealistic client expectations, along with a simple lack of knowledge on the part of the client, make for sometimes troubled relations between translators and their clients.

Participant 5M goes on to say the following about 'grumbles' from clients:

> I think that's normal, I think ah something can always happen, yeah, that people write back to you and ask you "could you please ahm review that terminology or replace this phrase by another one" or or "former translator translated this term by whatever, and which one is better, and which one do you prefer and why?" and, well that's ok, and that's ahm, I think it's important to always ask the questions at the beginning and ahm if you have any doubts about terms, ahm I always, yeah, ask my clients what they mean, where can I find information, and so they know that you are actually thinking about… yeah, the words

Participant 5M frames this kind of event in terms of being an externally-caused situation, with the locus of that cause not necessarily being in the client, but rather a generalised locus based in 'the situation' or 'the context'. Whether or not this is an explicit strategy or not, it has a particular effect. In this way, there is an advantage—no parties are to blame, as such, but the translator's self-esteem is also preserved. Everyone wins.

Participant 5M also discusses the idea of a constructive approach to problems if they are perceived to be genuinely the translator's fault.

> *I think it's ah important in this situation, to ah, to ahm say or to to know ahm that it's your own fault, and tell your customer that, you know, "sorry, I hadn't had the time, or it's my fault and I will correct it"*, and ah ahm, yeah correct your work and it's important to know that, yeah, nobody's free of faults

A person's general locus of responsibility for negative outcomes will largely dictate whether such discussions would come up or not. In fact, while having a moderately external RNO is beneficial for ego protection, when it is too external it can have negative effects. If our RNO is too external, discussions such as mentioned here with clients will probably not even occur, perhaps because we do not think that the problem is our fault in any way, so there appears to be nothing to discuss. When that happens, there is the possibility of losing a client who is not happy but who has been denied the possibility of dialogue which would have led to the problem being solved. Thus a balance between the two extremes appears to be the most adaptive strategy.

When asked about how she might attribute negative events in her translation career, Participant 6M had the following to say:

> Ah yes, hmm, negative events, yes, we've had one or two of those. That I think has also been the ahm fact that I have the medical background, because I feel I know what I'm talking about, and I do not like when the clients says "well, I want to call it so-and-so", and I think, "no, that's not what it's called", ah and I try and point out that this would be a better term if, and if they've insisted on it, ah I have used it because the client is always right (*!*), but that's, I find that quite negative, and in fact I had one client I basically, we got to a stage where we felt we were no longer mutually compatible, because they wanted me to, w- I produced translations, and then they changed them, and they changed them not for the better. There is a beautiful German word, which is "verschlimmbessern", which means "making worse by making better" [*both laugh*], and so *if somebody corrects something but actually makes it worse, then this is "*verschlimmbessern*", and ah that's what I felt they were doing to my translations, and when I saw them in print, I thought "I don't like that", I did not like that*
>
> […]

> And I think the negative side comes from the fact that, ok I know better, you know it's it's perhaps my attitude there, "I know better", but ahm that's we- where it causes me difficulties, because I think I do know better [*laughs*]

The issue here seems to be largely the clash of knowledge and perceived knowledge between client and translator, and the perception that the client has essentially not respected the translator's knowledge of medical terms in English. Thus we can see that Participant 6M makes a very clearly external attribution (i.e. the client as the cause) for these negative events. It is quite possible that some people may have made more internal attributions for identical events (e.g. "perhaps I should have been more diplomatic with the client", "it is just possible that perhaps I was incorrect about the terminology"), but it is evident that Participant 6M has a high degree of confidence in her understanding of medical terminology, with ample justification, given her background and training. Therefore, for her, it would simply be too much cognitive dissonance to accept the idea that she might be primarily or even partly at fault. In summary, we can see in the case mentioned here that the demand for quality conflicted with the demands of the client, and the demand for quality won out. The case is interesting because we can see how qualifications, knowledge and experience can change the nature of our attributions. With increasing experience, we can often more accurately judge the nature of cause in a conflict, and place the locus of causality correctly. In the earlier stages of a career, our personality tendencies have more influence on our attributions, because, lacking experience and an in-depth understanding of the mechanisms of our working environment, we often cannot make judgements about causality as accurately.

5.2.2.4 Self-efficacy

As we have already mentioned previously, the idea of self-efficacy is that of confidence in handling challenges, both in our environments and regarding internal issues specific to us. In terms of work, occupational self-efficacy can show itself in a number of ways, which we will explore here.

The process of rejecting some work is often an indicator of increased self-efficacy about finding enough suitable work, and usually comes after a translator is more established. It seems to indicate that the translator is not afraid to drop a particular job, and is not afraid that other suitable jobs will not come along—in other words, they have reached

that point at which they do not feel that they have to accept every job that is offered to them.

Participant 1M states the idea this way:

> During the last few years *I've started rejecting some work, because hmm I felt they were not so interesting*
>
> […]
>
> *At the beginning I accepted almost everything*, now I'm not doing it any more

There is an increasing confidence indicated here, which usually grows with a growing business.

One area in which self-efficacy is invaluable in a freelance business is when payment time comes. Dealing with slow payers seems to demand a certain level of self-efficacy, and a feeling of being able to solve the problem of slow payment, without alienating the clients from providing future work.

Participant 1M says:

> And *the other thing is about the payment, you know; sometimes you have to fight, really fight, and call again and again and again and again*. "Ok I've done my work three months ago, I think the time to be paid has arrived, I think, don't you think so?" You have to be very polite, because if you want them to to ask you for another work you you can't ah ahm be rude or something like that

She appears to have a fairly high level of self-efficacy around debt collecting, so that she can control her behaviour to be forceful enough to communicate the message that payment is due, but not to lapse into anger about late payments.

The field that a translator's texts are in is also a determinant of the level of self-efficacy that they may feel about the actual translation process. In other words, if a text is in an area which is familiar to the translator, then they will tend to feel higher levels of self-efficacy about the ability to solve the translation problems presented by those texts, because of prior experience. Participant 1M states this very plainly:

> *I feel confident with kinds of texts that are related to my hmm ... fields of study* and ah I don't feel confident if they are ah very far from my fields of study.

Analysing this, we can see that prior familiarity with a topic correlates with an increased level of self-efficacy for translation problem-solving in texts dealing with that topic.

Participant 2M has interesting things to say about her approach to challenges over her career:

> I mean I was probably pretty lucky because I always had ahm it was when I started I was still at university so I could I didn't have to earn money with it straight away, so ahm *the challenges I had in my translation career were not really big challenges, but smaller challenges so it was easy to solve* […] but it was easy, I mean I never really had hard challenges, *so it was always one small step after the other*, so ahm so never really had these big challenges so ahm in at these stages, I felt pretty confident because it was n-, for me it was never impossible to do it and at the beginning I have to say I always had ahm at least one or two persons who were in the same team, so *as a team you always feel more confident as compared to a single person* or an individual person

So the moderating factors here seem to be that not desperately needing work appears to allow some room for self-efficacy to grow, as, presumably, she didn't have to face the prospect of jumping straight into highly challenging types of translation or into marketing on which everything depended. Working as part of a team also seems to have provided a boost of confidence and self-efficacy in dealing with the challenges of starting off on a translation career.

When Participant 3M made the transition from in-house work to freelance, she found that a good level of self-efficacy helped her through the challenge of going from a secure work environment to a much more free-form one. She says that what worried her most as the time was:

> …the lack of security. *I'm still learning not to panic when I don't have very much work in a certain month*.
>
> *Interviewer:* So, by security do you mean…?
>
> Financial security.
>
> Interviewer: Ah, ok.
>
> Ahm because if you—I was I was employed for for twenty years in all, ten years in an editorial capacity, and ten years as a translator, so *I was used to getting my monthly cheque*, I was used to having all my health insurance covered here in Germany, I was used to being able to gauge my tax burden, and now ahm *when I started off, my the the first month I had a kind of overlap of work coming from my former employer, and the second month I had nothing*, zilch. I'm sitting there, "don't panic!", "don't panic!", ahm and that kind of, it it still happens to me now, but I'm learning to to cope with it and with the fluctuations in work, ahm that did worry me more at the beginning, it would have worried me even more if I'd still been supporting four children

This progression seems to show the development of self-efficacy as Participant 3M becomes more convinced, with the passage of time, of her ability to survive financially.

Again, this is likely due to the accumulation of a good proportion of successful experiences in dealing with her income.

Participant 3M comments further on the jump that she made from in-house to freelance translation, and how she felt about it at the time.

> When I realised I was going to terminate my employment as a translator because the situation [*at her company*] had deteriorated, I realised that living where I do in [*city name removed*], there is no local market for me, so I would have to commute, Frankfurt or Stuttgart, it's [*amount of time removed*] each way. And then I thought, "no", so I realised "you're going to go freelance", and in fact I was I was not not worried when I was thinking of starting up, I thought to myself "you've got to get yourself some training in accounting", because me and figures, no way José! "You've got to get that done, you've got to get tax aspects sorted out, you've got to talk to the tax advisor", but I thought "the market was there, you have to access it, you have to do some discreet marketing, ahm nothing too loud or anything like that, ahm and get your head down" and *I was convinced that I would be able to cope, suddenly at at that time, having not dared to do it beforehand, I knew I could do it, at that moment*

These comments indicate that she had found a sufficient level of career and business-related self-efficacy to deal with the problems that establishing a business might bring up, and that this enabled her to make a start in freelancing, rather than move on to more in-house work, which would have been the 'safe' option.

Participant 4M shows a high degree of self-efficacy in his translation work, and attributes this to the academic work that he has done which makes him familiar with the kinds of demands that his clients (mostly academics themselves) may make.

> *I'd say very confident because ahm like I said I'm I'm not compelled to take on any job if I didn't feel qualified ah and if it were too specialised* ahm but most of the ones that I have taken on have been academic or popular science publications and ah I guess with with my academic background ahm I'm pretty well attuned to the kind of register they would want to write in in English and know the norms that that are prevalent in English, so…

Participant 4M adds that he has been able to maintain his self-efficacy even in the face of professional setbacks:

> *My confidence hasn't been shaken by the few ah setbacks I've had ahm, which may be a little bit of conceitedness*, but [*both laugh*] I ah I think it helps that I've taught translation now because in in the past I was a bit of a naïve translator, who just jumped right in, and didn't understand much about text linguistics, or didn't understand ah the benefits of ah analysing a text or ahm focusing on collocations but I've I've learned a lot of that, and and *I've learned a lot about my own language teaching in this department, so that ah not only can I, not only do I have a sprachgefühl, intuitions for what works in English and what*

> *doesn't, I can often put an exact ahm term on it, or explain what's wrong syntactically with a certain construction, and then ah that that makes it even easier to explain it to the client*, if say they question "why didn't you translate it this way?" I can ah I can usually explain those pretty competently so, I think all of those things combined

These comments indicate that Participant 4M has gained a lot of self-efficacy from his academic work, and that he has applied this to his translation, which also deals primarily with academic works, perhaps by a process of transferral of self-efficacy. In other words, if I am familiar with the practicalities of gardening, then I will be most likely more confident about running a shop selling gardening products than I would be if I had experience only in animal husbandry. Self-efficacy can transfer with us if we move into 'neighbouring' areas of practice. If we jump too far at once, then self-efficacy may diminish, although some people have generally higher global levels of self-efficacy than others, and these actually influence how far that they may feel that they can jump at one time.

Participant 6M illustrates this in her discussion of self-efficacy in the early stages of her career. She said that she felt:

> *…a little insecure because it wasn't, you know I was used to working as a doctor or for a company or for somebody else*, ah so I had to do a little bit of ahm research into paying my ahm various insurances, paying the various ahm taxes in Switzerland, I had to work all that out, ahm *it wasn't actually that difficult once I I got started, and now now it's not a big issue*

This would appear to reflect the simple uncertainty of moving from a structured career to a less structured one, similarly to the ideas expressed by Participant 3M. It is interesting to note that here the apparent lack of self-efficacy was not around translation or marketing for clients, but around taxes and insurance.

Building on the points that she made in Section 5.2.2.1, Participant 6M explores her increasing self-efficacy over time about rejecting certain types of work.

> At the beginning I really accepted any work, was- that I was offered, and over time I've become more selective because I have reputation, I know I'm good, the clients know I'm good, and therefore I can afford to say "no" to the stuff I don't want to do, and that's that's the basic change, that *I've got far more confidence in myself now, I also have the confidence to turn work down because at the beginning you think "well if I don't do this one for them, are they going to give me another one, or will they not come back again because I've said no? So I've got to do it!"* and then you find you're getting too much in one go, or you're rushed for time, which is not not good for translation, and now I know that I can say "no", and even if I do say no, they still come back because they want me next

> time, or I can say "yes, I'll do it, but not by that date, if you want it, me to do it, I can't do it, and you'll have to give me a couple more days, because with what I've already got on I can't do a decent job for you", and *that is my self-confidence, which I now have, which I didn't have when I started*

Participant 6M notes that accepting any work also created potential quality problems, because of the frequent feast/famine nature of freelance translating. Too much work in one period would lead to quality issues because of lack of time for proofreading, checking, etc. (discussed previously in the responsibility for negative outcomes section).

> I think that's another thing that's changed over the years, at the beginning I would work for for less, ahm per line or however it was ah worked out, because *I thought I had to have the work, I thought perhaps I wouldn't get the work, whereas now I can do fewer jobs at a slightly higher price*, and still feel quite happy about it, in fact happier because it's usually more interesting work

Participant 6M also discusses her increasing self-efficacy regarding prices, and that this enables her to do fewer but more interesting jobs, an enviable position to be in!

She also discusses the other side of the self-efficacy issue—the limits of self-efficacy. Self-efficacy can be unrealistically high. This can lead to problems when the gap between leading self-efficacy and trailing performance becomes too great, and in the case of medical journal articles, the consequences have important ramifications.

> I *I know my limitations, that's also very important, because I think some people come a cropper when they take on something that they can't handle*, especially in the medical field where they really write something that's … wrong

Another issue for Participant 6M in the early stages of her translation career was that she gave discounts to friends, which affected her income. She found that she had to develop the self-efficacy to deal with this situation, to say 'no' to reduced rates or 'alternative payments' in a polite way that would not damage the friendship.

> Again at the beginning, I suppose I got ahm, once or twice friends would say "you, could you just read this paper through for me" or so, and I'd find I was doing all this proofreading and ah for nothing, you know, or a bottle of wine or or, you know [*laughs*] or a glass of wine even at the end, ahm, and *I learned that if I was going to do it* [*translation*] *as a business, then I had to say "no" to the friendly bits*, because it was, I I mean I would not go to a lawyer and expect them to look at a legal document, for me, I expect to have to pay for it, I wouldn't actually consult a doctor without expecting myself or the health insurance to pay for their time, so why should I do this reading, proofreading, translating, for nothing, ahm and perhaps because I I wasn't a professional translator to start with, I did get caught out on that once or twice

This problem of division between friendship and working relationship is one that many freelancers (and in fact many direct-selling people) have faced at one time or another (e.g. Grayson 2007). It is apparent that Participant 6M initially found saying 'no' a little difficult, and that she took time to clarify the boundaries between friendships and work relationships.

Participant 7M has an interesting and detailed story to tell regarding his feelings of self-efficacy about running his freelance translation business, and how he dealt with the uncertainty of marketing and pricing prior to starting out, all of which is worth repeating in detail here.

> Well I suppose, you- obviously, ahm you know, you, *obviously one was a bit ahm apprehensive as to how easy it would be to find work*, ahm I have to say that I myself have never, at this- I mean I I've been very fortunate in as far as I have never actually ahm had to do any marketing, ahm *people have come to me, and that actually resolved one of the major problems that I thought I would encounter*, actually never occurred, ahm having said that, it is clear to me that in order to increase the volume of work that I do to where I would like it to be, because I'm, I mean basically you know I work quite quickly, I mean I would have capacity to do more than I'm doing at the moment, ahm you know for that some marketing would be necessary, ahm but I'm, I mean now I'm not particularly bothered about, I mean I will embark on it, ahm but ahm obviously, you know, if you've got a business that's already running you you don't feel to- I mean, you know I'm not, I I don't find that particularly daunting now, *I would have found it quite daunting to actually go and look for work, if I didn't know- if if if if, if I had no clients* and so on, but as it happened, that- I was never put in that situation, ah but I think that's probably the difficulty most people have
>
> […]
>
> Well it's been three years now, ah has it, well nearly three years, ahm I've become, well I fairly quickly became reasonably confident that it worked, I mean I set myself a couple of tests, you see, the first test was ahm ahm how qu- how much money could I work, could I earn per day, if I worked, you know, reasonably you know, the sort of day that I would have worked when I was working in the finance industry, or perhaps a bit less than that but, ahm and because I you know because I'd sort of worked out you know, I- I- basically what I did was I said to myself, you know "this is the amount I would like to earn", ahm and in order to earn that, I would envisage myself doing, you know I think I said, I think s- if I remember correctly I said to myself "well let's assume that I work ahm forty weeks a year, five days a week, you know eight or nine or ten hours a day, something like that" ahm and then sort of said, "well ok, you know, I ought to be able to make X", ahm I was quickly, fairly quickly able to establish that my first idea- th th th so the first test was in a day when I have got a lot of work, can I actually make X? The answer to that question was "yes, easily" that wasn't a problem, so th- so that was quite reassuring, once I, you know because

obviously you know you can imagine if you th-, you know let's imagine that you you thought, you know you were going to make, you were going to make you know Y francs per day, and then you worked all day and you think "God, I've only made, you know, one quarter of that"

Interviewer: Not up to forecast…

Yeah well then there's, then you've got a serious problem, you would have a serious problem because because there's no way that you can quadruple your productivity

Interviewer: Due to the limited number of hours in the day…yeah

Well, if you work more hours, you wouldn't you know increase your productivity, I mean, re- you know, you productivity per hour, so I was quite pleased about that, ahm and I think probably ahm, so that was, th- so that so so so so that worked, then there was the question of ah you know, pricing, ahm I talked to a couple of people, who work as freelance translators, ah some of them told me that I should charge ahm a figure which is slightly higher than I charge, and they sort of said "yeah, that's the absolute minimum, I mean you've got to charge at least that, or more", and then I talked to somebody who'd actually worked as a freelance translator for a long time, who I'd been a university with, and has has in fact only ever done that, ahm and he's been very successful, ahm and he charges quite a bit less, about 20% less, so I decided to pitch myself exactly in the middle between those two, ahm ah there were a number of reasons for that, one of the reasons was that actually, I did- I mean, I was fortunate in the sense that this guy, as I say, he has, he has a flourishing business of his own, ahm so flourishing, in fact, that he needs to get rid of clients, ahm and so he asked me if he could get rid of one, if he could pass one of his clients on to me, which suited me extremely well, ahm since then that client has actually become my biggest client

[…]

Convincing myself that the pricing was right, and that I could, and that I could make enough per day if the work was there, those were two important things

Having a background in finance, Participant 7M went about finding out what he would need to charge in a relatively methodical way. As well as talking to other freelance translators, he also used financial formulas to help him to figure out how much money he would need to earn to make his translation business a financially viable one, by the criteria that he had set himself (which was to earn an income from translation that was broadly comparable to that which he earned in the banking world). Two major issues that affected Participant 7M's levels of self-efficacy about being successful were that he had priced his work correctly, and that he would be able to keep his income up to a sufficient level.

Participant 7M also shares comments about his sense of efficacy around areas of skill and the issue of dropping clients who provide less interesting work (also mentioned previously).

> Because ahm you know, *I'm sort of fairly ahm ahm fairly knowledgeable about certain, several technical areas of finance*, ahm it would be silly for me not to look for work in those areas, ahm because that's where I have the biggest ahm you know *that's where I have the unique selling proposition*, ahm because you won't find very many, th- th- there will be very few translators who would know the difference between a credit default swap and a poached egg, ahm whereas I do
>
> […]
>
> Unless I'm unable technically to do a piece of work, I will not turn it down, ahm and if I look at the work, if I look at my client list, you know, ahm yeah I mean there's certainly some, there's certainly some, one or two that I wouldn't mind getting rid of [*laughs*]
>
> *Interviewer:* Because they give you boring work?
>
> Yeah, because it's really pretty boring! And it's yeah, there's a few of those, fortunately not very many, ahm what's unfortunate is that ah not the I I ah I th- th- th- I have very few or practically no purely financial stuff, so in other words the area where I have a unique selling proposition I don't actually have any work at all or very little, so I need to move, you know, I basically need to to position myself so that the a- additional work that I get is in the area I want it
>
> *Interviewer:* Hence the networking kind of strategy
>
> Exactly, ah because otherwise if I just let the business grow organically, what what'll is I'll end up with a lot of sort of general stuff, ah and I won't have benefited from from the from the from the knowledge that I have, ahm and of course the contacts that I have now are still fine, but I mean if I leave it another five years, it'll you know it'll be harder

Participant 7M, at the time he was interviewed, was just starting to do active marketing. Prior to this, he had used his networks from his time working in the finance industry. However, he was concerned that these links would continue decaying, given that he had shifted from England to Switzerland. He wanted to take a more active approach towards marketing his business, so that he could guide the business to grow into his area of specialisation, in which he was justifiably confident about providing good quality translations, due to his highly specific knowledge. He wants to take advantage of this specific knowledge, which not many other translators have. In this area of translation competence, he shows high levels of self-efficacy.

Participant 7M is not yet at the stage where he feels that he can drop work, although he would obviously like to drop some of the less interesting jobs. In contrast, Participant

1M mentioned that she now feels able to drop some work, but she appears to be in a more mature stage of her translation career (having worked for eight years, compared to less than five years for Participant 7M), and thus appears to have a higher level of self-efficacy in her ability to create more work to replace any clients who leave.

5.2.2.5 Locus of control

Just to review the concept, the idea of locus of control indicates the degree to which we see the relationship between our actions and the outcomes of those actions as being under our control or outside of it—i.e. under the control of others or of external forces in general.

Participant 1M discusses the idea that when working as a freelancer, control over one's time and one's schedule is always, for her and for others, ceded to a varying extent to the demands of clients. In terms of locus of control, the relationship between time-management plans and the actual outcomes of those plans is not always seen as under our control, due to unpredictable schedules and requirements of clients. She states that:

> You are not the chief you know you are not the boss hm hmm, you are always working for somebody else
>
> *Interviewer:* So even even as a freelancer you're not you're not your own boss? In a way?
>
> Yes and no
>
> *Interviewer:* In what way would that be?
>
> *Ahh you are the boss*, because you can for example arrange your time hm hmm, ahh I have for example friends that work only as a freelance translator, and they say "I'm really free because I can for example arrange my time during the day, I can go, if I want, during the morning to work, or going to the supermarket or stay with my children or something like that", *but ahm you have always to to follow the instructions of the client and you are free, but you are not so free*

Here Participant 1M presents quite explicitly the idea of a balance between time-related autonomy and client demands. This certainly contrasts with the layperson's conception of freelancing as being almost completely flexible in terms of time-management, in which a freelancer has almost perfect freedom to organise their work as they wish. In fact, it may be that some freelancers' loci of control are rather external, due to the unpredictable requests and unpredictable timetables of their clients. They may not be able to leave the 'office' at 5:30 pm.

However, Participant 2M perceives that she has a high degree of control over her amount of work at present. She states:

> Because I work in the translation industry and at university but also doing this training for for translation memory system producer [*laughs*], or for [*name of company removed*] in this case, but I I really know a lot of people who work in the translation business and have their own agencies and ah I know if I need it I need more jobs I know how whom to contact to get more jobs if I need it, so I mean it's hm it's actually a thing that a lot of people tell me—*the longer you work in the translation industry, the more people you get to know and the bigger is your network of people, you know, who work there, and I think this is something that makes it easier to control*

She considers that the perceived relationship between her job-seeking actions and their outcomes is increasingly internally-controlled when dealing with people who she knows will give her work. In other words, she perceives that she has more influence over those whom she has already got to know.

Participant 3M discusses a slightly unusual problem that affects her work, being Repetitive Strain Injury (RSI, or Occupational Overuse Syndrome (University of Canberra 2011)), and in this discussion shows some detail about her perceptions of control over this issue.

> *I've had RSI injury all this year, which I never had in twenty years beforehand, so that that does worry me, because I've got a couple of years ahead of me to work*, and I have to get that—keep that under control somehow
>
> […]
>
> I've been in physiotherapy all this year trying to get things under control, and ah I have to be careful, because I'm planning to work for a while longer

She is concerned that it will affect her ability to work, and yet has taken steps to reduce its negative effects, by seeing a physiotherapist. This demonstrates a certain degree of perception of internal control, in that she considers that the RSI can be controlled by actions that she takes, rather than just abandoning it to chance. Those with a more external locus of control might feel tempted to do so, and believe that the problem would occur whether or not they did anything about it. In her last statement, Participant 3M indicates her optimism for the future, indicating that she plans to keep working, and therefore has a reasonable degree of confidence that her RSI problem can be controlled, or at least managed, by her own efforts. In such a situation, it would be easy to give up, and to say to ourselves that managing the RSI was outside of our control.

Participant 3M also discusses her perception of locus of control around dealing with clients and work deadlines. In this area, she shows a highly internal sense of control:

> Whilst there [*at her previous in-house law-translating job*], ahm in in the job itself, we had to take everything that was thrown at us, absolutely everything, so some did, and it was… okay there was… one just had to cope, and now ahm well I feel I have a lot of control basically, because I can I I propose a date to a client, when I say I'll be completed by that date, sometimes I'll indicate I might be finished a day earlier or not, sometimes they'll call back and say "it's really urgent, we need it by Tuesday", if I can fit it in, I'll fit it in, if I can't I'll say so, but I'll promise it by Wednesday lunchtime, so I don't feel I'm being run over by clients with ridiculous demands, *I have ten years of of experience with lawyers, so I know how to set dates, and I always comply with them, so I feel I'm in control, basically*, yes

It appears that her training and experience in dealing with lawyers has helped foster this internal sense of control, which helps Participant 3M to see a clear and personally-controllable relationship between her actions in dealing with deadlines and clients, and the outcomes of those actions (e.g. satisfied clients who get their work when it was promised). She feels that she can largely control her time-usage. This is an interesting contrast to Participant 1M, who feels that time-use is more externally controlled, by clients' demands.

Participant 4M, who works in an academic setting, shows a highly internal locus of control in the area of getting sufficient work to supplement his income, most probably because he needs much less income from translation in order to be satisfied financially. However, he does have the perception that the *nature* and *content* of each job is much less under his control, quite simply because he does not do any active marketing, and therefore that the job types that do arrive are unpredictable and therefore relatively outside of his control.

> Pretty good deal [*of control*], ah since I have a full-time job and the translation job is on the side, ah *I haven't been forced to take on any jobs that were unappealing*, ah on the other hand most of the work has come to me through my department, ahm getting inquiries, and so that can be a little bit random, you take whatever comes to you, if if you're interested and ah if you're capable of doing it, and ah so *I haven't had a whole lot of control there*, I haven't gone out and sought ah translation jobs
>
> Interviewer: What kind of inquiries come to the department, is this from other parts of the university?
>
> Yeah, from other parts of the university, also from just authors, sometimes it's been authors who are ah driving the process of getting their work translated, they're they're pushing it on

> their own, and they've convinced the publisher that it could be worthwhile but only if they find a ah reasonable rate from a translator, or only if, yeah they do most of that footwork, the author, so ah sometimes these authors have approached the department, been thinking "maybe we can get students to do a team exercise" [*both laugh*] and and we don't let our students get exploited like that, so so sometimes I've landed jobs in that way

The last comments show that sometimes he has done work because others were not available to do it, something largely outside of his control.

Participant 4M also mentions (not quoted here) that he would have liked to have done more with his C language, but that affiliation with a German institution has meant that opportunities for doing work involving his C language have been largely outside of his control, mostly because of time restrictions imposed by other more important duties.

Participant 5M talks about her sense of control in her work, and appears from her conversation to have a highly internal locus of control (in fact the highest score from among the interviewed participants, with a *locus of control internal* score of 4.88).

> *I think in every profession, you can more or less choose which way you're going*, and ahm i- it's not only about translation, it's in every job like that, everybody can choose if he wants to leave a company, look for a different position somewhere else ahm ahm, if you're working as a freelance translator and you're not happy about ah, let's say, the amount of jobs, the amount of translations that are coming to you, you can always look for new clients, to find new work, so ahm, I *my situation I'm very much in control of ah my career*, yes, it depends what you do to direct it

Participant 5M clearly indicates that she believes that all of us have a reasonable degree of control between the actions that we take and the results of those actions when it comes to career issues. She uses the verb 'direct' to indicate that career management for her is an issue of internal control, largely subject to the volition of the individual. In her view, we take actions that shape our career, and control how those actions turn into results. She adds an interesting comment:

> *Everybody should feel that way, I think, because everybody can decide where he wants to go*

This comment perhaps sums up why interest in locus of control is so important, as most of us usually have far more options than we think we do, and often more influence over events than we think we do. We may close off choices, not because they are not actually possible, but because we perceive that the link between our actions and the results of those actions is largely influenced by a causal agent outside of ourselves (e.g. the whims of our supervisor or boss, the economic situation, the vagaries of client attitude, etc.),

when it comes to making career decisions and taking actions that shape our career. In summary, perception may not always accord with reality.

5.2.2.6 Family and work balance

Freelance translation is generally perceived to be a good career choice in terms of being able to balance work and family demands, particularly among women with younger children (this has already been explored in Section 4.2.2.7, with the pilot study participants). A number of the participants mentioned the flexibility of doing freelancing and how this allowed them to spend time with their children while working.

Participant 1M:

> As we said before, if you have, for example, children, and you're a woman and you have to be with them, it's very it's very good to have all the time at home because you can arrange your time and you can do your translation in the morning when your children are at school

Here, Participant 1M mentions the demands of looking after children, and how they can be balanced with other family and work demands, which she considers is easier to do with a freelance translation career.

Participant 3M discusses the fact that she delayed getting into a freelance career because she needed to help her husband provide for their four children financially, and felt that freelance translation could not provide a reliable or sufficient income for a family in her situation.

> I enjoy the flexibility of time it [*running her own business*] gives me, on the other hand I w- was late going freelance because I have four children and they need to be secure financially

The very real possibility of financial change and uncertainty lead Participant 3M to take the more certain option—to continue working in-house until the youngest of her children received a university grant, and became financially independent. Then she would only have to worry about income for herself and her husband.

One issue that can cause potential conflict when combining work and family-raising is what to do when children need attention, and how to balance this with work deadlines, especially if children have the expectation that they will be the centre of attention while their parent is working at home. Regarding the issues of managing her time at home, Participant 3M talks about the fact that her youngest child has grown up with someone working at home, and so is used to 'sharing' her mother with work demands:

> Since she [*Participant 3M's daughter*] was five, she's been brought up in a house where somebody's always been working at home, so she's used to it, yep

Participant 3M indicates that this situation has reduced the possibility of negative tension between family and home-work demands. In other words, her daughter is used to mum being at home and yet working, and has learned to distinguish her mum's time-usage boundaries.

Participant 6M had a good solution for combining the emotional needs of family and the time demands of work—she involved her son in some of her translation work.

> I am actually training one of my sons, who's interested in just sort of seeing if he can do it, and I occasionally give him a piece and say "right, you do this one, I'll read it through and then we'll, you know, it's got to be up to my standard, I'm not sending it off as you, but you can give me a hand, and see if you can do it" and that's that's going quite well

Here Participant 6M mentions that her son (a teenager) is interested in translation, and therefore she is able to involve him in the process, and use work time to train and educate him about translation. The necessary pre-requisite for such activity is, of course, the fact that her son is interested in the translation process. Given his interest, in this way she can spend family time and work time both together, and also perhaps gain a valuable helper in the process, as well as guiding her son in his future career, or at least in developing and exploring his general career interests. It could be said that Participant 6M is, in part, acting as a mentor for her son. If her son embarks on a translation career of his own, then Participant 6M's mentoring of his early work has potential for encouraging him through the start of his career.

5.2.2.7 Conceptions of professional success

The idea of professional success varies from person to person, and it is very insightful to find out what each person's definition of it is. In this section we look at how our participants consider themselves to be professionally successful as freelance translators. Success and satisfaction have some close links, as we have proposed in our model, and as indicated in this section of the interviews.

Participant 1M presents her idea as follows:

> *I think that I can consider that success comes when you can you can decide which work you are going to do*
>
> […]

> Little by little I can I can I have *I've been able to to decide which work I can do or I want to do* and ahm I have started to translate, for example, books
>
> […]
>
> It's very difficult to define success. *I think it's it's related to satisfaction* maybe hm hmm, and I I think I'm satisfied with the work I've done until now

So we see an increasing sense of professional success, manifesting itself for Participant 1M in terms of being able to do more work that she finds interesting and being able concurrently to reject less interesting work. She also mentions explicitly the idea that for her success is related to job satisfaction, which concurs with the idea of internally-judged professional success (see Section 3.3.2.2).

There is also the externally-judged component of success, in terms of income earned, number of jobs done, and client satisfaction (i.e. satisfaction located externally).

Participant 1M explores the idea of success being also an external concept.

> *How can you say if you have been successful? Maybe the clients are those who have to say it, if they are satisfied with your work.* I've never received … quejas? Complaints?

The clear idea here is that even if you are satisfied with your work, the client is still one of the main sources of externally-judged success, given that their perception of work quality will directly affect how much work they provide for you in the future.

Participant 2M presents an idea of success that is linked both to client satisfaction, and also to the classical externally-judged success criterion of sufficient income.

> I mean *it is successful* because I have jobs I mean and I have customers I've worked for for the last two to three years or longer, so I mean *I think setting up a business and keeping the clients or customers you have is probably a good sign!* [*laughs*] And ah so *this makes you successful* as well and ahm *because they offer you jobs again and again*, yeah *the money is also important*, so I can earn money with it and live off it as well

In other words, the business continuing to run, implicitly because of satisfied clients, as well as the fact that Participant 2M can make a living, define her fundamental criteria of success.

Participant 2M also mentioned that using translation tools in a certain way was also an important part of her definition of success:

> I mean *using, for example,* yeah *translation memory tools* or getting to know these tools *and working with these to optimise my work*, so *this is also a success*

The idea of professional mastery of a tool to improve one's work quality and one's productivity appears to underpin this particular notion of success. Perhaps in this

comment there is also an element of the need for mastery over technology, in order to make it work for us, rather than the other way around.[26]

Participant 3M shares her vision of what defines success for her in the following terms:

> Well first of all ah *I run my my translation business to make money*, it's not my hobby, it's my business, and that's what I explain to people ahm when they ask for ridiculously low rates [*both laugh*] on a Friday afternoon, ahm so ahm that's I *I want a return on the time investment that I've put in*, and I always want to ah my *my criteria for being successful is is that I make some kind of rate of return on what I produce*, I don't like producing good translations for no money, ah for bad pay, and also that ah that I feel I've produced a good translation, which is not always the case, of course, it happens that something, just something not right, but *those are the two things—that I produce good work, and that that good work is well paid*, fairly paid, fairly

The two principal components of success for Participant 3M appear to be both quality work and a fair price for it (which we could argue is a kind of normalised recognition of quality).

Participant 4M conceives of success in a slightly different way to the other participants interviewed.

> [*My translation career has been successful*] because ahm, it's it's *my translation work over the past few years has been more oriented toward translating* of kind of ho- *high-profile publications*, n-not so much commercial ahm texts that will be used briefly and then disappear, but *publications that should be around for years and years*, and ahm will be sold on, you know Amazon.com and major publishing houses and things, so ah *since I've gotten three of those kinds of texts finished, I rate that as a success*

For Participant 4M, success is at least partly defined by the long-term value of the works that he has translated, rather than the more usual values of quantity of money and how busy he is. Of course, that is not to say that these are not part of his criteria for success, but they appear to be less salient than the criteria of the target text's long-term value and public exposure.

Indeed, Participant 4M does still mention the criteria of money and of client satisfaction as important criteria for success.

> Ah the results that I want are that ahm the the ahm ah the German *Auftraggeber*, the person who hires me for a translation job, the client, is, *I want them to be satisfied with ah the work* ahm and ah, *I want to be paid* [*laughs*], *I usually get those results*, with with the exception of that instance I mentioned, and ah yeah a little bit of criticism everyone has to be prepared

[26] Cf. McClelland's (1958) *N-Ach*, Need for Achievement, which has been an influential model of human motivation.

> to face, but ahm the fact that you if you if you get ah criticism or friction from a client, as as long as they're prod- constructive enough with it that you can ah work through that and and comple- *successfully complete the translation, I think I'm I'm satisfied with that*

Participant 5M considers her success in more general terms—she labels it 'satisfaction', indicating that for her, success is more of an internal state rather than an external (not to say, of course, that the external does not matter):

> Well so, how can you measure success? *It's first of all the personal experience you have if your ahm confident about the work, if you're happy with ahm what you're doing, and then it's feedback from your clients*, if ah you can be happy with what you're doing, but the quality might be low and your clients might not come back after one job [*laughs*], so ahm it's, *for everybody, success is a different thing*, somebody just-, or there might be some people who think "I'm successful if I earn a certain amount of money per month", ahm others might say "I'm happy if I, ahm if I have happy clients and I have free time, to do whatever I like to do, it's successful, it's a difficult term I think, ahm…
>
> *Interviewer:* What does it mean ah for you?
>
> For you- *for me it means ahm yeah just general ahm ahm confidence or maybe ahm, if you're satified- satisfied with your ahm situation, your income, your your jobs you're getting*, ahm if everything, all of that works out for you, and you're satisfied, well that th- th- that's success, I guess, for me, and yeah *so I'm satisfied with my situation*

Participant 5M mentions the specific externally-judged indicators of income and level of busyness as important criteria, which in turn contribute to an internal state of satisfaction for her, making her feel successful.

Participant 6M talks about success in terms of the following:

> By my standards, yeah, ah *I have enough interesting work to keep me satisfied*, *I earn enough from it for what I'm looking for*, I'm not looking for hundred percent, high-flier, huge sums, it earns enough, and as I say, *I'm now in a position where I can say "no", without the fear of never getting another job*, and *I can choose to work for the clients I enjoy working for*, ah so yes, I think, as *as a translating business, I am as as successful as I can be*

Again, the main idea seems to be that success is partly satisfaction, which she mentions explicitly, and partly being able to choose who to work for (i.e. the more personable clients, possibly irrespective of whether they have interesting work or not). Money does not appear to be top of her list of criteria for success in her translation business—in fact she explicitly states that it is not (although her translation-related income is in the 40-50,000 Swiss Francs bracket, by no means a bad income).

5.2.2.8 Personality characteristics of freelance translators

Perhaps the classical image of a freelance translator would be that of a solitary person who loves to work alone and to pursue their work alone, often working in confined spaces in a quiet, sober, and 'scholarly' manner. But the need to contact with other people is also a demand that various translators commented on. For example, Participant 1M had this to say on the subject:

> *Some people love to be alone and work alone*, and not depending on other people; *I prefer working in a group*, for example ahm and talking with other people, being in contact with other people, *I think it depends on the character*
>
> […]
>
> *I hope I don't have to be all day alone at home, translating*, ah *I hope I will be able to continue combining translation with other work*, that can be teaching, or can be, for example, researching or hmm, but combining both of them, ah and in that way, I don't have to be isolated or something like that

She indicates that personality, in her opinion, is a significant determinant of how much contact people may need, and that this influences how freelance translators may try to construct their careers in such a way that they receive enough interpersonal contact to keep them emotionally healthy.

However, Participant 1M also mentioned the need for quiet, in order to be able to concentrate on her work. She found this to be a great challenge when she previously worked in-house:

> *I was working in a company*, and you can you can think I was ah all around me were people working, *but if you want to do your translation in a good way*, you have to *[concentrate very much on]* what you are doing, *you cannot be talking with your mates or your colleagues*

This does indicate the conflicting demands of sociability versus solitary, distraction-free concentration in the professional context. Perhaps this could be seen as a similar issue to balancing childcare and translation—giving attention to children when working at home, but also working at the same time and in the same space.

Participant 2M also talks about her need for contact with others, and suggests that she would never want to work as a full-time freelancer, primarily because of the social isolation:

> *I could never work as a freelancer just full-time*, I'm, *it would be a problem for me to sit at home all the time* and ah
>
> *Interviewer:* What do you think would happen?

> Ahm
>
> *Interviewer:* Or might happen?
>
> *That I don't want to translate any more*, I mean I I need to to I *I need to work together with people* so it's something I mean I can I mean I do translation projects for a while and work on my own but ahm

Here again we see the influence of personality and need for contact with others, and how it affects the structuring of work styles. In this case, Participant 2M suggests that she would simply lose her desire to translate if these social needs were not met through collaborative work, this acting as a balance to the isolation of doing freelance translation by itself. This suggests that she would not find after-hours socialising enough if she were working at home-based freelance translation full time.

When asked what a solution to this problem might be, Participant 2M had this to say:

> *Interviewer:* If you were ah say going to give advice to somebody who was ah having a problem with loneliness and isolation, what would you suggest?
>
> Ahm *I would actually suggest to go like ahm what friends of mine have done for example is they work as freelance translators but they rented an office together*, so they worked for their own customers and all that but *they sit together in an office and kind of share the the office* and ah *just to have the contact to other translators as well*, and to get the network as well, I mean they they cover different language combinations so they actually can give each other jobs as well

This is a very interesting possibility for solving the need for work-related social contact, although there is a possible conflict with some personality types, such as that of Participant 1M, who found that social contact during work sometimes caused a level of distraction that was above what she could normally accept. So collaborative work in a shared office would certainly suit some personalities, but not necessarily all of them, all of the time.

Participant 2M was first exposed to the world of language translation in its broadest sense by observing an interpreter at work. She was interested in languages, but considered that translation offered a more measured pace of work, in terms of the time between source text input and expected target text output. She said:

> *I wasn't spontaneous enough I would say* so so it was something *I couldn't imagine that I would always sit and sit there and know the translation straight away*, so I was more interested in doing the work on on on the text and then ahm yeah read through it and *I just had the impression that I need more time to to do translations and I thought well interpreting might not be be yeah the job I want to do*

This is an interesting understanding of how her personality affected her career choice, in that Participant 2M had a clear notion that she would not be suited to interpreting due to the compression of time which occurs in that type of interlingual, intercultural communication process (e.g. Kurz 2003). Translation gave her more freedom, in that respect.

Participant 3M discusses her need for contact with others, and despite the fact that a solitary freelancing style of work often conflicts with this need, she has some strategies for dealing with it:

> *Isolation and loneliness are a great problem for me, because ahm I am not a natural home-worker, I'm a natural office-worker, I love being in the office environment*, and ah when I moved to [*city name removed*] with my husband, that's almost ten years ago now, I went from an office environment, where I was there every day, to working in an office alone, and I'm still now as a freelancer ah I then consciously chose to stay in my office alone, so what do I do, ahm I do sport, I play golf, and ah when I play golf I always meet somebody, so I go out…
>
> *Interviewer:* You have a golf date, kind of thing?
>
> Sometimes I have a golf date, I also play a lot of competitive golf for amateurs, we're talking about, yeah? And if you're at a tournament, you have play partners, and ahm you communicate with them, and sometimes for example I used to play regularly at one club every Monday morning say, at ten o'clock there would be a group of pensioners, who they would see me from afar and wave, and I would go round the course with them, so *a lot of my social interaction is combined with with my sport*, and also I mean *my husband and I we have we have a lively social life*, a lot of our friends are very busy with lots of children as well, but ah we have friends who like to go out, and ah have a social life, but definitely *doing my sport, playing golf is ahm definitely trying to counterbalance the loneliness that I definitely feel at my workplace*, yes

It's evident here that for Participant 3M, sport provides, if not a total degree of social satisfaction, at least an amelioration of the negative effects of isolation, perhaps more so than 'general socialising', at least based on the evidence here.

Participant 6M also mentions the issue of loneliness, but states that it doesn't bother her:

> I think I would do [*feel isolated*] *if I were working five days a week, on translations at home, I think I would find that quite difficult*, but because I'm not, again it's not a problem, it's not one I've ever faced, because I've never done 100% translating at home, I've always had another part-time job or another part-time interest [*laughs*]

Childcare two days a week prevented Participant 6M from doing full-time translation for a certain period, and this also enabled her to avoid feelings of isolation, to a large

extent. However, she considers that working at home full-time would probably create feelings of isolation.

In summary, it seems that most participants we interviewed would have had concerns about isolation and loneliness if they had been working full-time at home.

5.2.2.9 Cause-effect sequence of beliefs and behaviours as viewed by participants

The nature of causes and effects, in terms of behaviours, beliefs, and outcomes, is very difficult to untangle in a real career context. This is especially true given the length of time that had passed since some participants first thought about becoming translators. Perceptions of the past, and of causal links leading to actions therein, can be notoriously unreliable with the passage of time. Therefore we can only get a glimpse on occasion of the perceptions that our participants had of the nature of this relationship.

For example, Participant 2M felt that her experience had enabled her to negotiate with clients more confidently and specifically about work issues and the service that she offered, hinting that increased self-efficacy had been caused by increasingly successful experiences.

> If you speak of changes, so I I would just make, I've learned more, *I have more experience now and this is what makes it easier to to talk to clients and offer bigger packages*

It is apparent from this comment that she felt that she had seen more, experienced more, and so the novelty, and uncertainty that often accompanies novelty, were reduced.

Participant 3M felt that encouragement helped her prior to making decisions that led to translation as a career (she worked as a legal secretary prior to joining the translation industry). She said:

> *People told me that things were working well and I was quite good at it, so I decided to pursue it* and then ah tried to get my ah do more training
>
> […]
>
> My colleague said to me "you you can do this, this is fine, and ah it it seems to be working, seems to be producing good English, with a very good understanding of German"

Here the support of other people seemed to arrive prior an internally-sourced increase in self-efficacy, and it appeared to lead to and support an increase in Participant 3M's self-efficacy to deal with more challenges in her profession.

Participant 5M thought that encouragement from her parents was one of the triggers that got her into the language field:

> *So they al- they always ahm encouraged us* to abroad, to learn languages, to read foreign books, to watch foreign movies, to just yeah, feel and experience language and different cultures

Participant 5M shows here that it was parental encouragement that acted as a major stimulus for her development in the language industry, which appears to have had a positive effect on her ultimate decision to get involved with translation.

Participant 7M provided an interesting and detailed history of his first entry into the world of translation, and how this affected his subsequent career leading up to his second entry:

> I suppose because I'd studied ahm I'd done Latin at school, and I'd studied French and German, and the way in which ahm all those languages were taught ahm involved a lot of translation, I mean basically you know your competence in those languages was examined largely through that, ahm so I knew I could do it, and I was quite interested in doing it, and ahm I did originally intend, when I was sort of in my teens, I suppose, that you know to do a degree in ahm modern languages, which I did, and then to work as a, I didn't really want to work as a translator particularly, but I thought I would work as a conference interpreter, ahm and I did various aptitude tests for that, and you know it looked as if you know, I was encouraged to pursue that, and while I was at university, I had the opportunity of actually working as a freelance translator, and ahm I did that while I was at university, and was quite happy doing that, ahm I could work quite quickly, ah quite well paid and then I, after I graduated I ahm, because I had worked for a bank for about, for the last three years or four years I should- in fact nearly all the time of my degree course I had worked as a translator, I mean first not very much and then more and more, ahm I became more and more interested in finance and in the end, I I as I got closer to graduate I decided that I didn't want to work as a translator any more, I you know, it wasn't really all that interesting, ahm and you can't really un-, you can't really translate stuff that you don't understand so I'd become quite interested in finance, and anyway to cut a long story short, I decided to go into, I applied for various jobs, I had a couple of job offers, and then I went and worked in finance, and I did that for twenty-odd years, and it was only, well as I told you the other day in 2006 that I decided to return to working as free- or, to working as, to working as a freelance translator

Participant 7M indicates that freelance translation did not suit him at the time of his graduation, even though it would have appeared that translation and interpreting (which he had an aptitude for) would have been the logical choices for a career. Nonetheless, a career in finance won out at the time, but in fact this proved to be very beneficial for his return to translation, as he can now specialise in financial translation to a high level.

It appears that in Participant 7M's case, self-efficacy gained through translation exercises done during his schooling encouraged him to seek a career in translation/interpreting. His many years of work in the finance industry then appeared to provide him with a good level of self-efficacy (particularly concerning the topic of finance) when he returned to translation at a later stage (see the end of Section 5.2.2.4 for more discussion). It appears, in summary, that occupational self-efficacy came first in the causal chain for Participant 7M.

5.2.2.10 Translators and their technology

One major issue with modern translation is that of the use of translation-specific tools, but also the influence of practices brought about by the use of, or demand for, those tools. For example, agencies or clients may demand that particular tools be used, and translators may have to comply in order to get work from these sources.

Participant 1M mentions the issue, prevalent in the localisation industry particularly, of mechanisation taking away payment from translators, as they are no longer considered to have translated sentences that were already in a translation memory database.

> I want to mention that *one thing that I'm not really happy about with tools is that sometimes the agencies or clients don't pay you for all the ah words translated, because they say "you have it in your memory", and ah you haven't done anything with this* […] For example they say "we are going to pay you only for the translated words, but if you have this sentence, or this piece of sentence, already translated, we are not going to pay you for this, when you have to—that's not, *that's not fair, according to me, because ah you have to review if that translation has been done well*

She presents the idea that although a translated fragment may already be in memory, work still has to be done, in terms of at least reviewing and checking the stylistic flow of the sentence with the others around it, and that translators should be paid for that work.

Participant 2M, on the other hand, sees nothing particularly negative in using translation memories and how this relates to rates of payment.

> I mean when you use translation memory systems, companies say "ok, because they are 100% matches or fuzzy matches, so ah we don't pay you the whole-" I mean they just work with translation memory, the companies use translation memory systems to reduce their translation costs, which is fair enough, I would say because I mean *it's actually less work when you work with translation memory systems and what a lot of translators criticise is that they say "ok ah but then we don't earn that much money" but that's not true because*

> *they don't need that much time to do the translation so they could do more translations*, I mean in terms of words, and earn the same amount of money, I don't think that you earn less using a translation memory system

However, Participant 2M does acknowledge that translation memories do tend to reduce texts to the level of a series of sentences. She believes that using them changes the translator's perception of the text, and that this can be a problem that requires proofreading in order to solve it:

> *It's* [*the text*] *just presented in segments to you* and so how could you think in bigger units if you just see the sentence, and it's so easy to translate sentence by sentence even if they [*the translation memory software*] offer you the option to to put sentences together in bigger units, but ah *I think this is one really negative aspect that people forget about text, the whole text, as a unit* and ahm what I always say is when once you have your target text, so your translation, *you should actually read through the whole text and just to to see if it makes sense and if the connections between the sentences ah are any good* or if it's kind of ah sentence by sentence translation and ah and ah a lot of people don't do that

A related aspect of technology and the breaking up of large projects, or the use of translation memories to which many translators have contributed, is that the quality of segments contained within the translation memory database may be unknown. Participant 1M states that:

> Cada vez que haces una traducción, aumenta la memoria, entonces la base de datos ... etcétera, etcétera. Entonces, si es la primera vez que piden que realices la traducción, quizás la memoria la haya alimentado otro traductor, y no sabes si ese traductor es bueno, si es malo
>
> [Every time you do a translation, the memory increases in size, so the database … etcetera, etcetera. So, if it's the first time that they've [*an agency or client*] asked you to do a translation, *perhaps another translator has added to the memory, and you don't know if that translator is good, or if they are bad*] (translation ours)

This lack of control over some of the technological aspects of the translation process, and the resulting quality of the output, leads some translators to despise using translation memories. We even had a comment from one participant (not interviewed) that they would use translation memories "over their dead body"! This indicates the level of feeling that some translators have regarding the technology that they interact (or hate to interact) with. It would be interesting to investigate these reasons further.

Participant 3M discusses both positive and negative possibilities if she were to start using a translation memory in her work (at the time of the interview, she did not use any

memories, but had received training on two different systems, so understood the general operating principles).

> What might be attractive would be ah would be having ah vocabulary or or certain phrases at my fingertips, if they were found, within a matching process, ahm and also to to increase consistency, that would be, that would be very useful, definitely
>
> […]
>
> *If I can't see the whole sentence, I can't translate*. I cannot work like that

In the second paragraph, Participant 3M refers to the possibility of German legal sentences being so long that the entirety of each sentence would not fit in a window at one time, and considers that this would represent a radically different way of translating to that of working on paper, in which she received her initial translator training on legal texts. She did, however, allow for the possibility that the window structure of translation memory software may have recently changed for the better, to become more flexible and controllable by users.

Participant 4M has a favourable attitude towards translation technology, and in fact encourages his students to use it, but nonetheless has not used it much in his own work.

> *The benefits are clear, I think it's just a matter of ahm having enough time in between the s- the hectic periods when you can tend to these things*, and I haven't invested that time [*laughs*] in my own translating

It appears that Participant 4M does not perceive such strong advantages that would encourage him to start using translation technology—such as starting a translation memory database. For him, the disadvantage of initial effort to correctly set up a terminology database and translation memory seems to outweigh any advantages that using such tools may provide.

On the other hand, Participant 5M is very happy to use translation tools in her work, and considers that they provide her with a significant advantage:

> *I do use them for everything actually I translate*, more or less [*laughs*], everything, more or less, I do use them for everything I translate as a freelance translator, I do not use them for ahm my university translation, ahm, because I'm not teaching ah translation tools at the university, ahm I'm just teaching regular translation classes, and sometimes I show them but ah the texts we're translating are not actually fit for the tools, they don't ahm, yeah, it wouldn't be an advantage to use the tools to translate the texts, that's what I would like to say, but *as a freelancer, ahm I, they help me a lot because I have clients who keep coming back, so ahm it is very useful that I have the terminology of the former translations in there,*

> *that I translate similar words or similar sentences always the same, that ah you can look up vocabulary you've used before, ahm it just makes things much easier*, yeah

Participant 5M does mention that occasionally there are technical problems with software, but suggests that this is not a problem with any particular group of software (i.e. it can just as easily occur with the word processor as with a translation tool).

Participant 6M did not use any translation-specific tools, and is not entirely convinced of their usefulness for medical translators:

> I I looked at them, oh gosh, going back quite a while, when I started out, and *I decided that for my purposes they weren't going to be very useful*, and I work with someone who does use them and ahm he puts, he sends me stuff that he's put through this program, and it's translated bits of it that it recognises […] and it takes me twice as long to sort it out almost, than translating it from the beginning because sometimes it's not quite what you want to say in a particular sentence, and I have noticed it actually got something the wrong way round the other day, so, *I don't think they've replaced human effort yet, and especially in the medical field where it's really important to get it right, and not just nearly right*, ahm, so no, I don't personally use any of them but I do work with someone who who does use them

Participant 6M indicates that she finds it easier to translate 'by brain' rather than using a translation memory, indicating that, for her, the effort of editing and revising the target text is at least as great as that of translating it herself.

Participant 6M does, however, use a particular feature of Microsoft Word as a tool to help her in her work—the autocorrect feature, which automatically corrects or changes words or acronyms when they are typed:

> Ahm I mean I do have my own ahm shorthand, ahm I use the Word program [*Microsoft Word*] to expand, ah so I'll just dip in three letters and it'll, I put in MYI and it gives me "myocardial infarction", or whatever, so I c- I use the the Word correction program
>
> […]
>
> So I'll just put in my few letters and it comes out as the whole sentence, which saves time

This method enables Participant 6M to work with shorthand, which saves typing time, and allows her to translate repetitive phrases by entering them as a kind of consistent 'code', which the autocorrect feature then expands to the full phrase. This usage is something akin to an authoring memory, but without any such features as grammatical checking or fuzzy matching of phrases. Participant 6M's method is quite an innovative way of using a feature that was not originally designed for such a purpose.

Participant 7M generally does not see the need for translation memories or other tools in his work.

> No, ahm I don't [*use translation tools*] *because I have a fairly good memory*, and in any case, you can, you're likely to remember if you've seen a word before, ahm and since all my texts are done in Word, it's quite easy to search for the original term in the in the in the in the source text, and then once you've found that, then you can find your own translations, quite easy to find, and it it quite honestly I don't, I mean *I haven't really found that it's worth the effort, some people do it, ahm, but I personally haven't found it necessary or or or useful, I I think it would probably be more effort than it was worth*

He has found that using his own human-memory-based system, along with his word-processor's search function, provides him with all the translation technology that he needs. Similarly to Participant 4M and Participant 6M (who does not really like to use such tools), Participant 7M does not see a significant return on any effort that he might invest in setting up translation tools, and appears happy to continue to work the way he does.

5.2.2.11 Career paths and career development

In this section, we investigate very briefly what appears to happen when translation and other career components of a portfolio career are not entirely compatible, in terms of career trajectory and competition for limited time.

As mentioned previously, Participant 4M works in the academic field of Translation Studies, as well as doing academic translation jobs, and faces a particular career issue, that of making sure that his academic career grows in the way and in the direction that he wants it to.

> In my personal career path, *I've come to realise that ah I have to choose one or the other ahm either to ah ah succeed in academia and do research and publication of my own, or else keep translating other people's work*, so I've decided to cut back some and and not take on so many translation jobs, and that's been a development of the past few years
>
> […]
>
> *I mean sure you get credit for translating, especially if it's academic works, scholarly books and things, ah but it's not the same as something you've written yourself*

In this case, it appears that translating really does take second place, in terms of its perceived value, to writing original works and doing original research. Given limited time and resources, Participant 4M has decided to place more emphasis on that activity

which will give more benefits for career advancement in his chosen direction—an academic tenure track.

Participant 4M also discusses his vision for the future of his career, and how translation and academic demands might coexist.

> If I ever get a tenure track position at a university, I don't expect I would have much time for translation, and that's been my my professional goal, the tenure track position, and also achieving tenure
>
> Interviewer: And it still is at this stage?
>
> Still is, so far [*laughs*], ah if that doesn't work out soon, though, the translation could very well take over a bigger role, and ahm and then I would think, g- getting more and more high-profile book translations, wi- with a better rate of pay would be the direction I'd like to go
>
> Interviewer: Would ahm you stay to a certain extent in the translation of academic ah work?
>
> Yeah I think that's a good niche for me, because ahm *I have a PhD and so I can ask a rate at the higher end of the scale*, the going rates, you know, ahm otherwise, th- there's no reason people would pay what I charge, if if I were just a run-of-the-mill you know fresh out of ah secondary school kind of ah, or you know with one undergraduate degree, kind of translator, ah, so I would want to move into more that that specialised ahm upper echelon of work

As in the previous quotation, Participant 4M indicates that in his experience, those with a lack of academic tenure usually do not have enough time to do much actual translation, focusing instead on research (and teaching) in order to get ahead in the competitive academic context. He also discusses the fact that higher qualifications have nonetheless enabled him to achieve greater rates of pay for those jobs that he has done than he would have had without a high-level qualification. Therefore, all things considered, his translation-derived income may not have suffered too much through doing fewer individual jobs. The idea of taking time out from a career in order to retrain and therefore earn more is one parallel—short-term loss is often longer-term gain.

5.2.3 Brief summary of main-study interview findings

The interview data, broadly speaking, provide general support for the theory of psychological skill as it affects translators. They also show points of interest regarding participants' working lives, which was the other major aim of the data.

Similarly to the pilot study, satisfaction was conceived of in several ways, such as making a product available to others, good client relationships, problem solving, lifelong learning from translating the materials, and the translator as facilitator for communication between others. Some sources of dissatisfaction included issues around payment and tax, and unreasonable client demands.

Relating to responsibility for positive and negative outcomes, there were mixed results. On a purely personal basis, some attributed their successes to external factors (such as luck, being in the right place at the right time), while others attributed it to the quality of their work, which was brought about by diligence, aptitude, and skill. In terms of negative outcomes, participants tended to take responsibility for these, which often included quality issues due to lack of time or lack of care in quality control procedures. One other notable contrast, however, was externally-attributed negativity due to lack of client understanding of the nature of translation. Personality clashes and subject-area unfamiliarity were also briefly mentioned as causes of negative events, as was the important issue of clients' stylistic preferences versus genuine errors.

Self-efficacy showed itself in a number of ways. One of these was that those with increased self-efficacy felt more confident about dropping work that they did not want to do. In other words, they felt more confident about finding enough of the work that they *did* want to do. One participant mentioned that self-efficacy can be greater when working as part of a team. One consistent theme seemed to be that self-efficacy increased with the passage of time, assuming no large shocks were encountered. One translator also doing academic work indicated that his translation-related self-efficacy was improved by ideas that he learned from his academic study. Self-efficacy became particularly salient for one participant who moved from doing an in-house translation job to working freelance.

Locus of control seemed to be rather a compromise for most participants. Some felt the tension between control of one's own schedule and control given over to client demands and client timelines. Locus of control seemed to be affected by the situation and by experience. One participant had dealt with lawyers for much of her working life, and so felt a strongly internal locus of control around client negotiations, while simultaneously having a more external locus around an issue with a strain injury. Another participant felt a rather external locus of control regarding the content of their work, due to having little opportunity to select what kind of work they received.

Family and work balance was important, particularly in terms of child-rearing. Financial and time demands influenced translation practices in varying ways, with one participant delaying entry to freelance translation until her children were independent.

Again, similarly to the pilot study, the perception of success manifested itself in many ways. Client satisfaction, sufficient income, mastery of translation tools, public exposure through high-profile and long-lasting translations, confidence and satisfaction—these were all indicated as being important criteria for success by various participants. Success and satisfaction appeared to be closely interlinked.

Other findings of note were that some participants did not consider themselves to have a suitable personality to work alone all of the time, in the manner of the classical conception of the solitary translator. Some participants deliberately attempted to balance their work with leisure activities, while others indicated that they simply would not like to work alone full-time.

Those translators who used translation tools expressed various opinions towards them. One mentioned that she felt that payment was reduced for pre-translated segments, but that stylistic editing still had to be done in order to create a quality target text. Others acknowledged the advantages, but did suggest that translation memories tended to make them myopic (tending to focus on text segments, rather than whole texts). Some participants did not consider investment in translation tools to be worth the effort of setting them up, although one of these strongly encouraged students to learn how to use them.

Finally, one of the university-based participants mentioned that there was some tension between the freelance translation that they did and a career in Translation Studies, and that for him at this point in his career, translation was secondary, due to time constraints.

Chapter Six – Discussion and Beyond

In this, the final section, we discuss in detail the results that we have found and observed, and attempt to relate them to Translation Studies and to the current state of the translation industry. We will also discuss the implications for training and teaching both new and more experienced translators based on our findings in this project, and look at the possibilities that mentoring and other teaching techniques might bring to increasing translator psychological skill. In parallel, we discuss future research possibilities, based around these ideas for application.

6.1 Outline of the major quantitative findings

In this section, we will outline and summarise the major quantitative findings of this thesis, focusing on both the pilot study results and the main study results. The primary emphasis, however, will be on the results of the main study, as these are derived from a larger and more varied sample (in terms of the markets in which participants were based), and are therefore more globally generalisable, stable, and representative.

Perhaps most significantly, we have shown using statistical methods that professional 'success' (both internal and external) can be predicted by key elements of psychological skill, as well as by other more concrete work-related variables. The ordinal regression analyses in Chapter 5 have demonstrated this in a reasonably unambiguous fashion. Specifically, *income rank* can be predicted in part by *occupational self-efficacy* (i.e. the confidence necessary to deal with the challenges of work), along with other work-related variables (such as *hours per week* and *years worked*), both for the 73 main-study participants with all their data (income measured in various currencies) and for a German sub-sample of 29 participants (income all measured in Euro). *Job satisfaction* could also be predicted by a mixture of work and psychological variables, the two most significant being *identity as a translator*, and *occupational self-efficacy*.

This finding is particularly interesting and important, as it means that occupational self-efficacy (and perhaps other psychological skill variables with larger sample sizes) could potentially be used, perhaps as a Human Resources-type selection instrument (e.g. as an aptitude test), for predicting both income and job satisfaction among new translators. This could have important implications for the training and entry requirements of new translators, and would have both advantages and disadvantages. We will discuss this

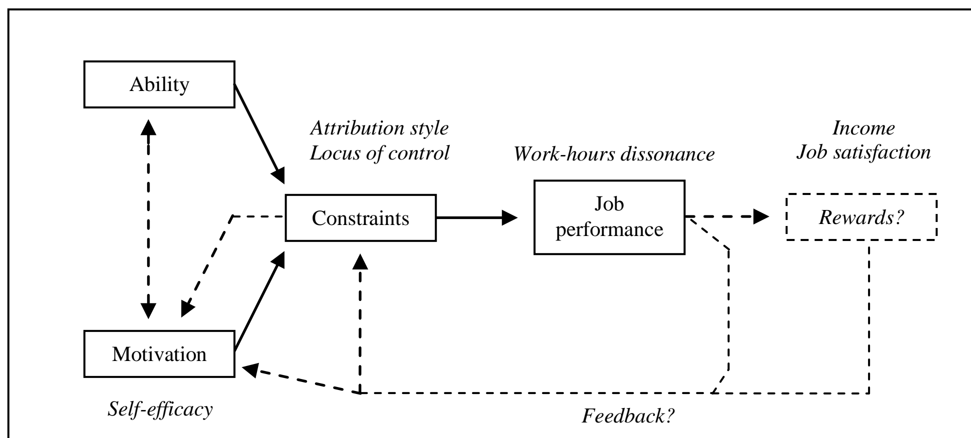
more in Section 6.4, in which we will outline the practical implications and applications of our findings.

We also found a number of statistically significant relationships when variables were tested for their correlations with other variables (see Figures 4.14 and 5.15), both in the pilot study and in the main study, and again, *occupational self-efficacy* displayed a fairly strong relationship with *income* and with *job satisfaction*. Further, the same results showed that *income* itself was positively correlated with various other variables, these being *identity as a translator*, *age*, and number of *years working in the translation industry*, *internal locus of control*, *job satisfaction*, *jobs per week*, *hours per week*, and *frequency of translation tool use*. *Income* was a major (perhaps the most obvious) indicator of professional success, and this has made it one of the central measures of the statistical sections of our study. *Job satisfaction* also had a number of statistically significant positive relationships with other variables: *age*, *identity as a translator*, *internal locus of control*, *responsibility for positive outcomes*, *career motivation*, and finally a negative relationship with *external locus of control*. Again, the number and strength of the relationships with other variables also indicates that job satisfaction is an important measure of professional success, and this was supported when we attempted to create an ordinal regression using a combination of variables to predict job satisfaction (see Section 5.1.2.14).

6.1.1 Findings related to the job performance model

Recalling Figure 2.2 in Chapter 2, in which we outlined Spector's (2003) model of ability and motivation leading to job performance, with both ability and motivation being mediated by constraints, it appears that we have sufficient evidence to suggest that translators' performance, as measured by income and job satisfaction, is most probably affected to a certain extent by their psychological skill constraints. To present this graphically, we show the model again, but with our findings included in it. This is an attempt to give the reader an overview of our findings' place in the greater scheme of things.

Fig. 6.1. A model of the relationship between ability, motivation, constraints, and subsequent job performance (after Spector 2003:239), with present findings added



Attribution style and locus of control are presented as potential constraints, depending on the form they take. Self-efficacy is primarily presented as a motivational feature (as outlined in Section 2.1.3), but a lack of it possibly acts as a constraint; it is difficult to tell without having evidence of the degree to which 'negative' attributional styles and an external locus of control might mediate its otherwise direct relationship with job performance indicators. Obviously there is room for further research on this. Related to this, the career motivation scale was designed to tap into the motivation section of the model, and despite correlating positively with self-efficacy (as well as statistically significant correlations with other psychological skill components) and with job satisfaction, it was not effective in relating to any aspects of job performance. Finally, work-hours dissonance was placed here as a measure of job performance, in terms of the match (or mismatch) between desired job performance and actual job performance.

The possibility that job performance could influence both motivation and ability would suggest that there should in fact be several feedback loops (shown with dashed lines), meaning that increased job performance will probably affect motivation, although it would probably not affect ability directly (because job performance can be considered as a manifestation of ability, mediated by constraints, job performance would come after ability temporally, which makes the path one-way). It is also possible that motivation may be influenced by constraints or perceptions of constraints. Motivation and ability may also affect each other, meaning that lack of motivation may decrease ability (e.g. not keeping professional skills current) and that lack of ability may decrease motivation (e.g. via self-efficacy through a "no point in trying" approach). A negative attributional style for explaining past events may, for example, influence our general view of future

events, i.e. our self-efficacy concerning our ability to deal with future challenges. Alternatively, constraints such as lack of time or unsuitable or unreliable software may in fact increase motivation, as the translator becomes more motivated to perform well and to be rewarded well in spite of (or even because of) possible barriers to performance and reward. In such a situation, self-efficacy would almost certainly have an influence on whether the translator felt that they could perform well, given constraints that are perceived to be outside of their control, and this might even represent the difference between starting and completing a particular job, or not doing so.

Another possibility for model revision could be that income and job satisfaction might be considered as being part of another element which would come after job performance—*rewards* for performance (shown in the dashed box). In other words, job performance is rewarded in various forms, two of which are represented here by income and job satisfaction (being examples of extrinsic and intrinsic rewards respectively[27]). Some of these rewards would be intrinsic (such as satisfaction), and some would be extrinsic (such as income). Then, increased rewards might lead in turn to increased job performance through increased motivation, although there would be limits based on both ability and constraints. In this way the model would be descriptive of feedback patterns and of how the consequences of past actions might influence future actions. Self-efficacy, for example, would be affected positively by the rewards that were gained from good job performance. But self-efficacy could also be affected positively if a person were to 'give' themselves a good reward of high job satisfaction, even if the actual job performance, in terms of 'objective' text quality, was not particularly good. This revision of the model would help then to explain why some people have notably high levels of confidence in their work even though the actual quality of their work is either average or below-average.

Thus the model would show that self-efficacy is an adaptive skill up to a point, and beyond this, overly high self-efficacy would become a liability. Similarly, an attributional style that is too self-serving (take all the credit for positive outcomes, lay all the blame for negative ones), and a locus of control that is too internal (I can control

27. Edward Deci, one of the pioneering workers on the concepts of intrinsic/extrinsic motivation, described these rewards in the following terms (1972:217): "Extrinsic rewards are ones such as money and verbal reinforcement which are mediated outside of the person, whereas intrinsic rewards are mediated within the person. We say a person is intrinsically motivated to perform an activity if there is no apparent reward except the activity itself or the feelings which result from the activity. All of the theories which consider both kinds of rewards assume that the effects of the two are additive." In other words, intrinsic rewards are such things as job satisfaction, which is largely a sum of emotional responses to work results and to work processes.

everything), would also become constraints, because the attitudes that they represent would no longer reflect reality. This could then lead the holders of such attitudes into conflict with other people, and with the nature of the social and work reality around them. In summary, the revised model would explain and predict quite well such an arrangement of factors.

6.1.1.1 Job performance model and translation competence research

Most of the previous research on translation competence has concentrated on the *ability* section of the model mentioned above, combined with a secondary approach to *constraints* in terms of procedures and quality control, and with few explicit mentions of *motivation* [e.g. PACTE's (2003) *psycho-physiological competence* and some of the competences contained in the *values* component of Keen's (in Rothe-Neves 2007) model of competence; see Section 2.1.1.1]. Otherwise, the classical competences of research competence, transfer competence, linguistic competence, cultural competence, and so forth, which are most commonly considered as necessary to make a good translator, mostly fall on the ability/constraints axis of the model. For example, Schäffner (2005) does not mention the motivational side at all in her model. Of course, one could argue that the reason that motivation is so little mentioned is that it is considered as fundamental to translator competence, and is so fundamental that it is implicit. In other words, with all the ability in the world, the job will not get done if there is no motivation.[28]

The problem with a lack of focus on motivation/constraints is that the resulting research presents an incomplete picture of translator competence. In other words, it assumes a linear progression from ability to performance, which results in a model that predicts that performance is affected mostly by ability. This is obviously only half the picture, and is why research like ours, which specifically considers factors affecting motivation, helps to fill this gap. While ability is obviously vital for doing translation activities successfully, it needs to be considered along with motivation and the psychological constraints that translators face in their work.

In summary, and to remind readers, we discussed the PACTE (2003) group's model in Section 2.1.1.1, and there proposed that the closest part of their model to our current

28. It is worth noting that "highly motivated" appears as one of the key phrases in the sample translation job advertisement presented in Figure 2.1.

research was their *psycho-physiological components* section. This section of their model contains aspects of attitude, motivation, and physiological components, such as attention, and it is in this section that we consider that our present results would perhaps best fit. As they suggest (PACTE 2003:48): "[t]he psycho-physiological sub-competence was defined as the ability to use psychomotor, cognitive and attitudinal resources" and it comprises (PACTE 2003:59): "intellectual curiosity, perseverance, rigour, critical spirit, knowledge of and confidence in one's own abilities, the ability to measure one's own abilities, [and] motivation". Here, despite the lack of clear parallels with our definition of psychological skill (which we explored in Section 2.1.1.1), we suggest that the psychological skill findings that we present here would potentially fit fairly well into this component, and could be considered as being part of cognitive and attitudinal resources. More research would be needed to investigate just how our findings fit together with PACTE's work.

6.1.2 Descriptive quantitative findings

We also found much descriptive quantitative data of interest. For example, among the international sample in the main study, social networking was the most popular method of advertising, followed closely by using translators' networking and advertising websites like ProZ. This example tends to confirm the idea of translators being strong networkers (in spite of their perceived solitary working style) and doing their advertising in a generally more informal and *ad hoc* manner, rather than advertising in traditional formats and in traditional media (ads in paper media, on television or radio). The nature of their job procurement is probably quite similar to that of many other small business types (e.g. plumbers and electricians) who do some traditional advertising types (e.g. sign outside their house, name and phone number on the side of their van, perhaps a small ad in tradesperson's magazine), but who get a lot of work through word-of-mouth networks and recommendations from others, or by being members of their professional associations. Membership of a professional translation organisation can be a significant aspect of being a freelance translator, as it gives opportunities for networking, sharing information and tips, and for building relations with other translators of one's language combinations, who may pass on work if they happen to be temporarily overloaded. One important difference between trades-people and translators, however, is that translation is often done for long-distance clients, as well as for 'locals'.

One important answer that we were able to show is who our participants work for. The data confirm that our main sample work for direct clients (47.8% of main-study participants classed this as their most important work type), or for agencies (47.7% of main-study participants classed this as their most important work type). Relatively few (18.1% of participants from the main study) did in-house work, confirming the general trend that has been in effect since the 1980s towards contracting and outsourcing. This independence has also given participants flexibility in terms of the hours that they work and the hours that they would like to work. Many were working what could be considered 'non-traditional' hours (e.g. 21-30 hours per week—i.e. not a 40-hour week, which is a common standard in many parts of the world, although by no means all). Moreover, many were also quite happy with the hours that they were working, not necessarily wishing to create career profiles that conformed closely to the established norms of employee work. In certain circumstances, it may be more about earning the necessary income, rather than working the socially-determined 'necessary' hours. In other words, if I, as a freelance translator, have a consistent and personally-acceptable average income from working a certain number of hours per week (again, on average), why should I necessarily wish to increase my hours in order to conform my career profile to the contextual norms? On the other hand, the nature of freelance work means that hours per week and income over shorter spans (a month or so) are often very hard to predict, and that the 'non-normal' hours that some participants indicated that they wanted were simply in response to the perceived realities of working in an environment where hours per week and numbers of jobs are often relatively unpredictable. In other words, perhaps hoping for a 40-hour week is considered to be unrealistic, given the limitations of the working environment and the flow of work that participants observe. An income from freelance translation is usually far more varied in its flow than a fortnightly or monthly wage or salary payment.

We also observed that translation technology was highly used among the main study's participants. Seventy-two percent of the participants used translation tools of some kind (this included many and varied types of software, from translation memories to electronic dictionaries), and 68% used translation memories. Given that the participants were based in mature and industrialised markets (those in which the 'localisation paradigm' is highly influential and well-established), the high usage of technology is not surprising, and is in line with recent studies (e.g. Language Technology Centre 2009:152-153). Despite the high use of translation technology, however, we were not

able to create suitable-quality regression models to predict its frequency of use, so this is an area that will need additional refinement in any further research related to its use.

One participant indicated a strong antipathy towards translation technology, indicating that attitudes towards its use are by no means homogeneous. This participant seemed to represent the other side of technology preference, perhaps the fields in which technology beyond a certain basic point (PC, internet connection, and printer) fundamentally gives no advantage (in literary and poetry translation, for example). Perhaps their opinion could be an 'outlier', or it could be symptomatic of a wider-held belief. This could be explained by Dillon and Fraser's (2006) findings, applied more specifically to translation memory usage, which show that those who use translation memories have a more positive attitude towards them than those who do not use them, and that younger translators generally had a more positive attitude towards them. We have not studied attitude towards translation technology specifically enough by age or frequency of use to make concrete comparisons here, but suspect that similar profiles would probably apply to our sample. We would expect that tool usage would be perceived positively where the benefits are simultaneously recognized, and more negatively by those who cannot see the benefits, or who consider that the cost-benefit ratio is too high.

Other findings of note were that our participants were generally quite satisfied with their translation careers, and also had high levels of occupational self-efficacy (although there is some variation in these scores, of course). They also had a moderately high level, on average, of career motivation, which was something that correlated fairly strongly with their occupational self-efficacy. More self-efficacious participants tended to be more involved with actively developing their careers, such as by improving skills, qualifications, and so forth. It was notable, though, that career motivation was not a factor which enabled us to predict participants' income, jobs per week, or other measures of performance, although some of these did show the expected correlation direction, and did come fairly close to being statistically significant.

Finally, as mentioned in the previous chapter, career motivation itself was not the variable of interest that we thought that it would be. It correlated significantly with various other psychological skill variables, and with satisfaction, but did not correlate significantly with any of the career variables, meaning that we could not use it for any work involving prediction. It would seem that in any further studies, the concept of

career involvement or motivation, as it applies to translators, would have to be re-evaluated, and a new questionnaire created for it.

6.2 Outline of the major qualitative findings

The interviews served two purposes—the first being to enrich and support the quantitative data with extra detail, and the second being to provide more description about freelance translators' backgrounds and working lives. We feel that they have made a significant contribution towards both goals, by enabling the participants to speak beyond the restrictions and limitations of the quantitative questionnaire format. This has allowed them to tell their stories in their own words, in answer to open-ended questions designed to guide but not restrict participants' answers.

In terms of the main qualitative findings, the following stand out as most interesting and important in terms of helping us to further understand the working lives of freelance translators (see also Section 5.2.3).

The problem-solving aspect of translation seems to be a particular source of satisfaction for translators, with several mentioning this explicitly. The idea of translation as a problem or challenge to be solved was the key theme. Closely related to this was the fact of being part of the process of enabling communication between different cultures, and the pride that comes with being a key part of that. Some participants felt that they were instrumental in making communication happen—the key aspect being that this communication most probably would not have occurred without their input (as a translator, although of course another individual translator could have done the job). The ability to learn in detail about a specific subject matter through a translation job was also a major theme, particularly for Participant 6M.

When discussing their perceptions of responsibility for positive outcomes, participants tended to be modest, and tended to attribute success to luck or the help of others, rather than to their own performance. One exception to this, however, was that they recognised that quality was appreciated by clients, and that this quality was something that they worked hard to achieve, and took a sense of pride in. Further, quality work provided them with a successful outcome in terms of keeping clients and gaining work through word of mouth.

Analysis of self-efficacy also showed some interesting highlights, for example the fact that as participants gained in experience and confidence, they tended to feel more

confident about rejecting work that they did not want. A very similar theme also emerged with one particular participant, Participant 6M, who with greater self-efficacy developed the ability to say no to discount rates or other specials for friends. This had apparently been a problem area for this participant.

Success was explored and defined in various ways by participants. For example, some saw making money as the major axis of success, others considered it more as client satisfaction and repeat work as a manifestation of that satisfaction. Some found satisfaction in working with their translation tools and improving their productivity and making processes more efficient. Happiness, positive client feedback, and having enough work were the major definitions of success. Various participants saw success as a personal definition, not to be imposed from the outside, but rather to be negotiated within themselves, according to the criteria that they had set for themselves. Income was also an important criterion, but certainly not the only one or even the major one.

Translator personality is a concept which has been researched to a degree (e.g. Hubscher-Davidson 2009, mentioned in Section 2.1.1.1), and we found some broad features of translator personality, although it was not a primary focus in this project.[29] The most salient feature was the division between those who could deal with isolation, and those who found it uncomfortable, and who preferred a more social type of translation. This latter group tended to be those who were doing freelancing, but also working full or part-time in the academic/teaching world. By doing this, they were presumably able to balance these two needs.

6.3 Support for the hypotheses

As previously mentioned in Section 5.1.2.15, the general findings indicate support for the overall research hypotheses, as well as good evidence for the more specific correlational and regression hypotheses.

To review, the key questions (outlined in Sections 3.1.1 and 3.1.2) that we wanted to answer were as follows:

1) does sufficient evidence of a relationship between psychological skill and professional success show itself in the network of correlations that we expect to find?

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29. One possibility for future research would be to investigate translator personality in terms of the so-called “Big Five” personality construct (Costa and McCrae 1992), which has had large influence in personality psychology in the last two decades (McCrae 2009).

2) can we use elements of psychological skill as a basis for predicting elements of professional success in translators (using regression, in this case)?

3) do the interview data provide at least general support for the statistical findings that we expect to observe?

The evidence suggests that these questions have fundamentally been answered in the affirmative, and that we have good initial evidence that psychological skill is importantly interlinked with translators' professional success. The network of statistically significant correlations and interview data recorded in Chapters 4 and 5, as well as the results of the regression models in Chapter 5, provide this evidence. The evidence is by no means unequivocal, at this point, but the general patterns indicate that future research will certainly yield more data of interest, and that our theory is worthy of being refined and further explored.

6.4 Applications of the findings and further research

Theory and practice go together—or at least we should aim for such an ideal every time we make advances theoretically, given that here has, historically, been something of a divorce between translation theory and translation practice (Chesterman and Wagner 2002).

In this section, we attempt to set out the practical consequences and possible applications of the theoretical work that we have done in this thesis, and to link this to possible research projects aimed at future theoretical development. The reason why we have included both applications and further research together is that we consider them difficult to separate, for the following two reasons. The first is that we believe that suggestions for application should preferably be accompanied by some form of quantitative analysis of their effectiveness within the particular context in which they are applied, which would also present an opportunity for increasing understanding of the nature of translation competence and psychological skill. It is easier to discuss ideas for further research on the applications while discussing the applications themselves. The second reason is that the findings here still require further refinement, and similarly to the first reason, they should be tested for their effectiveness in application. In conclusion, the reader can keep in mind that each suggestion for application simultaneously represents a possible field for further research efforts. Given this, let us explore some possibilities for further development and use.

An important issue to consider, before we begin detailed discussion, is the context within which modern translation activity finds itself. The translation industry has only relatively recently become formalised in terms of academic training for students and formal qualifications. Before the 20th century, it was a largely scholarly activity, done by those who were in official or academic posts and those who were highly literate/educated, who tended to do it using their own specific methods, with their own specific theoretical foundation. As Wilss (2004:777) points out:

> [T]ranslation practitioners were rather hostile to scientific norms; […] they saw their task as the benign systematization of their own methodological approach against the backdrop of domain-specific principles that they were eager to defend.

This indicates that translation was traditionally a rather individualistic and personal activity, both pragmatically and theoretically.

However, particularly after the Second World War, this changed to a more industrial and standardised approach, brought about by larger quantities of material needing to be translated, and by the demand for formally trained translators and interpreters. The general expectation in the last decade or so has been that a self-respecting freelance translator should have either a tertiary degree in language or linguistics, or preferably in translation studies itself, or alternatively have a good number of years of industry experience (which may make up for a lack of formal qualifications). Sometimes both are expected.

Parallel to the increasing professionalisation and standardisation of the translation industry has been the increase in the use of computer-based translation tools, and the time-related demands that the localisation 'work template' has put upon translators. This has meant the increased prevalence and discussion of concepts such as standardisation and workflows in translation—which raises some questions. Might it be logical to pre-test translators to see how well they fit into such a working environment? If such testing were done, what would it look like? What about having translators test themselves? Can aspects of psychological skill be taught in translator training institutes? If psychological skill were considered an important part of translator competence as a whole, what implications might this have for translator training and selection? What about ethical issues?

We discuss possible answers to these questions in Section 6.4.2 and its subsections. But first we briefly look at the idea of 'soft skills' (which has its origin in business and

organisational studies) and how this may provide a complementary framework for explaining the potential importance of psychological skill.

6.4.1 'Hard' skills and 'soft' skills

One of the important implications of the findings in this project is that the so-called 'soft skills', which probably include psychological skill, have a potentially important role to play in translation work.

Soft skills are defined as interpersonal skills or emotional skills (e.g. Hoffmann et al. 2010), and are seen as distinct from 'hard' skills, such as experience and technical ability (e.g. Joseph et al. 2010). One definition (Azim et al. 2010:392) is that:

> "hard" skills in the PM [Project Management] context generally refer to processes, procedures, tools and techniques, where as the "soft" skills refer to dealing with human issues, i.e. the "people" part of the project.

Soft skills have also been related to the concept of emotional intelligence, or EQ—Emotional (Intelligence) Quotient. This concept is an attempt to measure how well people interact with others in a social/network environment, and also attempts to expand the concept of IQ, Intelligence Quotient, which recently has been considered as a limited description of the total sum of intelligence, although its precise definition has been difficult to pin down (Cherniss 2010).

This division between hard and soft skills describes the differences between what is usually considered as 'classical' translation competence, and our extension of psychological skill, which could be considered as a 'soft skill' in its broader sense. Another way of considering psychological skill could be to borrow a model from project management—the *people, product/service, and process* model, in which the *people* component is considered to involve soft skills, which project managers need in order to manage well (Azim et al. 2010). This model suggests that these three fundamental components interact within any project. The authors focus particularly on complex projects, but the basic model could be applied to a translation project also.

More traditional models of translation competence, as outlined in the introduction, have tended to focus on the *product/service* (translated text quality) and *process* (efficiency and accuracy of translation and its associated research). As described in the introduction, the *people* component has tended to be regarded as important, but implicit. Our current

research helps us to understand more about issues that affect the *people* component, and which can also affect the outcome of the process and the product.

An example of the hard versus soft skills theory in action is a study by Joseph et al. (2010), who have investigated the hard and soft skills of business school graduates in Europe. Employers generally stated that they wanted the soft skills as much as they did the hard skills, to form what they considered a complete package. The one problem here is that soft skills are defined quite generically, and often not clearly, as communication skills, as team-work, and as innovative thinking. All of these could potentially be considered as part of psychological skill, but our model is much more specific, while the soft skills components are quite general and can change depending on how they are defined and who they are defined by. This lack of precise operationalisation and clear definition appears to be an issue in the soft skills literature, despite its descriptive utility.

Schulz (2008) discusses the spectrum of soft skills as including some aspects that are broadly related to psychological skill. Project management and self-management are two of these aspects (perhaps as analogues or effects of a combination of self-efficacy and locus of control), and both are particularly important for those working on their own, without someone to supervise them. Schulz indicates that graduates often leave training institutions with an incomplete skill-set. That is, they have the technical, declarative and procedural knowledge that they need to begin work, but often are deficient in soft skills. This is not necessarily due to any fault of theirs, but because these skills are not emphasised during their training and are not considered particularly important, or are taken for granted. Schulz argues that soft skills are required in addition to hard skills and that they are not an optional extra.

The main point here for us is that the soft skills theory may provide a good parallel framework for understanding the important place of skills other than procedural or technical skills, in a work environment.

6.4.2 Applications and further research in industry, training, and education

Given the data that have been collected, how might we be able to apply them to the translation industry and to translator training? What steps would need to be taken?

The first step should be to refine and improve the results that we have found here. One way to do this would be to re-perform the current study with a larger sample and with other refinements, such as improved questionnaire wording. In doing so, we could

achieve greater stability of the statistical data and sensitivity for tests using it (as explained in terms of statistical power in the previous chapter). There would also be the added benefit of having larger numbers of complete cases (i.e. without missing data). Then we would be able to perform the tests on internal reliability (see Sections 4.1.1.3 and 5.1.1.3), to make sure that question items were of good quality. The items that were most effective in predicting, say, income and job satisfaction could then be used in a questionnaire for new translators. Factor analysis could be done on the various components of the questionnaire, to try to refine concepts to single factors, where possible. The question items in the psychometric parts of the questionnaire, as part of this process, could be made more specific to translators, although this would also have the disadvantage that results might not be directly comparable to results from more general work-related psychometric instruments.

Once the tests themselves had been refined and improved in quality, translation agencies or even training institutions might be able to use the questionnaire to collect data on the attitudes and beliefs of new translators, and use these to predict how successful they might become, perhaps by using the type of regression analysis that we have used here. This would basically help the students[30] or new translators to see how well their personality might fit to the demands of the job. As a side-effect, the use of psychological skill scores in such a manner may potentially have a positive impact on public perceptions of the translation industry, as it may be seen to indicate that the industry is becoming more professionalised and self-regulating, and interested in improving the 'quality' of its workers, and thus the quality of their output. However, there would also be potential negative issues in the use this methodology (see Section 6.4.3), and we would strongly suggest that this performance-predictor approach should not be used on an industry-wide magnitude. The reasoning is that there are highly likely to be more aspects of translation performance than just 'traditional' translation competence plus psychological skill—but only further research will uncover exactly what these are.

Extending and integrating the research in terms of translation competence models would also be beneficial, especially using such designs as would assess the interactions between psychological skill and the 'classical' translation competences. As discussed

[30] In this section, by 'students', we mean those who are attending some form of professional development, be it a one-day development seminar, or a whole degree in Translation Studies. Additionally, students have many different levels of translation experience, so *student* here is by no means a synonym for *neophyte*.

previously in Section 6.1.1.1, integrating with existing models of translation competence, such as PACTE's (2003), would be a possibility. Other models of translation competence could also be extended to include more emphasis on the motivation/psychological constraints aspects of our findings, and try to integrate these with other metrics of translation competence, such as target text quality, translation speed, task difficulty, and so forth.

One major question concerning further research is this: To what extent would teaching aspects of psychological skill actually help to improve performance? There are a number of different arguments related to this. We could argue that the concepts are too vague to be actually useful in helping translators. Do most people care about the less-obvious aspects of job performance, when there is still so much to be done concerning more traditional approaches to understanding translator competence? As evidenced by the review of translation competence research in the beginning of this study, there is much more emphasis on the text-production aspects of competence, rather than on less tangible issues.

However, there is good evidence from other research fields that changing aspects of psychological skill does actually improve performance in various areas. For example, depressed people can be helped by attributional retraining (Laird and Metalsky 2008), people can be induced to start taking active steps to reduce their consumer debt (Main, Wei, and Fischer 2008), interviewees can be helped to explain job interview failure in more adaptive ways (Jackson et al. 2009), and amateur sportspeople can be helped to make more positive explanations for mistakes while learning (Rascle, Le Foll, and Higgins 2008). Sports psychology is an area particularly rich in research on the effects of attributions, and on attribution retraining. In other areas, Wolinsky et al. (2010) observed that elderly people could be assisted to gain a more internal locus of control regarding their sense of management over cognitive reasoning and speed of information processing. Locus of control has also been modified regarding risky practices related to HIV/AIDS contagion (Gwandure 2010). Similarly, in the area of self-efficacy, Mitchell and colleagues (1994) observed that participants working with an air traffic control simulator had their initial performance predicted quite well using their self-efficacy scores, but once they had a performance record, other aspects, such as goals (which would be influenced by locus of control), became more powerful predictors. Shea and Howell (2000) present similar findings in their analysis of self-efficacy and performance feedback loops. Would the same apply to new translators? We would

suspect that it would probably be so, but research based specifically on translators would help to answer this question.

6.4.2.1 Applications for self-assessment

One of the primary potential uses for the data could be that translators themselves could assess their own psychological skill, which would give them guidance on what features their career would need to have to sustain them in terms of encouraging their strengths and supporting them in their weaknesses. Self-reflection and self-analysis are good opportunities to look at personal strengths and weaknesses, and consider how to improve them.

We suspect, based on the data from our research, that having a solid theoretical awareness of psychological skill factors would be particularly helpful for translators in the early stages of their career. As we saw with a statement made by Participant 4M in Section 5.2.2.3—regarding how they would attribute responsibility for negative results—having an awareness of such factors may make a significant difference between maintaining a certain sense of wellbeing versus engaging in negative self-blame in a situation which could be considered a 'failure'.

Additionally, having awareness of what effects locus of control beliefs can have may also influence how translators behave. They may realise that they in fact have greater or less control than they initially thought, depending on their prior beliefs in this area.

However, self-assessment has its limitations. One of these is simply lack of opportunities for contact with the idea of psychological skill. The other is that some people simply do not see the point of thinking too much about theoretical issues, because they tend to be strongly pragmatic. In these cases, presenting the theory within an educational setting would have potentially greater effect, allowing them to see the theory in context, in an environment in which most people are naturally more open to integrating new ideas. We believe that including the idea of psychological skill as an important part of translation competence in this way would allow it to be presented in a manner which would integrate well with teaching the other competences necessary for translators.

6.4.2.2 Applications and research in education

Here, we mean education in the broadest sense, not just in terms of translator training programmes or institutional qualifications, although these are the focus of discussion here. What we are particularly interested in is how early-career translators (in their first few years) might react when educated or informed about the effects of particular attitudes and beliefs, and how these might affect their work. How might these translators be affected if they became more consciously aware of how explaining success and failure affect their emotional states, and how their perceptions of control might affect their future attempts at particular tasks?

Psychological skill data itself could be used in a number of ways within an educational setting. Training institutions might wish to gain some insight into the psychological skill of their students, with a view to addressing these by including relevant material in translator-training sessions. For example, if some students show particularly undesirable combinations of traits (e.g. very low self-efficacy, highly external locus of control, strongly negative attribution style), then this might be mentioned to them, perhaps in order to help with remedial work. This remedial work would have the aim of helping students to understand that their particular combination of attitudes was less than ideal, and help them to understand why this is so. There would be two elements to this, the first being education on what psychological skill is and why it is important, and the second being how it might be changed for the better, particularly among those with a particular 'high-risk' combination of characteristics (as mentioned above). At the same time, educators would have to be aware that it would not be unusual, for example, to find a student with low self-efficacy towards translation (given that they sometimes have very little experience at that stage), and an external locus of control regarding it (given that translation is a new experience for many of them, and they are therefore often not used to manipulating the tools, texts, and processes used during translation). A negative attribution style, on the other hand, may manifest itself more generally in other areas of life, and could be the most important issue to focus on at the early stages of teaching. Educators would also have to distinguish between low psychological skill in translation procedures themselves, and low psychological skill in the peripherals of translation, such as marketing, networking, continuing development, time management, and so forth. Often these latter skills are not taught as part of traditional translator training courses, or are alluded to relatively indirectly. This in itself may affect attitudes towards such peripheral but vital tasks, once the freelance translator has left the training

institution and begins work in the field. Increased training in *how* to be a freelance translator after leaving the training institution may also have the added benefit of not just increasing practical understanding about how to run one's own translation business, but also increase psychological skill levels around running it (see Section 6.4.2.4 on mentoring).

Actually teaching aspects of psychological skill could take a number of forms. Awareness could be taught by presenting a summary of research on how the components of psychological skill affect people, by summarising research from psychology on the individual factors. These could then be modelled and explained as theory to the students. This, at very least, would provide them with a conceptual understanding of how the psychological skill mechanisms work in all of us.

An example of an effective training approach was used in Gwandure's (2010) study of HIV/AIDS and risky behaviours among South African university students, mentioned previously. As Gwandure states, regarding his methods of locus of control training (2010:199):

> The training techniques included small group discussions, role plays, HIV and AIDS peer information sharing, experiential learning approach, and discovery learning through HIV and AIDS-related games. Participants were involved in leaderless group activities. They initiated the entire learning process after getting learning cards with key social learning points from the facilitator. The researcher gave them information on social learning principles regarding locus of control, social systems control, self-control, fatalism, achievement-oriented behaviour, deferment of gratification, personal values and expectancies, and social alienation. Participants engaged with the principles and how they applied to health risk reduction. They discussed how the principles could be applied to reduce locus of control-based health risks and HIV and AIDS.

This method provides a possible model of how psychological skill could be presented and explained in a translator education setting. Naturally the subject matter of psychological skill is rather less critical to survival than HIV/AIDS, but the methods could possibly be similar. These particular methods were also effective, as Gwandure (2010:189-194) found that most participants had a more internal locus of control after the programme (measured at both one month and three months post-programme), which generally affected both those with an external locus of control and those with a more internal locus of control. In other words, most participants indicated a significant reduction in risky behaviours as measured by an HIV/AIDS risky-practices scale.

Gwandure considered these findings as evidence that the programme's effects were relatively stable.

Looking at possible teaching methodology related more closely to translation, González Davies and Scott-Tennent (2005) suggest a socio-constructivist approach (in their case to the problem of cultural references in a text), with some concrete suggestions that could be relevant for teaching aspects of psychological skill:

> – Knowledge is not put across only by the teacher, but is also constructed and reconstructed by the students according to their previous knowledge, (transformation vs. transmission);
>
> – The students build their knowledge not only through self-study, but also through social interaction; (González Davies and Scott-Tennent 2005:169)

The components described here have strong parallels with the psychological skill construct. When applied to education, the fundamental philosophy concerns collaborative learning (e.g. as argued in Kiraly 2003) combined with students' own experiences, to provide an alternative to the traditional transmissionist 'read and translate' teaching method (González Davies 2004:11-12). Additionally, one of the key aspects of such an approach is that emotion is recognised as important to learning outcomes—the idea that affect affects acquisition.

González Davies (2004:216-217) suggests some areas related to psychological skill that translation students can work on in an educational setting, as part of translator training. These were *attitude*, which she defines as "the emotional and psychological aspects that will help in the students' professional advancement", and

> the translator's subjectivity, […] directly related to intrapersonal and emotional intelligence: knowing one's strong and weak points and using one's personal and professional background to advantage. Motivation and the willingness to be flexible and open-minded will certainly influence professional success as well.

Another aspect of González Davies' work that is applicable here is her three-part model of translator teaching, which involves function-based, process-based, and product-based approaches to teaching translation (2005:74). The teaching of functions involves the *why*, *where*, and *when*; process involves the *how*, and product involves the *what*. This model also shows parallels with the major areas of translation research, particularly the process research mentioned in the introduction, while more traditional approaches to translation have tended to be interested in the product—i.e. a good quality target text (Bassnett 1980 [2002]:13). Given this changing focus, there are greatly-increased possibilities for different approaches to teaching. Process research, described in Section

2.1.1.2, is a popular source of empirically-based ideas for teaching. There are also other theoretical angles. For example, Colina (2003) takes an approach to teaching translation that is based on functionalism—that is, the purpose and aim of a translation and of the translation process.

The broadening of the way in which translation is understood through approaches like this, both as an outcome and as an activity, allows for a potential multitude of teaching models, which we believe should be founded on collaborational and social-constructivist principles of teaching (e.g. Kiraly 2000; González Davies 2004). In other words, the teacher presents the 'bones' of an idea or a basic framework for guidance, and the students elaborate on that idea, building on it via group discussion and sharing, and from inclusion of their own experiences that they bring to the classroom.

Using this approach would have the advantage that class participants would be presented with the fundamentals, but would learn and absorb them in their own way. They would also have opportunities to model each other, or to hear about experiences in other participants' histories, particularly if one participant had particularly well-developed psychological skill in any particular area. One method of doing this kind of teaching based on peer modelling is through collaborative translation projects, which we discuss further in the next section.

Another method of training that would be relevant would be the workshop-type training programme, in which professional translators would attend training sessions during which aspects of psychological skill would be taught and explained to them by tutors. This could be presented either as a dedicated workshop, or as part of a larger programme devoted to assisting translators with the transition into a freelancing career (such as the Institute of Translating and Interpreting programme, explained below). This is where education begins to overlap with mentoring.

We would recommend that all such teaching projects, as described here, involve some pre-project/post-project measurement of psychological skill, i.e. using a longitudinal design, to observe if it changes during teaching sessions. This before-and-after data could be used, along with student feedback, to refine and improve the manner in which material was presented to students. Such methods could also be integrated with measurement of more traditional metrics of translation competence.

6.4.2.3 Applications and research in partnerships between education and industry

There is a second group of possibilities for applying and researching the improvement of psychological skill, while simultaneously addressing the need for development of translation competence as it is more commonly understood. This section looks at some possibilities for use within formal educational settings, but using links with 'real world' translation projects.

Collaborations and project work involving translation jobs from businesses and organisations external to the educational setting have the potential to improve psychological skill as well as increasing student understanding of the processes involved in running a translation business. For example, students can work on a project which will be published, and the project structure can closely simulate how a normal paid job would be performed. Emphasising to students (when they successfully complete the project) that they have worked on something which is similar to a professional project would have a number of potential benefits (see Schmitt 2009 for an excellent example of an extra-curricular translation project undertaken by translation students). These include improving technical skills, gaining a greater understanding of the market, and gaining self-efficacy by overcoming real challenges. As Schmitt (2009:81-82) mentions:

> Throughout the duration of the project, students always assured me how much they appreciated being part of this authentic learning experience, in spite of (or even because of) all the little setbacks and the small and large problems that everyone involved had to overcome. They expressed how much the project had built their self-confidence to succeed in the translation market.

Related to another practical translation project between training institute and external organisations, in which students gradually took over the management of the exercise, Baumgarten, Klimkowski and Sullivan (2009:57) note that "[s]tudents learned about time management and editing and built confidence in their own abilities".

González Davies has also used these kind of practical projects (2004:218-223). Two of these involved translating a calendar for a non-governmental organisation (NGO), and translating children's literature. In this project, students were able to apply the emotional and psychological aspects mentioned in the previous section to work in a real translation project. This enabled them to gain experience with negotiation, project management, and many other aspects in addition to actual translation. These kinds of projects are extremely valuable in terms of allowing students to develop their

psychological skill in a relatively controlled and safe environment, rather than being 'dumped on the market' with no preparation.

These observations and approaches suggest that if occupational self-efficacy can be encouraged to grow while students are still in the relatively protective environment of a training institution, this provides the advantage of allowing them to deal with challenges in a constructive way. Additionally, when problems arise, they are able to get guidance relatively easily from tutors and peers, which will most probably in turn increase their self-efficacy, particularly around negotiation and communication. Students who have been through such a process are most probably better prepared (in terms of psychological skill) than those who have not. This is certainly an issue that would be worth researching quantitatively, again perhaps using a longitudinal design, with the aim of measuring possible improvements in students' psychological skill, at least in terms of self-efficacy.

Focusing on attribution style, slightly different exercises could be developed and researched, which would revolve around quality control feedback and how to respond positively to it. Positive responses involve dealing proficiently, gently and accurately with suggestions for improvement or client complaints, but are also about protecting our professional ego from unjustified harm. This is, we consider, a vital skill for modern translators to cultivate.

In the first place, professional translators often suffer from a lack of clear, constructive, and frequent feedback. For example, Fraser (2000) conducted a survey of 296 freelance translators in the United Kingdom and found that only 17% of these received "automatic" feedback on quality issues in their work. Nor is there any particular evidence to suggest that this figure has changed in the last decade. Often when feedback *is* received, it is strongly negative. As Fraser (2000:58) states:

> A number commented that feedback was an important quality tool, enabling them better to evaluate future work before submission and hence increase client satisfaction, yet if feedback was given at all, it was overwhelmingly negative, with client satisfaction going largely unremarked. Worse still, despite feedback being a crucial indicator of their competence in relation to a particular job, translators often felt unable to ask for it. One commented that "there is little idea of the need for feedback, and if you ask for it, that may be interpreted as a sign of doubt".

One way to address these issues in the professional context is the development of feedback principles as part of quality control criteria. The Directorate General for

Translation of the European Commission has recognised this as a sufficiently important issue to include it in their quality control guidelines (Directorate General for Translation 2009). Key among the 22 points of their programme is the issue of feedback to help their contractors to improve their output.

Translators themselves can also arrange for feedback to be provided as part of the contract of service, such as those contracts based on the old DIN 2345 standard, now replaced by the EN 15038 quality standard. This standard provides an international benchmark within the European Union (and several other countries in the region) covering the process of translation service provision. With reference to translation service providers (TSPs) working with the standard, Heaton (2008:58) suggests the following:

> A TSP should have procedures in place for wrapping up a project. This covers post-delivery: archiving, follow-up and assessment of client satisfaction. Again, this points to the larger need for good communication. Project "postmortems" are effective means by which clients and TSPs can discuss the good and bad aspects of a project, which will lead to future improvements.

Whatever the contract, with good feedback criteria in place, translators can be given more regular and consistent feedback.

Within their educational opportunities, they can also be taught about attribution style and how it affects how they respond to feedback, both negative and positive. Having a greater theoretical understanding of the importance of responding constructively to feedback should be an advantage to freelance translators, and this could be reinforced using various exercises, which we will look at now.

There are a number of possible projects that might be suitable. For new student translators, working with local companies and organisations on either paid or unpaid[31] projects could be a good option (both of these project types have been described in other publications (Baumgarten, Klimkowski, and Sullivan 2009; Schmitt 2009)). Similarly, working on projects for non-governmental organisations (NGOs)[32] can benefit both parties in the transaction, in part because commercial time pressure is often not so great with these types of organisations. Projects involving internships within a translation agency might also yield good results, if managed well. In such a situation, a student

31. These projects should be structured carefully so as to avoid the charge of student exploitation (e.g. Malik and Syal 2011).

32. Traducteurs Sans Frontières/Translators Without Borders (http://www.tsf-twb.org/) does this type of work. Translators at TSF/TWB are volunteers.

translator or translators can receive feedback from the editing/checking team and practice responding positively to that feedback, as well as improving their translation skills.

Collaborative work (i.e. teamwork) on any particular project is also an option (e.g. Kiraly 2005; Gaballo 2008; Huertas Barros 2011). This would involve a project to be translated, with various parts being given to individual students within a group. Collaborators could be entirely within the educational setting, or could include others from the professional world, perhaps an experienced freelance translator donating time to help with new student translators' development. This would reflect a kind of practical mentoring by a professional of a group of students. As well as offering practice in terms of translating part of a text in isolation (which is a commercial reality at times), it would provide practice during the post-mortem stage, in which general feedback could be given to the group, along with tutor-guided criticism and responses among group members regarding each others' work. A visiting professional translator providing feedback could also be an option in such a project.

Such exercises could, for example, involve simulating both negative and positive feedback situations, as well as classroom practice dealing with hypothetical situations, with the specific aim of helping to foster a positive attribution style and to understand its effects. This could move on to responding to course-work assignment feedback, and in turn responding to feedback given on work done for external organisations in the manner mentioned in this section. This need not necessarily involve discussions with the sources of the feedback (particularly if it is external), but perhaps practice in small groups, or with the tutor leading and guiding classroom discussions. The fundamental idea would be to practice dealing in a constructive manner with feedback, either negative or positive, until constructive responses to criticism become more automatic.

The great advantage of a collaborative project for an external organisation would be that students would be dealing with real feedback on a real job that they have done themselves. The external partners in such projects could be asked to provide realistic feedback, concerning both strengths and weaknesses of the translation. This feedback in itself could potentially be used as part of a text revision exercise, as well as being an opportunity to work on students' attribution style.

Learning to deal positively with feedback could also have the benefit of helping to internalise locus of control, because students will be able to observe that they can

actually influence future contact with clients by responding positively to the feedback that clients give, therefore encouraging clients to return for further work.

Naturally, research involving such exercises would yield a lot of interesting data, not least because these types of exercises are relatively new within the framework of translation studies institutions (Schmitt 2009:82). Research on elements of psychological skill could form just a part of a larger research project, which might also involve measures of text quality, translation turnaround, client satisfaction, and related metrics.

6.4.2.4 Applications and research in mentoring

The third major area for applications and further research is mentoring, and how it relates to translators. This is where a more senior (that is, more experienced, not necessarily older) professional helps out a junior person starting out in their work. Mentoring can be done within an organisation, or among freelancers, and it can be formal (a 'buddy' system, for example) or informal. Mentoring has been associated with increases in both subjective career success (satisfaction, for example) and objective career success (income), with small but consistent effects observed in meta-analyses (Allen et al. 2004; Eby et al. 2008). Additionally, Eby and colleagues have noted that mentoring not only provided positive career outcomes, but also health benefits (reduced stress, etc.), increased motivation, and positive attitudes. They hypothesise that "protégés will develop positive attitudes toward the activity that they engage in with their mentors" (Eby et al. 2008:256). This is not further defined in their work, but it could easily include self-efficacy, constructive attitudes towards both positive and negative events, and so forth. It does seem to presume that the protégés will have or develop positive affect towards their mentors, which would strengthen the bond. Again, the benefits of mentoring relationships could be included as part of a study further investigating aspects of psychological skill, perhaps with participants being measured periodically.

A working mentoring relationship can be brought about in a number of ways. A new translator can sometimes organise a mentor in a formal manner, such as through a professional association—like the Institute of Translating and Interpreting (ITI) Professional Support Group programme (Institute of Translation and Interpreting

2011).[33] The ITI PSG programme is a 14-week online course (based in the United Kingdom, but obviously allowing anyone with an internet connection, based anywhere, to participate). It allows new translators to gain experience alongside more senior translators in many aspects of the industry. Specifically, the ITI offer instruction and advice for those making the switch from in-house translation, or from 'para-translation' (what we mean here is translation as a firmly secondary or minor activity) to freelance translation with the aim of earning a living. Their areas of focus are:

> - [P]resenting yourself through a CV
> - quoting and invoicing for a translation job
> - making sure your invoices are paid
> - finding the specialist subject that is right for you
> - communicating with clients by telephone
> - working with translation memory
> - choosing business tools: hardware, software, office equipment
> - drawing up a marketing plan
>
> (Institute of Translation and Interpreting 2011)

They place this programme within the framework of continuing professional development (CPD), which is the idea of further developing skills based on those that we already have (in other words, staying current or upgrading ourselves). As mentioned, the course is provided online, and this may have advantages and disadvantages, which would be relevant to help us understand how such programmes may benefit new translators. Another aspect would be to investigate how attitudes might differ between those (at similar stages of development) who have done the course, and those who have not.

It is interesting, and certainly not unexpected, to note that the focus of the course is on practical issues. The effect that such a focus would have on translator attitudes would be the main point of further research in this area. For example, is there a concrete relationship between having completed the course and having higher levels of self-efficacy? We would expect so, along with having a more internal locus of control in these areas. What about the fact that the course is online? Would that have an effect in terms of the potential remoteness of contact, or would dealing either by phone or in

33. Incidentally, the American Translators Association did recently offer a mentoring programme at one point, but it was inactive as of late 2011 (American Translators Association 2011).

person with tutors (such as in a workshop setting) increase the course's efficacy in helping translators to develop more positive attitudes?

Returning to the general discussion of mentoring, and focusing on the informal side, a new translator may simply be able to establish an informal relationship with a more experienced translator, who would be able to advise and assist them with their career establishment. This relationship could take many forms, such as advising on work and payment procedures, how to do networking successfully, and so forth. Mentors may also help with less tangible aspects of career development, such as increasing confidence, helping translators deal with isolation, cultivating an internal locus of control regarding time-management, and other social-emotional issues.

Some of the other advantages of a mentoring relationship can be that mentors and juniors can help each other with work overflow and overload. Once trust levels build up and each can see, based on their shared history, that the other is competent and reliable, then work can be shared during busy times, which helps each translator to be able to accept more work. This kind of mentoring relationship could be considered as going beyond what is traditionally thought of as mentoring, but it would have the practical advantage of giving some tangible economic and social benefits to both translators.

In a final word on the subject, the US Government's Labor Statistics Bureau recommends mentoring in its Occupational Outlook Handbook for 2010-2011:

> Whatever path of entry they pursue, new interpreters and translators should establish mentoring relationships to build their skills, confidence, and professional network. Mentoring may be formal, such as through a professional association, or informal with a co-worker or an acquaintance who has experience as an interpreter or translator (2010:342).

They include these comments in the section about getting started in the translation career, and methods of gaining experience and skill.

6.4.2.5 Possibilities for career profiles based on levels of psychological skill

In the previous sections, we have discussed some possibilities for helping to improve aspects of psychological skill. What possibilities might exist for those who cannot easily change their levels of psychological skill, for whatever reason? Sometimes, in cases like these, it may be easier to change the working environment or the career trajectory than to change aspects of oneself. Looking at the three basic structures of psychological skill, we discuss some possibilities for general recommendations, based on the findings of our

current research project and on the general structures of self-efficacy, locus of control, and attribution style (as discussed in Section 2.2).

Firstly, those with a highly external locus of control might do best to either work within a system in which others provide them with work or do any active marketing, as their own external locus of control may influence their behaviour—given that they do not strongly believe that taking active steps will lead to the desirable outcomes of getting more work and getting paid. Such a translator may in fact be better off having an in-house job (although these are now rather hard to get) or by working exclusively for agencies, during which (from their point of view) work arrives 'of its own accord', and what they mostly have to focus on is actually *doing* the translation, rather than also doing the marketing and networking and other activities that usually accompany the direct-to-client freelance translator's work.

Secondly, an attribution style that is of a certain nature may also indicate whether a translator might be best to do freelance work, or at least what type of work they might specialise in. In other words, those with a highly 'negative' style (i.e. blame themselves for failure, attribute their success to luck) may find the pressure eventually too hard to bear, and may end up wishing to quit and do work which is less evaluated by others than translations often are, which often come into the public eye and are therefore subject to scrutiny and criticism. It is possible that these traits could become stronger in the absence of communication with others in similar professional situations. In other words, talking to other translators about their situation may help freelance translators with a negative attribution style to see more clearly that negative events are not always their own fault. This is one of the major reasons why attending professional association meetings or having a mentor can be beneficial, in order to gain a wider perspective. Those who have a tendency towards a negative attribution style could be recommended to get more frequent contact with other freelancers who might be able to help them to balance their attributions, either explicitly or by modelling others' successful behaviour styles.

Thirdly, those with low self-efficacy might also find it easier to deal perhaps with an in-house job or agency work to start off with, which provides a slightly more protected environment. This environmental protection could also be provided by a mentor, who would help them to develop their skills and confidence beyond that of the basic translation competences (i.e. linguistic, research, and cultural skills needed to do the actual translation job). This would be a chance for translators in such a position to allow

their confidence in themselves to grow in a supportive environment, rather than be exposed to shocks while working on their own—those shocks possibly damaging their self-efficacy to critical levels. Benevolent agency project managers who provide constructive and affirmative feedback could also be helpful in this situation (although they are often rather short of time, and we cannot always pick and choose who we deal with!). We see in Figure 5.16 that self-efficacy is positively correlated with both age and years worked in translation, so it seems that it grows naturally as time passes. The important issue, in that case, would be having enough self-efficacy so that any shocks during one's early career do not lead to the translator quitting their profession.

6.4.3 Potential issues in applying the concept of psychological skill

There would be, of course, some potentially negative issues in any application of testing regimes to freelance translators (discussed previously in Section 6.4.2). If badly managed or carelessly applied, it may contribute to what various authors have labelled as the 'marginalisation of translators' (e.g. Leech 2005), and lead to those with less than ideal scores being discouraged or denied work. As mentioned earlier, we strongly believe that such an approach would lead to negative consequences for potentially good translators, and that the full set of predictors of the criterion of good translation performance consist of a complex set of skills and situational aspects (witness the quantity of research on translation competence, described in the second chapter). Psychological skill is part of this complex, but is not its entirety.

One primary reason for caution in questionnaire application is the fact that even the most refined psychometric instrument cannot capture all the subtleties of human nature and skill. Marais (2008:473) argues the point clearly:

> It is precisely because problems at work are uncertain, unique and laden with value conflicts that answers that were derived in neatly structured disciplinary settings or with narrowly defined technical tools do not suffice.

What he refers to here is translator practice and the conflict of teaching rules for translator practice versus the reality of uncertain problems, but the basic argument can apply equally to the idea of 'weeding out' or discouraging potential translators based on their psychological skill test results. Such an action would not take into account the full nature of translation competence, of which psychological skill is but a part.

The Society for Industrial and Organizational Psychology (SIOP) lists some of the advantages and disadvantages of applying the results of psychometric tests. The section most relevant to our current research is that of personality tests, which include a broad range of types, concerning which SIOP (2011) has the following to say:

> Some commonly measured personality traits in work settings are extraversion, conscientiousness, openness to new experiences, optimism, agreeableness, service orientation, stress tolerance, emotional stability, and initiative or proactivity. Personality tests typically measure traits related to behavior at work, interpersonal interactions, and satisfaction with different aspects of work. Personality tests are often used to assess whether individuals have the potential to be successful in jobs where performance requires a great deal of interpersonal interaction or work in team settings.

There are some specific disadvantages that SIOP lists concerning such personality testing instruments:

> * May contain questions that do not appear job related or seem intrusive if not well developed.
>
> * May lead to individuals responding in a way to create a positive decision outcome rather than how they really are (i.e., they may try to positively manage their impression or even fake their response).

This relates to our research in some important ways, especially given that a few participants felt that some of the personality questions were not directly relevant to their work as freelance translators, and that some questions seemed tailored to organisational work, rather than freelance work (which of course they were, given that minimal changes were made to questionnaires that were designed for traditional organisational employment). Some participants felt that questions seemed to be angled in a certain direction (e.g. a lot of emphasis on luck as the perceived cause of outcomes), and others felt that some specific questions were not relevant to them at all (these issues are to do with the perceived face validity of the questionnaires, as mentioned in Section 3.2.2). It may also be that if results are considered to have important ramifications for the future, then participants may try to respond in a favourable way, rather than being completely honest and open with their answers.

Another potentially negative issue is that using psychological skill scores at the start of a career may lead to erroneous conclusions. Given that we cannot be sure, at least yet, of the causal directions involved (does psychological skill cause successful performance, or is it the result of it?), nor their strengths, it would be a mistake to place too much emphasis on such scores before a translator has started working freelance and built up

some experience. There would certainly be a range of scores among new translators—some would feel confident, others less so; some would feel a sense of control over their decisions, others would feel more at the mercy of the market's decisions—these may lead to more active or passive approaches to marketing, promotion, problem-solving, and so forth. The main point is that these scores may not be stable in the longer term. Experience almost certainly affects such scores, and the profile of a translator who has been working for several years may be quite different from that same translator when just starting out professionally (we see this in the correlational data, in terms of the number of significant correlations with age: six of them). This is where longitudinal research would have so much to offer in terms of shedding light on this process of change. We can predict income based on occupational self-efficacy (part of psychological skill) in a one-time test, but how would the predictive power change over time? In other words, does occupational self-efficacy contribute a significant part to a regression model predicting income a year or two years later? Some of the ideas for application presented previously, would, if accompanied by appropriate research, help to answer these important questions.

In summary, we feel that the best way in which results might be used from tests of psychological skill is the identification of weaknesses which could potentially make working as a translator more difficult than it needs to be, rather than trying to identify characteristics that could be used to suggest that test-takers consider a different career. This would be a positive and progressive application of the results. A negative application might discourage someone who would actually make a good freelance translator, with a little help. This philosophy also acknowledges the nature of translation as being an art as well as a science, and that there are many different approaches to working as a translator. To emphasise, what must be avoided at all costs is the situation in which someone is technically an excellent translator, but is discouraged from pursuing their skill because of less-than-ideal psychological skill scores. We believe that the fundamentals of psychological skill can be taught (research in psychology mentioned elsewhere in this thesis strongly suggests that they can be) and that each individual can boost their self-efficacy (which, as we have indicated, usually grows organically with experience). They should also be able to change their locus of control and attribution style, particularly once they become conscious of how these operate in affecting them and their work. Augmentation and self-assessment of existing strengths,

rather than selection or elimination based on weaknesses, should be the ultimate purpose of any measures or discussions of psychological skill.

6.5 Weaknesses in the current project

There are always a number of weaknesses in any study, partly through lack of space (even in a PhD thesis) in which to elaborate on the many inter-related aspects that can influence the final conclusions, and partly through inability to use as wide a range of methodologies and research strategies as would be ideal, given the assumption that explaining the data and reaching similar conclusions through different methods is a good research principle.

To elaborate, even though we have used descriptive statistics for data description, and ordinal regression for prediction, it would have been ideal to have also been able to use ordinary least squares (OLS) regression, which is a more commonly-used and more widely understood statistical procedure. Similarly, in the interview analysis we have used a variation of thematic analysis, but there are many other valid methodologies which could have been used. These methods, while still extracting the same fundamental data, could have presented data in slightly different shades or come to slightly different conclusions (for example, analysis of interview data could have been done by a small team, which can help to eliminate bias). These datasets could then have been used to make broad analyses of similarities and differences, and to come to conclusions based on the results of multiple analyses, rather than just one. This is the principle of the meta-analysis, in which broad trends are observed over multiple research projects in a particular field. Of course, given the nature of diminishing returns, many further analysis iterations would eventually yield little further data of interest, so there would be a limit to the realistic benefit of multiple analyses within one dataset.

One of the major issues of both the quantitative and qualitative sections was that it would have been good to have had more participants. The work done on profiling the language industry (including translation) in the European Union (Language Technology Centre 2009), for example, had over 1000 participants from around 200 different professional associations. In our case (in terms of the quantitative section), such a sample size would have enabled us to be more confident about some statistical generalisations, as data derived from larger sample sizes is more robust and generally applicable. Sample size is not always an issue in itself (i.e. see the beginning of Section

5.1.2.3 for a brief discussion of statistical power and sample size, and the fact that large samples can sometimes create problems of their own). However, the larger the sample, generally the more useful it is because we can be more confident about generalising from it due to its representative nature. Additionally, one issue with smaller target samples is that every sample suffers from loss, in terms of participants who do not complete questionnaires fully, or who simply view the questionnaire page but do not provide any data.

The number of interviews could also have been increased, which would have enabled us to describe and collect data from a wider range of participants, each with different career profiles. This would have principally created descriptions of a wider range of career profiles (e.g. those translators with school-age children, those about to retire, in-house translators, and those who are just starting out). We would also have been able to randomly select interview participants, which was something that was essentially not practical in this project, because we needed almost all of the participants from the pool who indicated that they would be happy to be interviewed. We could also have asked more questions, approaching our key points from a wider variety of angles, using various lexical and semantic structures to tap into the underlying constructs.

It is possible, additionally, after reviewing the pilot study interviews in particular, that the interview technique used there guided the interviews too much. We might argue that the researcher influenced the participants' answers a little too strongly, with subconscious verbal cues that may have encouraged participants to keep talking, but nonetheless affected how they responded (although we cannot know how they *would* have responded). This fault was rectified in the main study interviews, with the researcher consciously attempting to refrain from cueing as much as possible. This issue also demonstrates the benefits of conducting a pilot study, which provides an opportunity to address methodological or procedural problems so that they can be reduced in time for a second round of data collection.

The final major issue to be discussed here is that of the nature and directions of causality. General research in psychology suggests that self-efficacy, locus of control and positive attribution style are at least partly responsible for causing subsequent performance on various tasks (see Sections 4.1.2.8 and 6.4.2 for a just a few examples of research supporting this). But how does having high levels of psychological skill actually cause good performance in translators, or is it in fact caused by the results of good performance, such as via the satisfaction of success? To what degree? Untangling

the directions and strength of possible causal relationships between the factors in the model in Figure 6.1 should be one of the main focuses in any further research.

This could be done by using a longitudinal design, in which new translators were observed over, for example, the course of a year, with researchers investigating how translation competence and psychological skill might contribute to their success. Simultaneously, researchers would control for other factors, such as the market that the translator works in, their language combinations, and their text types.

Alternatively, path analysis could be used as a secondary option, if a longitudinal study was not possible. Path analysis would be suitable for creating a *hypothetical* model of causality, providing more evidence for our model in Figure 6.1, and seeing how well such a model might be supported by the fit of the data available (Garson 2011). It would not 'prove' causality by itself, nor that the model was the only suitable one. Only an experimental procedure or a longitudinal design is able to provide the highest level of evidence for a particular causal sequence; even this is not 'proof', as there are always plausible, but sometimes highly unlikely, alternative explanations available (see Rothman and Greenland (2005:148-149) for a discussion of Hill's criteria, as applied to epidemiology). An experimental model involves manipulation of independent variables in a controlled environment, in order to observe their effects on dependent variables, and this limits alternative explanations of causality. However, two major problems with experimental designs are that they are often either rather artificial because so many variables must be controlled, or very difficult to perform ethically in naturalistic settings. Longitudinal designs do present certain advantages over experimental designs when dealing with human participants, one of which is the ethics problem, which would occur if one group were presented with information on aspects of psychological skill, while another was deliberately denied this information. Such denial of information could potentially negatively affect a participant's career. The other advantage is that longitudinal designs have the potential to record the subtleties of human developmental stages, including psychological skill.

6.6 Research synopsis

The key findings of our project were based on three types of data, which were descriptive, correlational/regression, and interview. The descriptive data (Sections 4.1.1 and 5.1.1) showed many and varied details about our freelance translator participants,

including the types of work that they did, the translation tools that they used, their income, amount of work, how much translation work they did, text formats, and various other measures of interest in understanding more about what freelance translators do in their work. The correlational/regression data (Sections 4.1.2 and 5.1.2) showed that some important measures of professional success (such as income, job satisfaction, jobs per week) were positively correlated with central elements of psychological skill, particularly occupational self-efficacy. Using ordinal regression models, we could successfully predict both income and job satisfaction based on a mixture of work-related variables and occupational self-efficacy, which showed itself to be the 'flagship' variable of the psychological skill group of variables. Finally, the interview data (Sections 4.2 and 5.2) showed that participants had a lot to say about the intricacies of their work, and how they negotiated their emotional states depending on individual circumstances. Using thematic analysis, we were able to show support for the broad concepts of psychological skill as they showed themselves in participants' answers to semi-structured interview questions. Additionally, participants discussed other aspects of their working life, such as conceptions of success, dealing with potential isolation, and balancing family and work demands while working at home.

Some implications for practice, teaching, and further research follow. As regards practice, it appears that a good level of occupational self-efficacy is one of the key components of psychological skill, and that as long as translators either avoid or deal positively with any shocks in their career, it tends to grow organically with experience. Additionally, avoiding a highly external locus of control (i.e. feeling that things are largely out of our control), and avoiding a negative attribution style (especially negative and destructive self-blame for failings in work) appear to be the next-most important aspects of maintaining or developing psychological skill.

Referring to teaching and research, we believe that it should be possible to teach psychological skill, firstly by presenting the theory and explaining to translators (both student and early-professional) how it affects all of us, and why it is important to us to have some conscious understanding of the psychological mechanisms that influence our behaviour. Some aspects can most probably be learned by modelling successful others, and some by monitoring ourselves, with understanding of the theory helping us to build cognitive frameworks for improving psychological skill. Teaching could be done in formal settings, such as presenting a module within a Translation Studies class, or as a segment within professional development courses which help freelancers to up-skill and

retrain. Extramural partnerships with translator-training institutes and external organisations would help academic students to gain valuable and guided experience while dealing with real translation jobs, concurrently developing classical translation competence with psychological skill. Teaching could also be done in an informal manner, such as through mentoring or career coaching, both of which would most probably be one-to-one, with the mentor passing on knowledge about the components of psychological skill and their importance. We would recommend that research projects accompany these methods, in order to measure their effectiveness. Such research would also help to integrate psychological skill findings more closely with classical models of translator competence as proposed thus far.

Finally, in terms of further refinement of our findings, a larger sample should be used, so as to increase the statistical power and accuracy of the work done here. Other methods could also be used, such as a longitudinal design, in which the researcher would follow participants, perhaps over the course of a year or so. Such a project could observe the development of psychological skill concurrent with career development, and make inferences about the relationship between the two. As we have discussed previously, having more data on causal directions would add greatly to the strength of the findings.

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Appendix One

The following is a PDF version of the questionnaire that was used for the pilot study.

1. Participant Information

Participant Information Sheet (participant)

Title: *Relationship between attitudes and professional success in freelance translators*

Dear participants

My name is David Atkinson. I am a Doctor of Philosophy student from the Centre for Translation and Interpreting Studies at the University of Auckland, in New Zealand. My supervisors for this project are Associate Professor Frank Austermühl, who is Director of the Centre, and Dr. Helena Cooper-Thomas, who is a Senior Lecturer in Industrial Psychology at the University of Auckland.

I am the principal researcher on this project. It is an investigation into the relationship between attitudes and success in freelance translators who have been working in the translation industry for 6 months or more. I am also interested in how translators deal with challenges in the profession (e.g. changing technology, professional relationships), and I want to explore solutions surrounding the effect of personal and career attitudes on professional performance.

This research primarily focuses on written translation activities, not on interpreting or other language-related activities (e.g. language teaching).

There are two parts to this research.

Anonymous questionnaire
The first is to collect data using electronic questionnaires, which will collect demographic information, information about the type and amount of work that you (as a translator) do, how satisfied you feel with your job, and your use of translation-specific technology. The research also aims to measure your attribution style (how the causes of life events are understood and explained), locus of control (whether events are seen as controllable by your own actions or controlled by external forces), and self-efficacy (the attitude towards new challenges in life) using three validated and tested psychological measures. Each questionnaire will take between 10 and 20 minutes to complete, and will be anonymous, unless you decide to leave your email in order to express interest in a follow-up interview, in which case the connection between your questionnaire data and your name will be known only to the researcher, and will be kept confidential.

Interview
If you are interested in taking part in a one-to-one interview in the second stage, then you will be invited at the end of the questionnaire to leave your email address, and I will contact you shortly to confirm your interest. The interview will take around 1 hour, and will be a one-to-one interview with a selected number of participants. Those selected to take part will be chosen in order to represent a wide variety of professional characteristics.

The purpose of the interviews is to collect more detailed data on aspects of your professional life. I would like to investigate in more detail what career journeys you have taken to arrive at your present position. Specifically, I would like to look at your attitudes to professional challenges, how challenges have been overcome in the past, and your general attitudes to translation as a profession. The interview will be recorded and later transcribed, but you can request that the recorder be turned off at any time during the interview.

Please note that you have to live in the Auckland [New Zealand], Heidelberg-Frankfurt [Germany], London [England], Madrid [Spain], Winterthur-Zürich [Switzerland], and Tokyo [Japan] areas to take part in an interview. These are the areas that I am able to visit.

Privacy
All data from both questionnaires and interviews will be treated anonymously. All questionnaire data is encrypted. Electronic copies of all data will be kept indefinitely for possible future research. Interview data will be anonymised so that you cannot be identified individually. Real names will not be used. All references to individuals and organisations that appear in the interviews will be removed from the final interview transcript.

Please note that if you leave your email in order to show interest in attending a follow-up interview, your questionnaire data will be connected to your name for selection purposes. However, only the researcher will be aware of this connection, and this connection will remain confidential.
Data collected through the questionnaire is encrypted during the collection process using SSL 3.0. Interview audio data will be stored in encrypted files.

You should be aware that there is a very slight chance of being identified through the interview transcripts (by someone who is already familiar with your professional profile), when discussing working language combinations, work history, or work type. Although explicit references will be removed, unique combinations of work types, work histories, and language combinations may possibly make you identifiable to someone else.

Withdrawal from the study and editing of interview data
If you choose to attend a follow-up interview, you may withdraw from the research at any time up until one (1) month after the interview has been conducted. Please note that you will not be offered the opportunity to edit your interview or questionnaire data after it has been collected, nor you will be offered a copy of the interview recording.

Further research using the data
In the future, parts of the data from this research may be compared with other research supervised by A-P Frank Austermühl or Dr. Helena Cooper-Thomas. The data may be used in presentations and further academic publications; again, this will be anonymous. Raw data from the questionnaire and interview gathered during this research will be securely stored for up to 6 years, and will be destroyed if there is no further interest in it. Processed questionnaire data will be shared with those researchers who created the scales, so that they can receive feedback on the scales' effectiveness.

Your wellbeing
The questions in this research may possibly influence the way you feel about your career, either in a positive or negative way, or they may have no effect. Please discuss this with me, or with my supervisor, A-P Austermühl, if you have any concerns either now, or at any point in the research. If questions are raised surrounding professional issues that are not able to be answered by either of the above, you will be referred to an occupational psychologist or other appropriate career development professional. You will receive a brief summary of the research via a group e-mail, with access to full published versions when they become available. If you wish to know more about the study, you will be welcome to contact me at any time.

Contact details

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If you have any ethical concerns about this research, please contact:
The Chair, The University of Auckland Human Participants Ethics Committee, the University of Auckland, Research, Private Bag 92019, Auckland, NEW ZEALAND
Telephone: +64 9 373 7599 extension 87830

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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 10 September 2008 for a period of three years, from 10 September 2008 to 10 September 2011.
Reference number 2008 / 356

* 1. I have read and accept the conditions of the survey. I would now like to proceed to the questionnaire consent form.

jn Proceed

2. Consent form

Participant Consent Form – Online Questionnaire

Research title: *Relationship between attitudes and professional success in freelance translators*

Researcher: David Peter Atkinson

Please read and answer all of the following consent questions before beginning the questionnaire.

A) I have read the Participant Information Sheet (previous page), which gives an explanation of this research.

B) I have had the opportunity to ask any questions and to have them answered.

C) I understand that the questionnaire data is anonymous. SSL 3.0 encryption is used for the data that I submit during this questionnaire. My computer's IP address will not be saved, so my location cannot be identified.

D) I understand that secure and anonymous electronic copies of this questionnaire data will be kept for up to 6 years, for future research.

E) I understand that at all times personal information about me will be treated as confidential.

F) I understand that if I leave my email in order to show my interest in attending a follow-up interview, my questionnaire data will be connected to my name/email address (i.e. it will no longer be anonymous). However, only the researcher will be aware of this connection, and the connection will remain confidential.

G) I understand that all content data that I submit in this questionnaire will be treated as confidential.

H) I understand that a summary of general results of the overall study will be provided to me by email at the conclusion of the research, or that published versions will be available through my translators' association.

I) I understand that I can edit my answers during the survey, but I will not be able to change anything once the questionnaire has been submitted.

* 2. I have read and understood the above information and the information describing the aims and content of the following questionnaire. I am aged 16 years or older. I understand that, by submitting this questionnaire electronically, I agree to take part in this research under the terms indicated in the information supplied.

jn Yes

3. Basic information

This is the first of five pages. Press the "next page" button at the bottom of each page to move forward. If you want to change something on a previous page, press the "previous page" button. When you reach the end, and are satisfied with your answers, press the "Complete: Submit questionnaire" button.

The questionnaire will take about 10-20 minutes to complete.

3. What is your gender?

- Male
- Female

4. How old are you?

5. What is your country of origin?

Country of origin:

6. In which country are you currently based?

Country based:

4. Work profile

7. How many years have you been working as a translator? Use decimals (e.g. 1.5) to indicate half-years.

8. Over the past year, how many translation jobs have you completed (on average) per week? (Use decimals if you have less than one job per week).

9. Over the past year, how many translation hours have you worked (on average) per week?

	0-10	11-20	21-30	31-40	41-50	Over 50
Hours worked:	jn	jn	jn	jn	jn	jn

10. If you also do interpreting, and/or another job, what are the approximate percentages of your work?

Translation:

Interpreting:

Other:

11. How strongly do you identify yourself as a translator (rather than interpreter, etc)?

	Very weakly	Weakly	Moderately	Strongly	Very Strongly
Level of identification:	jn	jn	jn	jn	jn

12. Ideally, how many hours per week would you *like* to work as a translator?

	0-10	11-20	21-30	31-40	41-50	Over 50
Hours:	jn	jn	jn	jn	jn	jn

13. Which one of the following statements applies to you?

jn I have too little translation work

jn I have the right amount of translation work

jn I have too much translation work

14. Which bracket best describes your income from translation in the last year?

- 0-10,000
- 10,000-20,000
- 20,000-30,000
- 30,000-40,000
- 40,000-50,000
- 50,000-60,000
- Over 60,000

15. In which currency have you measured your income?

- British Pounds (GBP)
- Euros (EUR)
- Japanese Yen (JPY)
- New Zealand Dollars (NZD)
- Swiss Francs (CHF)
- US Dollars (USD)

16. As a translator, who do you work for most frequently?

Please rank your answers by inserting 1 for most important, 2 for second-most important, etc. If you do not do a particular type of work, just enter zero (0).

Direct work for end-clients: _____

Work for translation agencies: _____

Work in-house: _____

17. For which market do you do the majority of your work? Please enter approximate percentages.

For clients based within the country I currently reside: _____

For clients based overseas/internationally: _____

18. How do you advertise your translation business? Select any that apply to you.

- Using my social networks
- My own website
- A translator's website (e.g. ProZ, TranslatorsCafe, etc.)
- Print media (e.g. newspaper, industry magazine advertisements)
- Yellow Pages
- Going to trade fairs
- No active advertising

19. Do you use any other methods of advertising? (Please skip if this does not apply to you).

20. Which main fields of specialisation do you translate in? Select any that apply to you.

- Law (commercial and civil law, including patents)
- Medicine (e.g. prescriptions, laboratory reports, patient histories)
- Business/economics/finance
- Immigration (e.g. birth certificates, police certificates, letters of reference)
- Science/engineering (e.g. manuals, articles, abstracts, plans)
- Literature (e.g. novels, poems, short stories)
- Entertainment (e.g. subtitling, voiceover scripts, games)
- Journalism
- Advertising/creative
- Tourism (e.g. brochures, websites, travel industry documents)
- General (anything not specialised)

21. Do you have any other fields of specialisation? (Please skip if this does not apply to you).

22. Which source text formats do you generally work with? Select any that apply to you.

- Hard copy (i.e. printed, photocopied)
- Microsoft Word or other word processor
- Other MS Office formats (PowerPoint, Excel)
- PDF
- Desktop publishing formats (FileMaker, Interleaf, InDesign, PageMaker, etc.)
- Web-based formats (HTML, XML, etc.)
- Software (.exe, .dll, etc.)

5. Translation tool usage

Note: If you do not use any translation tools (e.g. translation memories, localisation tools), then please skip to the next page of the survey.

23. What specific translation industry tools do you use (if any)? Select any that apply to you.
If you do not use any specific industry tools, please skip to the next page of the survey.

- SDL Trados suite
- Déjà Vu
- STAR Transit
- Across
- Wordfast
- Foreign Desk
- Passolo
- Alchemy CATALYST
- Any terminology management tools
- Any open-source translation tools

24. Do you use any other translation-related software? (Please skip if this does not apply to you).

25. For what reasons do you use these tools? Select any reasons that apply to you.

- Client requires or requests them
- To increase my productivity
- To increase my quality

26. For what purposes do you use these tools? Select any purposes that apply to you.

- Simply translation
- Terminology creation and management
- Project management

27. How often do you use any of these tools (on average)?

	Every day	Once every two or three days	Once a week	Once every two or three weeks	Once a month	Just a few times a year
Frequency:	jn	jn	jn	jn	jn	jn

28. How skilled do you consider yourself, overall, in the use of these tools?

	Very low skill level	Low skill level	Average skill level	High skill level	Very high skill level
Skill:	jn	jn	jn	jn	jn

29. How confident do you feel, overall, in the use of these tools?

	Very unconfident	Unconfident	Unsure	Confident	Very confident
Confidence:	jn	jn	jn	jn	jn

6. Job satisfaction

30. The following questions are about satisfaction in your work as a translator. Please think about how you generally feel about your work, and answer the following questions based on how much you agree or disagree with each statement.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
I feel fairly satisfied with my present job.	jn	jn	jn	jn	jn
Most days I am enthusiastic about my work.	jn	jn	jn	jn	jn
Each day at work seems like it will never end.	jn	jn	jn	jn	jn
I find real enjoyment in my work.	jn	jn	jn	jn	jn
I consider my job to be rather unpleasant.	jn	jn	jn	jn	jn

7. Beliefs

31. The following questions ask you about your general beliefs about life and about your work as a translator. Think of a range of situations, both past and future, and answer the following questions based on how much you agree or disagree with each statement.

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
I will be able to achieve most of the goals that I have set for myself.	jn	jn	jn	jn	jn
When facing difficult tasks, I am certain that I will accomplish them.	jn	jn	jn	jn	jn
In general, I think that I can obtain outcomes that are important to me.	jn	jn	jn	jn	jn
I believe I can succeed at almost any endeavour to which I set my mind.	jn	jn	jn	jn	jn
I will be able to successfully overcome many challenges.	jn	jn	jn	jn	jn
I am confident that I can perform effectively on many different tasks.	jn	jn	jn	jn	jn
Compared to other people, I can do most tasks very well.	jn	jn	jn	jn	jn
Even when things are tough, I can perform quite well.	jn	jn	jn	jn	jn

32. Please answer the following questions about your beliefs about work in general. They do not refer only to your present work.

Note: When thinking about your work as a freelance translator, the word 'job' may refer to 'translation assignment' or to regular work from a particular client, rather than to a 'career' or a fixed position in a company.

	Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
A job is what you make of it.	jn	jn	jn	jn	jn	jn
On most jobs, people can pretty much accomplish whatever they set out to accomplish.	jn	jn	jn	jn	jn	jn
If you know what you want out of a job, you can find a job that gives it to you.	jn	jn	jn	jn	jn	jn
If employees are unhappy with a decision made by their boss, they should do something about it.	jn	jn	jn	jn	jn	jn
Getting the job you want is mostly a matter of luck.	jn	jn	jn	jn	jn	jn
Making money is primarily a matter of good fortune.	jn	jn	jn	jn	jn	jn
Most people are capable of doing their jobs well if they make the effort.	jn	jn	jn	jn	jn	jn
In order to get a really good job, you need to have family members or friends in high places.	jn	jn	jn	jn	jn	jn
Promotions are usually a matter of good fortune.	jn	jn	jn	jn	jn	jn
When it comes to landing a really good job, who you know is more important than what you know.	jn	jn	jn	jn	jn	jn
Promotions are given to employees who perform well on the job.	jn	jn	jn	jn	jn	jn
To make a lot of money you have to know the right people.	jn	jn	jn	jn	jn	jn
It takes a lot of luck to be an outstanding employee on most jobs.	jn	jn	jn	jn	jn	jn
People who perform their jobs well generally get	jn	jn	jn	jn	jn	jn

rewarded.						
Most employees have more influence on their supervisors than they think they do.	jn	jn	jn	jn	jn	jn
The main difference between people who make a lot of money and people who make a little money is luck.	jn	jn	jn	jn	jn	jn

33. Please answer the following questions concerning your beliefs about good and bad events in general life and in your work as a translator.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I usually blame myself when things go wrong.	jn	jn	jn	jn	jn
It will largely be a matter of luck if I succeed in life.	jn	jn	jn	jn	jn
If I get what I want in life it will only be through hard work.	jn	jn	jn	jn	jn
In my case getting what I want has had little or nothing to do with luck.	jn	jn	jn	jn	jn
I have found that success in anything is built on hard work.	jn	jn	jn	jn	jn
For most of my misfortunes and disappointments I have nobody to blame but myself.	jn	jn	jn	jn	jn
Most of my successes have happened without my really trying.	jn	jn	jn	jn	jn
When I have been criticised it has usually been deserved.	jn	jn	jn	jn	jn
Success seems to me to have been largely a matter of having been in the right place at the right time.	jn	jn	jn	jn	jn
My misfortunes have resulted mainly from the mistakes I've made.	jn	jn	jn	jn	jn
When relationships with others have gone wrong I have usually felt that I was to blame.	jn	jn	jn	jn	jn
When people have	jn	jn	jn	jn	jn

not liked me I have usually felt there was something wrong with me.

34. Would you be interested in doing a one-hour face-to-face interview with the researcher, to answer some questions about your life as a translator?
Note: You would have to be based in the Auckland, Heidelberg-Frankfurt, London, Madrid, Tokyo, or Winterthur-Zürich areas to take part. These are the locations that the researcher is able to travel to.

- Yes
- No

35. If yes, please enter your email address and the researcher will contact you shortly:

36. Do you have any comments or feedback about this survey?

Appendix Two

The following is a PDF version of the questionnaire that was used for the main study.

1. Participant Information

Participant Information Sheet (participant)

Title: *Relationship between attitudes and professional success in freelance translators*

Dear participants

My name is David Atkinson. I am a Doctor of Philosophy student from the Centre for Translation and Interpreting Studies at the University of Auckland, in New Zealand. My supervisors for this project are Associate Professor Frank Austermühl, who is Director of the Centre, and Dr. Helena Cooper-Thomas, who is a Senior Lecturer in Industrial Psychology at the University of Auckland.

I am the principal researcher on this project. It is an investigation into the relationship between attitudes and success in freelance translators who have been working in the translation industry for 6 months or more. I am also interested in how translators deal with challenges in the profession (e.g. changing technology, professional relationships), and I want to explore solutions surrounding the effect of personal and career attitudes on professional performance.

This research primarily focuses on written translation activities, not on interpreting or other language-related activities (e.g. language teaching).

There are two parts to this research.

Anonymous questionnaire
The first is to collect data using electronic questionnaires, which will collect demographic information, information about the type and amount of work that you (as a translator) do, how satisfied you feel with your job, and your use of translation-specific technology. The research also aims to measure your attribution style (how the causes of life events are understood and explained), locus of control (whether events are seen as controlled by your own actions or controlled by external forces), and self-efficacy (the attitude towards new challenges in life) using three validated and tested psychological measures. Each questionnaire will take between 10 and 20 minutes to complete, and will be anonymous, unless you decide to leave your email in order to express interest in a follow-up interview, in which case the connection between your questionnaire data and your name will be known only to the researcher, and will be kept confidential.

Interview
If you are interested in taking part in a one-to-one interview in the second stage, then you will be invited at the end of the questionnaire to leave your email address, and I will contact you shortly to confirm your interest. The interview will take around 1 hour, and will be a one-to-one interview with a selected number of participants. Those selected to take part will be chosen in order to represent a wide variety of professional characteristics.

The purpose of the interviews is to collect more detailed data on aspects of your professional life. I would like to investigate in more detail what career journeys you have taken to arrive at your present position. Specifically, I would like to look at

your attitudes to professional challenges, how challenges have been overcome in the past, and your general attitudes to translation as a profession. The interview will be recorded and possibly later transcribed in full, but you can request that the recorder be turned off at any time during the interview.

Please note that you have to live in the Heidelberg-Frankfurt [Germany], Barcelona-Tarragona [Spain], and Tokyo [Japan] areas to take part in an interview. These are the areas that I am able to visit.

Privacy
All data from both questionnaires and interviews will be treated anonymously. All questionnaire data is encrypted. Electronic copies of all data will be kept indefinitely for possible future research. Interview data will be anonymised so that you cannot be identified individually. Real names will not be used. All references to individuals and organisations that appear in the interviews will be removed from the final interview transcript.

Please note that if you leave your email in order to show interest in attending a follow-up interview, your questionnaire data will be connected to your name for selection purposes. However, only the researcher will be aware of this connection, and this connection will remain confidential.
Data collected through the questionnaire is encrypted during the collection process using SSL 3.0. Interview audio data will be stored in encrypted files.

You should be aware that there is a very slight chance of being identified through the interview transcripts (by someone who is already familiar with your professional profile), when discussing working language combinations, work history, or work type. Although explicit references will be removed, unique combinations of work types, work histories, and language combinations may possibly make you identifiable to someone else.

Withdrawal from the study and editing of interview data
If you choose to attend a follow-up interview, you may withdraw from the research at any time up until one (1) month after the interview has been conducted. Please note that you will not be offered the opportunity to edit your interview or questionnaire data after it has been collected, nor you will be offered a copy of the interview recording.

Further research using the data
In the future, parts of the data from this research may be compared with other research supervised by A-P Frank Austermühl or Dr. Helena Cooper-Thomas. The data may be used in presentations and further academic publications; again, this will be anonymous. Raw data from the questionnaire and interview gathered during this research will be securely stored for up to 6 years, and will be destroyed if there is no further interest in it. Processed questionnaire data will be shared with those researchers who created the scales, so that they can receive feedback on the scales' effectiveness.

Your wellbeing
The questions in this research may possibly influence the way you feel about your career, either in a positive or negative way, or they may have no effect. Please discuss this with me, or with my supervisor, A-P Austermühl, if you have any concerns either now, or at any point in the research. If questions are raised surrounding professional issues that are not able to be answered by either of the above, you will be referred to an occupational psychologist or other appropriate career development professional. You will receive a brief summary of the research via a group e-mail, with access to full published versions when they become

available. If you wish to know more about the study, you will be welcome to contact me at any time.

Contact details

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If you have any ethical concerns about this research, please contact:
The Chair, The University of Auckland Human Participants Ethics Committee, the University of Auckland, Research, Private Bag 92019, Auckland, NEW ZEALAND
Telephone: +64 9 373 7599 extension 87830

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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 10 September 2008 for a period of three years, from 10 September 2008 to 10 September 2011.
Reference number 2008 / 356

* 1. I have read and accept the conditions of the survey. I would now like to proceed to the questionnaire consent form.

Proceed

2. Consent form

Participant Consent Form – Online Questionnaire

Research title: *Relationship between attitudes and professional success in freelance translators*

Researcher: David Peter Atkinson

Please read and answer all of the following consent questions before beginning the questionnaire.

A) I have read the Participant Information Sheet (previous page), which gives an explanation of this research.

B) I have had the opportunity to ask any questions and to have them answered.

C) I understand that the questionnaire data is anonymous. SSL 3.0 encryption is used for the data that I submit during this questionnaire. My computer's IP address will not be saved, so my location cannot be identified.

D) I understand that secure and anonymous electronic copies of this questionnaire data will be kept for up to 6 years, for future research.

E) I understand that at all times personal information about me will be treated as confidential.

F) I understand that if I leave my email in order to show my interest in attending a follow-up interview, my questionnaire data will be connected to my name/email address (i.e. it will no longer be anonymous). However, only the researcher will be aware of this connection, and the connection will remain confidential.

G) I understand that all content data that I submit in this questionnaire will be treated as confidential.

H) I understand that a summary of general results of the overall study will be provided to me by email at the conclusion of the research, or that published versions will be available through my translators' association.

I) I understand that I can edit my answers during the survey, but I will not be able to change anything once the questionnaire has been submitted.

* 2. I have read and understood the above information and the information describing the aims and content of the following questionnaire. I am aged 16 years or older. I understand that, by submitting this questionnaire electronically, I agree to take part in this research under the terms indicated in the information supplied.

jn Yes

3. Basic information

This is the first of five pages. Press the "next page" button at the bottom of each page to move forward. If you want to change something on a previous page, press the "previous page" button. When you reach the end, and are satisfied with your answers, press the "Complete: Submit questionnaire" button.

The questionnaire will take about 10-20 minutes to complete.

3. What is your gender?

- Male
- Female

4. How old are you?

5. What is your country of origin?

Country of origin:

6. In which country are you currently based?

Country based:

4. Work profile

7. How many years have you been working as a translator? Use decimals (e.g. 1.5) to indicate half-years.

8. Over the past year, how many translation jobs have you completed (on average) per week? (Use decimals if you have less than one job per week).

9. Over the past year, how many translation hours have you worked (on average) per week?

	0-10	11-20	21-30	31-40	41-50	Over 50
Hours worked:						

10. If you also do interpreting, and/or another job, what are the approximate percentages of your work?

Translation:

Interpreting:

Other:

11. How strongly do you identify yourself as a translator (rather than interpreter, etc)?

	Very weakly	Weakly	Moderately	Strongly	Very Strongly
Level of identification:					

12. Ideally, how many hours per week would you *like* to work as a translator?

	0-10	11-20	21-30	31-40	41-50	Over 50
Hours:						

13. Which one of the following statements applies to you?

- I have too little translation work
- I have the right amount of translation work
- I have too much translation work

14. Which bracket best describes your income from translation in the last year, before taxes and expenses?

	Income if in Euro, US Dollars, Swiss Francs, Australian Dollars, or British Pounds	Income if in Japanese Yen
Income:		

15. In which currency have you measured your income?

- British Pounds (GBP)
- Euros (EUR)
- Japanese Yen (JPY)
- New Zealand Dollars (NZD)
- Swiss Francs (CHF)
- US Dollars (USD)

16. As a translator, who do you work for most frequently?

Please rank your answers by inserting 1 for most important, 2 for second-most important, etc. If you do not do a particular type of work, just enter zero (0).

Direct work for end-clients: [ ]

Work for translation agencies: [ ]

Work in-house: [ ]

17. For which market do you do the majority of your work? Please enter approximate percentages.

For clients based within the country I currently reside: [ ]

For clients based overseas/internationally: [ ]

18. How do you advertise your translation business? Select any that apply to you.

- Using my social networks
- My own website
- A translator's website (e.g. ProZ, TranslatorsCafe, etc.)
- Print media (e.g. newspaper, industry magazine advertisements)
- Yellow Pages
- Going to trade fairs
- No active advertising

19. Do you use any other methods of advertising? (Please skip if this does not apply to you).

[ ]

20. Which main fields of specialisation do you translate in? Select any that apply to you.

- Law (criminal, international, commercial and civil law, including patents)
- Medicine (e.g. prescriptions, laboratory reports, patient histories)
- Business/economics/finance
- Immigration-related (e.g. birth certificates, police certificates, letters of reference, academic certificates)
- Science, social science, and engineering (e.g. reports, manuals, articles, abstracts, plans)
- Literature (e.g. novels, poems, short stories)
- Entertainment (e.g. movie subtitling, voiceover scripts, games)
- Journalism
- Advertising/marketing/commercial-creative
- Tourism (e.g. brochures, websites, travel industry documents)
- General (anything not specialised as above)

21. Do you have any other fields of specialisation? (Please skip if this does not apply to you).

22. Which source text formats do you generally work with? Select any that apply to you.

- Hard copy (i.e. printed, photocopied)
- Microsoft Word or other word processor
- Other MS Office formats (PowerPoint, Excel)
- PDF
- Desktop publishing formats (FileMaker, Interleaf, InDesign, PageMaker, etc.)
- Web-based formats (HTML, XML, etc.)
- Software (.exe, .dll, etc.)

5. Translation tool usage

Note: If you do not use any translation tools (e.g. translation memories, localisation tools), then please skip to the next page of the survey.

23. What specific translation industry tools do you use (if any)? Select any that apply to you.
If you do not use any specific industry tools, please skip to the next page of the survey.

- SDL Trados suite
- Déjà Vu
- STAR Transit
- Across
- Wordfast
- Foreign Desk
- Passolo
- Alchemy CATALYST
- Any terminology management tools
- Any open-source translation tools

24. Do you use any other translation-related software? (Please skip if this does not apply to you).

25. For what reasons do you use these tools? Select any reasons that apply to you.

- Client or agency requires or requests them
- To increase my productivity
- To increase my quality

26. For what purposes do you use these tools? Select any purposes that apply to you.

- Simply translation
- Terminology creation and management
- Project management

27. How often do you use any of these tools (on average)?

	Every day	Once every two or three days	Once a week	Once every two or three weeks	Once a month	Just a few times a year
Frequency:						

28. How skilled do you consider yourself, overall, in the use of these tools?

	Very low skill level	Low skill level	Average skill level	High skill level	Very high skill level
Skill:					

29. How confident do you feel, overall, in the use of these tools?

	Very unconfident	Unconfident	Unsure	Confident	Very confident
Confidence:					

6. Job satisfaction

30. The following questions are about satisfaction in your work as a translator. Please think about how you generally feel about your work, and answer the following questions based on how much you agree or disagree with each statement.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
I feel fairly satisfied with my present job.	jn	jn	jn	jn	jn
Most days I am enthusiastic about my work.	jn	jn	jn	jn	jn
Each day at work seems like it will never end.	jn	jn	jn	jn	jn
I find real enjoyment in my work.	jn	jn	jn	jn	jn
I consider my job to be rather unpleasant.	jn	jn	jn	jn	jn

7. Beliefs

31. The following questions ask you about your general beliefs about work and about your work as a translator. Think of a range of situations, both past and future, and answer the following questions based on how much you agree or disagree with each statement.

	Disagree strongly	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree strongly
Thanks to my resourcefulness, I know how to handle unforseen situations in my job.	jn	jn	jn	jn	jn	jn
If I am in trouble in my work, I can usually think of something to do.	jn	jn	jn	jn	jn	jn
I can remain calm when facing difficulties in my job because I can rely on my abilities.	jn	jn	jn	jn	jn	jn
When I am confronted with a problem in my job, I can usually find several solutions.	jn	jn	jn	jn	jn	jn
No matter what comes my way in my job, I'm usually able to handle it.	jn	jn	jn	jn	jn	jn
My past experiences in my job have prepared my well for my occupational future.	jn	jn	jn	jn	jn	jn
I meet the goals that I set for myself in my job.	jn	jn	jn	jn	jn	jn
I feel prepared to meet most of the demands in my job.	jn	jn	jn	jn	jn	jn

32. Please answer the following questions about your beliefs about work in general. They do not refer only to your present work.

Note: When thinking about your work as a freelance translator, the word 'job' may refer to 'translation assignment' or to regular work from a particular client, rather than to a 'career' or a fixed position in a company.

	Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
A job is what you make of it.	jn	jn	jn	jn	jn	jn
On most jobs, people can pretty much accomplish whatever they set out to accomplish.	jn	jn	jn	jn	jn	jn
If you know what you want out of a job, you can find a job that gives it to you.	jn	jn	jn	jn	jn	jn
If employees are unhappy with a decision made by their boss, they should do something about it.	jn	jn	jn	jn	jn	jn
Getting the job you want is mostly a matter of luck.	jn	jn	jn	jn	jn	jn
Making money is primarily a matter of good fortune.	jn	jn	jn	jn	jn	jn
Most people are capable of doing their jobs well if they make the effort.	jn	jn	jn	jn	jn	jn
In order to get a really good job, you need to have family members or friends in high places.	jn	jn	jn	jn	jn	jn
Promotions are usually a matter of good fortune.	jn	jn	jn	jn	jn	jn
When it comes to landing a really good job, who you know is more important than what you know.	jn	jn	jn	jn	jn	jn
Promotions are given to employees who perform well on the job.	jn	jn	jn	jn	jn	jn
To make a lot of money you have to know the right people.	jn	jn	jn	jn	jn	jn
It takes a lot of luck to be an outstanding employee on most jobs.	jn	jn	jn	jn	jn	jn
People who perform their jobs well generally get rewarded.	jn	jn	jn	jn	jn	jn
Most employees have more influence on their supervisors than they think they do.	jn	jn	jn	jn	jn	jn

The main difference between people who make a lot of money and people who make a little money is luck.						

33. Please answer the following questions concerning your beliefs about good and bad events in general life and in your work as a translator.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I usually blame myself when things go wrong.					
It will largely be a matter of luck if I succeed in life.					
If I get what I want in life it will only be through hard work.					
In my case getting what I want has had little or nothing to do with luck.					
I have found that success in anything is built on hard work.					
For most of my misfortunes and disappointments I have nobody to blame but myself.					
Most of my successes have happened without my really trying.					
When I have been criticised it has usually been deserved.					
Success seems to me to have been largely a matter of having been in the right place at the right time.					
My misfortunes have resulted mainly from the mistakes I’ve made.					
When relationships with others have gone wrong I have usually felt that I was to blame.					
When people have not liked me I have usually felt there was something wrong with me.					

34. Please answer the following questions concerning your beliefs and behaviours in your translation career.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I am able to adapt to changing circumstances.	○	○	○	○	○
I am willing to take risks (to achieve outcomes that are uncertain).	○	○	○	○	○
I welcome job and organisational changes.	○	○	○	○	○
I can adequately handle work problems that come my way.	○	○	○	○	○
I believe other people when they tell me that I have done a good job.	○	○	○	○	○
I have designed better ways of doing my work.	○	○	○	○	○
I am very involved in my work.	○	○	○	○	○
I see myself as a professional and/or technical expert.	○	○	○	○	○
I spend free time on activities that will help my job.	○	○	○	○	○
I have taken courses toward a job-related qualification.	○	○	○	○	○
I stay abreast of developments in my line of work.	○	○	○	○	○
I have joined professional organisations related to my career goal.	○	○	○	○	○

35. Would you be interested in doing a one-hour face-to-face interview with the researcher, to answer some questions about your life as a translator?

Note: You would have to be based in the Heidelberg-Frankfurt, Tokyo, or Barcelona-Tarragona areas to take part. These are the locations that the researcher is able to travel to.

○ Yes

○ No

36. If yes, please enter your email address and the researcher will contact you shortly:

37. Do you have any comments or feedback about this survey?