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*Male/Female Partnerships  
in Cohabitation and Marriage:  
Changing Trends in New Zealand*

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**Stephen Michael McTaggart**

Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the author, not Statistics New Zealand.

*A thesis submitted in fulfilment of the requirements for the degree of  
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## **Abstract**

*Since the 1980s, more couples in Western countries have been cohabiting, either before marriage or in short- or long-term partnerships. During this period, marriage rates have declined, couples are marrying later in life, divorce has become easier, remarriage rates have increased, educational attainment has increased, and more women have entered paid work. While cohabitation now looks more like marriage, previous research suggests that cohabitation and marriage continue to exhibit different socioeconomic, educational, and gendered profiles.*

*Drawing on New Zealand census data and other national and international research, this thesis examines the statistical differences between heterosexual partnerships within marriage and cohabitation from 1981–2006. The major variables include age, education, employment status, occupation, income, and parenthood. Insights from both macro-structural marriage market theory and micro-social social exchange theory are used to examine the changing trends in marriage and cohabitation.*

*The thesis argues that cohabitation has become more heterogeneous over the decades, showing more discrepancies between the characteristics of partners than in the past. Cohabitation was once a practice of youth but increasing proportions of the middle aged and older population now live together outside marriage. While homogamy remains prevalent in New Zealand, many women continue to marry older men with higher levels of occupation, education and income. However, more partnerships (especially in cohabitation) now consist of older women and younger men or women with higher status or greater resources than their partners. I argue that these changes have been influenced by increases in women's educational achievement and employment. Nevertheless, gendered differences remain within both partnership types, reflecting heteronormative cultural values and the impact of motherhood on women's employment and earnings.*

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## CHAPTER ONE: INTRODUCTION

### 1.1 Introduction

*My parents arrived from Dumbarton, Scotland by aeroplane into Auckland in 1949. They were recently married and my mother was 17 years old, my father just two years older. Both were devout Catholics and like many couples of the era, would never have considered 'living in sin'. My oldest sister was born in 1950 and seven siblings followed at two to three year intervals. Cohabitation was fairly rare at that time in New Zealand and childbirth out of wedlock was considered aberrant by the church and by much of adult society. I have a clear memory of the beginnings of the sexual revolution and changes to living arrangements for those in my family. In 1966, my older sister was living a bohemian lifestyle, flatting with men and other women. I can recall my parents' moral concern about my sister's living arrangements. Flash forward to 2013, by which time all five of my sisters had cohabited before legal marriage. My youngest brother only recently married his partner (in a church) after living with her for 20 years. My younger brother and I are both serial cohabiters but have never married our female partners. My parents have long since passed but they had anticipated (or at least hoped) that cohabitation would lead to marriage for their sons and daughters. Cohabitation in my family is now a normal and accepted practice, but is also recognised as taking multiple forms.*

This anecdotal evidence is indicative of international trends in heterosexual partner selection. As is occurring in Australia, Canada, North America, Great Britain, and Europe, an expanding percentage of the New Zealand population now cohabit before marriage, or live together in short to long-term arrangements (Lewis 2001, Beck-Gernsheim 2002, Manning and Smock 2002, Cherlin 2004, Coontz 2005, Baker 2010a, Statistics New Zealand 2013b).

That notwithstanding, cohabitation rates differ between countries. Kiernan (2001) argued that cohabitation was strikingly common in Denmark, Sweden and Finland, and less prevalent (but still common) in Belgium, Great Britain, Netherlands, Germany and Austria. Levels of cohabitation were much lower in

Southern European countries such as Ireland, where it was found to be relatively uncommon. Lehrer (2000) argued that these low levels of cohabitation are common in countries with strong links to the Catholic Church or other religions that discourage such intimate relationships before marriage. More recent OECD data showed that “cohabitation rates are high in France, and the Nordic and Anglophone countries (such as New Zealand and Australia), they are very low in Greece, Italy, Poland and the Slovak Republic, and negligible in Turkey” (OECD 2011:24).

In 1996, 25 percent of couples in New Zealand aged between 15 and 44 and in an intimate partnership were cohabiting. By 2006 this rate had increased to 40 percent (Statistics New Zealand 2013a). Although many couples still marry, others choose cohabitation for economic, symbolic, or ideological reasons (or all three). Some choose cohabitation as a living resistance to marriage, believing marriage to be an exclusive, gendered or heterosexist institution (Baker and Elizabeth 2012). That considered, some ‘choose’ cohabitation as a forerunner to an eventual marriage.

Current research shows that cohabitation and marriage have become more interconnected over time, with the former taking on many of the functions of the latter (Blackwell and Lichter 2000, Seltzer 2000, Smock 2000). This thesis demonstrates, however, that the two partnership types continue to differ ideologically, structurally, socioeconomically and in purpose.

Several ‘typologies of cohabitation’ have emerged in the last decades that support the above argument. Heuveline and Timberlake’s (2004) typology of cohabitation and its relationship to legal marriage argued that cohabiters in the United States and 16 other western countries fell within six ‘ideal types’. These were: marginal, a prelude to marriage, a stage in the marriage process, an alternative to being single, an alternative to marriage, and indistinguishable from marriage. Importantly, Heuveline and Timberlake (2004) argue that often differences between cohabiting populations in different countries can be linked to national cultures and legal frameworks. Buchler, Baxter, Haynes and Western’s (2009) typology model showed that Australian cohabiters differ from married and single people based on age, religiosity, ethnicity, education,

income and fertility intentions. Barlow and Smithson (2010) also argue that cohabiters can be categorised as either ideologues, romantics, pragmatists or uneven couples. These typologies indicate that cohabitation is necessarily being ‘rethought’ within law, demography, sociology and other sciences.

In this thesis I use the term ‘partner’ to represent one’s intimate other in both marriages and cohabitations. To be ‘partnered’ is to be married or cohabiting with someone of the opposite sex. ‘Partnering upward’, for example, signals the practice of marrying or cohabiting with a spouse of higher occupational status.

## **1.2 Focus of the thesis**

While marriage has evolved in function and meaning over the past decades, cohabitation has changed more, becoming increasingly heterogeneous over time. Although young people feature disproportionately in cohabitation statistics, it is an arrangement entered into by people of all ages. Importantly, cohabitation trends in New Zealand are similar to those found in Australia, Canada, Great Britain, and other Western countries.

Cohabitation is the normative pathway into marriage now, but not all cohabitations convert, nor are marriages preceded by cohabitations more stable.

... [T]here has been a substantial shift in the practice and experience of marriage, choosing an intimate partner, and family formation patterns over the last fifty years. Understanding the characteristics of cohabiters is, therefore, important to gain a fundamental knowledge of partnering patterns in Australia (Buchler, Baxter et al. 2008:3).

Arguably, similar comments could be made for New Zealand. This thesis seeks to assess how the practices and experiences within and between New Zealand marriages and cohabitations have changed, looking to link these changes to structural changes over time. To achieve the first goal, I assess and compare the demographic changes and differences between marriage and cohabitation over the past two and a half decades, addressing the following questions:

*How have patterns of mate selection changed over time?*

*Who marries or cohabits with whom?*

*How do the characteristics of those in cohabitation and marriage compare over time?*

*What influences the patterns of choices in marriage and cohabitation?*

I answer these questions using a comparative analysis of the changing profiles of married and cohabiting partnerships over time. This entails the analysis of differences within educational achievement, occupational type, labour force participation, personal income, parenthood, and age, for males and females within cohabitation and marriage. Analysis is conducted using New Zealand census data from six time periods, augmented and often compared with time series information from the Organisation for Economic Cooperation and Development (OECD) and other international and local quantitative databases and partnership-based literature. (See Chapters Two and Three for more details.)

This thesis examines differences in marriage and cohabitation trends on a scale and duration rarely attempted in New Zealand.<sup>1</sup> The quantitative results are based on self-reported behaviours of males and females in heterosexual marriages and cohabitations using micro-level data drawn from six New Zealand Censuses of Population and Dwellings (1981–2006). These data are a legacy of the Family Whānau and Wellbeing Project (FWWP), conducted by the Centre of Methods and Policy Application in the Social Sciences (COMPASS) at The University of Auckland. The project was directed by Professor Peter Davis and funded by the then Foundation for Research, Science and Technology (FRST). Secondary numerical sources include OECD databases; Statistics New Zealand Table Builder, and the later NZ.Stat website and published tables; Education New Zealand data; Statistics Canada databases; Australian Bureau of Statistics databases; Nationmaster databases; and UK National Statistics databases. Other sources include government departmental reports; international and national journal articles; conference papers; books; theses; websites; and newspaper and magazine articles.

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<sup>1</sup> Lyndon Walker's (2010) PhD thesis used the same data set but examined patterns of ethnic partnerships in New Zealand.

The thesis research primarily focuses on the 1981–2006 period in New Zealand, when many significant changes occurred in the area of marriage and cohabiting partnerships. For example cohabitation rates increased exponentially while marriage rates declined, people were marrying later in life, getting a divorce became easier, remarriage rates increased, getting a divorce became easier, levels of general education increased, and more women entered paid employment (among other local and international social and economic changes). To provide further context for the study, I also examine mate selection patterns in the post-WWII, period leading up to the 1980s, noting changes where they occurred.

### **1.3 Theoretical framework of the thesis**

This thesis is structuralist in design and purpose as it investigates and describes changes over time in mate selection practices in New Zealand, along with the changing social and economic conditions in which these occurred. I submit that the macro-structural marriage market theory and micro-social social exchange theory are appropriate theoretical frameworks to investigate and explain these issues.

When studying trends in mate selection, structural theories argue that social circumstances such as prevalent ideologies, socioeconomic position, geographical location, ethnicity, and cultural practices all influence our lifelong socialisation processes – what we prefer in a partner and the possibilities of partnerships occurring. Mate selection takes place within a marriage or partnership market that is subject to many if not all of the above possibilities and constraints. The marriage market<sup>2</sup> is a theoretical concept that postulates that partnership formation is governed by the supply and demand of attributes and characteristics understood as valuable by individuals looking for an intimate partner. In turn, many of the characteristics, such as level of education, occupation type, age, physical attractiveness, and income that individuals find valuable, are socially constructed as such (Cigno 1991, Becker

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<sup>2</sup> Marriage market is also a term/concept that is applied to cohabitation.

1993, Regnerus 2012). An imbalance in a sex ratio within the partner market, for example, can give greater choices for the smaller of the two (sex) groups.

Marriage market theory has its origins in the work of Gary Becker (1973, 1974), and has its roots in rational choice theory. It is used in this thesis to understand the motivation for choices within the mate selection process. This theory argues that individuals try for the ‘best deal’ when choosing a potential partner (Becker 1973, 1974, Blackwell and Lichter 2004). This choice is based on a combination of factors including the potential partners’ physical, personality, and socioeconomic characteristics. Men and women may have ‘historically’ and ‘typically’ prioritised differing characteristics when choosing their partner (Baker 2010b). Changes in political, cultural, and economic structures in New Zealand over the past decades have influenced the characteristics, practices, and expectations of men and women within the marriage market and resultant partnerships. While the level of educational achievement has increased for both males and females in the past five decades, gains have been greater proportionally for the female population, and even more so in higher education. This has resulted in a relative shortage of ‘educated’ males in the partner pool (Callister 1998). While romantic love is considered ‘essential’ for the success of modern partnerships, it generally occurs within close social and geographical boundaries. Bozon and Heran (1989) submit that:

Cupid’s arrows do not strike the social chess board at random, but form a diagonal line, perfectly visible in the cross tabulation of social origin of spouses (Bozon and Heron (1989) cited in Bottero 2005a).

The concept of social homogamy suggests that ‘birds of a feather flock together’, or ‘like marries or cohabits with like’. Social homogamy theory argues that individuals tend to choose partners with a comparable socioeconomic profile (McPherson, Smith-Lovin et al. 2001, Birkelund and Heldal 2003).

Individuals choose partners within specified endogamous mate selection norms, or within categories of occupation, status, religious affiliation, education, age and ethnicity (Kornblum 2008). Kalmijn (1998) holds that social homogamy is influenced by the preferences of individuals in

characteristics of partners, the interference of third parties, and the constraints of the marriage market in which mate selection takes place.

Social homogamy theory is useful to this thesis as it is multidimensional in its approach, allowing for nuance in the discussion of mate selection, and more so as it is conceived and measurable on a continuum, with extreme similarity between partners at one end and extreme dissimilarity at the other (Majone 1972, Bourdieu 1985, Prandy 2003). Bourdieu (1984) and Prandy (1999) posit that high degrees of occupational and educational homogamy in mate selection are consequential, helping protect access to amassed economic and cultural resources, especially for the professional classes. In essence, high levels of homogamy in mate selection contribute to the reproduction of hierarchies of inequalities and social stratification. Repeated acts of homogamous mate selection within lower, middle, and higher socioeconomic groups reproduce a social order disadvantageous to those in lower socioeconomic groups (Bourdieu 1984, Smits 2003). Historically and internationally the professional/occupational elite are more likely to marry and cohabit endogamously than other socioeconomic groups (Bourdieu 1984, McDonald 1985, Smits 2003, Schumacher and Lorenzetti 2005, Bottero 2005a, Weber [1921] 1978). Importantly, patterns of homogamy differ considerably dependent on gender. The concept of hypergamy, as part of social homogamy theory, submits that women tend to ‘marry or partner upward’ in age, occupation, education, economic wealth, caste or any number of personal and socially ranked characteristics (Rubin 1968, Fraboni 2004, Rose 2004, Kornblum 2008). As in many English speaking liberal countries, hypergamous partnerships are a cultural norm in New Zealand (Bernard 1982, Fraboni 2000, Torr 2004).

Given that increasing levels of educational achievement for women *and* growing levels of educational homogamy have occurred over time, the concepts of homogamy and hypergamy are useful tools with which to explain social change and practice at a macro level. This thesis is informed by the homogamy theory based studies by Jones (1987), Kalmijn (1998), Smits, Ultee, and Lammers (2000), Prandy (2003), Birkelund and Heldal (2003), Blackwell and Licher (2004), Bottero (2005a), and Hamplova and Le Bourdais (2008).

Opportunities to find a more educated partner through marriage have declined for women, especially for those who are highly educated (Callister and Didham 2011, Callister and Lawton 2011a). A significant proportion of highly educated heterosexual women in the late 20<sup>th</sup> century were obliged or chose to ‘marry downward’ in educational status or occupational status (or both), or they elected to remain single (Lichter, Anderson et al. 1995, Callister and Lawton 2011a). This shortage of ‘high education’ males has positive outcomes for some men, who can marry or cohabit upwards and benefit from the social and economic rewards those partnerships with highly educated women offer. In contrast, the general increase in education for women has left a depleted pool of ideal partners for poorly educated men (Callister 1998).

Nevertheless, mate selection is resultant of two self-reflexive individuals with distinct characteristics, values and aspirations, who enter into complex social and emotional interactions that entail complicated bargaining and negotiations (Thornton, Axinn et al. 2007:13). Changes in practices at the individual level can influence larger social trends within societies. I use social exchange theory to examine and understand the relationship between micro practices of partnership formation that underpin and inform the changing trends found with my empirical results.

Social exchange theory examines the personal and intimate choices we make within partnerships, and the power relationships and levels of satisfaction with such arrangements. Social exchange theory has three tenets. First, social behaviour is an exchange of material and non-material goods such as the symbols of approval and prestige. Second, people will act in ways that *may* result in beneficial exchanges, and will duplicate this behaviour if positive outcomes are forthcoming. That considered, beneficial exchanges are not always forthcoming. This can result in feelings of dissatisfaction and a reassessment of the exchange arrangement by individuals involved. Third, benefits gained in exchange are contingent on benefits perceived as having been given. People will attempt maximum gains in any exchange (Clark and Gilman 2007: 38).

When applied to mate selection, this approach considers individual and shared motivations, suggesting that intimate partnerships involve a complex, ongoing series of interactions or exchanges in which power relations are either reproduced or contested. This theory proposes that we ‘evaluate’ ourselves and attempt to find someone of similar worth (Lawler and Thye 1999, Zafirovski 2003). Both males and females will act in self-interest and cohabit or marry to achieve outcomes not possible to them individually. Interdependence and self-interest are the key elements of social exchange (Lawler and Thye 1999, Zafirovski 2003). Social exchange theory maintains that trade-offs of valued characteristics between partners may also occur within mate selection. Regan (2008) suggests that inevitably individuals with high ‘aggregate value’ of desirable characteristics, or social capital, will pair up with each other, while those with low ‘aggregate value’ will partner with one another.

As with economic stability, social capital is an essential and recognisable currency within the partnership market. Social capital is the resources or favours that one can tap into, based on the connections and acquaintances (both formal and informal) one has within any given community or social grouping. Generally, these favours and opportunities are not open to people without these social connections (Bourdieu 1986a, Bottero 2005a). An individual’s position within the social strata, or their social status, or both, will reflect the kinds of social capital available to them and will contribute to their ‘desirability’ in the partnership market. Social capital is desirable as it indicates potential in a partner, which may be transformed into material and symbolic gains in the future. Partner selection (for both males and females) *within* high socioeconomic status/class networks can result in a reinforcement of existing social class arrangements and socioeconomic stability within those networks (Bourdieu 1984, Lambert, Prandy et al. 2007).

I argue that the use of marriage market and social homogamy theories is warranted on several accounts. They take into account the influence of the larger socio-structural changes in New Zealand society that occurred prior to and within the 1981–2006 period. One of the consequences of these socio-structural changes was that many individuals were making different choices in partner selection to the generations before them. In particular, women faced

new possibilities because of evolving labour markets, changed discourses, legislation, and technologies related to marriage and cohabitation in society.

Marriage market theory explains that the nature of the partnership market is constituted by the (evolving) characteristics of those males and females that constitute it. Given that educational and occupational participation and salaries of women have increased over time, this theory addresses the possible changes that have occurred for highly educated women.

As with the structuralist theories outlined above, social exchange theory is used to understand trends in mate selection in New Zealand over time. Unlike the former approach, social exchange theory (in its material and emotional forms) offers theoretical insights at a micro-level in this thesis. It is useful as it considers intimate partnerships as an on-going product of the people that constitute them and their relationship with the outside world. This theory allows for the discussion of both constraint and agency. It recognises the parts that self-reflection, identity, negotiation, and power, play within partnerships on an everyday basis.

#### **1.4 Contribution this thesis makes**

This thesis makes several contributions to the sociology of the family and family policy literature. First, it examines changes over time in partnership formation in ‘liberal’ states or English speaking countries such as Canada, Australia, Great Britain, and New Zealand, each of which have had significant increases in cohabitation over time (OECD 2010).

Second, this thesis shows the benefits of using census data to show changes in intimate partnerships over the decades, allowing time series analysis of individual practices at the level of the household, something that sampling does not permit. This makes definitive statements about long-term changes in mate selection practices.

Third, using New Zealand as a ‘test case’ of an English speaking country, the thesis adds to the debates concerning the interconnectedness, similarities and differences between marriage and cohabitation. It does this by contributing to the methods and empirical evidence needed to more clearly examine and define the relationship between the two partnership types.

Fourth, it studies changing patterns in partnership selection using insights from structuralist/marriage market and social exchange theory resources. This thesis argues that changes in mate selection are related to historical, structural and micro-level changes in educational and labour force participation, and to improvements in earnings equity between men and women. The utility of this collection of theoretical tools is discussed in more detail in Chapter Four.

## **1.5 Background to the thesis**

A century or more ago, mate selection in New Zealand involved more individuals than just the couple, as parents, communities and the church often played deciding roles in who was an appropriate spouse (Baker 2010a). In traditional Māori society, marriage was often arranged by whānau rather than by individual, especially for those of high rank, who often had arranged, strategic marriages to cement allegiances between whānau and political groups (Du Plessis 2012). Although mate selection is still constrained by culture in many Western societies, the dual processes of individualisation and de-traditionalisation have lessened the influence of parents and the church upon the process. In many OECD countries, including New Zealand, dramatic shifts in mate selection practices in terms of timing and partnership type have occurred over time. First-marriage rates have declined while those of cohabitation have increased exponentially (Carmichael 1984, Jacobsen, Fursman et al. 2004, De Vaus 2004a, Statistics New Zealand 2009a, Baker 2010a).

This growth in cohabitation has influenced the general downturn in marriage rates and the delay of legal marriages. Legal marriage reached its peak of popularity in 1971, with 45.5 marriages per 1,000 people. This rate declined to

15.6 per 1,000 by 1998 and had fallen further to an all-time low of 12.5 per 1,000 in 2010, just over one quarter of what it was in 1971 (Statistics New Zealand 2009a:1, Statistics New Zealand 2011f).

Increases in cohabitation are linked to the almost universal social acceptance of the cohabiting relationship as a valid partnership type (Ressler and Waters 1995). In addition, the numbers of New Zealand and Australian men and women who are delaying their first marriage are expanding (Statistics New Zealand 2001b, De Vaus, Qu et al. 2003b, Statistics New Zealand 2013a). People are delaying marriage because they are permitted to cohabit but also due to extended time spent in education, time spent in international travel, the search for stable employment, career development, and time spent saving for the wedding (Hillcoat-Nallétamby and Baxendine 2004, McPherson 2004, Newell and Callister 2008).

In addition to changes in marriage statistics, the average divorce rate has almost tripled in OECD countries in the past few decades, rising from 14.3 divorces per 100 marriages in 1970 to 38.9 per 100 in 2011 (Baker 2010a, Nationmaster 2012). The rates of divorce vary between countries and are influenced by (among other factors) levels of religiosity, cultural acceptance, and divorce legislation. As in many countries, the divorce rate in New Zealand peaked in 1982 at 17.1 per 1,000 people, following the passing of the *Families Proceedings Act* in 1980, which liberalised the grounds for divorce. In the early 1990s, the rate was about 12.0 per 1,000 existing marriages but it had declined to 9.8 per 1,000 by 2011 (Statistics New Zealand 2001a, Statistics New Zealand 2013b:18). The duration of marriages (before divorce) has also declined over time. Of all couples married in 1971, 29 percent divorced before their silver wedding anniversary (25 years). Of those married in 1981, 35 percent divorced before this anniversary (Statistics New Zealand 2012c).

Increasing proportions of divorced and widowed individuals in New Zealand remarry. In 1971, 16 percent of all couples who married included at least one person who had been married before. By 2011, this figure had almost doubled to 31 percent (Statistics New Zealand 2013a). While the exact percentage of divorced or widowed people who cohabit is unknown, these individuals exhibit

different characteristics and partner selection practices to those within first marriages (DeJong-Gierveld 2002).

As Torr (2004) argues, the social and material characteristics of marriage and cohabitation have evolved significantly over the past 60 years. Largely, the trends in mate selection present in 2014 have been influenced by the larger ideological and structural changes within Western society. These structures shape and influence many of the opportunities for individuals within the social world, the partnership market, and ensuing cohabitations and marriages. This thesis submits that the structural changes of most importance for intimate partnership formation are in employment and earnings, levels of education, and age. These changes over time are visible within demographic statistics, many of which show substantial changes in the lives of New Zealand females, in particular.

## **1.6 Demographic changes over time**

### **1.6.1 Employment and earnings**

The prevalence of dual-earner and dual-career couples is proliferating in many Western countries, including New Zealand (Ministry of Social Development 2006, Raley, Mattingly et al. 2006, Winslow-Bowe 2009). In 1986, women made up 41.7 percent of the New Zealand labour force, and this rose to 44.6 percent in 1998, then to 46.7 percent in 2012. While women now constitute almost half of the working population, they make up the majority (71.6 percent in 2012) of the part-time workforce. Nevertheless, women are increasingly likely to work full-time, comprising 42.1 percent of the full-time workforce in 2012, an 8.2 percent absolute increase from 1986 (Statistics New Zealand 1999, NZ. Stat 2013b).

While many partnered women/mothers continue to work part-time, expanding numbers (more than half) of New Zealand mothers are now working full-time. As is shown in Table 1.1, the proportions of mothers 15 years and over in paid work grew by 3.3 percent over the 1986–2006 period. In contrast, one-fifth of

mothers were working part time in 2006, a one percent increase from 2001 (NZ. Stat 2013h).

**Table 1.1 New Zealand mothers 15 years and over in full- and part-time paid work: 1986–2006**

<b>Mothers in paid work</b>	<b>1986</b>	<b>1996</b>	<b>2006</b>	<b>Increase over time</b>
Full-time	26.7%	33.0%	37.0%	10.3%
Part-time	27.0%	19.0%	20.0%	-7.0%
<b>Total</b>	<b>53.7%</b>	<b>52.0%</b>	<b>57.0%</b>	<b>3.3%</b>

**Source:** (Statistics New Zealand 1996, NZ. Stat 2013h).

A mother’s age and education level, and the age of their youngest child, further influence these labour market participation statistics in New Zealand. In 2001, 43.2 percent of women whose youngest child was between 0 and 3 years were in the workforce. This rate increased to 74.7 percent when the youngest child was aged between 6 and 13 years (OECD 2006).

The average earnings for males have historically been greater than for females in New Zealand. This gender pay gap was substantially remediated following the Equal Pay Act of 1972 (Hyman 1994). That notwithstanding, the Ministry of Women’s Affairs (2013) argues that while the gender pay gap has narrowed marginally in New Zealand over the last decade – dropping from 12.4 percent in 2003 to 10.1 percent in 2013 – it is still substantial.

Differences in income are often related to the type of job one holds. The income gap is compounded by the gendered nature of paid work in New Zealand. Despite the increasing percentages of women in paid work, certain industries/ occupations employ more women than men, and vice versa. Table 1.2 gives an example of the gendered nature of occupations in New Zealand in 2012.<sup>3</sup>

<sup>3</sup> These occupations are a sample of the more highly gendered jobs within the 96 occupational types that are examined in depth in Chapter Seven of the thesis.

**Table 1.2 Gender distributions in five occupational groups in New Zealand: 2012**

<b>Occupations (NZSCO99)</b>	<b>Females</b>	<b>Males</b>
Clerical/Administrative workers	76.6%	23.4%
Community/Personal Service workers	69.9%	30.1%
Sales workers	60.1%	39.9%
Professionals	57.8%	42.2%
Managers	35.0%	65.0%
Technicians/Trade workers	18.9%	81.1%
Machinery Operators and Drivers	13.5%	86.5%

**Source:** (NZ. Stat 2013a).

Females made up large proportions of Clerical and Administrative, Community and Personal Service, and Sales jobs in New Zealand in 2012. In the same year, very large proportions of Machinery Operators and Drivers, Technicians and Trade workers, and Managers were males. The Professional workforce appears less gendered than other groups, consisting of 57.8 percent females and 42.2 percent males. That considered, both vertical and horizontal segregation are present within each of the occupational types.

These evolving patterns of gendered occupations, earning disparities and patterns of labour force participation help to explain multiple differences for men and women within and between the two partnership types examined in this thesis. I argue that increased levels of education, especially for women, in recent decades have changed the balance of an important characteristic for men and women within the partnership market, thus influencing trends within ensuing partnerships.

### **1.6.2 Increasing levels of education**

New Zealanders of both sexes have become progressively more educated over time. In 2013, 49.1 percent of the primary, special, and secondary school populations were female while 50.9 percent were male (Education Counts 2013b). In 1981, 55 percent of New Zealand residents 15 years or older had no educational qualifications; by 2001, this figure had dropped to 28 percent.

Participation in higher education has also increased for the population over time, and more so for females than for males (Newell and Perry (2006) cited in Callister, Newell et al. 2006: 4).

In 1986, 127,296 students were enrolled with New Zealand tertiary providers. By 2011, this number had increased to 383,469 (10.9 percent) New Zealanders 15 years and over enrolled in a tertiary institution (Education Counts 2013a). In the same year, almost 60 percent of tertiary students (local and international) were female. Sixty-four percent of undergraduate students and 58 percent of postgraduate students were female (Statistics New Zealand 2013c). However, most disciplines within tertiary education are gendered. In 2011, much greater proportions of males than females were enrolled in information technology, engineering, architecture and building, agriculture, environment, and related studies at tertiary institutions. Females were more likely to enrol for education, food, hospitality/personal services, health, and society/culture qualifications (Statistics New Zealand 2013c).

It is evident that access to the institutions that ‘generate’ achieved statuses, such as level of education, occupation, labour force participation, and wages has improved for the general population, yet some gendered differences remain. I argue that these differences can alter the mate selection process and the socioeconomic condition of ensuing partnerships. In addition, time spent gathering such capitals can influence the timing of first marriages and the ages of those involved.

### **1.6.3 Age difference**

In many countries, including New Zealand, the average ages of males and females at first marriage and successive marriages have increased over time, while the ages of entry into first cohabitation have remained relatively steady (Coontz 2004). Many people in Australia and New Zealand are delaying legal marriage, spending their younger years in cohabiting relationships or remaining single (Carmichael 1984, Statistics New Zealand 2001b, De Vaus, Qu et al. 2003b, Manning, Brown et al. 2013).

Traditionally New Zealand women have been younger than their partners, but the size, and in some cases, the direction of that age gap has changed. The median age gap between partners in all marriages (first time and remarriages) has declined over time, shrinking from 2.9 years in 1981 to 2.1 years in 2013. The age gap in first marriages remains lower than for the remarried population: in 1971 the gap was 2.1 years, and this had narrowed to 1.6 years by 2011 (Statistics New Zealand 2009c, 2013a). Similar trends have been evident in post-1970 Australian society (De Vaus 2004b). Partnerships where both members are of equal age, or the men are one or two years older, are the most prevalent ‘arrangement’ in New Zealand; those with a five-plus year gap are the least prevalent (Statistics New Zealand Microdata 2011). Two facts relevant to the thesis emerge from these changes in ‘partnership type choices’ over time. First, the expanding numbers of cohabiting relationships that evolve into (and delay) legal marriages have increased the average age at first marriage within marriage statistics (Blackwell and Lichter 2000). Second, the cohabiting population remains younger than the married population.

## **1.7 Thesis structure**

Chapter Two surveys and discusses the literature that seeks to describe and explain the demographic changes in marriage and cohabiting partnerships in Western societies over the past decades. Section One outlines the international and local studies of these changes over time, examining the changing social environments in which these partnerships are formed. Section Two examines and assesses the methods, primary debates, and theoretical approaches commonly used to understand mate selection.

Chapter Three discusses the theoretical frameworks used in this thesis to explain the evolving changes in partner selection trends. These are of two major strands: the macro-structural marriage market theory, and the micro-individual social exchange theory. I show that these theories are suitable for discussing the shifting socioeconomic and cultural constraints on the mate selection process, and the agency of individuals in rational and non-rational decision making in this process.

Chapter Four outlines the research design of this thesis. I make clear the data gathering process, the data themselves, the creation and testing of analysis models, and the development of hypotheses and variables used within the thesis. I also show the value of using census data in time series analysis to map social change. A simple example of the statistical analysis model is also offered here.

Chapters Five, Six, and Seven provide empirical evidence with which to answer the thesis questions. Chapter Five provides empirical proof of changes in ‘age of entry’, and age difference between men and women within and between marriage and cohabitation over time in New Zealand. I show that average age at first marriage has increased in past decades but that age has remained constant for entry into cohabiting partnerships. The results also show that age differences between partners vary dependent on time period, life stage, gender, partnership type, and marital status. While some New Zealand females have a partner of similar or identical age, substantial proportions continue to marry men older than themselves. In addition, the average age gap between the sexes in remarriages is wider than it is for those in first marriages. The data also show that a small but significant proportion of cohabiting women in their 50s and over have much younger partners, a trend not found in (first) married couples in this age group.

Chapter Six examines the idea that the increased educational participation of New Zealand women over time has intensified the educational ‘marriage squeeze’ or partner shortage effect (Greene and Rao 1995). This shortage changes the dynamic of the partner market, creating an imbalance in the traditional educational ratio between men and women. As with a sex ratio imbalance, this limits partner choice for one sex and increases it for the other (Callister 2006). I demonstrate that, on average, the educational gap between partners is wider in the cohabiting population than it is in the married population. The results also show that the marriage squeeze has altered the historically persistent patterns of women choosing male partners with higher educational qualifications. The (proportional) increase in women who acquire higher educational qualifications has lessened the possibilities for women to marry upward educationally. Over the decades, expanding proportions of

women have come to choose a partner with qualifications equal to their own. In addition, rising numbers of women are partnered with males with lower qualifications.

Chapter Seven demonstrates the historical persistence of gendered occupational and earnings differences within and between marriages and cohabitations, despite some changes. This chapter shows that men and women in professional occupations are more likely to choose someone of equal occupational status, than those in mid- and lower-level occupational groups. Moreover, this practice has become more prevalent over time. Evidence also shows that partnered men continue to earn (on average) a greater proportion of the family income than do women, but that women's earnings/contributions are larger in cohabiting partnerships than in legal marriages (Statistics New Zealand 2006g). I show that these differences in earnings are related to gendered occupations and salaries, levels of female labour force participation, and motherhood and childcare responsibilities (or the "child penalty effect"), and are therefore incidental to partnership structure (Budig and England 2001, Felfe 2006, Baker 2010c).

In Chapter Eight, the conclusion chapter, I revisit the central questions that directed this thesis. The chapter argues that although legal marriage and cohabitation have become more interconnected in purpose over time, they remain different in some respects. While gendered inequalities in levels of education, paid work, and earnings have typically improved for partnered women, those in cohabiting partnerships have on average greater financial and personal independence, and higher status jobs and levels of earning than married women. I also argue that differences and inequalities within both partnership types are contingent on life stage, gender, and socioeconomic status.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Introduction

The plethora of individual love choices and sexual urges of males and females cannot explain the historically recurring *and* changing patterns of difference and similarity, inequality and equality, within and between heterosexual marriage and cohabitation in the 20<sup>th</sup> and 21<sup>st</sup> centuries (Bozon and Heran 1989). Social, economic, cultural, legislative, socio-structural, technological, ideological, geographical, and proximal elements (in aggregate) also contribute to the mate selection processes and the nature of the subsequent partnerships (Poole 2005).

This chapter reviews the literature relevant to the changing trends within and between marriage and cohabitation in Australia, Canada, Great Britain, the United States of America, and New Zealand, with a particular focus on New Zealand. These changes are influenced by both structural and non-structural factors. This chapter begins in section one by briefly acknowledging the place of romantic love within 20<sup>th</sup> and 21<sup>st</sup> century partnership formation, followed by the historical changes to marriage, cohabitation, and mate selection. This is followed by a review of the multiple strands of mate selection theory, highlighting the utility of structuralist and social exchange theories for this thesis. The chapter then investigates the gendered patterns of difference within and between marriage and cohabitation, speaking to their ideological and structural origins and locations.

The final four sections of this chapter discuss the demographic changes within and between marriage and cohabitation over time. The first section discusses the historical increases in the ages of men and women at first and subsequent marriages, and the dissimilarity to those in cohabitations. The narrowing of age differences between partners is also discussed within this section. The following two sections demonstrate the gendered nature of mate selection in terms of educational levels and occupation types, taking into account increases in paid work and education for women over the past decades. The final section of the chapter investigates paid work and motherhood, noting the increases in

labour force participation for women over time, their concentration in the part-time workforce, and the declining, although still prevalent disparities, between the earnings of partnered males and females. The next section examines the reasons why men and women form long-term intimate partnerships.

## **2.2 Reasons for cohabitation and marriage**

This thesis focuses on structural patterns in partnership selection, but social-psychological desires for love, affection, sexual intimacy, and family formation, can influence whom we marry or cohabit (Kalmijn 1994, Sprecher, Sullivan et al. 1994). Marriage, and to a lesser extent cohabitation, remains a path of socioeconomic mobility or economic betterment for some women (Sorensen and McLanahan 1989, Prandy 1998, Queiroz 2004, Dribe, Van-Bavel et al. 2012). People also form partnerships for reasons of physical and emotional intimacy, the bearing of children, the love of their children and partner, seeing their children grow, companionship, personal fulfilment. People also marry or cohabit for specific economic benefits, such as access to their partner's (generally higher) income, the sharing of furniture, food, insurance, a car and general utility costs (Becker 1973, Dempsey 1997, Dempsey 2002, Niolon 2010). In Australia, the United States, and other OECD countries, people with low income and or educational qualifications are more likely to cohabit than are those with high socioeconomic status (Bumpass and Sweet 1989, Lichter, Qian and Mellott 2006, Buchler et al. 2009).

Men and women can and do resist social convention, structural influences, family pressure and economic logic when choosing a partner. Individuals also enter cohabitation and marriage for reasons of solidarity, empathy and compassion (Rosenfeld 2005). Sometimes people meet by chance, by being in a place they normally would not visit. Few young people make deliberate decisions to cohabit. It can happen gradually, often without discussion of the meaning of the move from dating to living together (Lindsay 2000, Manning and Smock 2005, Rhoades, Stanley et al. 2009, Gold 2012, Baker and Elizabeth 2014).

Some marriages are the result of relationship inertia, evolving from frequent sleepovers, to living together, to marriage without deliberative thinking or major fanfare (Lindsay 2000, Stanley, Rhoades et al. 2006). Some partnerships begin as an act of defiance against family, social or ethnic group, or peer expectations. Others start as a statement of individuality or a railing against social and religious convention (Augustin 1994). Given the increasing secularisation of society and the increased acceptance of non-marital sex, the flouting of social and religious convention through cohabitation is more difficult in the 21<sup>st</sup> century than in times past, limited to some fundamentalist religious and social groups. People's emotional needs and romantic love also play important roles in partnership formation (Baker 2010a).

While the focus of this thesis is not directly on romantic love, it is important to acknowledge its historical rise in importance within the mate selection process. As will be discussed later, expectations of romantic love owe their formation to structural factors similar to those that shape and constrain the mate selection process.

### **2.3 Romantic love and mate selection**

When asked why they chose to cohabit with or marry a particular individual, people's responses are rarely expressed in economic terms, or the possibility of status gain, social mobility, lineage or even group solidarity. Rather, their choices will be expressed in personal and emotional terms, of love and romantic love (Levine, Sato et al. 1995, Williams and Hill-Williams 2005). Simpson, Campbell and Berscheid (1986) argue that since the 1960s, most people in the US have thought that romantic love is a prerequisite for the formation and maintenance of a marriage relationship. Baker (2010a) contends that many young people in the Western World would insist that they marry for love. That considered, the 'necessity or presence of romantic love' before marriage is arguably more important for females than it is for males (Regan 2008). This 'privileging of love' in a partnership may be class specific. Women of low socioeconomic status, for instance, may prioritise earning ability (among other factors) before love in a potential partner (Edin 2000).

In general, theories of love and being in love must be understood within historical, cultural and gender contexts. Concepts of love and romantic love differ dependent on historical era and cultural location (Bernado and Owens 2000).

Social science seeks to understand the place of love in the mate selection process, but as Bernado and Owens (2000: 1696) state:

Love is one of the most complex and elusive concepts to deal with from a scientific point of view...poets, novelists and musical composers are much more adept at producing eloquent expressions about this pervasive sentiment.

Further, Max Weber speculated that emotions were irrational forces and that understanding them required a form of analysis outside of the rational modes of social action (Weber: 1947 cited in Burkitt 1997). Despite this dilemma, social scientists seek to make ‘rational’ sense of romantic and other types of love. They usually consider the dyadic relationships between individuals, or the impact of social structures on love and individuals, or more rarely, a combination of the two theoretical approaches. It is possible that romantic love exists/existed in some pure and singular form such as the Courtly Love of the middle ages (Wollock 2012). That notwithstanding, in many Western societies romantic love is often conflated and confused with sexual desire or passionate love (Lindholm 1998, Frommer 2008). For the sake of clarity, I will use the term romantic love as a substitute for the intertwined states of being in love and experiencing sexual desire.

In pre-modern Europe, most marriages were arranged or ‘contracted’, not on the basis of love or sexual attraction, but because of economic circumstances, status strategies, or the reinforcement of kinship ties (Giddens 1997). That considered, people understood that love was the fundamental requirement for the *success* of marriages; that love should ideally be present before the marriage, and if not, should certainly develop afterward (Thornton, Axinn et al. 2007, Dribe and Lundh 2009). This ‘institutional’ model of marriage of preindustrial times had evolved into a ‘companionate’ model of marriage by the early 1900s, no doubt influenced by the increasing industrialisation of many societies (Amato 2004). These marriages prioritised love, romance and

relationship satisfaction between a husband and wife. Romantic love had become the fundamental characteristic of the 'modern marriage' as recently as in the 19<sup>th</sup> century, and has a continuing influence on the formation of partnerships to this day. The beginnings of 1960's saw the emergence of the 'individualised' marriage in which both spouses considered their own levels of satisfaction and their own sense of self in terms of building a family, and playing the roles of parent and spouse (Seccombe and Warner 2003, Cherlin 2005).

The freedom to choose a partner for reasons of love is partially the result of the growing individualisation and de-traditionalisation within Western society (Beck and Beck-Gernsheim 1995, Giddens 1997, Coontz 2006, Wiik, Bernhardt et al. 2010). Baker (2010a) argues that falling in love is influenced by a combination of socialised class-based ideals of attractiveness and values, and our own personal needs. Within the 20<sup>th</sup> and 21<sup>st</sup> centuries, concepts of love and social expectations of falling in love have been transformed by the romantic love complex, in which love is expected to be democratic, a prerequisite for marriage, and now necessary for cohabitation.

Incidences of romantic love as a prerequisite for marriage or cohabitation are increasingly prevalent in many Western countries, as is the reinforcement of the concept by romantic love-based industries (Illouz 1997, Dribe and Lundh 2009). Certain concepts and narratives of love are absorbed by individuals through books, songs, television, movies and other instruments of the mass media, offering a culture of romance, of gendered roles, and scripts of how to act in relationships, preparing us psychologically (in a distorted way) to fall in love (Bernado and Owens 2000). Jackson (1993) considers that contained within these romance narratives are expectations of gendered material differences, unequal power relationships and role expectations in terms of emotional and domestic labour, all to be inevitably contested within marriages and cohabitations.

Giddens (1997) argues that a new type of love emerged in the 20th century that is at odds with romantic love and the romantic love complex. Confluent love is active and contingent rather than permanent and singularly focussed. It

assumes the pursuit or negotiation of true equality between partners, rather than the blind acceptance of the gendered inequalities found within romantic love. Giddens also argues that the emergence of confluent love, and its inherent individualistic and contingent nature, has prompted the rise in separations and divorces within western societies today. While love in its many forms is important for the formation and success of marriage and cohabitation, other factors also influence the mate selection process. In some instances, these factors influence people's socio-economic profile, our habitus, and our physical location—all of which contribute to the possibilities of whom we will fall in love with.

## **2.4 Mate selection theories**

At least four central theoretical approaches have been used to understand mate selection including the structural, psychological, social constructionist, and developmental theories (Baker 2010a). A number of social psychological theories emerged in the middle of the 20<sup>th</sup> century. One such approach was the 'opposites attract' or 'complementary needs theory' (Winch 1958). This theory suggested that individuals chose partners who had personality traits that were opposite, but complementary, to their own. Winch (1958) proposed that similarity in personality traits or social characteristics, such as occupational status, would produce an ego clash between partners and an unsatisfactory relationship. Coombs's (1961) 'ideal mate' or 'template matching' theory, argued that a partner was chosen based on a subconscious set of partner traits that were reflective of those held by an individual's opposite-sex parent or sibling (Wilson and Barrett 1987, Geher 2000).

Socio-psychological 'process' theories of mate selection have links to the 'filter and process theory' of Alan Kerckhoff and Keith Davis (1962). This approach suggested that structural influences such as propinquity (or proximity) and social endogamy (or preferences to marry within a social group), were the primary influences on the likelihood of individuals meeting. However, the mate selection and relationship development that followed contained a series of winnowing stages, beginning at race and social class,

moving to similarities in value orientation, and finally to needs complementarity between partners. A further iteration of the filter theory, the 'Stimulus-Value-Role' model, proposed that other structural factors influenced the filtering process, the order of the filters, and the likelihood of marriage. These factors included social and cultural background, historical changes, and the exchange value of assets (that people brought to relationships), age, gender, and marital history (Murstein 1970, 1974, Epstein and Guttman 1984).

A further approach to understanding mate selection is Developmental Theory, which posits that mate selection is a socially constructed process or journey involving negotiations on the parts of individuals. Rather than the process being guided by a set of psychological and social predispositions, who one (finally) marries marks the end of a journey characterised by chance encounter, degrees of commitment negotiation, and assessment of said journey, by both partners (Baker 2010a).

While the preceding social-psychological based theories may adequately inform the individual experiences and processes within mate selection, other, structural theories better 'explain' the changing patterns in mate selection at a societal level in New Zealand over time. This thesis therefore is based on structural theories discussed below.

#### **2.4.1 Structural patterns in mate selection**

Choosing a partner in many Western societies might be seen as the most individual and voluntary of actions. This behaviour, nevertheless, is likely to be one that follows socially embedded patterns and rules of interaction. Individuals choose, or are encouraged to choose, partners who are socially similar to themselves (Shepard 2009). Since the beginning of the 20<sup>th</sup> century, sociologists have described patterns of partner choice and attempted to explain why people marry endogamously (within their social group) and why they marry others close to their own social status (Kalmijn 1998).

Social homogamy research had its beginnings in the United States in the early 1900s. Simply put, homogamy theory argues that people with similar sets of social characteristics or traits will be drawn to each other. Closely

interconnected to homogamy theory is hypergamy theory. This approach argues that, historically, many women marry or cohabit with a partner of higher occupational and or educational status. Observations of homogamy reach back to Ancient Greece: Plato (429–347 B.C.) proposed that ‘similarity begets friendship’; Aristotle (384–322 B.C.) stated that people ‘love those who are like themselves’ (Lazarsfeld and Merton 1954, McPherson, Smith-Lovin et al. 2001). Homogamy is present in many countries, but the level of its occurrence and heterogeneity differs between nations (Hout and DiPrete 2006). These differences are linked to economic and social elements that include a nation’s stage of industrial development, its levels of gender equality in education and workforce participation, women’s rights, ethnic composition, and levels of religiosity (Hout and DiPrete 2006).

Two central streams of homogamy research have developed over time. One of these investigates the similarities between married partners using ascribed (personal) attributes such as age, values, physical attractiveness, physical similarities, temperament and intellectual abilities (See Jones 1928, Jones 1929, Smith 1941, Burgess and Wallin 1943, Kirkpatrick and Cotton 1951, Sundal and McCormick 1951, Coombs 1961). Patterns of ethnic marriage and intermarriage have also been examined in the US and other immigrant countries to assess levels of integration between immigrant and existing populations (See Drachler 1920, Wirth and Goldhamer 1944, Hutchinson 1957, Michel 1964, Kalmijn 1998).

A second stream of homogamy research proposed that social forces exterior to the individual also influenced partner choices. Kerckhoff (1964), Warren (1966), and Blau and Duncan (1967) contended that homogamy between males and females was apparent across multiple achieved characteristics, such as religion, education, socioeconomic status (SES) and education. Much empirical research has utilised combinations of these characteristics. Studies of religious homogamy in the United States (and other countries) have examined the influence of the church on personal life choices, and the place of religion in community group formation and reproduction (See Hollingshead 1950, Kennedy 1952, Bell and Blumberg 1959). Other homogamy research has

focused on the influence of family and family characteristics on mate selection (Sussman 1953, Leslie and Richardson 1956, Murstein 1967).

Further, homogamy research has examined the impact of gender, race, socioeconomic status and educational participation on levels of educational homogamy (See Landis and Day 1945, Glick and Carter 1958, Udry 1966, Blau and Duncan 1967, Michielutte 1972). Socioeconomic-based homogamy research was also prevalent in the mid to late 20<sup>th</sup> century (See Goode 1951, Glass 1954, Dinitz, Banks et al. 1960, Scanzoni 1967, Goody 1971). Social class and socioeconomic stratification studies in this period often used homogamy patterns in conjunction with mobility patterns to describe levels of openness within systems of socioeconomic stratification (Kalmijn 1998). Exponents of propinquity theory examined the effect of geographical distance between the residences of individuals on the likelihood of mate selection, suggesting that its influence decreased as spatial separation increased (See Bossard 1932a, Marches and Turbeville 1953, Katz and Hill 1958). Such researchers found that many people married partners who lived close to them.

More recent partnership market studies have responded to historical changes within marriage (and peripherally cohabitation) by conducting homogamy-based measurement of differences in the areas of age (Qian and Preston 1993, Fraboni 2004), education (Callister 1998, Blossfeld and Timm 2004, Rose 2004, Raymo and Iwasawa 2005, Chiappori, Iyigun et al. 2009, Callister and Didham 2011), occupation (Bergman and Joye 2003, Prandy and Lambert 2005, Bottero, Lambert et al. 2009), and labour force participation (Chen, Conconi et al. 2007). Results have shown that the practice of homogamy, partnering up, and partnering down in these areas remain prevalent but differ between many countries.

## **2.5 Historical changes to marriage and cohabitation**

The decision whether to cohabit or marry in many Western societies is also influenced by historical changes to financial constraints, social norms, ideologies, class structures, geographical separation, labour market opportunities, extended periods of education and the growing individualisation

of society (Flatau, James et al. 2003). Men and women in Bumpass, Sweet and Cherlin's (1991) American study chose or preferred cohabitation over legal marriage because it required less commitment and less sexual faithfulness. It also allowed more for personal and financial independence, especially for females. Given the increasingly heterogeneous characteristics and practices of cohabiters in the 21<sup>st</sup> century, it is possible that this study will not be as relevant now as in 1991.

The impacts of macro ideological and structural shifts are evident in many largely secular countries such as New Zealand. Organised religion's influence on mate selection, birth control, procreation and divorce behaviour has weakened over time. The 'moral compass' of the church here has been usurped somewhat by an ideological shift to more secular values (Carmichael 1984). This realignment of values has weakened the social and moral 'necessity' of legitimising cohabitation and childbearing out of wedlock. The increasing reliability, availability, social acceptance and use of oral contraception have also influenced the proportional increase in cohabiting unions in New Zealand (Baker 2010a).

In Australia, Canada, Great Britain, New Zealand and the United States, cohabitation and marriage have contrasting age demographics (although this is changing), ideological underpinnings, levels of commitment, durations, purposes, cultural influences, fertility, partnership stability, and levels of paid work (Casper and Bianchi 2002, Elizabeth 2003, Heuveline and Timberlake 2004, Buchler, Baxter et al. 2008, Hixson 2008, Elizabeth and Baker 2010, Gemici and Laufer 2010). While marriage is a legal and social declaration of commitment to one other person, cohabiting declarations of commitment tend to be personal, less legally binding, and more contingent (Stanley, Whitton et al. 2004, Hixson 2008, Buchler, Baxter et al. 2009). It follows that the age demographic of cohabitation is younger than of marriage, and cohabiting partnerships are more likely to be childless, unstable and of shorter duration, - in part because of the large proportion of young people who make up the cohabiting population.

Nevertheless, increasing proportions of couples are choosing cohabitation as an alternative or precursor to legal marriage (Khoo 1987, Lewis 2001, Beck-Gernsheim 2002, Manning and Smock 2002, Cherlin 2004, Coontz 2005, Baker 2010a). In Australia, for example, the cohabitation rate rose markedly from 4.7 percent in 1982 to 14.9 percent in 2006 (Buchler, Baxter et al. 2008, Australian Bureau of Statistics 2012). Cohabitation is becoming both normal and socially acceptable in Australia (Manning, Longmore et al. 2007, Hayford and Morgan 2008), and elsewhere.

Dempsey and de Vaus (2004:158) hold that “[Australian society has] ... reached the point where it is almost a deviant act to marry without first cohabiting”. In the 1950s, two percent of couples cohabited before marriage; by 2010, this figure was 78 percent (De Vaus, Qu et al. 2003b, Australian Bureau of Statistics 2012). Similar trends exist in the United States and New Zealand. Between 1965 and 1974, only 11 percent of Americans who married, cohabited first; by the turn of the century, the majority of those who married had cohabited beforehand (Bumpass and Lu 2000, Stafford, Kline et al. 2004). In Britain, cohabitation is usually a temporary arrangement that lasts two or three years and leads to legal marriage (Beaujouan and Bhrolcháin 2011).

The New Zealand cohabitation rate has also increased over time (Jacobsen, Fursman et al. 2004, Statistics New Zealand 2009a). In 1996, 25 percent of couples aged between 15 and 44 and in a partnership were cohabiting. By 2006 this rate had increased to 40 percent (Statistics New Zealand 2013a). As in many other countries, the social acceptance and proliferation of cohabitation in New Zealand has influenced such factors as, the national increase in age(s) at the first and subsequent marriages, ex-nuptial childbirth, and post-divorce living arrangements. The interrelationships between these are reflected in the historical analysis contained throughout chapters of this thesis.

Dharmalingam, Pool, Sceats, and Mackay (2004:17) recorded some of these interrelationships and changes over time in the practices of New Zealand women. The authors maintain that:

While women who were mothers during the baby boom of the 1950s and 1960s generally entered marriage as their first union, an overwhelming

proportion of women born during and since the baby boom have entered cohabitation as their first union. The propensity for women to delay marriage continued to increase among the most recent birth cohorts.

Dharmalingam and colleagues' (2004) study of New Zealand families showed that similar proportions of Māori and non-Māori women had cohabited before marriage, though Māori women in all age cohorts were more likely to cohabit than marry. While the relationships between ethnicity and marriage/cohabitation in New Zealand are of importance, they are outside the scope of this thesis.<sup>4</sup>

Arguably, married and cohabiting couples often exhibit contrasting gendered practices, socioeconomic/educational characteristics and intents; marked differences also exist *within* these two social arrangements. Cohabitation in the late 20<sup>th</sup> and early 21<sup>st</sup> century is heterogeneous in form, function, purpose, and meaning. New typologies with which we understand cohabitation have emerged. Cohabitors are neither a subjectively nor an objectively homogenous group. Rather, they are sub-groupings of couples who may be differentiated from each other by the purpose, meaning and the level of commitment to their partnership (Blackwell and Lichter 2000, Casper and Bianchi 2002, Heuveline and Timberlake 2004, Hixson 2008, Buchler, Baxter et al. 2009, Baker and Elizabeth 2013a).

For some individuals, cohabitating is a form of partner and partnership trial or assessment, and in some instances their partner's suitability for parenthood and/or future financial stability (Bumpass, Sweet et al. 1991, Oppenheimer 2000, McGinnis 2003, Heuveline and Timberlake 2004, Brien, Lillard et al. 2006). Elizabeth and Baker (2013) argue that a growing proportion of cohabiters in New Zealand do not have an explicit goal of marriage, rather they live within 'conditional partnerships' which are regularly assessed (by both parties) for levels of satisfaction. Some cohabitations are long-term and remain so, while others will be eventually transformed into marriage (Baker and Elizabeth 2013a). Cohabitation can also be a short-term living arrangement

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<sup>4</sup> The interested reader is directed to Callister and Blakely 2004; Callister, Didham and Potter 2005, 2007; Walker 2010.

that will transition into legal marriage when the couple is financially secure (McGinnis 2003).

Few young people make deliberate plans to cohabit (Lindsay 2000, Manning and Smock 2005, Rhoades, Stanley et al. 2009, Gold 2012). Some cohabitations therefore act as an alternative to being single, and in this sense might be understood as an extension of dating, while others are short-term casual sexual arrangements/co-residential dating in which individuals do not consider marriage or long-term cohabitation (Rindfuss and VandenHeuvel 1990, Heuveline and Timberlake 2004). Elizabeth and Baker (2013) argue that cohabitation can also act as alternative to marriage or residential dating. These casual, test bed, trial marriage, and conditional partnership cohabitations have become extensions of dating and the partner winnowing process. In summary, cohabitation takes at least three forms: a temporary arrangement, a partnership that leads to legal marriage, and a long-term partnership that retains its cohabiting status. However, the purpose, prevalence and duration of cohabitations, and their relationship to legal marriage, is related to the cultural and legal context of different nation states (Heuveline and Timberlake 2004).

The study by Pool, et al. (2007) using data from the *New Zealand Women: Family, Employment and Education Survey*, demonstrated a considerable drop over time in couples transitioning from cohabitation to marriage, and a notable rise in cohabitations that dissolved. Prior to 1970, 75 percent of cohabiting couples married within the first four years. A further 14 percent of cohabiting partnerships dissolved, while 11 percent remained cohabiting. From 1980 to 1989, 41 percent of cohabitations converted to marriage, 45 percent dissolved, and 14 percent remained cohabiting. Heuveline and Timberlake (2004) used the same survey data and other international data to show that the median duration of cohabitations in New Zealand was 2.18 years—just over half the 4.28 figure for France.<sup>5</sup> New Zealand's cohabitation duration was second shortest of eleven European and North American countries in Heuveline and Timberlake's (2004) study. The smallest median duration was 1.17 years for

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<sup>5</sup> Durations by which half of premarital cohabitations have ended in either in separation or marriages.

the United States. These studies show that cohabitation is typically, but not exclusively, a temporary and or unstable arrangement in New Zealand.

De Vaus's (2004a) study of cohabiting and marriage practices in Australia in the late 20<sup>th</sup> century and early 21<sup>st</sup> century found similar, though not identical, historical trends to Heuveline and Timberlake's (2004) and Pool et al's (2007) studies. Both studies showed that while a considerable proportion of 'first cohabiting' and 'cohabiting/been married before' partnerships became legal marriages in Australia and New Zealand, this practice had become increasingly less prevalent in the late 20<sup>th</sup> century. Cohabiting relationships are as likely to break up as to evolve into legal marriage, and more likely to break up if someone in the partnership has been married previously (De Vaus 2004a, Pool, Dharmalingam et al. 2007).

An individual's prior marital history can influence the likelihood of the transition from cohabitation to marriage. Cohabitors in Buchler, Baxter et al.'s (2008) Australian study were diverse in the intentions of their partnerships. Twenty three percent of the couples had been married previously. Of these, 19 percent intended to remarry while 14 percent did not. Sixty-seven percent of couples had not been married. Of these, 40 percent intended to marry, while 27 percent would continue to cohabit. Put plainly, cohabiters who had been married previously were less likely to plan for marriage than those who had never been married.

Given the relatively young age demographic of the cohabiting populations in Australia and New Zealand, it is likely that a considerable proportion of 'temporary cohabitations' may be co-residential dating, as Elizabeth and Baker (2010:3) state:

The decline of the regulative tradition of marriage means that young couples can live together in order to achieve the intimacy they desire without any expectation, either between themselves or family members, of a long-term committed relationship.

A relatively small but slowly increasing proportion of those who cohabit, do so long-term. That these multiple forms of cohabiting partnerships coexist and are relatively common within both societies suggests they have become more

socially acceptable. There is less social pressure on cohabiting couples to formalise their relationships through legal marriage (De Vaus 2004a).

### **2.5.1 Geography and mate selection**

More than 80 years ago Bossard (1932b:222) stated, ‘Cupid may have wings, but apparently they are not adapted for long flights.’ At this time, great geographical distance and the related travel costs constrained the mate finding and mate selection processes. In 2013, geographical separation is less of a physical constraint on mate selection. Face-to-face meeting is but one of many ways of connecting with, meeting and vetting potential partners. Rosenfeld (2012) maintains that over the past fifteen years, the Internet has been slowly replacing family, grade school, college, neighbourhood and friends, as a venue or link to meeting a partner in the United States. Relationships can blossom within cyberspace (Zhao 2006).

The rapid growth of the Internet and related forums of communication has made possible (but not probable) intimate relationships between people formerly separated by huge geographical distances and related costs. While these ‘new media’ allow for partner searching over greater geographical distance, partner selection is still subject to the ‘criteria of suitability’ that exist for each individual. Lampard (2007) suggests that, in Britain at least, relatively low proportions of Internet dates result in marriage or cohabitation. A recent survey of 3,800 people in Britain showed that of the 29 percent of respondents who had used an Internet dating site, 70 percent had had at least one date resulting from online contact; 43 percent had enjoyed a sexual encounter; and 9 percent had found a marriage partner (Gunter 2008). Similar trends existed for eHarmony customers in the United States. A survey of 17,500 members in 2004 found that 25 percent of them had developed a long term relationship from the matchmaking site while ten percent had found a marriage partner (Rosen 2008). In 2009, nearly five percent of all new marriages in the US were facilitated by eHarmony’s compatibility matching. eHarmony’s matching criteria include degrees of social homogamy *and* complementary psychological needs (Loving, Aragón et al. 2011).

Although evidence of marriages and cohabiting partnerships emerging from dating and matchmaking sites in New Zealand is slim, some exists for international mail order or Internet partnerships (Lawton and Callister 2011a). A growth in transnational partnerships has occurred in New Zealand, facilitated by recent social, structural, and technological changes worldwide. The collapse of the economy in Russia, for example, encouraged some women there to seek a partner with higher economic status than was available in the local marriage market. The rapid growth and relative affordability of Internet technology have streamlined the mate selection process. An industry that arranges tours and services that facilitate bride selection, ‘procurement’, and visa acquisition, is available to New Zealand males. Because of constraints and limitations in the marriage market in many countries, some individuals’ needs are not met. These people may look to the international marriage market to find love and financial security (Lawton and Callister 2011a).

## **2.6 Marriage, cohabitation and equity**

While the experience of marriage and cohabiting partnerships is generally positive for both genders, many females still face multiple and persistent inequalities within their partnerships and the interconnected public sphere. Despite some gains, partnered women continue to experience gendered inequalities in relation to the distribution of housework, childcare and eldercare, labour force participation, occupation, career progression, education, level of personal income, control of family finances and private/public sphere decision-making (Chesters and Baxter 2009).

Dempsey (1997) argues that Australian marriage and cohabiting partnerships are sites of unequal power relationships between the sexes, and that the persistence of such oppressive differences within partnerships can be attributed to a number of socio-structural mechanisms that range from:

[S]tructural and cultural processes (including capitalism, patriarchy, the dissemination of gendered ideologies, male ideological hegemony, and socialization); to biological factors (especially women’s reproductive functions); to differences in the resources of husbands and wives; to the normative order of marriage itself; to husbands’ determination and power to retain their advantages; to many women choosing to find fulfilment

through home making, motherhood and children rather than other accomplishments (Dempsey 1997:5).

Jacobsen, Fursman et al. (2004) posit that gendered inequalities are implicit within capitalism, suggesting that the nuclear family and couplehood are sites of exploitation for women. Within both cohabitation and marriage, females are expected to provide (among other things) free household and childcare labour. With the continued increases in the proportions of partnered women in paid work in Australia, Canada, and New Zealand, the majority of women endure a double burden or double shift of labour. While men do more paid work than women (on average) within these societies, partnered women will do full – or part-time waged work and then do a large proportion of the domestic tasks and childcare (Richard and Prince-Cooke 2004, The World Bank 2011). In 1997, partnered women in Australia did approximately three quarters of childcare work and two thirds of housework (Pocock 2003).

Similar trends existed in New Zealand in 2010. Statistics New Zealand (2011c:6) also revealed that as with paid employment, the division of unpaid labour in the home was gendered. They stated:

[F]emales did more unpaid work [*per day*] (4 hours and 20 minutes compared with 2 hours and 32 minutes for men), mainly due to females spending about an hour more on household work than males. Across all unpaid work activities, the two that males spent more time on than females were home maintenance and grounds maintenance (Statistics New Zealand 2011c:6).

The gendered division of domestic labour is prevalent, but not identical, within both partnership types in many societies (Baxter 2001, Batalova and Cohen 2002). Both partnership types then contain within them multiple, but differing gendered practices. Blackwell and Lichter (2000 pp 275-276), citing others, support this hypothesis. They state:

The attitudes, behaviours and socio-demographic characteristics of cohabiting partners often differ markedly from those of married persons...cohabiters are less likely than their married counterparts to espouse traditional family values and gender role attitudes, to share inequitably in household tasks, to desire or bear children, and to form committed or lasting relationships. Co-habiters [sic] are also typically less well educated, have less stable jobs, and earn lower wages than married individuals.

Married couples in Baxter's (2000) Australian study adhered more closely to 'traditional' gender roles in and around the home. Males were more likely to do 'outside' work and females did 'inside' work. Conversely, cohabiting partnerships were more egalitarian in housework and childcare practices. These egalitarian practices may be carried over into legal marriage from those cohabitations (Baxter 2000, Regan 2008, Baxter, Haynes et al. 2010). However, studies in West Germany, the United States, and Australia, shows that the sharing of housework can change after the birth of the first child. Spouses in both marriages and cohabitations may slip into traditional/complementary specialized gender roles, with women doing the majority of child care and house work, while the males work in the public sphere (Baxter, Haynes et al. 2010, Röhler and Huinink 2010).

That considered, Baxter, Haynes and Hewitt (2010) argue that the norms of housework distribution are developed even before young adults move out of the family home. Males and females within 'new partnerships' may have differing 'habitués of household tasks' amassed within family homes, flattening experiences and previous relationships, which will affect the positive negotiation of domestic duties. Davis, Greenstein and Gerteisen-Marks' (2007) study showed that while time availability and relative resources had similar impacts on the division of household labour in both partnership types, the influence of gender ideology was more influential on the distribution of unpaid work in cohabitations than in marriages.

Batalova and Cohen's (2002) study of the effect of premarital cohabitation on the household division of labour in marriage in 22 countries showed that women routinely do more household labour than males regardless of partnership type. That considered, marriages that transformed from cohabitations were more equal in household labour distribution than in marriages where pre-cohabitation had not occurred. Furthermore, levels of household labour equity differed between societies and were dependent on the general societal attitudes toward cohabitation, and the division of household labour itself. Countries with liberal attitudes toward gender relations and cohabitation had greater proportions of cohabiting couples and better labour equity than other less liberal countries. Other studies suggest that the division

of household labour within cohabitations can slip back into more conventional arrangements over time (Elizabeth 2000). After childbirth, particularly within marriage, men and women are likely to fall into traditional patterns of gendered household labour (Becker 1993, Bianchi, Milkie et al. 2000).

Becker (1973, 1974, 1981) held that the division of household labour was natural, and a manifestation of the trading of capitals between male and female partners, the end goal being a healthy family economy and wellbeing for all. Often the distribution of household tasks is a negotiated process, informed by a combination of economic logic and 'gender appropriateness'. However, the gendered division of labour is also a manifestation of patriarchal hegemony that recreates an illogical economic dependency of women on men that is fundamental for the functioning of capitalism (Parsons 1949, Engels 1972, Sorensen and McLanahan 1989).

Clearly, resistances to the cultural norms and practices that reproduce inequalities outlined above are not only possible but also important. Elizabeth (2003) and Baker and Elizabeth (2012) posited that legal marriage acted as a site for the (re)production of gendered practices and gendered identities for men and women. These normative practices reproduce and sustain the hierarchical power relationships between men and women. Marriages and cohabitations in New Zealand are sites of regular negotiation over the redistribution of income, household labour and future goals (among other things) and identity contestations. That considered, the two partnership types often have differing goals, aspirations, commitment and socio-political meanings. As Elizabeth (1997) suggests, resistance through practice, as a product of reflective thought, can change the power relationships within which one lives.

Cohabitation in New Zealand and elsewhere can function as an ideological alternative to legal marriage. The practice of cohabitation can be a lived, political, and symbolic act. Some couples choose to live in cohabitating partnerships as a statement *against* legal marriage, considering it a gendered and heterosexist institution (Baker and Elizabeth 2012:2). Feminist ideology, when articulated through practice, Elizabeth (2000, 2003) suggests, can

transform the mate selection behaviour of both males and females, and the lived experiences of cohabitation and marriage. Cohabiting couples may conceive the cohabiting form as a site of resistance, wherein the normative gender roles, behaviours, and power relationships that constitute legal marriages may be challenged and resisted. Areas of challenge and resistance include the social, financial, emotional, and domestic.

## **2.7 Age, marriage, and cohabitation**

In many countries, the average ages of males and females at first marriage and successive marriages have increased over time, while the ages of entry to first cohabitation have remained relatively steady (Coontz 2004, Arroyo, Payne et al. 2011, Manning, Brown et al. 2013). Increasing numbers of people in Australia and New Zealand are delaying legal marriage, spending their younger years in cohabiting relationships or remaining single (Carmichael 1984, Statistics New Zealand 2001b, De Vaus, Qu et al. 2003b).

Much research argues that the historically increasing ages at first marriages and remarriages can be linked to the growing proportions of population who cohabit (sometimes serially) before they marry (Licher and Qian 2008, Baxter, Haynes et al. 2010, Baker and Elizabeth 2013a). In one sense, young people's cohabitation is replacing marriage for their first intimate relationship, and has become a pathway to marriage (Manning, Longmore et al. 2007). As Gold (2012) and Elizabeth and Baker (2013) argue, cohabitation has multiple functions and meanings, some of which contribute to the historical increases in age at marriage. Cohabitations that function as a trial marriage or 'conditional partnerships' for example, allow intimacy but delay the timing of marriage.

While ex-nuptial births have become more culturally acceptable, improvements and better access to birth control technology have affected the timing of first births and (one of the) motivations to marry (Goldin and Katz 2000, Seltzer 2004, De Vaus 2005). The median age of women giving birth in New Zealand increased from 25 years in the early 1970s, to 30 years in the new millennium where it has remained stable. Fathers' ages have also

increased over the same period (Families Commission 2013). That considered, approximately 48 percent of births in New Zealand in 2012 were ex-nuptial (Statistics New Zealand 2012a). Often childbirth pressure can motivate the transformation of cohabitation to marriage. This can occur for both personal reasons and because of social pressure (Wu 1999, Osborne 2005, Thornton, Axinn et al. 2007). However, couples will still marry because of children but not necessarily before they are born (Baker and Elizabeth 2013a).

In many OECD countries women will delay childbirth and or marriage until they have finished their studies or concentrated on their careers (Goldin and Katz 2000, OECD 2008, Isen and Stevenson 2010, Statistics New Zealand 2013b). As was discussed in Chapter One, and later in this chapter, the average duration of education has increased in liberal countries such Australia, Canada, New Zealand, the United Kingdom, and the United States, more so for females than males (Baker 2012a). This condition, combined with the growing proportions of women in the paid workforce and the length of time they spend there have also influenced the increasing median age of marriage (Khoo 1987, Loughran and Zissimopoulos 2004). New Zealanders are marrying progressively later in life. The number of teenaged women who marry has declined dramatically since the early 1970s. In 1971, 32 percent of all married women were aged 15–19 years. By 2008, only two percent of married women were teenagers. In contrast, 90 percent of all teenaged females in partnerships in 2008 were cohabiting (Statistics New Zealand 2007a, 2009c). Couples in their 20s to early 30s are also more likely to cohabit than are older couples. These young cohabiters form an increasing percentage of cohabitation statistics in New Zealand, Australia, and North American, North European and other Western European countries (Dempsey and De Vaus 2004).

The average age gap between married couples is divergent between countries. For example, the age difference in first marriages in New Zealand, the United States, and Ireland (and other countries) for example, has decreased over time, while it has increased in Canada, Luxembourg and Austria (and other countries) (Ryan, Boddington et al. 2005, Rolf and Ferrie 2008, OECD 2009, Statistics New Zealand 2011e).

As in other countries, the education system in New Zealand creates age cohorts within which social interaction, ideological development, socialisation, and formulation of 'ideal partner types' can take place. Over the preceding few decades, young people have spent increasing amounts of time in education, including higher education, acquiring necessary credentials, and seeking job opportunities, and extending the period of cohort socialisation (Collins 2000, Blossfeld and Timm 2004). This has a dual influence on the age gap between potential partners. First, the pool of potential partners (at universities and polytechnics) is narrow in terms of age spread (Blossfeld and Timm 2004). Second, staying out of the formal work environment for an extended period limits the age range of potential partners. Larger age gaps between partners are possible within the workplace as the age span of the people is likely to be wider (Smeenk 1998 cited in (Fraboni 2000). That considered, many full time (post school) students also work part time, which exposes them to people of a wider range of ages than found within universities and technical institutes.

While much international research has investigated age gaps within marriages, little research has examined age gaps in cohabitations. One recent study has shown that the average age gap in the wider population cohabiting population is wider in many western countries than it is in marriage (Miret-Gamundi, González et al. 2009). In New Zealand, the average ages at first cohabitation in 1970 were 24 years for men, and 20 years for women. By 1995, males remained at 24 years while women were 21 years old. The age gap therefore had declined from four to three years in the 15-year period (Statistics New Zealand 2001b, Ministry of Social Development 2004, Statistics New Zealand 2011e).

The Ministry of Social Development (2004) argue that despite the increases in the occurrences of cohabiting partnerships in New Zealand in the past decades, the ages of males and females in first cohabitations, (and therefore the age gap) have changed little. Manning, Brown and Payne's (2013) American study showed differing age gaps to New Zealand but marginal changes over time. The median age at first cohabitation for women dropped from 22.8 years in 1980 to 21.8 years in the late 2000s, while the median age for men dropped from 23.9 years to 23.5 years over the same period. The age gap therefore,

increased only marginally over the 20 plus year period, growing from 1.1 years to 1.7 years.

Life stage and remarriage influence the age gap between partners. Lawton and Callister's (2010) study of legally married and cohabiting couples at 40, 50 and 60 years, revealed that males in these age groups were more likely than females to have a partner between five and ten years younger than them. In 2006, more than nine percent of men age 50 had a partner ten or more years younger. In comparison, 3.8 percent of partnered women at age 40 had a partner five years or younger, as did 6.7 percent of those in their 50s, and 5.4 percent in their 60s. Between one and two percent of women in all of the above age groups had a partner who was ten years younger than they were. Furthermore, the proportions of older women-younger men partnerships in these age groups grew by approximately two percent between 1986 and 2006.

According to Lawton and Callister (2010), the majority of these 'wide age gap' relationships were likely short-term rather than long-term partnerships. While their study tells us something about older women-younger men partnerships, the researchers used a combined population of married and defacto couples. I argue that as in many Western European countries, patterns of age homogamy, older males-younger females, and older female-younger male partnerships differ between marriage and cohabitations in New Zealand (Miret-Gamundi, González et al. 2009).

Miret-Gamundi, González and Treviño-Maruri (2009) demonstrated that in fourteen Western European countries, large age gaps were much more prevalent in cohabiting couples than in married couples. Cohabitation was 60 percent more likely than marriage if females were five or more years older than their male partner, and 50 percent more likely if they were five years younger. Conversely, the odds of cohabitation were lower if couples were of the same age or had an age gap of less than five years. The authors submitted that the larger age-gap was related to reconstituted partnerships that followed divorce or widowhood. Fraboni (2004) suggests that traditional gender roles and expectations within the home and larger society tend to maintain or widen the age gap between partners, when compared to societies with higher levels of

gender equity in education and paid work. Higher education tends to narrow or equalise the age gap between couples in any age bracket.

## **2.8 Educational homogamy**

Preferences in mate selection criteria, when acted on, have very real material consequences at both the individual and societal levels (Jenkins 2002). Preferences for homogamous partnerships in the areas of education, occupation type, income, ethnicity, and/or age contribute to socioeconomic stratification in societies. Callister (1998) postulates that higher educational status continues to rise in value within the marriage market ostensibly because society increasingly equates educational qualifications with the potential for economic reward and social status.

Using thirty years of Canadian and American marriage data, Statistics Canada (2007) displayed a clear correlation between educational, occupational, and ethnic homogamy on the one hand, and economic disparity on the other. Statistics Canada stated:

The rise in educational homogamy, along with increased selection into marriage based on education, has been a potent force underlying rising inequality in earnings in both countries between families at the low end of the income scale and those at the high end (2007:1).

Fu and Heaton (2008) concur, arguing that the continuing trend in educational homogamy in American society potentially widens the socioeconomic inequality between rich and poor. By default, educational homogamy within a population, limits the possibilities of upward socioeconomic mobility through marriage and cohabitation for those with lower or no educational qualifications, especially for females (Schwartz 2010).

Educational homogamy has also been customary in Australia since World War II. As in the United States, the highly educated and the lower educated Australians are more likely to choose a partner of similar educational status (Schwartz and Mare 2005, Hayes and Jones 2007). Smits's (2003) study of homogamy in New Zealand (and 54 other countries) for the 1970–1981 period revealed that homogamy was much more prevalent for the highly educated

than for those with lower educational statuses in most societies. Smits posited that New Zealand was the most ‘socially open’ (in terms of educational homogamy) of the 55 countries in his study. Of course, New Zealand has become significantly more socially stratified since Smits study. In addition, increased proportions of New Zealand women now have educational qualifications. Consequently, and as I show in Chapter Six, my research findings differ to those of Smits (2003).

The increase in higher educational achievement and occupations for females, combined with the stagnant population of males in both areas, has resulted in a shrinking pool of equal or higher status male partners, causing a marriage squeeze (especially for professional women) both in New Zealand and internationally (Raymo and Xie 2000, Hamon and Ingoldsby 2003, Raymo and Iwasawa 2005, Newell and Callister 2008, Lawton and Callister 2010, Callister and Lawton 2011a).<sup>6</sup> Such structural conditions raise the odds of women pairing with males of equal or lesser educational status or choosing to remain single. They also afford highly educated men a greater choice of potential partners (Callister 1998, Callister and Lawton 2011a).

Studies have also shown that levels of educational homogamy and hypergamy differ dependent on the educational levels of those involved. Callister’s (Callister 1998) study of New Zealand couples in the ‘first married/cohabiting, 25–34 age group’ over the 1986–1996 period, showed that educational homogamy had increased marginally over time, growing from 63.1 percent in 1986 to 65.4 percent in 1996. These levels of homogamy were similar to those found in Australian and in American studies (See Jones 1987, Mare 1991).

International research shows that levels of educational homogamy differ within and between marriage and cohabitation. Buchler, Baxter, Haynes and Western’s (2009) study showed that Australians with higher levels of education were more likely to be married or in long term cohabitation than in short term cohabitations.

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<sup>6</sup> A marriage squeeze for women results from a shrinking pool or man drought of ‘ideal’ partners in terms of education, occupation or any number of characteristics.

Hamplova and Le Bourdais' (2008) study of English and French Canada and Blackwell and Lichter's (2004) study of the United States showed that married partners exhibited greater levels of educational homogamy than cohabiting partners. Hamplova's (2009) study of ten European countries had similar findings but also showed that the differences in educational homogamy between the two partnership types, was lesser in countries with growing proportions of cohabitations.

Callister's (1998) homogamy research in New Zealand showed that married couples are slightly more likely to have educational qualifications than those in cohabiting partnerships. In addition, people with undergraduate or postgraduate degrees are *unlikely* to choose a partner with no formal qualifications, while people with no qualifications are *likely* to choose a partner with no qualifications. Furthermore, the proportion of couples, in which both individuals held university degrees increased while couples where neither had a qualification had decreased proportionally. A follow-up study found that women continued to make faster gains than men in educational attainment and that well educated men and women were the groups most likely to be in partnerships. They also found that people with no formal education were more likely to be in a partnership with an unqualified person in 2006 than in 1986 (2011).

Gendered differences in income, occupations and paid work within partnerships are also strongly contingent on their socioeconomic position. Individuals with similarly high socioeconomic, occupational, and educational statuses, combined with related economic and social resources, are more likely to experience higher levels of equality within their partnerships than those with lesser resources.

## **2.9 Occupational homogamy**

Importantly, historical studies of occupational homogamy have concentrated upon either married couples or amalgamations of married and cohabiting couples datasets. Before this thesis, the comparison of homogamy within and

between the two partnership types was relatively rare. However, the literature concerning occupational homogamy in marriage remains relevant for this study. A person's occupation acts as a critical form of social capital within the partnership market. It functions as a marker of present and future earning capacity, social resources, and social status. Occupation type is also directly linked to one's social identity and position in the overall structures of advantage and disadvantage within society (Vellekoop 1969, Morgan 1981, Prandy and Lambert 2005, Milne, Byun et al. 2012).

Often partners will have similar levels of education and occupations of similar social status, although males often hold a higher rank than females (see discussion of hypergamy earlier in this chapter). Bottero (2005a) argues that these dual homogamous conditions occur because individuals are likely to associate and consequently marry or cohabit with those of equal socioeconomic status. Hout and DiPrete (2006:13-14) argue that: "Homogamy is found in every country. Nevertheless, there is considerable heterogeneity both in the extent of homogamy and country-specific trends". Smits, Ultee et al.'s (2000) study of eight countries within the European Union for the 1975–1989 period drew similar conclusions. Numerous studies have shown that in both capitalist and state socialist countries, structural conditions such as stage of economic development, industrialisation, political regime, and the socio-economic classification of occupations can all influence the degree of occupational similarity between partnered males and females (Smits, Ultee et al. 1998, Smits 2003).

Kalmijn's (1994) study of occupations of newlyweds in the 1970s and 1980s demonstrated that a person's occupation type influenced the degree of occupational homogamy within their marriages, as did the occupational schema of the country in which they lived. Kalmijn revealed that professional and technical workers were more homogamous than managers and administrators, who in turn were more homogamous than sales and clerical workers. Researchers in the *Cambridge Social Interaction Scale* (CAMSIS) project found (over the 1970–2003 period) evidence of stratified occupational homogamy within nearly thirty countries including Australia, Great Britain, Canada, Ireland, and the United States of America. These CAMSIS studies

demonstrated that the gendered nature of occupations and differing levels of labour force participation by partnered men and women influenced patterns of occupational homogamy (Jones and McMillan 2001, Prandy and Jones 2001, Prandy and Lambert 2001, Prandy, Lambert et al. 2003a, Bottero, Lambert et al. 2009).

While studies of occupational homogamy in New Zealand are few, Pearson's (1980) case study of Johnsonville, a large suburb in northern Wellington, was broadly consistent with international studies, finding that occupational homogamy was markedly common and consistent between 1906 and 1975. Between 55 percent and 60 percent of all marriages in that period were occupationally homogamous. That considered, Pearson's measurement of homogamy was based on a comparison of the groom's occupation and that of the bride's father.<sup>7</sup> Morgan's (1981) Christchurch study, that compared the occupations of the bride and groom at time of marriage also concluded that marriage within occupational groups was common and that geographical and social proximity was also more common (than not) in those who had married.

A number of studies have found that occupational homogamy is a societal constant in New Zealand and is linked to patterns of educational homogamy (Vellekoop 1969, Pearson 1980, Morgan 1981, Smits, Ultee et al. 1998), and helps reproduce social group boundaries and structures of socioeconomic stratification. High levels of occupational homogamy in mate selection have similar consequences to those of education. Repeated and substantial practice of homogamous mate selection by large proportions of the professional class helps protect access to amassed economic and cultural resources (Bourdieu 1984, McDonald 1985, Callister 1998, Prandy 1999).

## **2.10 Paid work, gender, and income difference**

As in many western liberal countries, the proportions of partnered females in New Zealand labour force have increased over the past decades (Hillcoat-Nallétamby and Baxendine 2004, McPherson 2004, OECD 2004, Australian

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<sup>7</sup> The bride's father's job was considered a more reliable indicator of bride's socioeconomic status, as few women worked outside the home until recently (Pearson 1980).

Bureau of Statistics 2011, Statistics New Zealand 2013b, Statistics New Zealand 2014a). That notwithstanding, males in New Zealand typically earn more than females. In 2013, the median annual income for males (15 years and over) was \$36,500 compared to \$23,100 for women. The male median income was 1.6 times that of women's. Males were more likely than females to have an income of over \$70,000, at 19.6 percent for males compared with 8.3 percent for females(Statistics New Zealand 2014a).

As Jepsen and Jepsen's (2002) American study (using 1990 census data) showed that level of income was the least similar characteristic between partners in heterosexual partnerships. Historically, married women's economic contributions to the family were limited because childcare duties and homemaking, were considered to be a women's main job (Gimenez 2000). Nevertheless, marriages can be financially advantageous for both sexes. "Both men and women, it is fair to say, are financially better off because they marry. Men earn more and women have access to more of men's earnings" (Waite and Gallagher 2002:109). Economic marriage theorists suggest that rational decisions made by males and females in the mate selection process can lead to financial and other gains to themselves within both partnership types (Becker 1973, 1974, 1991, Becker 1993, Weiss 1997, Blackwell and Lichter 2004). Light (2004:3-4) explains further:

Married couples receive consumption-related gains because they jointly consume public goods, pool risk, extend credit to one another, and/or engage in intra-household specialization that enables more goods to be produced.

Nevertheless, increasing proportions of couples in the 21<sup>st</sup> century are 'dual earner' by desire and necessity. Many partnered women are contributing significantly to their household income (Kramarow and Biddlecom 1995). That notwithstanding, earnings are generally not equally distributed. Internationally, females continue to contribute less to family income than do their male partners. In 2006, on average, 35.6 percent of the American household income was contributed by the female partner (Winslow-Bowe 2009). Gemici and Laufer's (Gemici and Laufer 2010) American study showed that a lesser wage gap existed between those in cohabiting couples than between those who were

legally married. This, they argued, was because greater proportions of cohabiting women engaged in paid work than those in legal marriages.

Many women and mothers in both partnership types are now living in new ‘co-provider couples’ or ‘marriages of equally dependent spouses’, while still retaining old income differences (Nock 2001, Raley, Mattingly et al. 2006). These partnerships, in which both spouses earn between 40 percent and 60 percent of the couple’s total income, have become increasingly prevalent since the 1970s in the United States, New Zealand and other OECD countries (Nock 2001, Ministry of Social Development 2006, Raley, Mattingly et al. 2006, Winslow-Bowe 2009).

Nevertheless, the majority of the part-time labour force in New Zealand is female (Baker 2010a, Baker 2011). Motherhood, childcare and eldercare responsibilities, and household related tasks constrain time spent in paid work for partnered females in many OECD countries (Fursman and Callister 2009, Baker 2011). While the majority of partnered males in New Zealand enjoy an uninterrupted career trajectory over their lifetime, partnered females are often expected to juggle these private responsibilities with episodic full- or part-time paid work (McPherson 2004).

While more mothers in New Zealand are returning to paid work now than in the past, prompted and assisted by government programmes such as *Working for Families* package of tax credits, the rate of labour force participation by young mothers in New Zealand remains lower than in many other OECD countries (Department of Labour 2010, Working for Families 2013). While some mothers choose to take time out from the labour market until their children reach school age, especially those who can afford it, others are excluded from the labour force due to structural constraints such as the lack of quality affordable childcare, relatively low wages, non-flexible hours of work, and lack of part-time employment (Department of Labour 2010).

Working mothers often need to rationalise and juggle a commitment to home-centred motherhood and childcare with the financial needs of the family, the need for personal financial independence, and a place for the realisation of

personal and career goals outside of the family sphere. Understandably, mothers in low-income families are less likely to have extended periods outside the labour force than those in middle class families. Lee (2004) revealed a bifurcation in income levels for American mothers. Those with low incomes were likely to have low levels of education and to work part-time within a narrow range of high turnover occupations, while high earning mothers were likely to have high educational qualifications and to work full-time in high status occupations.

In many countries, the time spent in paid work increases incrementally for mothers as the age of their youngest child increases, particularly after the one year point (Statistics New Zealand 1998, Harkness and Waldfogel 1999, Baxter and Gray 2008, Gray and Baxter 2011). Baker (2009) argues that the 'motherhood penalty' is evident in many countries. This earnings gap between mothers and childless women is considerable, increasing with mothers' age, number of children, educational qualifications, job experience, and their time outside of the labour force.<sup>8</sup> Mothers who engage in paid work outside the home are also susceptible to the 'gender pay gap' in wages. The gender pay gap is prevalent for New Zealand mothers in paid work, as Dwyer (2006:4) explains:

Recent studies show that, in addition to the amount of time individuals have been in the workforce, interruptions to labour force participation, and working part-time, independently exacerbate the gender pay gap. Pay gap studies have also found evidence of a motherhood and marriage wage penalty that has been variously attributed to a mix of human capital (work experience), job tenure, and lower pay rates in part-time jobs.

Simply put, these mothers earn on average substantially less than partnered women without children, single women, single men, and partnered men (Dixon 2000, Felfe 2006, Baker 2010c).

In conclusion, paid work and earnings remains gendered in many western countries. Despite historical improvements for women in and outside of the workforce, the gender pay gap, the motherhood penalty, and the double burden remain. Women are more likely than men to have episodic employment during

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<sup>8</sup> See also (Baker, M. (2012). "Gendered families, academic work and the 'motherhood penalty'" *Women's Studies Journal* 26 (1): pp 11-24).

their lifetimes. They are on average paid less, and in jobs of lesser social status, than their partners. Motherhood and childcare have a further impact on women's level of labour force participation, which in turn constrains their earnings. It can be argued that these conditions and constraints upon occupations, paid work, and wages will be typically less for the cohabiting female population than those who are married. This argument is based upon their relatively young demographic and lower fertility rate. Chapter six of this thesis shows this to be the case.

## **2.11 Conclusions**

This chapter has provided an overview of the changes within and between marriage and where possible cohabitation in New Zealand and similar OECD countries over the past decades. I also provided an overview of the relative merits of each branch of mate selection theory and decided that the structuralist and social exchange approaches best met the needs of this thesis. These theories are discussed in more depth in Chapter Three of the thesis. This chapter provides the following chapters with contextual information on why people cohabit and/or marry, what the structural and personal influences on partner choice are, and the differential and contested lived experiences of males and females within both partnership types. Marriage and cohabitation practices and patterns continue to evolve in the 21<sup>st</sup> century. They are shaped by socio-legal, technological, economic, and ideological influences. The demographic and social profiles of marriage and cohabitation have become increasingly interconnected over time, yet have remained distinct in many functions and forms since the early 1970s. Hamplova (2005) argues that the meanings and functions of cohabitation in a society will determine the patterns of assortative mating within. More importantly, these meanings, functions and patterns will differ dependent between societies and the social strata within.

Recent research has shown that cohabitation is more heterogeneous in purpose and meaning than was formerly assumed (Heuveline and Timberlake 2004, Buchler, Baxter et al. 2009, Gold 2012). In some cases, cohabitation has assumed many of the social functions traditionally found in legal marriage, but

can differ from marriage in terms of age of entry, age gaps, fertility, and income differentials between male and female partners. Cohabitation has also become an extension of the dating process, and/or functions as an alternative to a single life. This form of cohabitation is typically much less functionally similar to legal marriage.

A considerable, but declining proportion of cohabitations evolve into legal marriage; a similar proportion of cohabiting partnerships also break up. A small proportion of cohabiting partnerships grow into long-term cohabiting partnerships. Those who have been previously married are more likely to remain in cohabiting partnerships than transition to legal marriage. The age demographic of the cohabiting population has also changed over time. While the average age of cohabiters remains considerably younger than that of marriage, growing proportions of individuals in middle and later life stages are now cohabiting.

While women's educational attainment and labour force participation rates have increased in many countries since the 1970s, gendered differences continue within the larger social world, and are visible within marriages and cohabiting partnerships. For example, despite the growing proportions of female graduates with tertiary educational qualifications and the fact that most partnered women participate in the paid workforce, most of the part-time workforce is female, including many who are mothers. That notwithstanding, cohabiting women are less likely to be mothers, have greater labour force participation rates and better jobs than married women, have their own bank accounts, and have some control over household finances and experience fairer, though not equal, distribution of household labour.

Importantly, this literature has shown that we know relatively little about how cohabitation compares with marriage in respect to various kinds of markers of status, hierarchy and power. The following chapters therefore bring cohabitation into sharper focus suggesting that further investigations of partnerships should not be conflated with that of legal marriage. To accomplish this, I examine six historical snapshots of the shifting trends within and between these two partnership types.

Chapter Three outlines the theoretical framework used within this thesis to investigate and explain historical changes to and stability in mate selection in marriage, and cohabitation in New Zealand. These theories inform both the methodology, explored in depth in Chapter Four, and the discussion and implications of the research findings in Chapter Eight.

## *CHAPTER THREE: THEORETICAL UNDERPINNINGS*

### **3.1 Introduction**

The central focus of this thesis is on macro and micro social structures that have influenced the long-term trends in mate selection and differences within marriage and cohabitation in New Zealand over time, within and between the partnership types.

This chapter discusses the theoretical approaches used within the thesis. These are the macro-structural approach of social homogamy and marriage market theories; and the micro-individual, social exchange theories (Esteve and McCaa 2008). Both approaches are used in this thesis, as a theoretical overlap exists between them.

Social homogamy theory argues that people choose partners from within their social group, including social class and neighbourhood (endogamy). Social exchange theory maintains that mate selection is a transactional act in which individuals attempt to maximise their (present and future) life satisfaction and socioeconomic position based upon characteristics valued by society. These include beauty, economic wealth, educational qualifications, social capital, and fertility (See Goode 1970, Schoen, Wooldredge et al. 1989, Becker 1993, Esteve and McCaa 2008).

Within Section 3.2 I discuss how social homogamy, the marriage/partnership market, levels of social interactions, geographical and social space, and social networking sites/internet influence mate selection, internationally. Within Section 3.3, I demonstrate how social exchange theory, in its material and emotional forms, explains why individuals choose a particular partnership type, why they select the partners they do, and their personal motivations for doing so. These motivations are considered from the interconnected sociological, economic and emotional approaches to social exchange theory (Blau 1964, Becker 1973, 1974, Barbalet 2001, Turner and Stets 2006).

Most importantly, both the macro-structural and the micro-individual approaches consider (with varying levels of success) the relationship between socioeconomic structures and individual action and/or agency in partnership type selection, partner choice and the power relationships within resultant partnerships. Section 3.4 shows how the two theoretical approaches will drive the analysis process in answering the thesis research questions.

### **3.2 Macro-structural theories of partner selection**

Social exchange theory allows the discussion of *individual* incentive, strategy, motivation, and agency within the assortative mate selection process. This approach allows for a link between *micro* behaviour in the form of individual decision-making in mate selection and *macro* socio-structural influences, such as the historical dynamics of the marriage market on this process. In contrast, homogamy and marriage market theories offer a useful macro-structuralist explanation of the changing patterns of homogamous mate selection among men and women over time. Homogamy theory argues that individuals and the choices they make are influenced by an aggregate of group specific socialisation processes, socio-structural pressures, and marriage market constraints.

#### **3.2.1 Social homogamy theory**

The central arguments of social homogamy theory pertain to three aspects of mate selection: the preferences of people for particular qualities in a partner; the influence of third-party agents, families and friends in the mate selection process; and the constraints of the partnership market in which potential mates are sought (Kalmijn 1998). Homogamous partner selection has societal consequences. Max Weber ([1921] 1978) argued that both individual and intergroup homogamous marriages were acts of cultural and socioeconomic exclusion or social closure. Whether by strategy or accident, the consequences of such acts by certain groups can result in both monopolisation and protection of socioeconomic and cultural resources, and the reproduction of positions of domination within socio-cultural and economic hierarchies (Bottero 2005a).

Homogamy is theorised as being of two types: status and value. Status homogamy is socio demographic in form, and is based on the matching of: (a) ascribed characteristics such as race, ethnicity, height, body shape, gender, and age; and (b) acquired characteristics such as social class, family background, religion, education, occupation, taste, manners, cultural consumption, habits, and other learnt behaviour patterns among couples (Kalmijn 1991, 1994). Value homogamy is based on the matching of individuals' internalised values, attitude and belief schemas, and systems (or habituses) with which they make sense of and negotiate their positions within the social and economic world (Bourdieu 1984, McPherson, Smith-Lovin et al. 2001, Shepard 2009). This habitus, an on-going 'product' of the socialisation process, acts as a subconscious guiding force in decision making within the partner selection process (Bourdieu 1990b).

As is argued in Chapters Five, Six and Seven, levels of homogamy are typically greater in marriage than in cohabitation. The 'double selection' hypothesis, as applied to the partner selection process, argues that cohabiting couples will be more heterogamous than married couples in respect to achieved characteristics such as education, occupation, and earnings and ascribed characteristics such as ethnicity and age (Blackwell and Lichter 2000, Hamplova 2009, Mäenpää and Jalovaara 2013). Cohabitation provides cohabiting men and women with a highly selective pool of potential marriage partners from which to choose.

Nearly half of today's marriages [*in the United States*] are *doubly selected*: selected first into cohabitation and then into marriage. This winnowing process implies that individuals entering cohabiting unions may be less selective of specific partner characteristics (e.g. similar educational levels or race) at the outset of the union than individuals entering marriage. Cohabitation thus provides a staging ground for evaluating potential marital partners and fostering better matches in marriage<sup>9</sup> (Blackwell and Lichter 2000: 279).

That considered, the partner selection process takes place in the social and physical worlds simultaneously; it is constrained by both social and material elements (Kalmijn 1998). The strategies that agents may employ in mate selection, both unconscious and conscious, are subject to social and physical

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<sup>9</sup> There is evidence however, that marriages that are preceded by cohabitation are less stable than those that do not (Marshall and Sawhill 2006, Reinhold 2010).

regulation. Strategies are contingent on and constrained by demographic factors such as the composition of local marriage markets, population size and composition, geographical location, and time (Marshall and Sawhill 2006, Reinhold 2010).

### **3.2.2 The marriage/partnership market**

The socio demographic makeup of ‘marriage markets’ influences partner choice (Kalmijn 1998, Dribe, Bavel et al. 2012). In its simplest form, an uneven sex ratio within a market offers greater choice to one gender than to the other (Cigno 1991, Becker 1993, Callister, Didham et al. 2006). For example, in the early- to mid-1800s in New Zealand, Pākehā (of European origin) men outnumbered Pākehā women considerably. The shortage of these women arguably raised their ‘value’ within the marriage market, giving them a greater choice of partners. Notably, intermarriage and cohabitation between Pākehā men and Māori women was reasonably prevalent at this time (Macdonald 1999, Baker 2001).

Material and ideological changes within the larger society over time can influence the material circumstances, attitudes, needs, and expectations of the men and women who constitute the marriage market. An example of such a change in post-war New Zealand has been increasing educational and labour force participation for females, resulting in a female population that is less dependent on males for financial security. While changes like this have been beneficial for women, they have altered the dynamic of the partnership market. An imbalance between supply and demand of ‘ideal’ partners has arisen, resulting in a proportional scarcity of males with equal or higher occupational and educational qualifications (especially for highly educated women) (Newell and Callister 2008). Such partner market conditions constrain the opportunity for some women to partner homogamously or upward in education (as are the social norms).

For highly educated and professional women, partnering with someone of higher educational or occupational status has become less likely than in the past, more so for Māori than for Pākehā women (Callister cited in Laugensen 2005). Some of these women will choose a partner with *high* financial status, despite a deficit in their partner’s occupational status and or educational

qualifications. However, as with other partnered women, it is more likely that they will make greater career and income concessions (than their male partners) will for child care and elder care responsibilities (Baker 2012a). Other highly educated women will remain single by choice because of partner market shortfalls. Males with low educational or occupational qualifications (or both) are also at risk of remaining single because of these ‘market’ shifts. Where these men traditionally partnered with women of equal qualifications (of which there were plenty), the pool of such females has been depleted (Callister 1998, Hamon and Ingoldsby 2003, Lawton and Callister 2010, Callister and Lawton 2011a).

### **3.2.3 Levels of association and geographical distance**

Social interactions happen at the levels of family, marriage, neighbourhood, city, school, voluntary organisation, university, and workplace. The frequency and ‘significance’ of such interactions are affected by the similarities or differences in ethnicity, gender, age, education level, taste, social class, and occupation type of those involved (Bourdieu 1984, Kalmijn and Flap 2001). Geographical and social location also affects the chances and dynamics of social interactions and the formation of intimate relationships.

People gravitate to social sites and settings where they fit in and can remain in their comfort zone. People are more likely to mix with similar people in environments in which they are at ease, and less likely to associate with dissimilar people in unfamiliar places. Individuals tend to form relationships with others they meet on a regular basis. They develop friendships and sometimes partnerships by mixing in particular social circles and settings. The supply of people with whom people may ‘freely’ interact are shaped and constrained by institutional and ideological divisions within schools, workplaces, churches, neighbourhoods and family networks, among others.

A strong link exists between social networks and specific locations of interaction. Multiple social and physical mechanisms such as a person’s level of income, their ethnicity, social class, and sometimes age ensure that meeting places and social events consist of people of similar interests and dispositions (Lampard 2007). These conditions at once limit the range of individuals with

whom we form personal relationships and provides fertile ground for homogamous partner selection (Bozon and Heran 1989, Laumann, Gagnon et al. 1994, Kalmijn and Flap 2001, Lampard 2007, Haandrikman 2011). Usually, people have extensive social networks that are differentiated by degrees of social closeness and frequency of association. We meet people every day, but some relationships hold more value than others do. Greater degrees of similarity between people and groups of people make some interactions more fruitful in terms of personal satisfaction and relationship building (Bottero 2005a).

Population density also influences mate selection. The more densely populated the area in which we live, the greater the chance of meeting the same kinds of people and forming lasting bonds (Stevens 1991, Haandrikman and Harmsen 2006). The more often we interact with somebody by chance or by choice, the more likely we are to form a friendship that may lead to cohabitation or marriage (Morgan 1981, Berscheid and Reis 1998). Propinquity and segregation theory posits that geographical distance, or spatial proximity, between people has an impact on mate selection. Physical distance from a community hall, a local college, or bar, for example, influences patronage, as does the purpose of these social settings themselves. Indeed, the purpose of a social venue may influence population composition. Entry criteria and taste predispositions draw certain people together while excluding others. Schools and universities, for example, will bring together people with similar levels of education and social class positions (Stevens 1991, Pullum and Peri 1999).

Shared interests in certain kinds of music, dancing or other cultural interests will draw people together to mix at particular clubs, venues or concerts (Bottero 2005a). Lampard (2007) argues that the physical sites and contexts of initial meeting between spouses shifted in the latter half of the 20<sup>th</sup> century in Britain. Although social networks still held a consistent level of significance in partner selection, meeting at places of education and work had grown more likely, while the chances of partners meeting in public places (such as town dances) had decreased. This, Lampard suggests, was influenced by the increasing social class ‘meanings’ of specific public locations. Financially and socially exclusive venues such as high priced restaurants or local pubs take on

subjective meanings of belonging and not belonging to the general population. Our habitus will inform us whether we will be comfortable in particular locations. Furthermore, our understanding of the meaning of a location tells us what type of possible partners might be there, what their social characteristics might be, and whether they will be to our liking.

### **3.3 Social exchange theories**

Social exchange theory considers the individual and shared motivations for mate selection, suggesting that partnerships are complex and ongoing series of exchanges in which power is contested or unequal power relationships are reproduced. Goode (1970) argued that *all* courtship systems are market or exchange systems (Rosenfeld 2005). Historically, marriages sometimes provided a pathway to socioeconomic mobility, even when an inheritance of assets was not present. Some studies of pre-industrial societies have shown a prevalence of socioeconomic homogamy in partnerships, but many of these marriages were the choice of families rather than individuals (Queiroz 2004). By marrying a person of higher socioeconomic status, an individual would increase their chances of upward mobility. In contrast, marrying downward increased the possibility of downward mobility (Dribe, Bavel et al. 2012).

Exchange theory developed within the field of social psychology and was derived from earlier philosophical and psychological perspectives rooted in utilitarianism and behaviourism (Cook and Rice 2003). Social exchange theory had its genesis in the work of Georg Simmel (1858–1918), who proposed that economic exchange could be best understood as a social exchange. He argued that the historical shift from barter to monetary exchange affected the nature of social interactions between actors (Cosser 1977). Simmel's social interactionist approach was taken up by scholars in the United States in the 1950s and '60s (See Homans 1961, Emerson 1962, Blau 1964).

Homans (1961) proposed that the fundamental processes of social behaviour within social groups, such as power, conformity, status, leadership and justice, were generated from the ground up by individuals interacting with individuals, rather than emergent from social systems (Cook and Rice 2003). In contrast, Blau proposed that social behaviour and social structure were emergent

properties of social systems. Homans theorised the associations of the dyad (individual to individual), whereas Blau constructed a theoretical formation to link the macro behaviour of wider society to the micro behaviour of individual action (Cook and Rice 2003).

Social exchange theory has two intertwined perspectives, the sociological and the economic. Both approaches contend that partnerships are sites of mutual dependency, of exchanges between partners, and of shared joint investments. All of these practices contribute to a partnership's strength, and they often find form in the shifting but still gendered division of labour within the home and between the home and paid work. Other shared investments include emotions, time, and the generation of a commonly shared world of meaning (Hamplová 2002).

Ultimately, exchanges vary in complexity, content, levels of satisfaction, and strategy. Lawler ((2001) cited in Turner and Stets 2006) argues that exchanges are of four types: (a) productive: these are conditional on cooperation with another person; (b) negotiated: when bargaining takes place over time to establish what must be sacrificed within the exchange to gain other payoffs; (c) reciprocal: where resources are gifted, with the arrangement or understanding that gifting will be reciprocated at a subsequent point in time; and (d) generalised: when there is no immediate payoff to the exchange, but resources may pass through a chain of others, and eventually return to individuals at a later, unspecified date.

Social exchange theory also proposes that we 'evaluate' ourselves and attempt to find someone of similar or better worth anticipating a maximisation of rewards such as social approval and emotional security, and a minimisation of losses. Both males and females will act in self-interest and marry or cohabit to achieve outcomes not possible to them individually. Interdependence and self-interest are the key elements of social exchange (Lawler and Thye 1999, Zafirovski 2003). Partnerships are also resultant of two self-reflexive individuals with distinct characteristics, values and aspirations, who enter into complex social and emotional interactions that entail complicated bargaining and negotiations (Thornton, Axinn et al. 2007).

This theory has three main tenets. First, social behaviour is an exchange of material and non-material goods such as the symbols of approval and prestige. Cultural background and the stage of a society's economic development will influence what is held symbolically and materially valuable for individuals and groups. Second, people will act in ways that will result in beneficial exchanges, and will duplicate behaviour if positive outcomes are forthcoming. Third, benefits gained through exchange are contingent on the receiver being aware of the benefit's origin. People will attempt to maximise gains and satisfaction in any exchange (Homans 1958, Clark and Gilman 2007).

Links exist between social homogamy and social exchange theories. Early social exchange theorists such as William Goode (1951) proposed that it was the desire of all individuals to get the best possible deal in a partnership, and that the optimum deal was one of status homogamy. Homans (1964) similarly argued that individuals with similar resources would maximise each other's rewards and that pairs with equivalent resources were likely to have homogamous characteristics. It is likely, therefore, that partnerships will be homogamous with respect to a given set of characteristics such as education, occupation and age (Edwards 1969, Smits, Ultee et al. 1998).

This combination of theoretical approaches allows for both the mechanisms of (limited) social or economic mobility through marriage and the reproduction of socioeconomic strata. England and Farkas (1986 cited in Rosenfeld 2005) predict that a person with the highest level of education (or other status indicator such as SES) will be the most desirable on the marriage market, and will marry a person of a similar level of desirability. Persons with middle status will aspire to find a person with middle status and, by default, persons of low status will remain to find each other.

Becker (1965, 1973, 1974, 1981) argues that individuals strive to maximise their economic and other (life) chances by interacting with, and ultimately choosing, a partner whose 'resources', both present and future, will be of benefit to themselves with minimum costs to themselves. This 'rational choice' economics-based approach suggests that men and women will make strategic,

rational decisions to facilitate the ‘best deal’ partnership for themselves. This best deal is based on the interdependence of the two partners.

Grossbard (2009:4) explains further:

... [T]wo persons are the decision-makers who compare the product they can produce alone with the income they will get if they marry each other. The total income after marriage is the sum of their individual incomes and corresponds to the marital output. For two individuals to want to marry that marital output needs to be at least as large as the sum of their single outputs.

Fundamental to Becker’s (1965) explanation of mate selection is the interrelationship of the marriage market, household production and (gendered) labour supply in the private and public spheres (Grossbard-Shechtman and Fu 2002). In the 1960s, Becker’s economic theory of the family proposed that the main purpose of the family was the production and rearing of children. For the optimal economic functioning of the family, this required the specialised labour roles of males and females. Males participated in the paid workforce and females did household and childcare duties. This arrangement was better known as the ‘male breadwinner – female homemaker’ model of household production. This economic model presumed that the enduring gendered division of labour in the family and the labour market was not the result of sex differences but rather of gender specific educational and training investments (Kasearu and Ainsaar 2010). Given that the majority of part-time work continues to be done by females and mothers, and that a substantial proportion of household production and childcare remains the responsibility of females, one might conclude that couples continue to make (shared) rational economic decisions that will result in maximising benefits for the family, particularly when children are involved.

That considered, both the marriage market and levels of women’s agency have changed considerably over the past decades. As was demonstrated in Chapter Two, increasing numbers of women are now passing through the educational system and are engaged in full- or part-time work (Hewitt and Baxter 2012). Rosenfeld (2005) rightly argues that because male dominance of the public sphere has declined in the last 40 years and the ‘male breadwinner – female homemaker’ model family is much less prevalent than when Becker was

writing in the 1960s and 1970s, his market exchange theory now requires a more nuanced discussion: the dynamics of social exchange have shifted.

Economists Choo and Siow (2006) offer a modified version of Becker's model for calculating the likelihood of homogamous mate selection (in the evolving marriage market) that includes new parameters such as time, age, ethnicity, and noteworthy societal events. One such event is change to the dynamic of partner market itself. What counts as capital on the partner market remains an aggregate of economic and non-economic characteristics, such as cultural tastes, beauty, education, title, social status or any number of assets (Garrod 2007). Although some 'attributes of partner value' such as labour force participation, education and earning power are now the currencies of both males and females within the partner market, others remain gendered.

Traditionally, assets differed between the genders and they were clearly defined. Females offered youth, physical beauty, fertility, nurturing and homemaking skills, love, sex, respect, and commitment, while males offered higher levels of earnings and education, status, physical protection and family representation in the community (Becker 1993, Sprecher 1998, Rosenfeld 2005, Huppertz 2009, Baker 2010a). A trading or bartering of attributes may take place (within the mind of an individual) when an imbalance between the desired and the existing characteristics of a spouse is present. A difference in education in a potential spouse could be supplemented or offset by earning power, physical attractiveness or other desirable attributes (Edin 2000, Grossbard-Shechtman and Fu 2002). Put simply, men and women may rationalise their 'spousal criteria list', substituting one attribute for another in order to feel comfortable with their partner choice.

Changes to the dynamic of the partnership market include less economic dependency of females on males, the currencies in which social exchanges are transacted, and the preferred aggregations of capitals that are acceptable in both males and females. Individuals' perception of their own 'value' within the market also influences their choice of desirable criteria or characteristics within a partner and therefore the pool of people within they may choose (Davis 2012).

Given that women in the 21<sup>st</sup> century generally have greater educational and socioeconomic statuses than those in past decades, the dynamics of the social exchange process have changed. Women have greater autonomy and freedom of choice in partner selection, but the supply of males who fit females' 'spousal criteria' is proportionally smaller than in the past, especially in the area of education (Callister and Lawton 2011a). Because of the historical increases in females marrying down educationally in many countries (more so in countries with a narrowing gender gap in education), this 'trading' process may be more prevalent for women now than in past decades, especially for those with higher educational qualifications (Esteve, Garcia et al. 2011). Increases in partner selections of this type are now occurring in New Zealand society. Increasing proportions of highly educated New Zealand women are marrying men of lesser educational status (Callister and Lawton 2011a). Given that males still make more money (on average) than women do, these highly educated women may 'substitute' higher earnings and/or some other characteristic to compensate for a lower educational status in the partner selection process. The independence hypothesis however argues that highly educated women benefit less from marriage as they have less need of their husbands' economic support. These women are therefore less likely to marry, preferring to remain single (Kaufman and Goldscheider (2007) and Blossfeld (2009) cited in Esteve, Garcia et al. 2011).

Lawton and Callister (2010) agree that the position of single women in their 40s and 50s in New Zealand has changed, suggesting that they now have 'more to offer' on the partner market than women of the same ages in the 1950s. Their increased education level, advanced labour force participation, higher income and social status (among other attributes) result in increased perceptions of (self) worth on the market and an objectively 'better deal' for potential partners than was possible in the past. Furthermore, the authors maintain that the emerging trend in older female-younger male cohabitation in New Zealand society can be explained (in part) by social exchange theory. A perceived difference in the partnership, i.e. the age difference, is balanced out or compensated for with beauty, intelligence, charm, wealth, and social status by the women, and youth, virility and physical abilities by the men.

Nevertheless, the negative cultural perceptions of older female-younger male partnerships, and gender roles generally, have improved over the decades. Society is slowly moving away from the norms of older male-younger female partnerships (Proulx, Caron et al. 2006). These changes will further alter the nature of social exchanges within partner selection.

Decisions about new partnerships, however, are not always about economic gain or even free choice. Females who re-partner may find themselves less economically well off than in their former relationship. New partners may be selected for non-economic reasons or gains, such as their contribution to a partnership satisfaction greater than experienced in previous marriages or cohabitations (Lamanna and Riedmann 2009). Importantly, the rational choices made in mate selection, marriage, and cohabitation, do not take place within a vacuum, but are always embedded within networks of social relations.

Social exchange theory also tells us that the process of mate selection and resulting partnerships are evaluated by people for levels of 'emotional' success, by comparing them to past experiences and looking to those of their peers (White and Klein 2002). Individuals will experience positive emotions when payoffs exceed costs and investments within exchanges. Conversely, people will experience negative emotions when standards of justice, or expectations of what is fair and just, are not met within the exchange process (Turner and Stets 2006).

Some social exchanges can be understood as rational and emotionally neutral. In negotiated exchanges, for example, actors may assume a professional demeanour or affective neutrality to achieve a material payoff (Parsons 1951, Lawler and Thye 1999). The intensity and kinds of emotions 'generated' within exchange processes vary dependent on the exchange model entered into, and the expectations individuals have of their outcomes (Lawler 2001). The degree of emotional payoffs or deficits may also be mediated by repeated or habitual exchanges (Barbalet 2001).

Emotions such as love, degrees of trust, and fairness will affect the processes of exchange. These will be reshaped by the outcomes of such exchanges and will affect subsequent exchanges (Uzzi 1996, Cook and Rice 2003). Lawler and Yoon (1996, 1998) suggest that, as an exchange relationship develops, actors will develop feelings of relational cohesion, and develop behaviours outside of the economic (such as gift giving) that aim to help the continuance of the relationship. Repeated profitable exchanges (in both economic and emotional terms) often result in a commitment to an exchange relationship by both parties, regardless of better offers from other sources (Cook and Rice 2003). Relational cohesion develops because people are driven to generate commitments as a way of reducing anxiety (Lawler, Yoon et al. 2000).

### **3.4 Conclusions**

The interconnected homogamy, marriage/partnership market, and social exchange theories outlined in this chapter provide the tools used to explain the changing patterns of mate selection (on macro and micro levels) in New Zealand within the late 20<sup>th</sup> century – early 21<sup>st</sup> century period. These theories allow a robust examination of the impacts of both structural and ideological constraints, and individual freedom of choice, on both mate selection processes and the resultant partnerships. Further, they allow a discussion of how and why legal marriages differ from cohabitations, focusing on gendered differences, material profiles, power relationships and ideological differences. This chapter has also shown that these theories are useful for understanding and comparing the gendered differences that exist in both partnership types, particularly in relation to motherhood and childcare (OECD 2003, Baker 2010a).

Homogamy theory tells that ‘like marries or cohabits with like’ (McPherson, Smith-Lovin et al. 2001). It helps us understand the roles that social and economic structures play in mate selection. It argues that people with similar ascribed and achieved characteristics are drawn together because of what we learn during the socialisation processes in our lives. It also posits that an individual’s socioeconomic position, occupational status, and level of education will influence the chances of meeting and probability of choosing a

particular partner, as do the social and geographical circles in which one moves.

Social exchange theory tells us that rational self-interest plays a pivotal (but not exclusive) role within partner choice in the partnership market. It also shows that the distributions and ranking of valued characteristics within the market are influenced by culture and that they have shifted over time. Although Blau's (1964, 1982) and Becker's (1973, 1974, 1993) models of social and economic exchange remain relevant, other approaches such as Homans's (1961, 1964) and more recently Choo and Siow's (2006) exchange theory and research must be included in the theoretical framework of the thesis. They allow for the discussion of individual agency in the areas of fairness in relationships, emotional reciprocity, equal distribution of housework, and general relationship happiness within partnerships.

Social exchange theory also addresses the changing dynamic within mate selection and resultant partnerships in a thorough and nuanced manner. This theory considers a person's level of satisfaction within a partnership, the social environment in which social interactions take place, and what is valued within the partnership environment over time, and their effect on the functioning of the partnership. Furthermore, it shows how the distribution of power within the partnership environment can affect relationship dynamics, suggesting that individuals think about past, present and future gains (and losses) within partnerships on a regular basis. For example, if an individual thinks that their partner is investing enough 'labour' into the relationship, be it emotional investment, commitment, or even household duties, then personal levels of satisfaction are more likely to be achieved.

Chapter Four discusses the methods used to investigate thesis questions set forth in Chapter One. It outlines the hypotheses and statistical model used to investigate these questions. I also show how and why I selected my variables and gathered my data.<sup>10</sup> This chapter validates the use of time series analysis of mate selection data in New Zealand over the 1981-2006 period.

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<sup>10</sup> See Appendix Four for the complete list of Statistics New Zealand variables used in the thesis.

## *CHAPTER FOUR: METHODOLOGY*

### **4.1 Introduction**

While this research is fundamentally quantitative and positivist, it is augmented by secondary qualitative information, gleaned from local and international studies. Using a positivist research approach enables me to comment on the changing patterns of partner selection, in marriage and cohabitation in New Zealand society over time. These trends, the positivist position argues, are part of a social reality that can be studied, captured, and understood (Turner 1985, Denzin and Lincoln 2005, Bryman 2008). This approach also posits that correlations and influential relationships among these social factors can be understood and measured, and allows the formulation of testable theories/hypotheses (Schrag 1992, De Vaus 2002). To understand these patterns I have used secondary data, derived from self-completed questionnaires in surveys, primarily those used in the New Zealand Census of Population and Dwellings. As a further benefit of such quantitative work, the methods described here can be replicated at a later period in New Zealand and/or other OECD countries.

The research design, implementation, analysis, and discussion stages of the thesis were guided by an extensive literature review of relevant theories, and quantitative and qualitative studies in the subject area. Given New Zealand marriage and cohabitation trends are similar to those in other OECD countries (De Vaus 2002, Bryman 2008, OECD 2010), I have drawn on previous research from Australia, Great Britain, Ireland, the United States and other OECD countries as well as New Zealand to compare and explain my data. The positivist research design allowed me to investigate and describe at a macro level, patterns in marriage and cohabitation practices over time in New Zealand. The discussion of ‘why’ these changes and trends have occurred is informed by the theories found within Chapter Three of the thesis.

This chapter outlines the processes followed and methods used to gather and develop the key information necessary for the investigation of the central research questions. Sections 4.2 to 4.4 describe the New Zealand census data

acquisition process, the research hypothesis formulation and the building of the six data sets necessary to test hypotheses. The development of the *Statistical Analysis Software (SAS)* program code necessary for data cleaning analysis, and the testing of multiple hypotheses are also summarised. Section 4.5 discusses the statistical approaches trialled and used within the thesis, citing their respective utility and historical precedence. I then explain, using examples, the principal statistical approach used in the research: the ‘proportional comparative’ model. Section 4.6 outlines the range of incremental measurement approaches used to measure difference within the thesis. Section 4.7 offers some conclusions about the methodology.

## **4.2 Working with New Zealand census data**

While employed as a researcher at The University of Auckland for the *Family, Whānau, and Wellbeing Project (FWWP)* at the *Centre of Methods and Policy Application in the Social Sciences (COMPASS)*, at The University of Auckland, I was granted access to confidentialised data related to New Zealand individuals within couples in heterosexual marriages and cohabiting partnerships between 1981 and 2006. These data were derived from multiple *New Zealand Census of Population and Dwellings (NZ Census)* data sets, made available by Statistics New Zealand. I used *Statistical Analysis Software (SAS)*, *Statistical Package for the Social Sciences (SPSS)*, *Excel*, and *R* in order to carry out the different analyses for this thesis.

Statistics New Zealand supplied me with six data sets, one for every census undertaken over the 1981–2006 period. Each set was populated with variables I had chosen as relevant to the thesis research questions, and other work established criteria for ensuring they were comparable over time. Importantly, all information within the data sets was ‘couple linked’, that is, supplied at the level of the individual but also linked to information on their family and household, and their partner. This use of census data at the level of the individual, household, and family generated results in which we can have extreme confidence, more so than when using samples of populations.

Access to the data was provided by Statistics NZ under the Statistics Act and a Declaration of Secrecy was signed. It was also necessary, (under section 37 of the Statistics Act 1975), for me to conduct all data analysis in the secure Statistics New Zealand Data Laboratory in Auckland.<sup>11</sup> All information imported into, and exported from the Data Lab was checked by government staff to ensure confidentiality. All checked tables, graphs and other data were forwarded to me via email (Statistics New Zealand 2011h).

The design of the NZ Census questionnaire evolved considerably over the 1981-2006 period. Questions designed to measure personal and family information were often modified, included, and/or excluded from one census to the next. Because of the time series design of my thesis methodology, it was necessary to assemble a set of variables that were comparable across census periods (Errington, Cotterell et al. 2008). These variables included marriage and cohabitation status, age, sex, education, occupation, labour force status, personal earnings, parenthood, child dependency, religion and employment status.<sup>12</sup> While ethnicity has a large influence on mate selection and partnership choice in New Zealand, the comparability of this variable across time was poor, particularly in the New Zealand Census (Statistics New Zealand 2007c, Errington, Cotterell et al. 2008). Ethnicity therefore was not included in the thesis research.

Concurrently with the data set design, variable choice, and access processes, I developed a set of hypotheses with which to examine my research questions. The data set design, content, and hypotheses were interlinked in purpose, and were informed by social homogamy and social exchange theories. These hypotheses were tested using the multiple variables and data sets outlined above, and the robust statistical model, outlined in Section 4.5.

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<sup>11</sup> The Data Lab provides secure computer facilities in Statistics New Zealand's offices, where researchers can work with anonymised microdata. Statistics New Zealand is legally required to protect confidential individual and corporate information. A rigorous application process and strict eligibility criteria apply based on the requirements of the Statistics Act 1975 and Statistics New Zealand's microdata access protocols. The Auckland Data Lab is, at time of writing, on Level 7 of SAP Centre, 67 Symonds Street, Auckland.

<sup>12</sup> See Appendix One for a comparison of the relative compatibility of some key census variables over time.

### 4.3 Research hypotheses

As stated in Chapter One, this thesis asks two central questions: (a) Have the partner selection practices, socioeconomic profiles, and gendered differences within and between marriage and cohabitation changed over time and (b) What ideological and structural shifts have contributed to any changes that have occurred? To answer question (a), the thesis proposes and tests the following (central) hypothesis:

*“Legal marriages tend to be more homogamous than cohabitating partnerships”.*

Change and or stability in trends of mate selection in marriage, and cohabitation is usually conceptualised and measured as occurring across multiple dimensions. Many studies suggest that age, ethnicity, social status, education, occupation, religion, and others factors affect both mate selection and the socioeconomic conditions and relations within cohabitating and marriage partnerships (Johnson, Caughlin et al. 1999, Kalmijn and Flap 2001, De Vaus 2002, Teachman 2003, De Vaus, Qu et al. 2003a, Ono 2004, Buchler, Baxter et al. 2009). To investigate this ‘multidimensionality’ of difference and change, I constructed a series of four sub-hypotheses targeting gender, age, education level, occupation type, and employment income.

As was discussed in Chapter Two, OECD data show that in many countries, the average ages of males and females in all marriages (first marriages and remarriages) have risen over time. People are marrying and remarrying later than in past decades (OECD 2008). While many women will have a partner of similar age, a considerable proportion of them still choose a partner older than themselves (De Vaus 2004b). While this age gap has been narrowing over time in New Zealand, it is increasing in other countries. In addition, the average age of first cohabitation in many countries is younger than that of marriage (Ministry of Social Development 2004, Statistics New Zealand 2011e, Manning, Brown et al. 2013). I argue that New Zealand society, as with many other English speaking western countries, has experienced most if not all of the above changes over the past decades. Considering these ideas, I argue that the

‘average age’ and ‘age difference’ within and between marriage and cohabitation in New Zealand has changed over time. I therefore propose the following hypothesis:

*“The ages of individuals in marriage and cohabitation have become more homogamous over the decades”.*

To test this hypothesis, I examine the historical changes to ‘age of entry’ and age difference between the sexes within both partnership types in New Zealand. This is in three sections. First is a broad demographic/description of the historical changes to age within marriage and cohabitations. Second is a comparison of age difference between the sexes in cohabitation and first marriage relationships. Third, an analysis of historical changes to ‘age of entry’ and age differences between ‘remarried’ partners are undertaken.

An international increase in education and paid work for females has occurred over time but women continue to partner with older men (Baker 2012a). Resultant is an intensification of the ‘marriage squeeze’ effect (Greene and Rao 1995, Callister and Lawton 2011a). A ‘marriage squeeze’ occurs when the number of available men is different from that of available women (or vice versa). It can occur within many characteristics including occupation, ethnicity, age, and social status. An educational marriage squeeze has occurred in New Zealand in the past decades particularly for the highly educated. From 1991 to 2012, the percentage of women achieving a post-school qualification increased from 32 percent to 50 percent. Males are still more likely to have this level of education, with 53 percent doing so in 2012 (Families Commission 2013). The thesis proposes that the ‘marriage squeeze’ has altered but not radically changed. The historically persistent patterns of educational hypergamy in New Zealand, and the amount of ‘change’ differs with gender and partnership type.<sup>13</sup> This ‘idea’ is tested using the following hypothesis:

*“Educational homogamy is more prevalent for males, than for females and more prevalent amongst married couples than cohabiting couples”.*

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<sup>13</sup> Educational hypergamy is defined as when a woman is partnered with a man with higher educational qualifications than her own.

As is prevalent practice in similar research studies, I begin with a demographic analysis of educational achievement for all partnered people for the 1986–2006 period.<sup>14</sup> This investigates the gains in education for the population over time, and how they are greater for women than for men, particularly for those in higher education. This is followed by a series of specific analyses and comparisons of educational difference between males and females within and between marriage and cohabitation. These results are also examined for changes over time.

In many countries, the level of occupational homogamy between partners differs significantly dependent on the occupational groups they are in (Verbakel and de Graaf 2007, Bottero, Lambert et al. 2009). Milne, Byun and Lee (2012) argue that in New Zealand, an individual's level of education, occupation type, level of income, age influences their socioeconomic status level. Just as an individual's level of education influences their choice of partner, so too does their occupation (Kalmijn 1998). Previous research suggests occupational homogamy is more prevalent among those with higher educational qualifications and professional occupations than for those with less education and/or lower status jobs (Callister 1998, Hayes and Jones 2007).

This prevalence is a product of, among other factors, economic, cultural, and social protectionism by males and females in the 'professional' group. This protectionism limits the chances of mobility through marriage or cohabitation for those within the lower social strata (Smits 2003, Schwartz 2010). Furthermore, those who occupy the upper ranks of society, or those who hold the top occupations and/or the highest educational qualifications, are very likely to select partners close to themselves in socioeconomic, educational and cultural status, and this 'class protectionism' has changed little over time (Kalmijn 1998). To investigate these ideas in a New Zealand context, the thesis proposes the following hypothesis:

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<sup>14</sup> Education data from the 1981 census were not suitable for time series analysis with data from the 1986–2006 censuses (Errington, Cotterell, von Randow and Milligan 2008).

*“‘Professional’ individuals are more homogamous than ‘non-professional’ individuals, more so in married couples than cohabiting couples”.*

This historical comparison of occupational homogamy (and hypergamy) in New Zealand helps to show how males and females within these status groups establish and maintain their socioeconomic statuses in society (Bourdieu 1984, McDonald 1985, Smits 2003, Weber [1921] 1978).

Testing this hypothesis entails two calculations. The first determines the proportion of all partnered females (in both marriage and cohabitation) holding an identical or very similar occupation to that of their male partner. The second determines the proportion of females (in both partnership types) holding an occupation of lesser status than their partner’s.

Partnered women are more likely to work part-time, earn less money, and work in lower skilled and lower status than both their partners, *and* single men and women (Baker 2001, Conway 2003, Pocock 2003, Callister and Singley 2004, Baxter, Gray et al. 2007, Chen, Conconi et al. 2007, Chesters and Baxter 2009). This condition is even more prevalent for women with dependent children (Waldfoegel 1997, Budig and England 2001, Felfe 2006, Baker 2010c). To investigate the historical persistence and/or change in gendered occupational and financial inequalities in New Zealand, I examine the concentrations of partnered females in the full-/part-time labour force over time, paying special attention to the labour force positions of their male partners. I propose that occupational and financial status differ dependent on gender, occupation, and partnership type. To test the above assumptions, I propose the following hypothesis:

*“Married women are more likely than cohabiting women to work part-time and earn lower wages than their male partner”.*

I test this double-barrelled hypothesis by firstly comparing the levels of full-time and part-time labour force participation for married and cohabiting couples in the 1981–2006 period and by comparing levels of labour force

participation for partnered mothers and non-mothers over the same time period. The results of these calculations show the impact that dependent children can have on full-time work participation and income difference (Baker 2010c). Finally, I examine the historical patterns of gendered income differences within and between marriage and cohabitation by comparing the proportional earnings of males and females living together, in 96 occupational types. This comparison is done at each of the 1981–2006 census points.

#### **4.4 Creating the six data sets for hypothesis testing**

To examine change within partnerships over time, I required ‘couples-linked’ data sets containing the relevant variables. New Zealand Census data sets do not come in this form but, on my request, Statistics New Zealand created data sets of ‘matched pairs’ of men and women in legally married or cohabitating partnerships, from the 1981, 1986, 1991, 1996, 2001, and 2006 censuses.<sup>15</sup> They first sorted the individual level census data sets by ‘*dwelling id*’ and ‘*family id*’ (dwelling and family identifier codes), keeping the resulting ‘couples’ information. Following this, they created new gendered codes for all variables within the ‘couples’ data sets. The sex and occupations variables for example, were renamed, ‘*sex\_1*’ and ‘*occup\_1*’ for males and ‘*sex\_2*’ and ‘*occup\_2*’ for females. This was important as gender can influence life experience, predispositions, and life chances. Variables were also coded by census year, thus facilitating time series analysis. The final stage of the construction process was to change the data set structure from ‘one record per couple-member’ to ‘one record per couple’ format.<sup>16</sup>

These novel data sets allowed comparisons on ‘multiple characteristics’ of partnered males and females within and between individual New Zealand households. Variables included census year, gender, age, partnership type, level of education, occupation type, employment status, labour force status,

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<sup>15</sup> Statistics New Zealand did include same-sex couple data, but as this group was not the focus of the thesis, they were excluded from subsequent versions of the data sets.

<sup>16</sup> These data sets were named ‘*mosc81sm*’, ‘*mosc86sm*’, ‘*mosc91sm*’, ‘*mosc96sm*’, ‘*mosc01sm*’, and ‘*mosc06sm*’.

level of personal income, ethnicity, religion type, and child dependency status<sup>17</sup>. For a more detailed list of variables, see Appendix Three.

While these data sets were ‘couple-linked’ and contained all of the necessary variables, further data preparation and cleaning was necessary. In data sets of this size, inconsistencies, data entry errors and other mistakes are often present. I removed couples with one or more person under 15 years, same-sex couples, and couples with significant ‘missing’ data. An example of the SAS code used to convert the Statistics New Zealand data sets into ‘clean’ working data sets can be found in Appendix Two.

#### 4.5 Statistical models

Several statistical models were investigated for utility before I chose the proportional comparison/time series approach used in this thesis. Model choice was dependent on suitability for analysing paired nominal, ordinal, and continuous data. The first two models tested were correspondence analysis and log linear analysis. As the initial hypothesis concerned relationships among partnership type, gender, occupation type, and social stratification in New Zealand, considerable time was spent developing a local version of the Cambridge Social Interaction Scale (CAMSIS)<sup>18</sup>. Correspondence analysis, which is explained below, underpins much of the statistical work in this scale.

Correspondence analysis is an *exploratory data analytic* technique designed to analyze simple two-way and multi-way tables containing some measure of correspondence between the rows and columns... [E]xploratory data analysis is used to identify systematic relations between variables when there are not (or rather incomplete) *a priori* expectations as to the nature of those relations (UNESCO 2013).

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<sup>17</sup> The term ‘child(ren’s) dependency status’ used in this thesis is as defined by Statistics New Zealand (2014b). Statistical standard for child dependency status. Statistics New Zealand. Wellington: pp 1-5. as, ‘A child (birth, biological, adopted, step- or other) in a family nucleus who is aged under 15 years, or who is aged 15–24 years of age and not employed full time. A child’s usual residence will be that (of least one) of his or her parents.’

<sup>18</sup> According to the CAMSIS approach, individuals are embedded in socially moderated networks of relationships within which they engage in social, cultural, political, and economic interactions, which are qualitatively and quantitatively different from interactions with persons who are more distant from these networks. For instance, acquaintances, friends, and marriage partners tend to be chosen as social and economic exchange partners much more frequently from within a given social network than from without (Bergman and Joye 2003: 34).

Correspondence analysis is designed to show how cell proportions in a contingency table deviate from the proportions expected, when row and column variables are independent.<sup>19</sup> It allows the measurement of values of two discrete variables. This measured distance between two points can be treated as a measure of correlation or association (Statsoft 2005a).

In its simplest form, correspondence analysis takes a two-way table such as a cross-tabulation of husbands' and wives' occupations (as variables), and calculates the probability of a global association between the rows and columns. It shows *how* the variables are related, not just that a relationship exists. Assuming row/column independence, it identifies a small number of dimensions in which deviations from expected values are represented. For the thesis, this was calculated for rows (males) and columns (females) independently, allowing for gender comparison of occupations in mate selection (Friendly 1995, Statsoft 2005a, UNESCO 2013). This model is also useful as it maps multidimensional relationships into two-dimensional 'correspondence' plots/maps and tables that allow the intuitive analysis of categorical data (Greenacre 1984, Benzecri 1992, Greenacre and Torres 2003, Garson 2006). Correspondence analysis has been used internationally to examine friendship and mate selection patterns, social stratification, occupational homogamy, class and gender differences, socioeconomic status and educational performance, and social mobility (Stewart, Prandy et al. 1980, Bourdieu 1984, Marks, McMillan et al. 2000, Bottero and Prandy 2003, Bottero, Lambert et al. 2009).

The development of the CAMSIS scale/correspondence analysis model was useful to the thesis. It allowed the investigation and graphic depiction of gendered differences within occupation types, levels of education, earnings, labour force participation, and age difference over time. While the correspondence analysis model provided nuanced analyses and interpretations of the patterns within mate selection data, it was eventually dismissed as unsuitable for my purposes because it did not allow for statistical significance

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<sup>19</sup> Correspondence analysis is also known as optimal scaling, reciprocal averaging, optimal scoring quantification analysis, and homogeneity analysis. This model contains elements of factor analysis, canonical analysis and principal components analysis in its approach.

testing, and the results were less open to interpretation and generalisability than other models, such as log linear analysis. This statistical model makes possible the verification of a priori hypotheses about relations between variables (UNESCO 2013).

The log linear model is commonly used to examine multi-level contingency tables of categorical data. It can uncover relationships among variables such as gender, level of education, and ethnicity rather than examining them separately.<sup>20</sup> This model is a form of multi-way frequency calculation and acts as a form of logistic regression for categorical or grouped continuous data. It calculates the means of cell counts in contingency tables by describing the association patterns among a set of two or more variables (Agresti 2002, Garson 2010). This model is often used in studies of mate selection, social mobility, and homogamy of gender, education, economic status, age, occupation, household labour, and ethnic intermarriage. (See Jones and Davis 1986, Mare 1991, Erikson and Goldthorpe 1992, Kalmijn 1994, Callister 1998, Smits, Ultee et al. 2000, Birkelund and Heldal 2003, Ono 2003, Blackwell and Lichter 2004, Rose 2004, Vaid 2005, Baxter, Haynes et al. 2007, Hayes and Jones 2007, Rolf and Ferrie 2008, Craig and Siminski 2010, and Walker 2010).

After a trial of the log-linear model, I decided that its sophisticated capabilities were not necessary for the analysis tasks. While multivariate regression techniques found in the log linear model are useful when using samples to infer distributions or patterns within a population, as many researchers must do, they are unnecessary when one has access to an entire population. Because I had access to multiple variable micro-data from six national censuses over a thirty-year period, a simple, powerful statistical model was instead used, that of proportional comparison in time series. This simple but elegant approach allowed the thesis to calculate and illustrate research results in a clear and relatively uncomplicated form.

Proportional comparison is a percentage-based measure commonly used in studies using ordered and non-ordered characteristics/data (Kalmijn 1998).

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<sup>20</sup> The related crossing parameter and quasi-independence log linear models were also examined for suitability.

Statistics New Zealand, the Australian Bureau of Statistics, Statistics Canada and the OECD often use this model in their ‘Marriage and cohabitation’ publications (See OECD 2003, Australian Bureau of Statistics 2007, Australian Bureau of Statistics 2011, Statistics New Zealand 2011b, Statistics New Zealand 2011i, Statistics Canada 2013). New Zealand academics and researchers with access to complete census sets also use time series comparative proportional analysis (See Davis, Jenkin et al. 2003, McTaggart 2004, Milligan, Fabian et al. 2006, Cotterell, Weldon et al. 2008, Cotterell, Von Randow et al. 2009, Cotterell, Von Randow et al. 2009, Callister, von Randow et al. 2011).

After considering alternative measures, I used the proportional comparison model, in bivariate and trivariate form, to calculate the proportional differences between males and females across multiple variables within and between marriage and cohabitation, at each of the six historical periods. In this way, I could show differences and similarities between legally married males and females, between cohabiting males and females and between marriage and cohabitation over time. Given the relatively complex analysis described above, multivariate analysis of variables was purposely limited to a few examples. The investigation of the impact of age upon earnings, fertility, labour force participation, and occupation (among other factors) was outside the scope, word limit and focus of this thesis. This is the work of a postdoc or further funded research.

#### **4.6 Measuring the increments of difference**

The calculation of proportional difference in the thesis varied, dependent on the variable type used. Some were categorical; others were numerical, while others were ordinal.<sup>21</sup> For most variables, I utilised the categories established by Statistics New Zealand, the OECD and other agencies. Often these were ranked by social status or by numerical value, while others were non-ranked categories. To examine differences in the occupations of partnered couples I

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<sup>21</sup> Most variables were comparable across the five census period while others were not, affected by the way that Statistics New Zealand designed questions in certain years (see Milligan, Fabian, Coope and Errington 2006).

used such a ranked categorical system: *The New Zealand Standard Classification of Occupations* (NZSCO) (Statistics New Zealand 2006f). This schema contained 96 occupation types that were ranked from ‘*Legislators*’ at the top, to ‘*Labourers*’ at the bottom. Similarly, differences in educational levels between male and female partners were investigated using a ranked, four category scale of educational achievements. This was based on the ‘*Highest qualification*’ reported by individuals within their census forms. This system was also ranked, with *Tertiary qualifications* at the top and *No qualifications* at the bottom (Statistics New Zealand 2006f).<sup>22</sup>

Comparisons of work and labour force status were based on a four-category non-ranked classification schema established by Statistics New Zealand. This included, *employed full-time*, *employed part-time*, *unemployed*, and *not in the labour force* (Statistics New Zealand 2006f). Comparisons of income were based on the *total annual wages or salaries* reported by each partner. Income data was supplied by Statistics New Zealand as bands of income that ranged from ‘*Loss*’ at the bottom to *\$100,001 or more*, at the top (Statistics New Zealand 2006f). Average age, and age gap between the sexes in partnerships were calculated using units of single years (Statistics New Zealand 2006f). Other variables used in the thesis such as gender, partnership type, parenthood, number of children, and childhood dependency were more straight forward to calculate, often being a yes/no category or a numerical value.

The units of measurements outlined above were selected to gather the greatest level of detail from the data consistently over the 1981–2006 period. Constraints were present due to the changes to particular census questions over time, or the inclusion or exclusion of questions at any given census period (Errington, Cotterell et al. 2008). However, the resulting methods of measurement are robust.

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<sup>22</sup> See Appendix Three for a full list of variable categories.

## **4.7 Conclusions**

In this chapter, I have outlined the development of the methodological approaches used to test the central and sub-hypotheses proposed in this thesis. Census variable selection was discussed, paying attention to each one's comparability across census periods. The data acquisition process, data set design, construction and cleaning were also outlined and shown to be complex processes that necessitated the acquisition of statistical programming skills. I then discussed the journey leading to the use of the proportional comparative statistical model to test the hypotheses, before illustrating that model's elegant and robust design through a series of examples. In conclusion, the methodology outlined within this chapter is both theoretically and practically sound. Evidence of its reliability has been provided by citing multiple uses in local and international social science and demographic research.

The following three chapters provide the results of the testing of hypotheses. Chapter Five investigates and compares the changes in 'age' and 'age difference', within and between both partnership types over time. Chapter Six repeats the process for level of education, while Chapter Seven compares changes in occupational homogamy or occupational difference between partners over time, levels of labour force participation for males and females, and the impact of motherhood on income level.

*CHAPTER FIVE: AGE DIFFERENCE WITHIN AND BETWEEN  
MARRIAGE AND COHABITATION*

## **5.1 Introduction**

While age is a measurement of an individual's elapsed time since birth, it also has socially constructed symbolic meanings. Certain ages are social and legal milestones that signal particular rights, privileges, constraints and expectations of the individual within society. In one sense, age is socially and legally regulatory. In another it is an indicator of positive power, be it youth, vitality and fertility, or experience, advanced knowledge and capital assets. Age, therefore, is a valuable *and* gendered capital within the partnership market.

Because of the multiple social, material and ideological shifts in New Zealand over the past decades, age-related milestones or norms of partner selection have changed. The 'evolved' norms accommodate changes to the timing and type of first and sequential partnerships. Influencing these shifts have been: the delaying of first childbirth, increased education for males and females, increased labour force participation for women, greater proportions of youth spent in cohabiting partnerships, the rising cost of weddings, and the relative financial and sexual independence possible within cohabitations (Baker 2014, Baker and Elizabeth 2014).

Historical changes to age within and between partnership types are related to the increasing prevalence of cohabitation – this has been observed in New Zealand, Canada, the United States, Australia, and Europe (Statistics New Zealand 2001b, 2007a). In 1981, 3.2 percent of couples 15 years and older were cohabiting rather than married. By 2006 this had increased to 20 percent (Statistics New Zealand 1994:37, Statistics New Zealand 2010c:4). This proportional growth had an inverse relationship with the decline in the number of individuals entering legal marriage, and the average ages of each group.

The cohabiting population is younger than the marital population. In 2006, 90 percent of all partnered women in the '15–19 years' age group in New Zealand were cohabiting (Statistics New Zealand 2010c). In contrast, ten

percent of partnered males and females aged 45 or more, were cohabiting. Importantly these data show the age related nature of marriage and cohabitation.

In addition, average ages at first and subsequent marriages have increased over time in New Zealand. Over the 1981–2006 period, the median age at first marriage increased from 24 years to 30 years for men and from 22 to 28 years for women. In contrast, the median age at remarriage (post-divorce) increased from 37 to 46 years for males and from 34 to 42 years for females in the same period. The median age in post-widowhood remarriages increased from 59 years to 61 years for males and from 53 years to 54 years for females. Nevertheless, increasing proportions of ‘new cohabitations’ now follow divorce in New Zealand (Statistics New Zealand Microdata 2011).

Median age difference between married partners has declined over time, from 2.1 years in 1971 to 1.7 years in 2010. This difference is contingent on life stage. In 2010, males in first marriages were on average 2.1 years older than their partners, whereas males in post-divorce and post-widowhood marriages were 3.7 and 7.7 years older respectively (Statistics New Zealand 2010b, 2011e). Given that cohabitation is a complex arrangement of purposes and ideologies, and that it often (but not always) precedes marriage and/or follows divorce or widowhood, it is prudent that sociology know more about age and differences within it. I demonstrate in this thesis that, just as is the case with legal marriage, the practices that lead to age and age difference in cohabitations are related to life stages.

This chapter tests and reports the results of the hypothesis “*The ages of individuals in marriage and cohabiting relationships have become more homogamous over the decades*”. To address this idea, the chapter examines the historical trends of average ages and age differences within the two partnership types in New Zealand, comparing them over the 1981–2006 period. The findings demonstrate that the age profiles of both the married and cohabiting populations have changed appreciably over time. I also show that age differences between partners within and between the two partnership types have shifted over time. Most important, I show that levels of age homogamous,

older male-younger female, and older female-younger male partnerships differ between partnership types and are dependent on the life stages of the individuals involved.

Section 5.2 outlines and defines the technical terms and categorical schema used to discuss, calculate, and understand the historical changes to age profiles and age differences. Section 5.3 provides a broad demographic/descriptive picture of historical changes to age trends within marriage and cohabitation. It shows that ages of entry into first and subsequent partnerships have increased (albeit at different rates) over time. Section 5.4 builds on this, showing changes and differences to the age demographic for males and females within and between both partnership types over time. Sections 5.5 and 5.6 demonstrate that life stage, gender, and partnership type (and cultural changes) all influence shifts in age difference over time. These influences include the gendered social norms of age differences within and between individuals in first marriages, cohabitations, remarriages, and post-divorce cohabitations. Larger social structures and cultural changes, such as the delaying of marriages, increases in remarriages and changing expectations of males and females within the partnership market in turn influence age difference. Section 5.7 contains a summary of the findings and some conclusions.

## **5.2 Methodological details and definition of terms**

All empirical results shown within this chapter are based on units of single years. Where age aggregation was necessary, I used a combination of the models used by Statistics New Zealand, and a 'life stages' schema of my design. This schema represented three 'life stage groups': 16–29 years, 30–49 years, and 50 years and over. This model allowed sufficient differentiation between younger, middle, and older groups without the loss of detail. These aggregation models allowed me to model, analyse, and discuss the historical changes to age difference within and between marriage and cohabitation partnerships in New Zealand. With this in mind, I calculated the three states of age similarity and difference in this thesis using an expanded measurement scale developed (by me) for such a purpose.

Age difference and similarity between partners are defined as follows: Age homogamy is defined as when couples have identical birth years or only a one or two-year age gap exists between them. Age differences within older male-younger female and older female-younger male partnerships are divided into three categories: three to five years age difference (older or younger), six to ten years age difference (older or younger), and 11-plus years age difference (older or younger). I created these categories to show the extent of gendered differences in age gaps within and between the two partnership types.

### **5.3 Increasing ages over time for individuals in first marriages and remarriages**

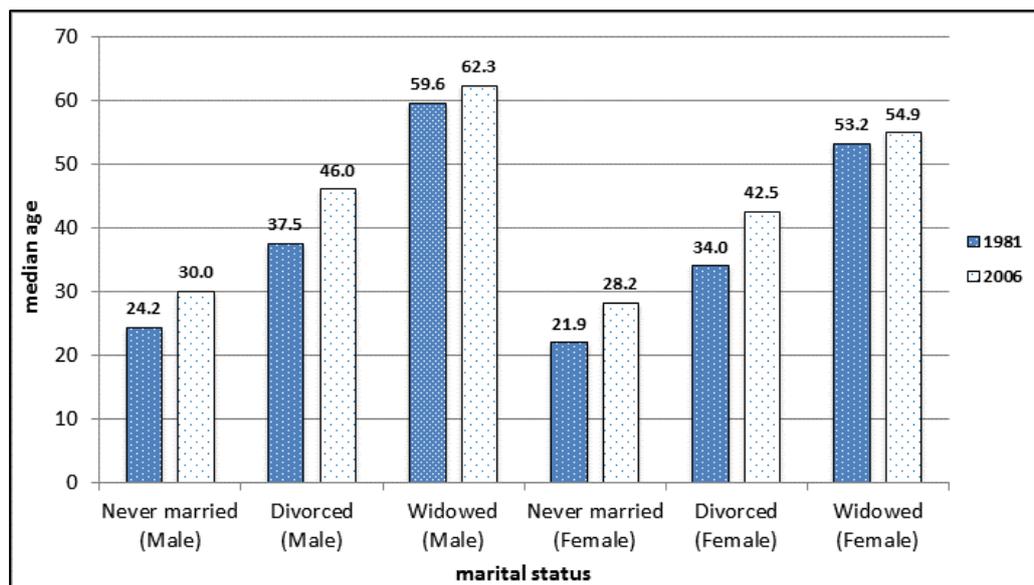
Increasingly, New Zealanders are marrying for the first time later in life. In contrast, the average ages of men and women entering their first cohabitation have remained relatively stable over time. In both marriage and cohabitation, the average age of males is higher than it is for females, but this age gap has narrowed over time. As will be demonstrated later in the chapter, it also often varies between partnership types. Figure 5.1 shows the changes in median ages of males and females at the date of their marriage registrations, between 1981 and 2006. We see that ‘age at marriage’ has varied dependent on ‘pre-partnership’ status, gender and time period. Median ages at remarriage also increased over the period, again dependent on individuals’ widowhood or divorce status prior to the new partnership. Divorce, remarriage, and post-divorce cohabitation all affect the age profiles of both partnership types.

A considerable proportion of partnerships in New Zealand do not last, and approximately one-third of marriages end in divorce (Statistics New Zealand 2010c:6-7). Prior to the early 1980s, the legal termination of marriages was a complex and difficult process, and this was reflected by relatively low divorce rates. Changes to New Zealand legislation in 1980, in the form of the Families Proceedings Act, enabled divorces through ‘irreconcilable differences’, making divorce easier to obtain than in the past (New Zealand Government 2009).

The trend of increasing age at first marriage over time has influenced average age at divorce and remarriage. Factors including age at divorce, sex, and parenthood influence the chances of remarrying, especially for females. Median ages at first divorce for males and females were 38 and 35 years respectively in 1987. These steadily increased through to 45 years and 42 years respectively in 2009 (Statistics New Zealand 2010b). Age difference between males and females at divorce changed little over this period. It was 2.7 years in 1987 and 2.6 years in 2009.

Many individuals remarry after divorce, but greater proportions of males than females do so. Since the mid-1970s, remarriages have comprised an increasing proportion of all marriages each year. In 1974, the remarriage rate was 19.9 percent of all marriages. This rate reached a peak in 2001 when it constituted 36.6 percent of all marriages, and it had fallen to 31.5 percent by 2009 (Statistics New Zealand 2010b). Several such trends are evident in Figure 5.1. First, ‘never married’ individuals married in early adult life, divorced men and women remarried later, and widowed individuals did so much further into the life journey.

**Figure 5.1 Median ages of married males/females by previous status: 1981 and 2006**



**Source:** Statistics New Zealand microdata 2011

Second, the average ages of males and females in all three ‘pre-marriage’ categories increased over time. The median age for ‘never married’ males

reached 30 years in 2006, a 5.8-year increase over the 1981 figure; for females this figure was 28.2 years in 2006, a 6.6-year increase over 1981.

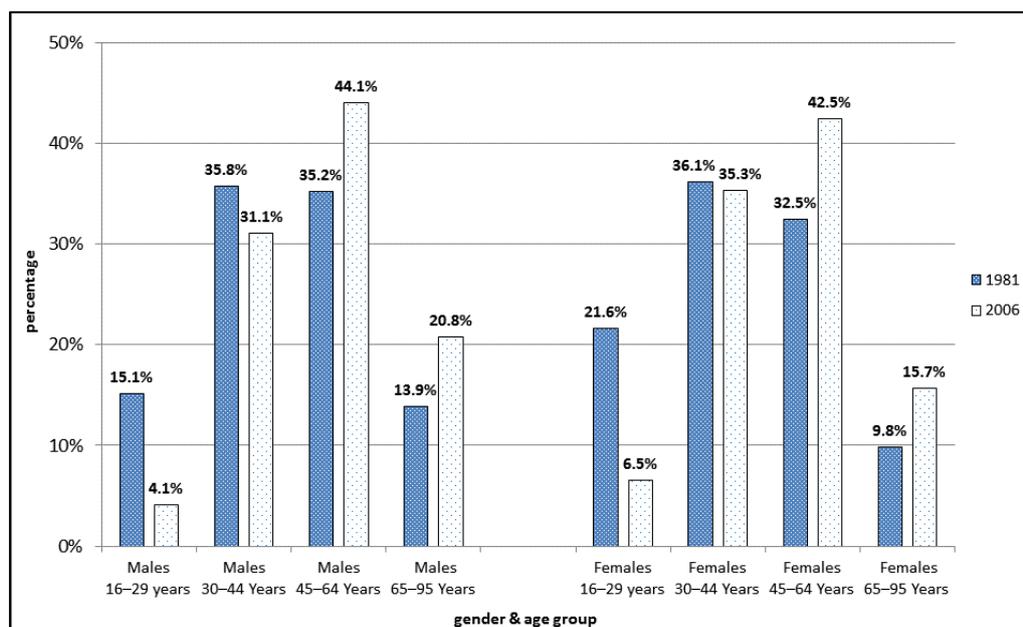
As stated, greater proportions of men than women re-partner after divorce or widowhood. In addition, divorced males and females are remarrying later than in past decades. The median ages of divorced males and females remarrying increased by 8.5 and 8.6 years respectively in the 1981–2006 period. This was due in part to the delaying of first marriages. Widowed males and females are also remarrying later than in the past, but only marginally. The median age increased by 2.7 years for males and 1.8 years for females over the 1981–2006 period. This was due in part to the stage of life when the death of a partner occurs; hence the possibility of remarriage.

Third, the average age gap between males and females differs dependent on premarital status. Figure 5.1 shows these age differences in marriage and remarriage. The median age of males was consistently greater than that of females in all of: first marriages, post-divorce remarriages, and post-widowhood remarriages. In 2006, Males were on average 1.8 years older than females in first marriages, 3.5 years older in post-divorce remarriages, and 7.5 years older in post-widowhood remarriages (Statistics New Zealand 2010b). As stated, median age differences between partners in first marriages declined over time. Although Statistics New Zealand has published some age demographic information on cohabiting partnerships in New Zealand, their analysis and reporting of age difference is scant. Having access to census data with age in years allowed me to make these calculations, and the results are shown and discussed in the following section.

#### **5.4 Changing age profiles for married and cohabiting males/females**

This section illustrates the historical interrelationship between and fundamental changes to age and age difference within and between both partnership types. Figure 5.2 demonstrates the changing trends in the proportional (age) composition of marriages over the 1981–2006 period for males and females.

**Figure 5.2 Age distribution of males/females married: 1981 and 2006**



**Source:** Statistics New Zealand microdata 2011

In 1981, 71 percent of the married male population was between 30 and 64-years-old while 29 percent was in the 16–29 and 65–95 groups. By 2006, there was evidence that the married male population was getting older. Fewer younger males were getting married. Less than five percent of the married male population in 2006 was in the 16–29 group, an 11 percent decrease from 1981. Correspondingly, in 2006, greater proportions of the married male population were in the 45–64 and 65–95 age groups than in 1981. There was also a smaller but still important (five percent) proportional drop for the 30–44 age group over this period.

Greater age demographic changes occurred for married females between 1981 and 2006, especially for those in the 16–29 age group. In 1981, this group made up 21.6 percent of all married women, but by 2006, this had declined to 6.5 percent, (a 15 percent drop compared to the 11 percent drop for males in this period). As with the married males, the largest proportions of married females were in the 30–44 and 45–64 age groups across the period. There was no proportional change for married females in 30–44 age groups over time.

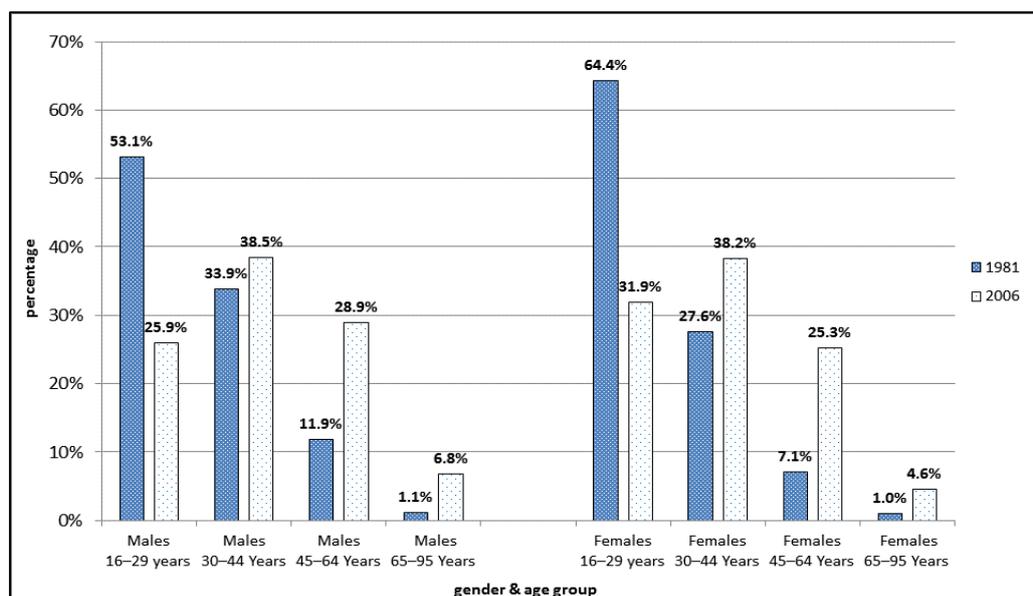
In summary, the age demographic of the married population changed over the 1981–2006 period in New Zealand, but was similar, although not identical, for males and females. In 2006, the 16–29 age group made up less than six percent

of both male and female married populations. By default, the married population was much older in 2006 than it was in 1981.

Cohabitation can begin in one’s mid-teens, can take multiple forms, and be of various durations. Individuals may experience multiple sequential cohabitations; some lead to legal marriage. Others will experience marriages followed by or interspersed with periods of cohabitation. Cohabitation can act as an alternative to marriage, a pre-marriage holding site, a training ground, a place for winnowing and/or a political/ identity statement. As it can take all of these forms, it shares a symbiotic age demographic relationship with legal marriage.

Because of the ‘informal’, unregistered nature of cohabiting partnerships, little official age data exist for cohabitation in New Zealand (and many other English-speaking countries). Nevertheless, we do know that in 1970, the average age of people entering their first cohabitations was 24 years for males and 20 years for females. This had changed little by 1995, when the equivalent figures were just over 24 years for males and 21 years for females (Ministry of Social Development 2004). Figure 5.3 shows the changing age demographic of cohabitations over time in New Zealand, which is notably different from the earlier discussion of how age at marriage has increased over time.

**Figure 5.3 Age distribution of males/females cohabiting: 1981 and 2006**



Source: Statistics New Zealand microdata 2011

In 2006, 95 percent of the cohabiting population consisted of individuals from the three youngest age groups (16–64 years), approximately 15 percent greater than for the married population. Although the cohabiting population remained younger over the 1981–2006 period, the proportion of ‘older’ cohabiters grew during it. As is shown in Figure 5.3, the proportions of males and females in the 30–44 and 45–64 age groups increased over the period. In contrast, the proportions of males and females in the 16–29 age group declined.

This proportional increase for the two middle age groups may reflect an increase in cohabiting partnerships that did not, or had not yet, transitioned to marriage, or more cohabitations as an alternative to marriage, or more short-term cohabitations. A small but increasing proportion (approximately six percent) of cohabiting males and females fell within the 65–95 age group, noticeably less than the 15 percent of married females and 20 percent of married males that were in this age group. As is now evident, the average age of marriage increased while the average age of cohabitation remained relatively stable.

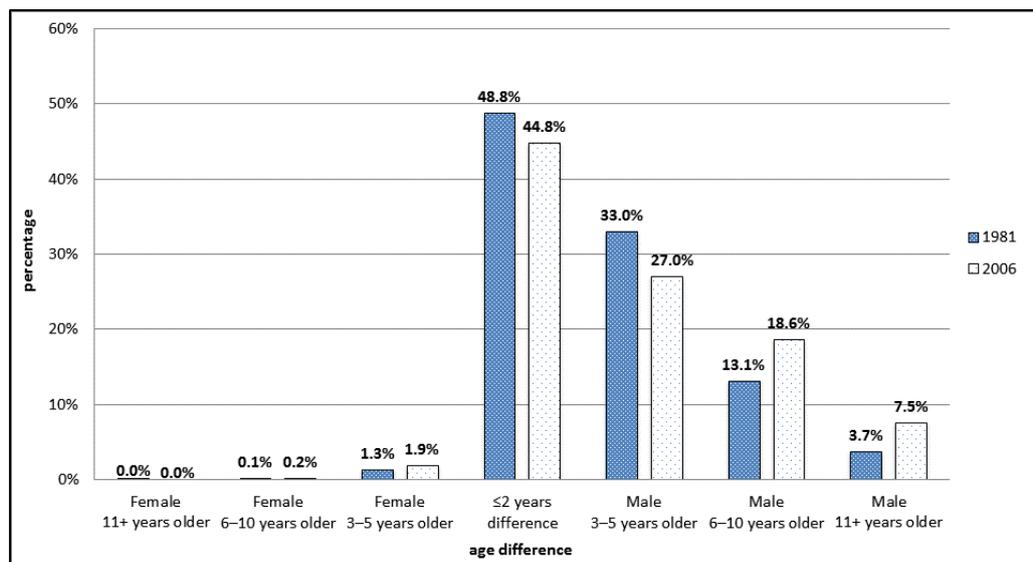
## **5.5 Shifting age differences for males and females**

Although age homogamy is prevalent within the New Zealand population, a large proportion of females have a partner older than themselves. However, the average age difference between married partners declined from 2.1 years in 1971 to 1.7 years in 2010 (Statistics New Zealand 2011e). I show that significant variation exists within the age demographic, which tells us much about the evolving characteristics and purposes of marriage and cohabitation. The changing patterns of age difference vary dependent on life stage, marriage, remarriage, and post-divorce or widowhood statuses, and the partnership type of the people involved. Section 5.6 investigates these ‘characteristics’ by comparing age differences by gender and time series, across three age groups (16–29, 30–49, 50 years and over) and between marriage and cohabitation.

## 5.6 Changes in age differences within marriage and cohabitation: 1981–2006

Figure 5.4 shows consistently high levels of age-homogamous and older male-younger female partnerships in the 16–29 age group over the 1981–2006 period. Females in this group were very likely to marry men equal in age to or older than themselves. While the level of homogamy dropped by four percent over time, 44.8 percent of marriages in this age group in 2006 were age-homogamous.

**Figure 5.4 Age gaps in marriages (16–29 age group): 1981 and 2006**



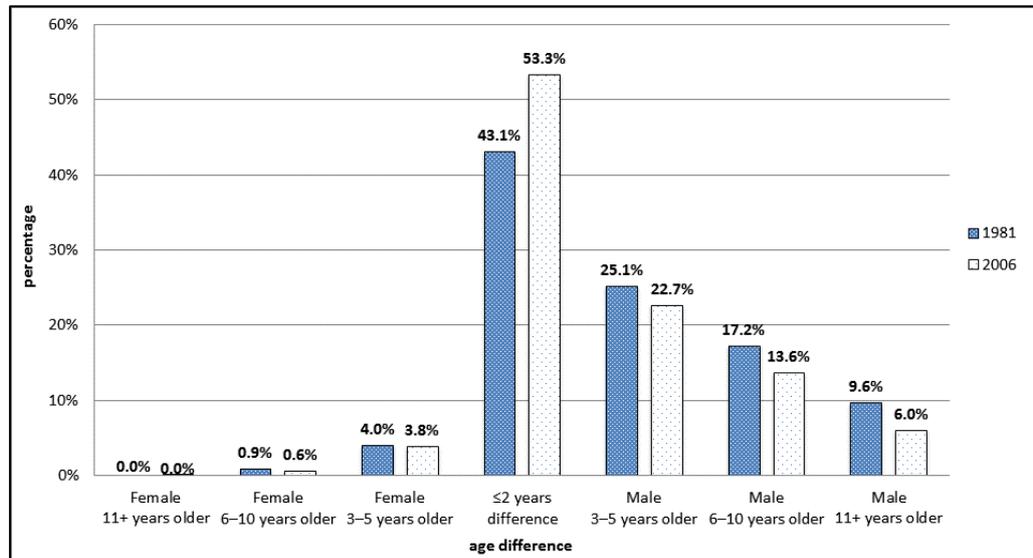
**Source:** Statistics New Zealand microdata 2011

Figure 5.4 also shows that the proportion of females in this age group who were married to men three to five years older than themselves also declined by six percent between 1981 and 2006. An interesting counter trend also emerged from the data, showing a 9.3 percent increase in partnership (between 1981 and 2006) where male partners were between six or more years older than their female partners. In contrast, less than two percent of marriages in this age group (in both 1981 and 2006), female partners were between three and five years older than the male. This finding is important as it is contrary to journalistic commentaries.

As with the married population in this age group, the majority of cohabiting partnerships during the 1981–2006 period were either age-homogamous or older male-younger female. Nonetheless, as is shown in Figure 5.5, the level of homogamous cohabitations grew by 10.2 percent over this period, reaching

53.3 percent in 2006, a figure 8.5 percent greater than for the married population.

**Figure 5.5 Age gaps in cohabitations (16–29 age group): 1981 and 2006**

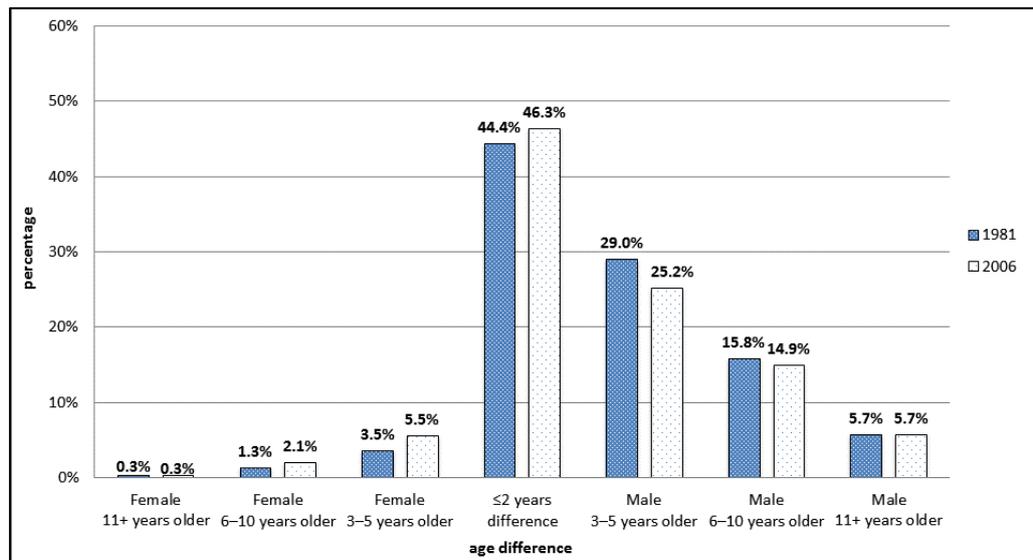


**Source:** Statistics New Zealand microdata 2011

Correspondingly, older male-younger female partnerships declined by 9.6 percent over the period, ending at 42.3 percent in 2006. There was little change in the percentage of older female-younger male partnerships over time: this remained at approximately five percent, more than double that (2 percent) of the married population in this age group in 2006. While Figure 5.4 showed that proportions of married population where males were 6 years and over/older than their partners increased from 16.8 percent in 1981 to 26.1 percent in 2006, Figure 5.5 showed that the levels of cohabitations with this ‘age gap type’ declined from 26.8 percent to 19.6 percent between 1981 and 2006.

As Figure 5.6 shows, married people in the 30–49 age group demonstrated similar but not identical patterns of age-homogamous and older male-younger female partner selection to those of the 16–29 age group. The majority of females in this age group had partners who were similar in age or were older than they were. As with females in the 16–29 cohort, declining proportions of those in the 30–49 age group were married to males three to five years older. In this case, the figure dropped from 29 percent to 25.2 percent over the 1981–2006 period.

**Figure 5.6 Age gaps in marriages (30–49 age group): 1981 and 2006**

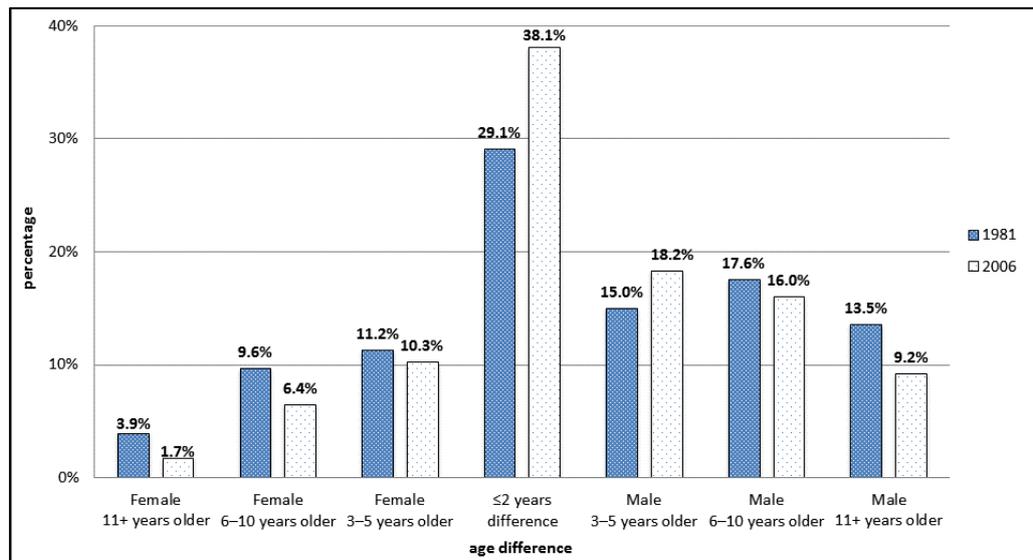


**Source:** Statistics New Zealand microdata 2011

That considered, in 2006 nearly eight percent of marriages in this age group involved females who were between three and ten years older than their partners, a greater percentage than that found in the 16–29 age group. This proportional difference is likely linked to the ‘greater age range’ of younger men available to women in this age group than to those in the younger group.

Figure 5.7 shows that the proportion of age-homogamous cohabitations in the 30–49 age group increased over time, from 29.1 percent in 1981 to 38.1 percent in 2006. Figure 5.7 also shows that the levels of older female-younger male partnerships in this age group decreased marginally over time, from 24.7 percent in 1981 to 18.4 percent in 2006. Importantly, in 2006, older female-younger male cohabitations were nearly twice as prevalent (18.4 percent) as that model of marriage (8.9 percent).

**Figure 5.7 Age gaps in cohabitations (30–49 age group): 1981 and 2006**



**Source:** Statistics New Zealand microdata 2011

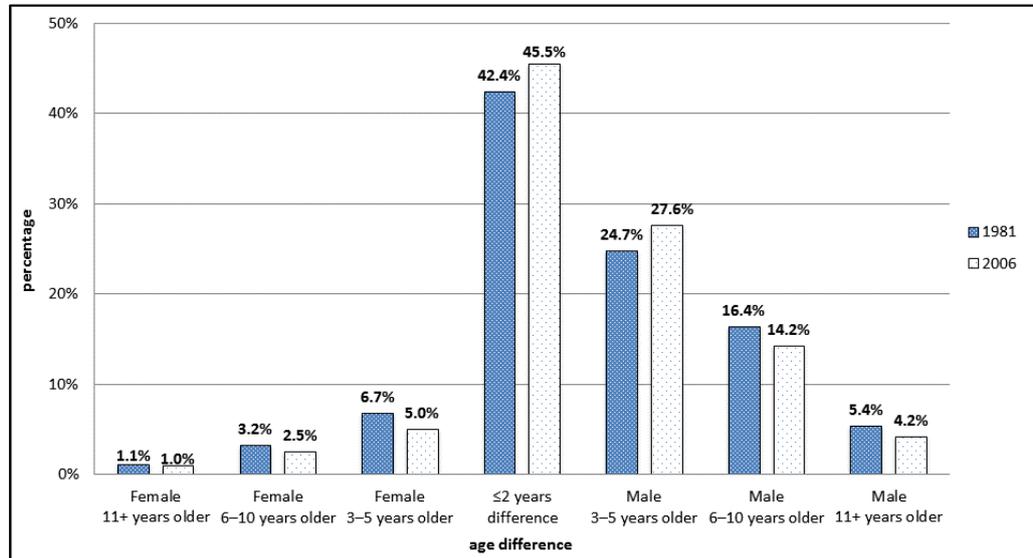
In 2006, the 50 years and over group constituted 45 percent of the married population and 13.5 percent of the cohabiting population. This group exhibited greater age heterogeneity in partner selection than the 16–29 and 30–49 years groups. Importantly, married couples within this group are more ‘traditional’ in terms of age difference and the prevalence of older male-younger female partnerships, while cohabiting couples exhibit more flexible age difference arrangements. That considered, patterns in both partnership types have changed over time.

Where individuals remarry or re-cohabit after divorce, the age difference between the partners is often greater than in their first marriages. Greater proportions of males than females remarry. Remarrying males often choose females who are younger than their original spouses. This affects the pool of available males within which older divorced/widowed females may choose. It becomes smaller and demographically younger. Granted, the majority of remarrying females in this age group choose a male of similar age, or one much older, whereas others marry younger men, treating this either as a compromise or as a positive decision.

Figure 5.8 shows that in 2006, 45.5 percent of marriages were homogamous and 46 percent were older male-younger female. Older female-younger male marriages were more prevalent for this age group (8.5 percent) than for the

16-29 group (two percent) and 30–49 group (7.9 percent) (as shown in Figures 5.4 and 5.6 respectively).

**Figure 5.8 Age gaps in marriages (50+ age group): 1981 and 2006**

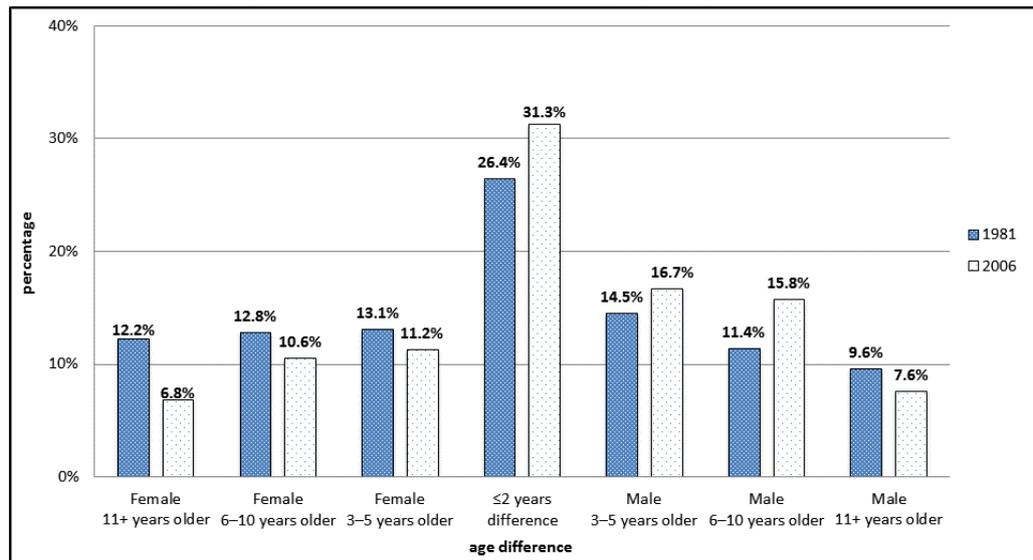


**Source:** Statistics New Zealand microdata 2011

Nevertheless, the proportion of older female-younger male marriages declined slightly over time, while levels of age-homogamous and older male-younger female marriages marginally increased.

The age difference patterns of cohabiters 50 years and over were in contrast to those of the younger groups, and also to the married population in the same age group. As is shown in figure 5.9, the largest proportion (31.3 percent) of cohabitations in the 50 years and over group were homogamous. While age homogamy increased by 4.9 percent over the 1981–2006 period, it remained lower than in both younger groups (and in both partnership types), and was considerably lower than the 45 percent of marriages in the same age group that were homogamous (shown in Figure 5.8).

**Figure 5.9 Age gaps in cohabitations (50+ age group): 1981 and 2006**



**Source:** Statistics New Zealand microdata 2011

While the shape of the age gap distribution in 1981 was almost symmetrical for cohabiters in this age group, by 2006, a marginal shift towards more males cohabiting with younger females had occurred. This slightly left-skewed age gap distribution for cohabiters was less pronounced than that found in the married population for this age group (shown in Figure 5.8).

Importantly, older female-younger male partnerships were more prevalent (28.6 percent) in the married 50 years and over group (8.5 percent) (shown in Figure 5.8), and in all of the younger age groups, regardless of partnership type. Correspondingly, 40.1 percent of cohabitations in 2006 in the 50 years and over group were older male-younger female. This is in contrast to the 46 percent of this partnership type in the 50 years and over married population (shown in Figure 5.8).

## 5.7 Conclusions

In this chapter, I investigated the hypothesis, “*The ages of individuals in marriage and cohabiting relationships have become more homogamous over the decades*”. My results show that while the married population has become more age homogamous over the decades, cohabiting population is increasingly age heterogeneous. I have shown in the chapter that the ages at which males and females enter marriage and the age gap between them have shifted over the past decades in New Zealand.

Males and females are marrying and remarrying much later in life than in the past. This behaviour can be attributed to social and economic factors that include the greater length of time individuals spend in education; the delaying of child bearing and raising; and the increasing numbers of women participating in the workforce. It is also influenced by the changes to social norms concerning timing of entry and exit from marriage and cohabitations, and the sequencing of cohabitation and marriage, divorce, remarriage and re-partnering. For example, women with high educational qualifications typically marry later than those with lesser qualifications (Stevenson and Wolfers 2007). Cohabitations are typically short in duration and now take place across the entire age spectrum many populations (Bumpass and Sweet 1989, Waite and Gallagher 2002). Unfortunately, little official sequential or durational age data exists for cohabitation in New Zealand, primarily because cohabitations are not registered with the government.

That considered, the Ministry of Social Development (2004) stated that average age at first cohabitation was 24 years for men and 21 years for females and had changed little since the 1970s. This is considerably younger than the 30 years for married males and 28.2 years for married females in 2006 (Statistics New Zealand Microdata 2011).

Cohabitation and marriage are typically, but not exclusively, sequential life events. In 2014, a considerable proportion of those who marry, cohabit first. Previously, many individuals married in their teens or remained dating before marriage. Increasing proportions of these young individuals are now cohabiting before or as an alternative to marriage. This expansion of premarital cohabitation has increased the average age of the married population and kept the average age of cohabiters lower. These two practices have also pushed up the median ages of second and subsequent marriages in New Zealand. In 2006, the median post-divorce age at marriage was to 46.0 years for males and 42.6 years for females. The average ages in post widowhood remarriages are understandably higher than for the first two groups and are 61.7 years for males and 54.8 years for females in 2006 (Statistics New Zealand Microdata 2011).

I have also shown that the average age gap between partners has changed over time and is contingent on gender, life stage, partnership type, and the partnership market. The average age gap between all married individuals was 1.7 years in 2010, but the amount of difference varies in each, sequential partnership type (Statistics New Zealand 2011e). Men are on average 2.1 years older than women in first marriages, 3.7 years older in post-divorce remarriages and 7.7 years older in post widowhood marriages (Statistics New Zealand 2010b).

Levels of age homogamy, partnering upward and downward in age continue to differ significantly between marriages and cohabitations. More importantly, they vary considerably between age groups. Marriage is typically more age homogamous than cohabitation across the 16–29, 30–49, 50 years plus groups. Perhaps the most important finding of my ‘age difference’ research showed that older female-younger male partnerships are significantly more prevalent in cohabitation than in marriage and is increasingly more likely in the 50 years plus cohabiters than in all other age groupings, in both partnership types. While figures have declined marginally since 1981, 8.5 percent of marriages and more than a quarter (28.6 percent) of cohabitations in 2006 were older female-younger male. However, this is still considerably less than the percentage of older male-younger female partnerships.

The 50 years and over cohabiters group is unique in combining homogamous, older male-younger female, and older female-younger male partnerships. In 2006, this group exhibited the lowest level of age homogamy (31.3 percent) of all cohabiting and married age groups (16–29 years, 30–49 years and 50 years and over). While 40.1 percent of female cohabiters in this age group partnered with an older male, a significant 28.6 percent had a younger partner. This figure is in strong contrast to the 8.5 percent of married females in this age group who partnered downward in age. While these figures represent a significant trend, we need to keep in mind that these proportions are still small when compared to those couples that are homogamous or older male-younger female.

Arguably, the likelihood of older female-younger male partnership is greater in cohabitation than in marriage is influenced by a number of structural and personal factors. In its simplest form, many of those who divorce in New Zealand remarry while others do not. Many individuals will still desire an intimate relationship and (for multiple reasons) will choose to cohabit short or long term. Women may choose cohabitation with a younger partner for reasons of looser bond or commitment and greater agency with the partnership, sometimes adding their younger partner to their existing family. De Vaus (2013) argues that both men and women who cohabit are less conventional in their attitudes to marriage and have lower levels of commitment than those who marry.

Divorced and widowed men in the 50 plus group typically partner with women who do not have children, are younger than their original partners, and who may want to start a new family. Women in the 50 plus group, some of whom will already have children, may seek a man of an equal or greater age but may find that supply outstrips demand on the partnership market. That considered, partnership characteristics that are considered desirable within society and the partnership are multiple. Age is but one. Individuals will often trade characteristics or swap characteristics on their partner wish list. For example, men in their 50s may be valued for their financial security and experience on the partnership market. Younger men may offer (among other factors) greater levels of virility, physical fitness, and fewer (or no) dependent children. Lawton and Callister (2010) argue that women with younger male partners might also benefit from a better quality of life and care from their partners, in their final years.

In conclusion, the age structures of marriage and cohabitation have changed significantly over the last 40 plus years. Increasing proportions of males and females cohabit before or instead of marrying. This, among other factors, has increased the average age of first marriages and remarriages. Age at first cohabitation has remained the same over time. Yet, marriages are much more likely to be age homogamous or older male-younger female than are cohabitations. In contrast, cohabitation is more age and gender heterogeneous. While a significant proportion of cohabitations are homogamous or older male-

younger female partnerships, significantly greater percentages of cohabitations are older female-younger male than are marriages across all ages.

The following chapter investigates the changing trends in levels of education for males and females in marriages and cohabitation in New Zealand.

*CHAPTER SIX: GENDERED EDUCATIONAL DIFFERENCE  
WITHIN AND BETWEEN MARRIAGE AND COHABITATION*

## **6.1 Introduction**

The extended time New Zealanders now spend in education now encompasses tertiary education. Post school/tertiary qualifications are increasingly necessary for the development of on-going employment, and steady earnings (Nair, Smart et al. 2007). These factors have had a significant influence on marriage and cohabitation in the late 20<sup>th</sup> early 21<sup>st</sup> century. In previous decades, educational homogamy in marriage and cohabitations was somewhat predictable as many partnerships evolved from similarities of social and personal characteristics, and from institutional and geographical proximity (Stevens 1991, Bourdieu 2005). This was especially true of males and females who attended and graduated from post-school educational institutions, such as technical institutes and universities. While social class and proximity of age, workplace, occupation, and ethnicity also influenced mate selection, the increased participation of males and to a greater extent females in general and post-school education has affected the dynamic of the marriage market (Newell and Callister 2008). Educational homogamy and hypergamy (or males with higher education), while still prevalent, are declining. I demonstrate that proportional increases in cohabitation and decreases in marriages over the past decades have also contributed to increased educational discrepancies between men and women in both partnership types.

This chapter tests and reports the results of the hypothesis: “*Educational homogamy is more prevalent for males, than for females and more prevalent amongst married couples than cohabiting couples*”. Section 6.2 outlines the key terms and methods used to measure educational similarity and difference between partnered males and females, as I examine these over the 1986–2006 period in New Zealand. I explain the strengths and limitations of the data and categorisations used. Section 6.3 shows that levels of partner’s educational qualifications are generally more discrepant for males than for females, but that educational difference has narrowed over time and is dependent on partnership type. Section 6.4 shows (at a macro level) that educational

homogamy was more prevalent in marriage than in cohabitation at five historical points over a 25 year period in New Zealand. Section 6.5 expands on the previous findings by showing that there are also large proportions of males and females who partner upward or downward in educational status. The results show that educational difference between partners varies with gender and partnership type. Section 6.6 investigates the correlations between educational ranking and mate selection. Section 6.7 offers some concluding remarks on the work outlined in this chapter.

## 6.2 Definitions of terms and methods

Educational homogamy in marriages and cohabitations occurs when the individuals hold identical educational qualifications (within Statistics New Zealand schema)<sup>23</sup>. Educational hypergamy is present when males hold a higher qualification than their partners. Educational hypogamy is present when males hold a lower qualification than their female partners. Because of the gendered nature, these terms are often confusing and confused. Because men and women ‘marry equally’, ‘marry up’, or ‘marry down’ in terms of educational status, and hence, I have created the following terms: *to partner homogamously*, *to partner upward*, and *to partner downward*. These terms are used to describe educational mobility or stability in both partnership types.

Rates of partnering homogamously, partnering upward and partnering downward were calculated, (and are discussed here), using four ranked educational categories. These are *Tertiary level*, *Vocational level*, *School level* and *No qualifications*. These are used by Statistics New Zealand within the Census of Populations and Dwellings to measure an individual’s highest educational qualification (Statistics New Zealand 2006f). I used these categories as they were comparable across the 1986–2006 period, both in New Zealand and internationally (Milligan, Fabian et al. 2006).

While finer gradation of educational status exists within these four categories, it was outside the scope of this thesis to perform more gradational analysis,

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<sup>23</sup> See methodology chapter for discussion of comparability of census variables/data over time.

particularly as educational assessment criteria in New Zealand have changed many times over the past decades (Errington, Cotterell et al. 2008). This makes time series analysis particularly difficult. However, we can certainly observe partnering upward and downward within these categories, particularly the Vocational and Tertiary levels. Within the Tertiary education sectors of Australia, Canada, and New Zealand, for example, married and cohabiting female academics are often partnered with males of higher educational status and/or occupational position (Baker 2012a).

### 6.3 Educational changes for partnered men and women in New Zealand over time

As with the general increases in education for New Zealand population, levels of educational achievement increased for partnered males and females over the 1986–2006 period. As is shown in Table 6.1, percentages with no educational achievement, especially partnered females, declined dramatically. That considered levels of education continued to differ by gender and partnership type. In 2006, for example, partnered males with tertiary qualifications were more likely to be married than cohabiting. In contrast, partnered females with tertiary qualifications were as likely to be cohabiting, as they were to be married.

**Table 6.1 Percentages of qualifications by level, partnership type, and gender: 1986–2006**

Education	Married Males			Married Females			Cohabiting Males			Cohabiting Females		
	1986	1996	2006	1986	1996	2006	1986	1996	2006	1986	1996	2006
	%	%	%	%	%	%	%	%	%	%	%	%
Tertiary	12	13	19	11	8	18	9	10	15	9	10	20
Vocational	25	27	32	12	21	24	24	24	30	11	20	24
School	22	25	26	29	34	36	23	32	31	32	40	37
No quals	41	35	23	48	37	22	44	35	24	48	30	19
All columns total to 100% (allowing for rounding)												

**Source:** Statistics New Zealand microdata 2011

Given the above educational increases, especially for women, combined with declines in marriages, increases in cohabitation levels, and changes to social

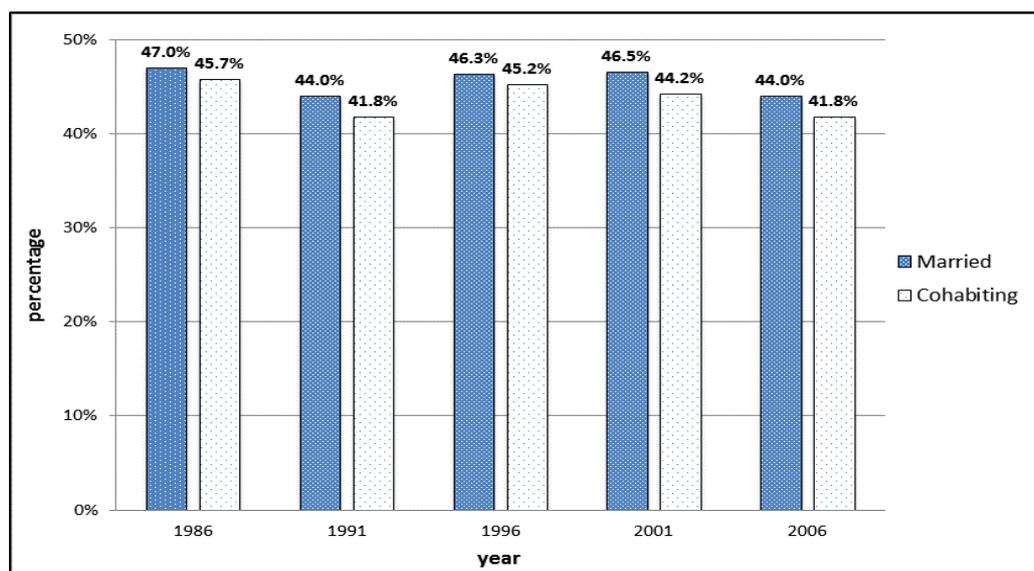
norms, it is likely that patterns of educational homogamy and partnering upward have also changed over time in New Zealand. Correspondingly, distinct differences in these patterns are likely to have occurred between partnership types.

#### 6.4 Contrasting educational homogamy between partnership types

Absolute educational homogamy is present when partnered males and females have identical levels of education. Figure 6.1 shows the changes in overall levels of educational homogamy in New Zealand over time. Four clear trends emerge from the data. First, educational homogamy was prevalent for both partnership types over time. Second, educational homogamy was more common in marriage than in cohabitation.

Third, while levels of homogamy remained greater in marriage than in cohabitation in 2006, the proportions of homogamous partnerships, regardless of type, had declined marginally over the previous two decades. Fourth, in 2006, over 55 percent of couples partnered either upward/downward in education.

**Figure 6.1 Proportions of married and cohabiting couples that were educationally homogamous: 1986–2006**



Source: Statistics New Zealand microdata 2011

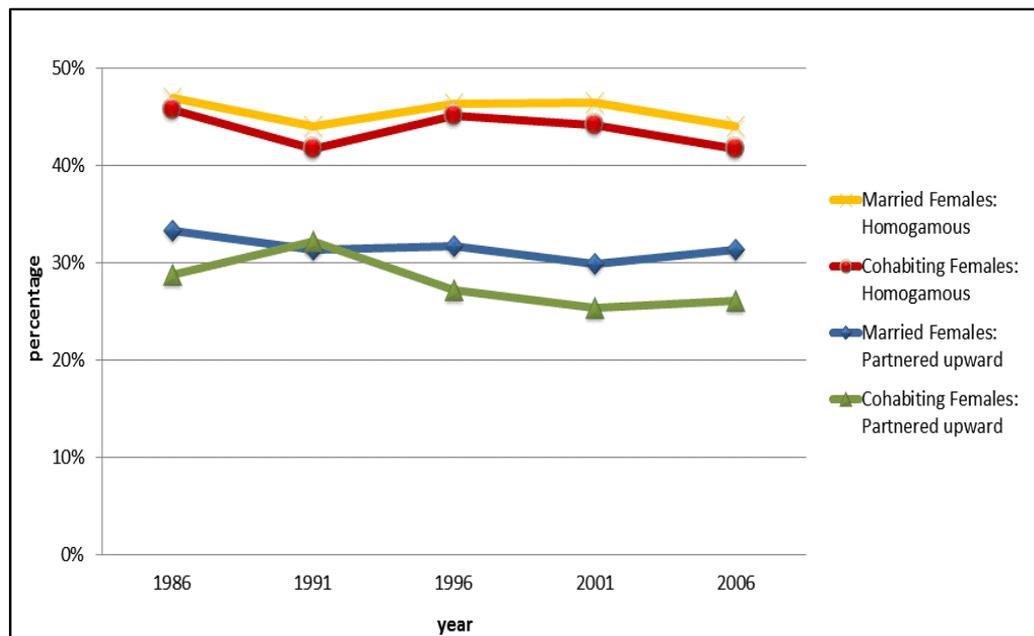
Considering the above changing trends, the following section of the chapter shows (a) how patterns of educational homogamy and partnering upward and downward have consistently differed between the genders over time, (b) how they compare between marriage and cohabitation and (c) how they differ among the ranked levels of New Zealand educational achievement.

### 6.5 Changing patterns of educational homogamy and partnering upward

Figure 6.2 shows that large percentages of females have continued to partner homogamously over time, and that this was slightly more likely among the married population than those who are cohabiting. As with the general partnered population (as shown in Figure 6.1 above), levels of educational homogamy declined for partnered females over time.

Figure 6.2 also shows that a significant percentage of women continued to partner upwards over the decades, though this declined marginally. Partnering upward stayed more prevalent for married than for cohabiting females over the period.

**Figure 6.2 Educational homogamy and partnering upward for married and cohabiting females: 1986–2006**



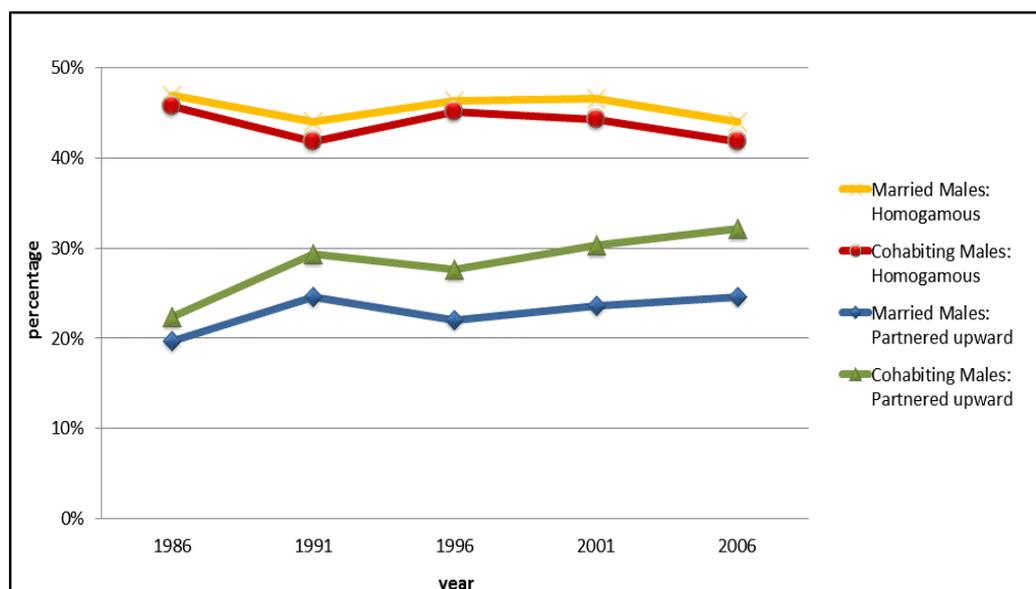
Source: Statistics New Zealand microdata 2011

In 2006, 32 percent of married and 26 percent of cohabiting females had partners with higher educational qualifications than their own. Moreover, as is further discussed below, these declines in homogamy and partnering upward for women are correlated with historical increases in partnerships where females have higher qualifications than their partners.

Mate selection patterns have also changed for cohabiting males. Figure 6.3 shows that their levels of homogamy declined over the 1986–2006 period (as was the case for cohabiting females (shown in Figure 6.2)). That notwithstanding, in 2006, more than 40 percent of married and cohabiting men were in educationally homogamous partnerships. Figure 6.3 also shows that percentages of males with a partner of higher educational status increased considerably over the 1986-2006 period, and more so for cohabiting than for married men.

In 2006, 32 percent of cohabiting and 25 percent of married males had a lower level of education than their partner (i.e. they partnered upwards). While partnering downward has been historically prevalent for men in New Zealand (Baker 2010a), increasing numbers of men now have lower educational qualifications than their partner.

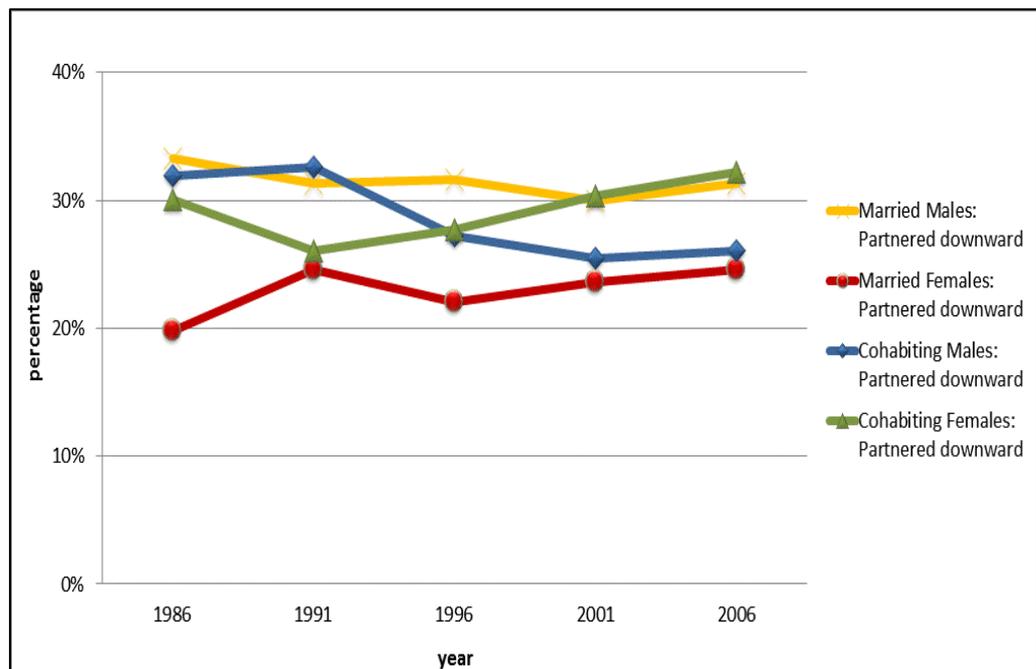
**Figure 6.3 Educational homogamy and partnering upward for married and cohabiting males: 1986–2006**



Source: Statistics New Zealand microdata 2011

Figure 6.4 shows that significant percentages of married females (25 percent) and cohabiting females (32 percent) partnered downward in education over the 1986–2006 period and this practice had increased over time. It also shows that while partnering downward was also prevalent for New Zealand males but that it had declined marginally over time. In 2006, 31 percent of married males and 26 percent of cohabiting males partnered downward, two percent and four percent drops (respectively) from 1986.

**Figure 6.4 Partnering downward in education for married and cohabiting males and females: 1986–2006**



**Source:** Statistics New Zealand microdata 2011

Section 6.4 showed that educational homogamy, partnering upward and partnering downward differed between married and cohabiting partnership types over time. It can be argued that men and women's levels of education are proxies or indicators of economic circumstances, social, wellbeing, occupation and social class. As shown in Chapters Two and Three, educational homogamy is often strongest for the educational elite than for any other educational status group.

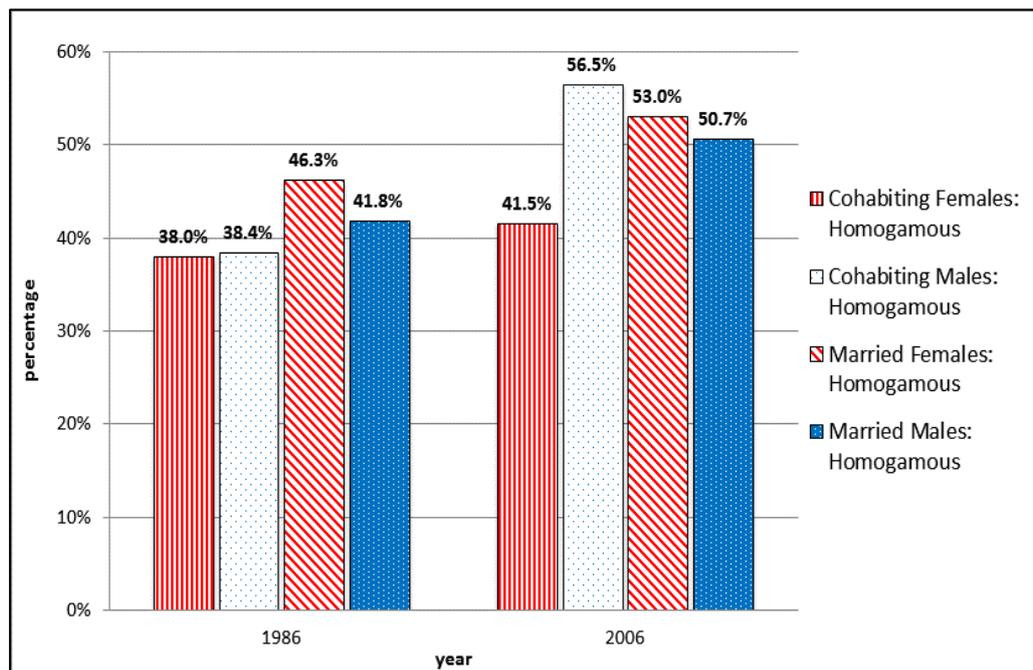
## 6.6 Mate selection and education level

This section shows how mate selection patterns differ between married and cohabiting individuals with tertiary, vocational, school or no qualifications. Levels of educational homogamy for those with tertiary education are higher than for all other educational status groups, but these vary by gender.

### 6.6.1 Tertiary qualifications

Levels of educational homogamy are high for those with tertiary qualifications, and increased over the 1986–2006 period. As Figure 6.5 shows, in 2006, married females were more likely to have a partner with the same level of education (53.0 percent) than were married males (50.7 percent). In the same year, an even higher percentage of cohabiting males in this group (56 percent) were partnered homogeneously. In contrast, 41 percent of cohabiting females had a partner of equal educational status.

**Figure 6.5 Tertiary qualifications: homogamy among married and cohabiting males and females 1986 and 2006**



Source: Statistics New Zealand microdata 2011

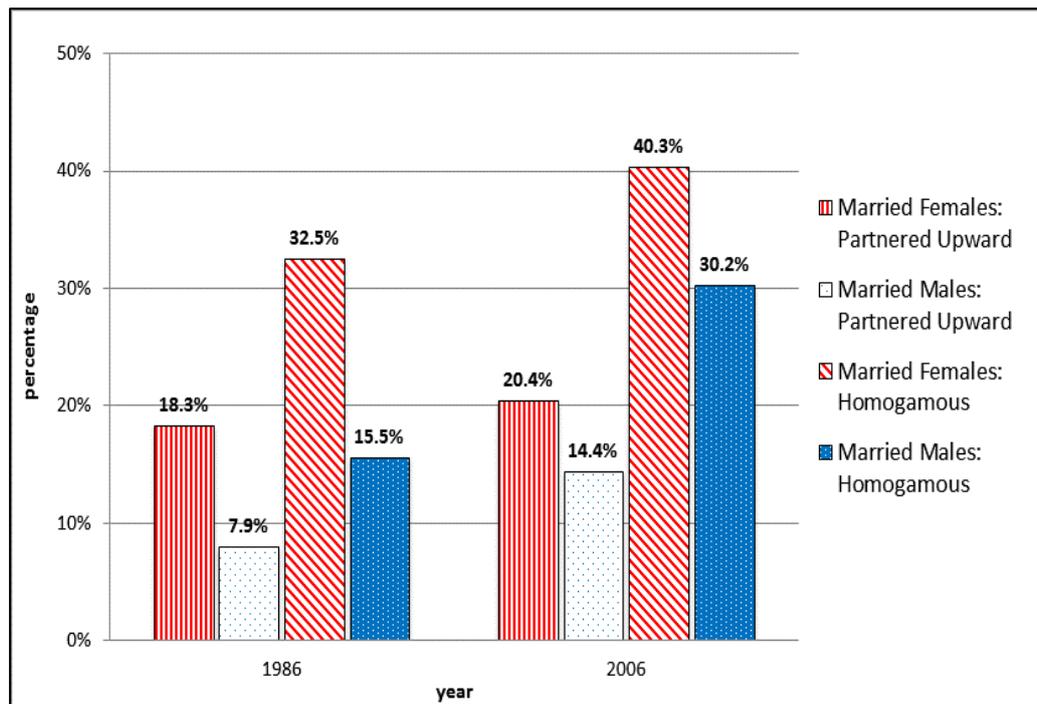
### 6.6.2 Vocational qualifications

The patterns of mate selection for those with vocational qualifications are in sharp contrast to those for the tertiary qualification group. Unlike those in the tertiary group, males and females in this group (given the desire and ideal conditions) can also partner *upward*. Figure 6.6 shows the levels of educational

homogamy and partnering upward for married males and females in the vocational group, in 1986 and 2006, and they all increased. Married females in particular had high levels of homogamy and partnering upward (61 percent combined) in 2006. In contrast, these levels for married males summed to 45 percent in 2006.

Importantly, this tells us that married males with vocational qualifications were more likely to marry downward than they were to partner homogamously or upward. Fifty-five percent of married males with vocational qualifications in 2006 had a partner with school or no educational qualifications, as compared to only 39 percent of married females.

**Figure 6.6 Vocational qualifications: homogamy and partnering upward among married males and females: 1986–2006**

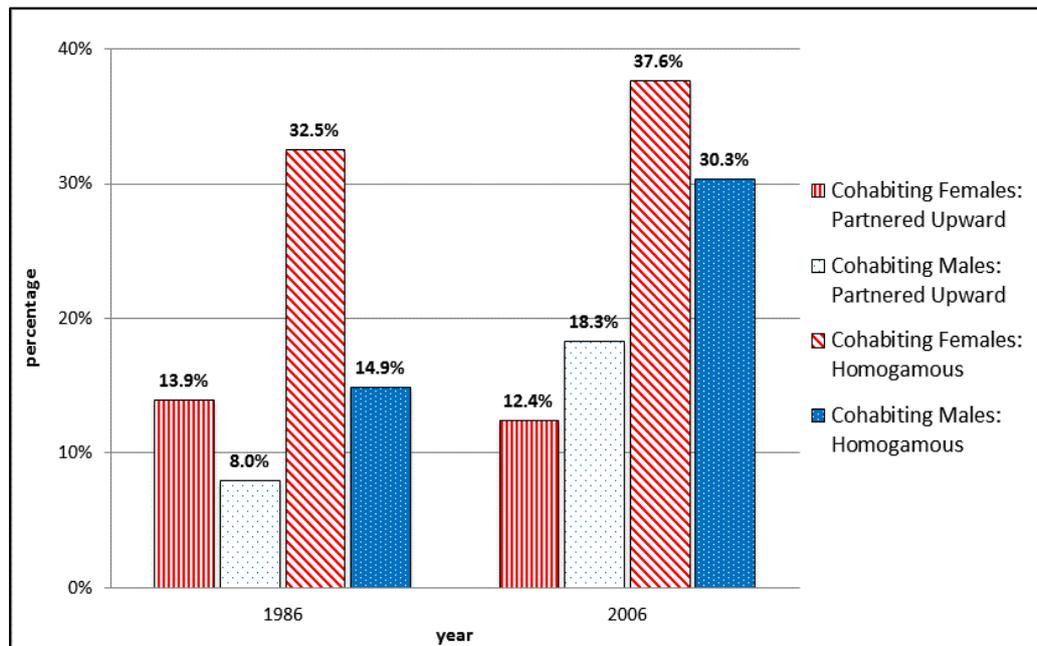


**Source:** Statistics New Zealand microdata 2011

Figure 6.7 shows us that as with the married population, levels of educational homogamy and partnering upwards generally increased over the 1986–2006 period. By comparing Figures 6.6 and 6.7, we can see that levels of homogamy were similar in the married and cohabiting populations with vocational qualifications. However, females within the cohabiting group were less likely to partner upward (12.4 percent) than those who were married (20.4 percent). As we can also infer from Figure 6.7, high percentages of the cohabiting group

partnered downward in terms of education. Specifically, in 2006, 51 percent of cohabiting males and 50 percent of cohabiting females had a partner with either school or no educational qualifications.

**Figure 6.7 Vocational qualifications: homogamy and partnering upward among cohabiting males and females: 1986–2006**



Source: Statistics New Zealand microdata 2011

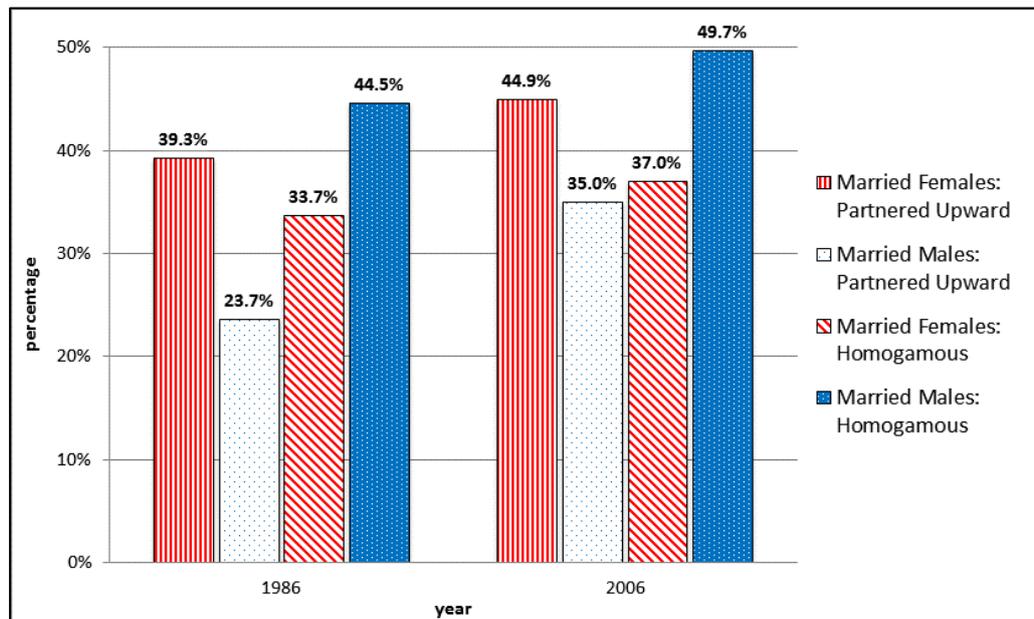
### 6.6.3 School qualifications only

As was shown in Chapters Two and Three, general education levels have increased for most Organisation for Economic Co-operation and Development (OECD) countries since the 1970s. That considered, and as was shown in Table 6.1, those with ‘school qualifications only’ constituted the largest education status group of partnered people in New Zealand from 1986 to 2006. Yet, the percentage differed by gender and partnership type. In 2006, 26 percent of married males and 36 percent of married females had school level qualifications only. In the same year, 31 percent of cohabiting males and 37 percent of cohabiting females had only school level qualifications.

Gendered differences in educational achievement can affect the dynamic of the partnership market and constrain partner choice. As with the tertiary and vocational populations, levels of homogamous marriage among the school qualification group increased marginally over the 1986–2006 period and more

so for males than for females. As is shown in Figure 6.8, male homogamy increased from approximately percent to almost 50 percent between 1986 and 2006. In contrast, female homogamy increased by 3.5 percent to 37 percent over the same time.

**Figure 6.8 School qualifications only: homogamy and partnering upward among married males and females: 1986–2006**



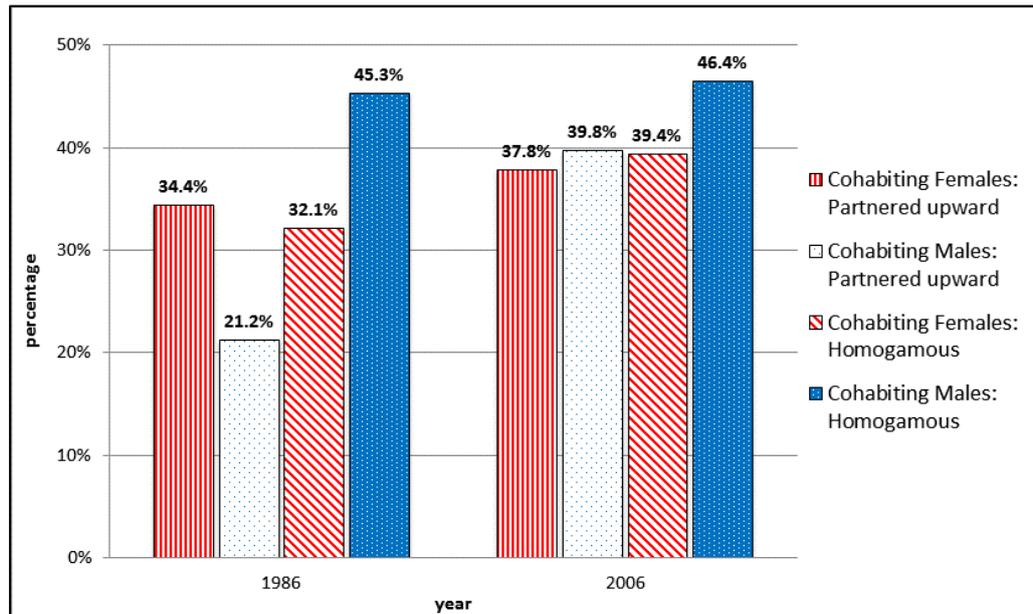
**Source:** Statistics New Zealand microdata 2011

Figure 6.8 also shows that the partnering upward also increased over the period for both males and females. Forty-five percent of married females and 35 percent of married males partnered upward in 2006, constituting six percent and 11.5 percent increases respectively since 1986. Relatively small percentages of this category (15 percent of men and 18 percent of women) married downward in 2006, perhaps because educational qualifications cannot get much lower.

Some interesting changes in mate selection in New Zealand have occurred over time for cohabiting males and females with only school qualifications. As is shown in Figure 6.9, levels of educational homogamy for cohabiting males were quite high, at 45 percent in 1986 and 46 percent in 2006; figures similar to the 50 percent for married males in 2006, perhaps because educational qualifications cannot get much lower. Levels of homogamy were also relatively similar for married (37.1 percent) and cohabiting females (39.4 percent) in 2006. Finally, we infer from Figure 6.9 that a lower percentage of

cohabiting males (14 percent) partnered downward than did cohabiting females (23 percent) within this educational group in 2006.

**Figure 6.9 School qualifications only homogamy and partnering upward: cohabiting males and females: 1986–2006**



**Source:** Statistics New Zealand microdata 2011

That considered, further comparing Figures 6.8 and 6.9 it is evident that married women were more likely to partner upward (44.9 percent) than were cohabiting women (37.8 percent), and that cohabiting males were more likely to partner upward (39.7 percent) than were married males (34.9 percent).

#### **6.6.4 No formal educational qualifications**

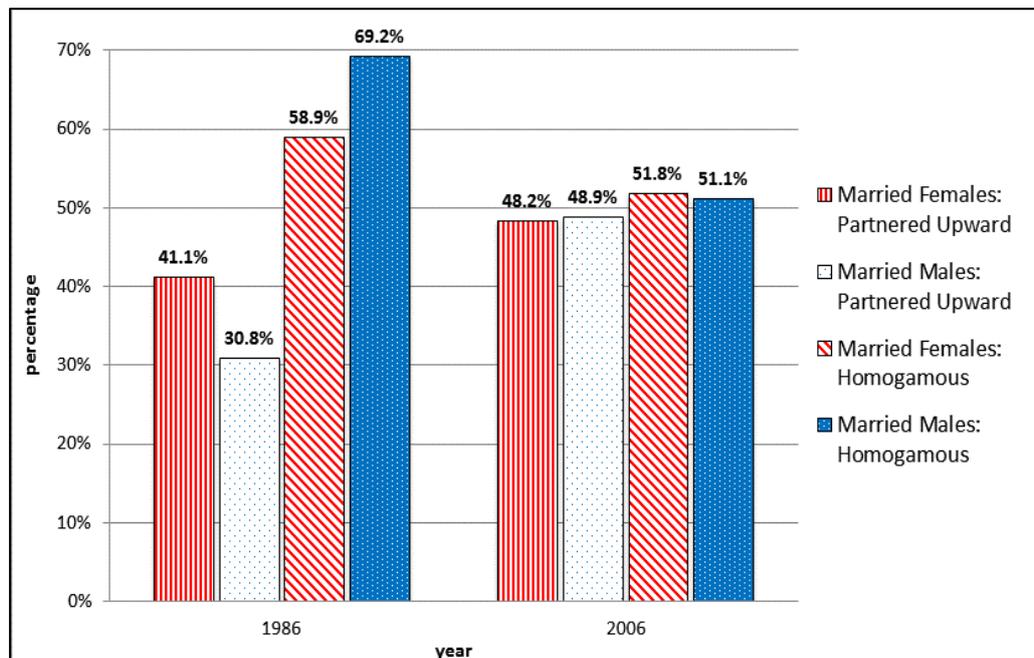
Historically, a large proportion of individuals with no formal educational qualifications will have left, or dropped out of school at an early age (Fergusson, Swain-Campbell and Horwood 2002). This practice can have a significant effect on the age demographic of partnered men and women with no formal educational qualifications, making it potentially younger than for other level of educational groups.

As was shown in Table 6.1, however, the education levels of married and cohabiting individuals increased considerably between 1986 and 2006. We can

see this by looking at the married group with no qualifications: in 1986, 41 percent of married males had no qualifications. By 2006, this had declined to 23 percent. Similarly, for married women this figure fell from 48 percent in 1986 to 22 percent in 2006. General levels of education also increased for the cohabiting population. In 1986, 44 percent of cohabiting males and 48 percent of cohabiting females had no qualifications but by 2006, these proportions had declined to 24 percent for males and 19 percent for females.

These increases in educational achievement, particularly for women, had a considerable effect on the dynamic of the partnership market for individuals with no qualifications, and more so for males than for females. This section illustrates these effects over the past decades, and shows how they differed between marriage and cohabitation. Figure 6.10 indicates significant changes in mate selection patterns for males and females with no qualifications over the last decades. Married individuals in this group in 2006, regardless of gender, were almost as likely to have a partner with no educational qualifications, as they were to have a partner with higher educational status.

**Figure 6.10 No qualifications: homogamy and partnering upward among married males and females: 1986–2006**



Source: Statistics New Zealand microdata 2011

This was a marked change from the 1986 distributions where far greater percentages of married males and females were partnered homogamously than

upward. In 1986, married males in particular were extremely homogamous (69.2 percent), which may be attributed to the larger proportions of women with no educational qualifications at this time. The general increases in education for women over the study period shrank the pool of women without educational qualifications and available to partner homogamously.

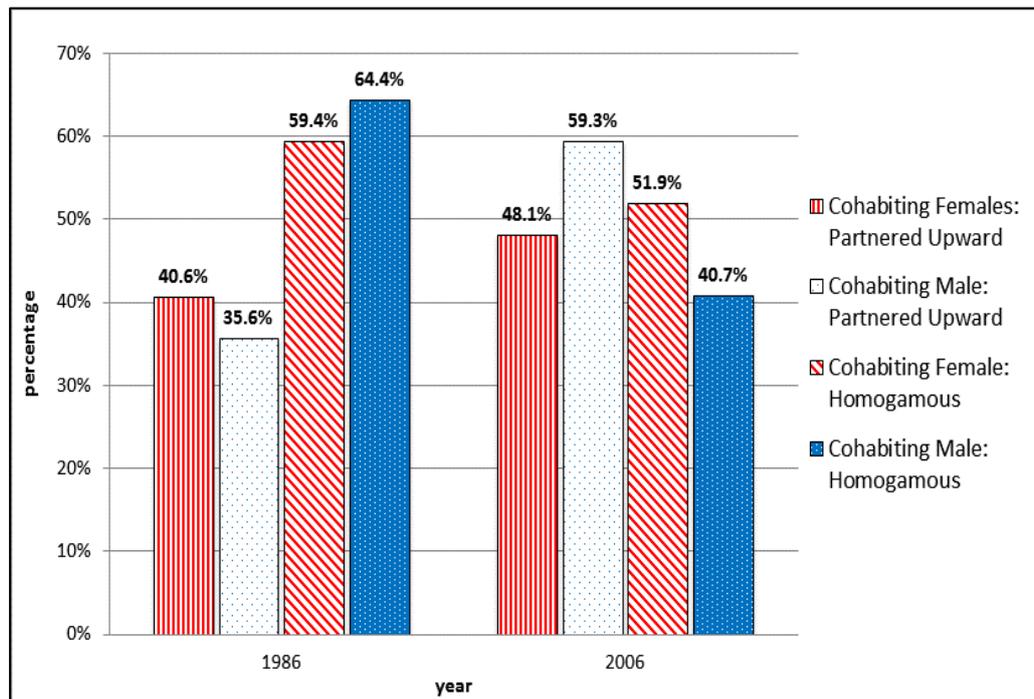
Figure 6.10 also shows that partnering upward increased for males (from 30.8 percent to 48.9 percent) and females (from 41.2 percent to 48.2 percent) over the study period. The much larger increase for males again relates back to there being fewer females with no educational qualifications in 2006 and points to a general increase in the proportions of women who are partnering downwards. Importantly, partnering upward for this educational group has its limits: Marriage rarely occurs between one partner with no educational qualifications and one with a tertiary degree. In 2006, approximately three percent of married males, and married females with tertiary qualifications had a partner with no qualifications. In addition, 4.5 percent of cohabiting males and 1.8 percent of cohabiting females also had a partnership of this type.

While levels of homogamy and partnering upward were similar for married and cohabiting populations in 1986, the two groups were markedly different in 2006. Figure 6.11 shows that homogamous cohabiting partnerships declined considerably for both genders over the decades as cohabitation became more prevalent. Male homogamy declined from 64.4 percent in 1986 to 40.7 percent in 2006, while female homogamy dropped from 59.4 percent in 1986 to 51.9 percent in 2006.

Conversely, the percentage of cohabiting males with no qualifications that partnered upward increased from 35.6 percent in 1986 to 59.3 in 2006, while the same figure for cohabiting females increased from 40.5 percent in 1986 to 48.6 percent in 2006. In the group with no qualifications in 2006, the greatest difference between the married and cohabiting populations was that married males were more homogamous (51.2 percent) than were cohabiting males (40.6 percent). Married females were almost equally as homogamous (51.7 percent) as cohabiting females (51.9 percent). Married males who partnered upward in 2006 constituted 48.9 percent of this educational group while 59.3 of cohabiting males also partnered upward. Similar proportions of

married females (48.2 percent) and cohabiting females (48.1 percent) also partnered upward in 2006.

**Figure 6.11 No qualifications: homogamy and partnering upward among cohabiting males and females: 1986–2006**



Source: Statistics New Zealand microdata 2011

## 6.7 Conclusions

Education has been considered one of the most fundamental capitals for the successful negotiation of the social and economic worlds (de Oliveira and Ahenakew 2007). It cannot be directly purchased off the shelf; rather the mind and body must be invested over time, within and without educative institutions. As Bourdieu (1986a) argues, educational qualifications cannot be inherited. That considered, the unquestioned right and/or expectation to partake of and succeed in education (especially post-school education) is often “passed down” from parents to children (Bourdieu 1986a). Education, particularly at a higher level, is a conduit to social and economic mobility (Haveman and Smeeding 2006). Historical increases in general education levels for both genders, and significant increases in women engaged in higher education over time, have altered the dynamics of the New Zealand partnership market.

This chapter has shown that educational difference between partners in New Zealand remained gendered over the 1986–2006 period and differed between partnership types. The hypothesis “*Educational homogamy is more prevalent for males, than for females and more prevalent amongst married couples than cohabiting couples*” was therefore proven valid. Patterns of educational homogamy and partnering upward continue to linger in New Zealand society. However, the likelihood of educational similarity or difference in partnerships is dependent on an aggregate of four factors: partnership type, gender, one’s own level of education, and time period.

Levels of homogamy declined slightly over the study period, but even in 2006, 44 percent of marriages and 41.7 percent of cohabitations were homogamous. While partnering upward educationally remains a cultural norm for females in New Zealand, increasing proportions of males are now partnering upward, perhaps influenced by the shrinking pool of less educated females. Importantly, both cohabiting males and cohabiting females are more likely to partner upward educationally than are their married counterparts.

Arguably, a person’s level of education is a marker of social class, social status, and/or social difference. Their membership within an ‘educational group/social class’ influences the likelihood of educationally endogamous or exogamous partner selection. Over the decades, both males and females within the ‘tertiary qualification group’, for example, were more likely to partner homogamously than those in all other educational groups. In addition, married people in the tertiary qualification group were more homogamous than those who were cohabiting. Interestingly, married females with tertiary educations were much more likely than were cohabiting females to have a partner with the same education level.

While significant increases in homogamous partnerships occurred for all males in the tertiary qualification group, increases were greater for cohabiting males than for married males. An absolute increase of 18.1 percent (from 38.4 percent in 1986 to 56.5 percent in 2006) occurred for the former while only an 8.9 percent increase (from 41.8 percent in 1986 to 50.7 percent in 2006)

occurred for the latter. This rise in educational homogamy for both partnership types over time is likely related to the meaningful increases of highly educated females within the partnership market, the institutional proximity effect, and the increased economic/social status value of highly educated females in the marriage market. Arguably, educational homogamy levels are lower for cohabiters than for the married population because cohabiters are typically a younger demographic and are more likely to be in 'trial' or contingent partnerships where levels of education, occupation and age (among other characteristics) tend to be more discrepant between partners, than they are for married couples(Statistics New Zealand Microdata 2011).

It is likely that partnering upward occurs *within* the tertiary qualification group, especially within academia. For example, Baker (2012b) found that male professors with doctorates in universities often partner with females with undergraduate or post-graduate degrees. However, Rose (2006) suggests that in the United States, opportunities for women in higher education to partner upward are declining, due in part to increasing numbers of females in academia and a steady number of males in the tertiary qualification partnership market.

Evidence of adherence to social norms also remained strong for those with vocational qualifications in the 1986–2006 period. Homogamous partner selection in this group was more likely for females than for males, regardless of partnership type. In addition, married women were much more likely to partner upward than were cohabiting females. Whether influenced by love, cultural norms, rational choice or social exchange, 60.7 percent of married females and half of cohabiting females with vocational qualifications partnered either homogamously or upward in 2006. Conversely, married and cohabiting males with vocational qualifications were more likely to partner downward than upward (44.6 percent and 48.6 percent respectively). Importantly, partnering upward in education remains most prevalent for married women in this educational group. In 2006, 20.4 percent of married females and 12.4 percent of cohabiting females had a partner with a tertiary qualification, increases of two percent and one percent respectively from 1986. In comparison, 14.4 percent of married males and 18.3 of cohabiting males partnered upwards.

People with only school qualifications constituted the largest group of people in marriages and cohabitations in New Zealand from 1986 to 2006, but levels were declining due to the aforementioned increases in vocational and tertiary achievement for both males and females. Importantly, females continued to be proportionally overrepresented in this group throughout the period, affecting the dynamics of the marriage market. In terms of pure numbers, homogamous mate selection for women is limited by the supply of men with equal education levels. In theory, this allows for a greater chance of upward mate selection than for women in the two higher educational strata. However, levels of homogamy in the school qualification group were higher for males than for females, in both partnership types.

In 2006, in the school qualification group, almost half of married and cohabiting males and approximately one third of married and of cohabiting females had a partner from the same educational group. Importantly, partnering upward was almost as prevalent as homogamous partnering for the school qualification group and much more so than partnering downward. In 2006, 44.9 percent of married and 37.8 percent of cohabiting females had partners with higher qualifications. Significant proportions of married males (34.9 percent) and cohabiting males (39.7 percent) also partnered upward.

It is likely that these increases in partnering upward were the result of a combination of evolving structural influences, such as increasing educational achievement for females, rational decision making within the partnership market, and changing cultural attitudes to the value of women's education. That considered, the majority of this upward mobility for both males and females was limited to partners with vocational qualifications. Partnerships between those with school qualifications only and those with tertiary qualifications have become less common over time, and more so in the case where males had school qualifications only.

The balance, of course, partnered downward. This could have been for a number of reasons. Those that cannot find a partner of equal or higher education may choose a partner with lower education and or based on the

presence of other desirable traits. It is also possible that these men and women partnered in this way because of limited capitals and limited choice within the marriage market. Alternatively, those with no educational capital might have possessed other capitals and qualities of value such as a good occupation or a business venture. Importantly, this downward educational mobility for those with school qualifications only can also be interpreted as upward mobility for those with no qualifications (Statistics New Zealand Microdata 2011).

Given the strong links among level of education, occupational rank, labour force participation, and earning power, those with no education will have fewer capitals to exchange within the partnership market (Milne, Byun et al. 2012). Homogamous partner choice becomes limited for this group because of the shrinking population of others with no education. When combined with increased expectations within the partnership market (particularly for females), this limits homogamous partnerships and has contributed to a historical growth in partnering upward. The thesis research results bear this assumption out. Levels of homogamy for males with no formal education declined significantly over the 1986–2006 period, more so for married than cohabiting men. Importantly, educational homogamy was almost as likely in 2006 for married males and females as was partnering upward. In contrast, approximately two thirds of cohabiting males and half of cohabiting females with no formal education partnered upward.

In conclusion, this chapter has shown that partnership type, gender and level of educational qualifications (or lack of them) all influence educational difference between partners. For example, males and females with tertiary qualifications and those with no qualifications are most likely to have a partner from the same group (and by proxy, the same social class position). In 2006, married people with no qualifications, regardless of gender, were almost as likely to have a partner with a higher qualification (than themselves), as to have one with the same level of qualification. Gender differences in homogamous partnerships however, were apparent in cohabitations for the no qualifications group. In 2006, females were more than ten percent more likely than males to partner a person with identical educational qualifications.

It has also shown that while educational homogamy is prevalent in both partnership types over time, it is marginally more common in marriage than in cohabitation. Furthermore, levels homogamy in both partnership types has declined slightly over time. Correspondingly, in 2006, 56 percent of married couples and 58.2 percent of cohabitants were in educationally discrepant partnerships. While greater proportions of married females than cohabiting females continue to partner upward educationally over time, females in both partnership types are more likely to do so than are males. However, in 2006, 31 percent of married males and 24 percent of cohabiting males were partnered with females with higher educational qualifications than their own.

It is now clear that levels of educational homogamy, partnering up and partnering down differ with and between marriage and cohabitation over time. Cohabitation has become (typically) more heterogeneous in partner selection over the last decades. While the educational profiles for marriage have also changed, these changes are less than for cohabitation. Arguably, increased educational participation (particularly for women) has changed the currency/capitals, expectations and dynamic of the partnership market. While upward mobility within this market has always been a possibility for females, it is increasingly a possibility for males and particularly for those with few or no formal or only school qualifications. Increased and extended educational achievement by women, combined with lesser proportional increases of men, has augmented the aggregate values of these women in the marriage market. It has also raised subjective expectations of their value in the same. Put simply, these women consider themselves (and objectively are) a 'better deal' than women of generations past. Consequential of these educational increases, particularly for highly educated females and lowly educated males, is a shrinking supply of 'suitable' partners.

The following chapter investigates the changing trends in levels of paid work, occupations, personal income and parenthood for males and females in marriage and cohabitation in New Zealand.

*CHAPTER SEVEN: GENDERED DIFFERENCES IN PAID WORK,  
OCCUPATIONS, AND SALARIES WITHIN AND BETWEEN MARRIAGE AND  
COHABITATION*

## **7.1 Introduction**

This chapter tests and reports the results of two hypotheses: “*‘Professional’ individuals are more homogamous than ‘non-professional’ individuals*” and “*Married women are more likely than cohabiting women to work part-time and earn lower wages than their male partner*”. To address these questions, I demonstrate the historical trends of gendered differences in labour force participation, occupations, and earnings within the two partner types in New Zealand, comparing them over the 1981–2006 period.

As in many western countries, increased levels of female educational achievement, and delayed marriage and first childbirth have contributed to a growing pool of educated single women in New Zealand. Increasingly, women now occupy a range of high socioeconomic status occupations, with commensurate salaries and career development opportunities (Raymo and Xie 2000, Hamon and Ingoldsby 2003, Raymo and Iwasawa 2005, Statistics New Zealand Microdata 2011, Baker 2012a). Consequently, the dual breadwinner model of family has become increasingly common in New Zealand over time (Statistics New Zealand Microdata 2011). That considered, significant earning and occupational differences between females and males within partnerships remain, and more so when dependent children are present. Full-time annual salaries of women continue to be less (on average) than those of their partners (Statistics New Zealand Microdata 2011, Statistics New Zealand 2011g).

When individuals enter into long-term intimate partnerships, similarities between males and female’s levels of paid work, occupation types and levels of financial independence may change. Partnered males’ paid work will likely remain full-time, their career trajectory uninterrupted and their earning capacity growing. As partnerships develop and women transition into motherhood, many women and their partners consider it necessary or desirable for them to shift from full-time to part-time work or to temporarily withdraw

from the labour force altogether, resulting in a decline in personal earning capacity (Dwyer 2006).

New Zealand females continue to work within a gendered labour market (Dwyer 2006). In 2006, partnered females in New Zealand were considerably more likely to work in care provision, teaching, and service work occupations than were partnered males. Significant proportions of employed mothers with dependent children worked part-time in gender-segregated jobs, and continued to be the primary providers of unpaid childcare in their families (Fursman and Callister 2009). Because of this, mothers with dependent, and to a lesser extent, independent, children are inclined to move in and out of the labour force. In 2006, mothers constituted the largest single proportion of the part-time labour force. Of all workers employed in the 1991–2006 period, married mothers with dependent children were the group most likely to work part-time, followed by cohabiting mothers with dependent children (Fursman and Callister 2009).

Section 7.2 outlines the key terms, categories, and methods used to discuss and calculate differences within paid work. In sections 7.3, 7.4, and 7.5, I show the gendered differences in paid work within and between marriage and cohabitation over the 1981–2006 period. I then compare households where both partners are working full-time, those where males work full-time and females work part-time, and other household types.

Section 7.6 investigates the “child penalty effect” (See Waldfogel 1997, Budig and England 2001, Baker 2010c, Baker 2011). By comparing levels of paid work for partnered mothers and non-mothers, I show the impact that dependent children tend to have on full-time work participation and gendered earnings inequality. A time series comparison of paid work for mothers in both partnership types is included here.

Sections 7.7–7.10 illustrate the continuing gendered segregation of paid work in New Zealand, indicating how this practice has influenced occupational homogeneity and occupational differences within couples. This chapter shows that levels of occupational homogeneity and differences vary between the

partnership types, and that occupational homogamy is more prevalent among the occupational ‘elite’ than for other groups in New Zealand.

Section 7.11 demonstrates the continuing earnings disparities between partnered males and females over the 1996–2006 period. I show that cohabiting women typically earn a larger proportion of their household earnings than married women. In addition, I illustrate that gendered earnings differences vary by the occupational groups to which people belong. Section 7.12 shows that the gender wage gap increases for partnered women within their prime childbearing years, but is lower for women in the occupational elite than for those in occupations of lower status. Most importantly, I show that the gender wage gap and the motherhood penalty remain greater within marriage than in cohabitations. The chapter concludes with a summary and discussion of the research findings.

## **7.2 Definition of key terms and categories**

Occupational homogamy is defined as partnered males and females having very similar, if not identical, occupations. Occupational hypergamy means that the male’s occupation is of higher status than his partner. Hypogamy means that the male’s occupation is of lower status than his partner (or female’s occupation is higher status than her partner’s) (Kalmijn 1998). Given that hypergamy is simultaneously upward status movement for women *and* downward status movement for men, I use the terms ‘partnering/partnered upward’ and ‘partnering/partnered downward’ for both sexes to indicate movement between occupational types. Full-time work is defined by Statistics New Zealand (2013d) as being in paid employment for 30 or more hours per week; part-time is defined as being in paid employment for 1 to 29 hours per week.

The occupational categories used in this thesis are taken from the 1999 New Zealand Standard Classification of Occupations (NZSCO99) (Statistics New Zealand 2006f). Ages and age differences were calculated for this chapter using single years, but are reported in five-year age bands as is standard practice by Statistics New Zealand (2006f). The calculation of gendered

earnings within individual marriages and cohabitations was accomplished using wages and salary information supplied by Statistics New Zealand. Data were in 15 income bands, aggregated for reasons of confidentiality (Statistics New Zealand 2006f). The terms ‘labour force participation’ and ‘paid work’ are used interchangeably here.

### **7.3 Paid work in marriage and cohabitation in New Zealand**

As in other Organisation for Economic Co-operation and Development (OECD) countries, proportions of women in full-time paid work in New Zealand have increased over time (OECD 2010a). In 2006, however, 32.8 percent worked part-time, the third largest percentage among OECD countries, after Australia and the United Kingdom (OECD 2010a). Women also constituted 76.7 percent of the part-time labour force in New Zealand, a marginally higher figure than the OECD average of 74.1 percent and the 72.8 percent average for Australia, Canada, Denmark, France, Sweden, and the United Kingdom (Baker 2010a, OECD 2010b).

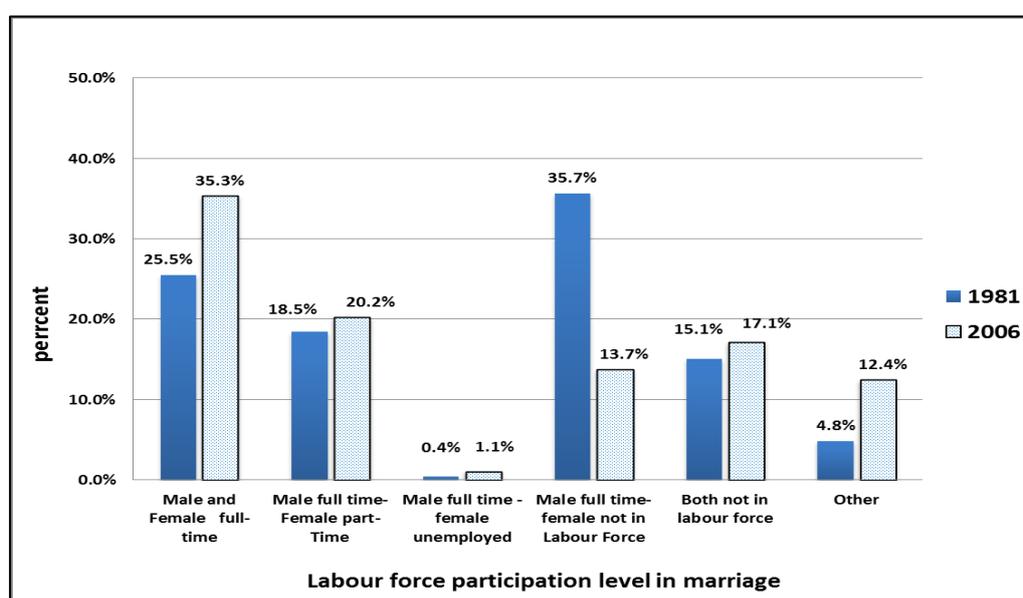
Gendered differences in labour force participation are greater within marriages and cohabitations than within the single population. In 2006, 92 percent of partnered men and 66 percent of partnered women in employment in New Zealand were in full-time work. It follows that 34 percent of all partnered women in the labour force worked part-time, a far greater proportion than the eight percent of partnered men for the same period (Statistics New Zealand Microdata 2011).

The following sections of this chapter show that the distribution of paid work differs not only by sex but also between partnership types. While levels of paid work have increased for partnered women over time, greater proportions of cohabiting women are in full-time paid work than are married. In contrast, proportions of partnered men in full-time work shifted little over the 1981–2006 period, regardless of partnership type (Statistics New Zealand Microdata 2011).

## 7.4 Paid work for married couples: 1981–2006

The gender balance of paid work within partnerships in New Zealand has changed over the last four decades but more so for marriage than cohabitation. While increasing numbers of married couples are now dual earners, other paid/unpaid work arrangements remain. Figure 7.1 shows the proportions of married couples in five paid/unpaid work types, in 1981 and then in 2006.

**Figure 7.1 Levels of paid work among married couples 1981 and 2006: percentages of total couples**



Source: Statistics New Zealand microdata 2011<sup>24</sup>

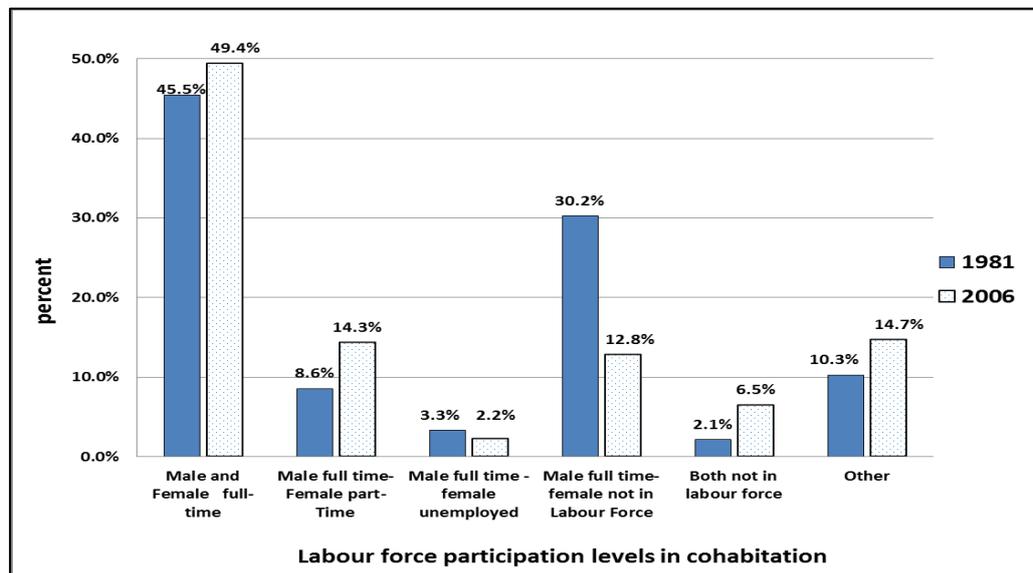
As was Lewis's (2003) general prediction, a decline in male breadwinner-female homemaker marriages has occurred over the past decades in New Zealand, dropping from 35.7 percent to 13.7 percent of all marriages between 1981 and 2006. Increasing proportions of married women have begun to choose, or to find it necessary, to do paid work. By 2006, in 35.3 percent of all married couples, both partners worked full-time, an approximate 10 percent increase from 1981. Interestingly, couples where males worked full-time and females worked part-time made up only 1.7 percent more of all marriages in 2006 than in 1981.

<sup>24</sup> Other 'labour force participation types' exist but individually are of small proportions. They are aggregated into the 'Other' category here.

## 7.5 Paid work for cohabiting couples: 1981–2006

Chapter Five showed that while the age structure of the cohabiting population is becoming more heterogeneous over time, cohabiters are typically younger and less likely to have children than married couples. Technically, this leaves cohabiting females freer to work full-time than married females. Figure 7.2 shows that dual full time cohabiting partnerships grew by four percent over time, reaching 49.4 percent in 2006- a significant 14.1 percent greater than the 35.3 percent for the married population in the same period.

**Figure 7.2 Levels of paid work among cohabiting couples 1981 and 2006: percentages of total couples**



**Source:** Statistics New Zealand microdata 2011

Figure 7.2 also shows that, as with the married population, the percentage of cohabitations that were male breadwinner-female homemaker declined between 1981 and 2006, from 30.2 percent to 12.8 percent. Interestingly, this couple type accounted for very similar percentages of married and cohabiting partnerships in 2006. By contrast, male full-time-female part-time couples accounted for considerably less of the cohabiting population (14.3 percent in 2006) than the married population (20.2 percent in 2006).

In summary, dual income, partnerships have become more prevalent in New Zealand over the past decades. Increasing percentages of partnered women have moved into paid work, although about one-third of these women continued to work part-time in 2006. Levels of paid work for females vary by

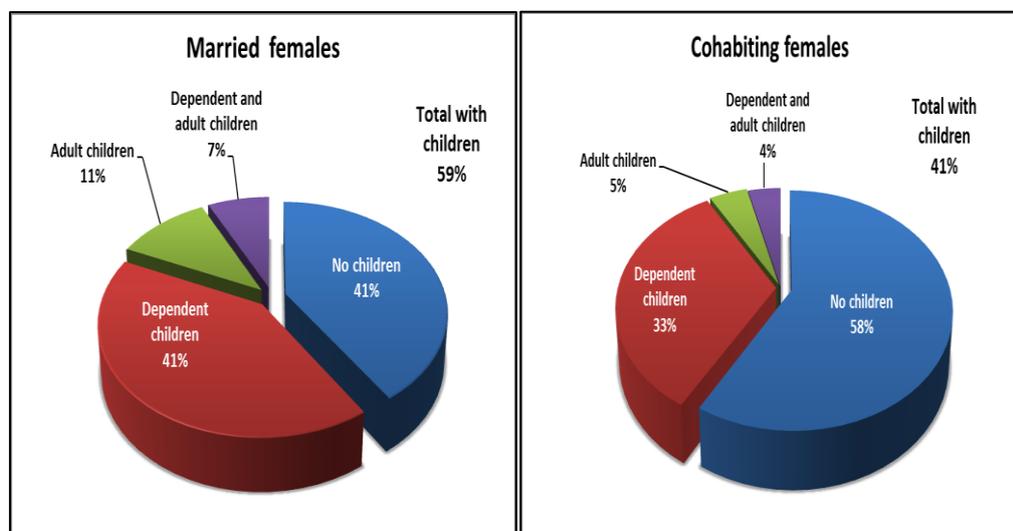
partnership type, with cohabiting women more likely to work full-time than married women. The following section investigates the differential engagement of mothers and women without children in paid work in New Zealand.

### 7.6 Paid work for married and cohabiting mothers: 1991–2006

Baker (2011:3), citing the Equalities Review Panel (2007:66), states: ‘[T]here is one factor that above all leads to women’s inequality in the labour market—becoming mothers’. As is shown in Figure 7.3, 41 percent of married women and 58 percent of cohabiting women were childfree in 2006. This differential is likely influenced by the age structure of the two populations and the tendency for marriage to occur when children are part of a family.

Paid work is generally more episodic for partnered mothers than it is for childfree women. Child dependency status, number of children, level of education, labour market, and availability of affordable childcare all influence employment decisions for mothers (Johnston 2005). As is shown in Figure 7.3 married females were more likely to have dependent children (41 percent) than were cohabiting females (33 percent) in 2006. In 2006, 59 percent of married females had dependent and/or adult children, while 42 percent of cohabiting females were mothers (Statistics New Zealand Microdata 2011).<sup>25</sup>

**Figure 7.3 Labour force participation for partnered females, with/without children: 2006**



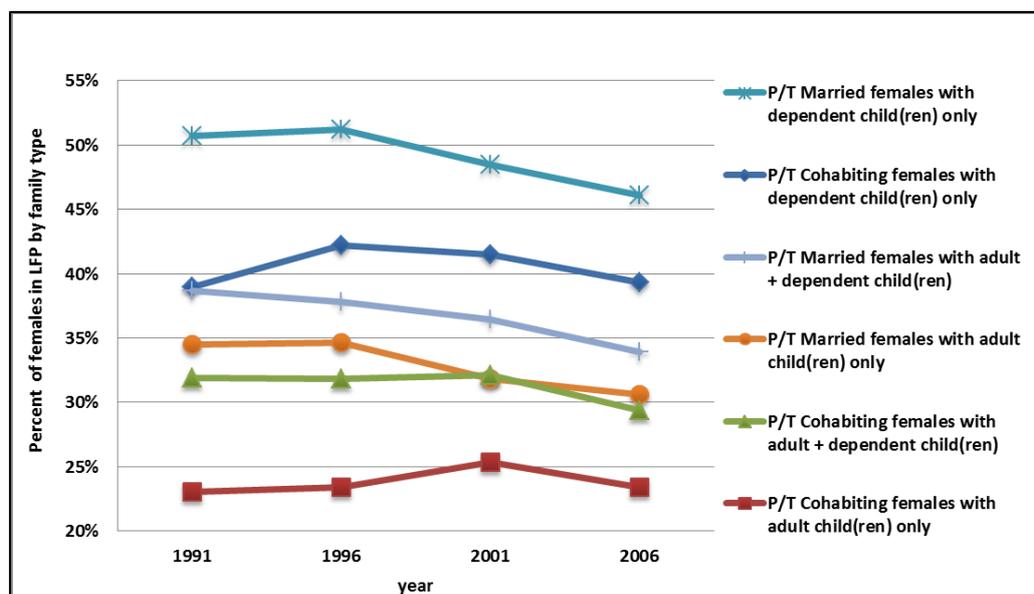
**Source:** Statistics New Zealand microdata 2011

<sup>25</sup> See Appendix Five for Statistics New Zealand’s Family / child(ren) dependency types.

Working mothers with dependent children are likely to be in part-time, flexible, gender segregated jobs. This is ‘necessary’ as mothers continue to be the primary providers of unpaid childcare in New Zealand families (Fursman and Callister 2009). Because childcare by females is generally perceived as natural and culturally normal within many societies, it has a transforming effect on levels of paid work and occupation type held by many females. In contrast, almost all partnered males/fathers will experience (and expect) an uninterrupted full-time paid work/career trajectory and to provide the largest proportion of household earnings (Statistics New Zealand Microdata 2011). Levels of paid work and job types for partnered females are therefore influenced by motherhood and child dependency.

While a significant proportion of mothers work part-time, things have been changing in this area. As is illustrated in Figure 7.4, percentages of mothers working part-time in most child dependency categories declined over the 1991-2006 period. Child dependency continues to have a strong influence on these figures. That said, in 2012, approximately three quarters of the part-time workforce were females and a weighty proportion of those were mothers. There is clear evidence here of the “child penalty effect” (See Waldfogel 1997, Budig and England 2001, Baker 2010c).

**Figure 7.4 Part-time paid work for married and cohabiting females with dependent/adult children: 1991–2006**



Source: Statistics New Zealand microdata 2011

Figure 7.4 also shows that mothers with dependent children were the most likely of all mothers to work part-time. This practice declined (marginally) over the 1991–2006 period, dropping from 51 to 46 percent. Cohabiting mothers with dependent children were less likely to work part-time than those who were married, but still a significant proportion of the former were working part-time in 2006 (39 percent). Mothers with adult children were more likely to work full-time than were mothers with dependent children. In addition, cohabiting mothers within this group were more likely to work full-time than those who were married. In 2006, cohabiting mothers with only adult children continued to be the most likely of all employed mothers to work full-time.

In summary, a large increase in full-time work and corresponding decrease in part-time work has occurred for married and cohabiting mothers over time. The absolute percentage changes have been of greater magnitude for cohabiting mothers than for married mothers. These findings are supported by recent Australian and New Zealand research that has argued that the age of the youngest child, the number of children, and the availability of quality childcare all have significant effects on levels of paid work for mothers (Mumford and Parera-Nicolau 2003, Johnston 2005, Baxter, Gray et al. 2007, Baxter 2013a).

While historical increases in paid work for partnered women have contributed to improvements in economic equity within partnerships, social structures such as the gendered nature of occupations and paid work continue to constrain the socioeconomic status of women within New Zealand society. The next section of this chapter illustrates the gendered nature and segregation of paid work in New Zealand.

## **7.7 Gendered segregation of occupations in 2006**

The nature of paid work in New Zealand changed following the end of the post-war economic boom (Roper 2005). The changes in the types of work done by men and women were partly due to the globally transformative effects of the “rollback” of Keynesian economics, the welfare state, and the “roll-out” of neo-liberalism, beginning in the 1980s and continuing through the present day

(Harvey 2009). These changes, combined with the internationalisation of capital and labour, affected New Zealand economically, culturally and socially (Peck and Tickell 2002). The historical shift from agricultural/dairy-based production and medium/light industry to more service-based light industry and tourism-focused work created new kinds of work (Bohle, Buchanan et al. 2008).

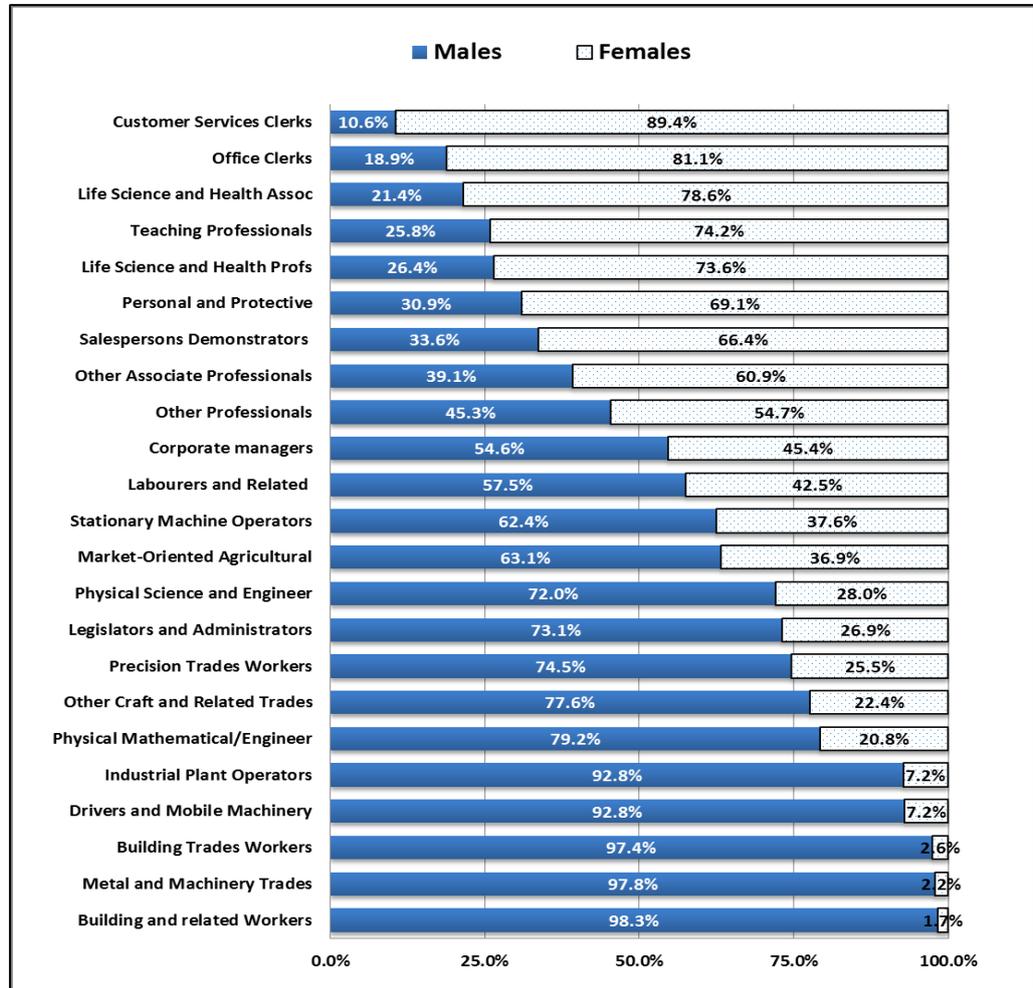
Although gendered segregation in occupations has declined over the past three decades in New Zealand, it has been slow to change. (Else and Bishop 2003, Dwyer 2006). New Zealanders have continued to work within a gendered labour market. Figure 7.5 shows variations in the proportions of partnered males and females in 23 occupations in New Zealand in 2006. As has occurred in many other OECD countries, and is shown in Figure 7.5, substantial proportions of partnered women in New Zealand were still working in customer services, sales, teaching, life sciences professions, clerking and other traditionally 'female-orientated' occupations (OECD 1998, Statistics New Zealand Microdata 2011).

Wattis and James (2010) argue that while partnered females/mothers are more likely to work in care provision, teaching, or service work than both partnered and single males and single females because these occupational categories offer part time or time flexible work. As is discussed further in sections 7.11 and 7.12, motherhood can also influence the types of work women do. Child dependency status and access to affordable childcare can affect a change from high status, high paid jobs into lower paying, lower status jobs (Johnston 2005).

Figure 7.5 further highlights that lower proportions of women (and therefore greater proportions of males) worked in the precision trades, labouring, the building trade, market-orientated jobs, metalwork and other traditionally 'male-orientated' occupations (Statistics New Zealand Microdata 2011). Figure 7.5 also shows that in 2006, a significant percentage of partnered women in paid work were employed in medium to low status gendered occupations. For example, 89.4 percent of 'customer service clerks', 78.6 percent of 'life science and health professionals', and 74.2 percent of 'teaching

professionals' in partnerships were women; a strong contrast to the percentages of partnered males in these occupations.

**Figure 7.5 Occupational segregation for partnered males and females: 2006 (ranked by female proportion in occupation)**



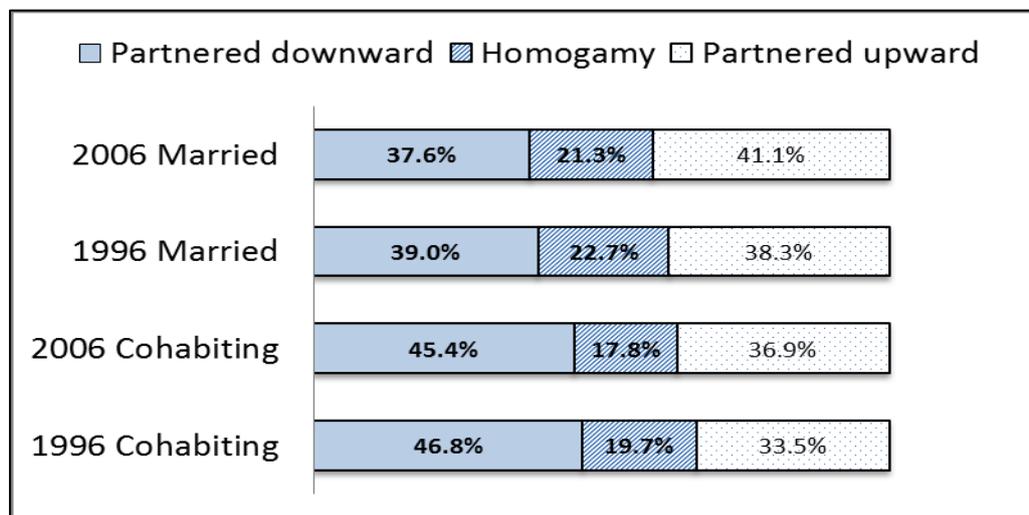
**Source:** Statistics New Zealand microdata 2011

The level of gender equity in occupations often varies dependent on occupation type and/or labour market fluctuations. As in other countries, New Zealanders formally and informally rank occupations (and therefore the individuals that hold them) by level of prestige, social status and/or economic worth (Grusky 2001, Bottero 2005a, Milne, Byun et al. 2012). Even within the same jobs, males and females are routinely assigned differing tasks. This can influence differences in working conditions, health outcomes and salaries between the sexes (Shin 2005, t'Mannetje, Slater et al. 2009).

## 7.8 Occupational differences between all couples: 1996–2006

While there is some evidence of historical improvements to gender-equity, considerable occupational differences remain between intimate partners. Figure 7.6 shows women who had relatively similar occupations to their partner (homogamy) diminished slightly between 1996 and 2006, and were higher for marriages than cohabitations at both time points. Figure 7.6 also shows that females partnering upward in occupation remained prevalent in New Zealand in that period, and that this was marginally higher among married females (41.1 percent) than those cohabiting (36.9 percent).

**Figure 7.6 Percentages of occupational homogamy, partnering upward/downward for married and cohabiting females: 1996–2006**



**Source:** Statistics New Zealand microdata 2011

In Chapters Five and Six, cohabiting females were shown to be more heterogeneous in partner selection (in terms of age difference and education levels) than married females. This pattern is repeated here. In 2006, greater proportions of cohabiting females (45.4 percent) partnered downward in occupational status than did married females (37.6 percent). While partnering downward in occupation decreased between 1996 and 2006 for females in both partnership types, this decline was minimal (Statistics New Zealand Microdata 2011). While the above trends show clear differences between the partnership types across time, these are macro trends. Levels of homogamy, partnering upward and partnering downward vary dependent on occupation type, gender, propinquity, and segregation (among other factors).

## **7.9 Gendered occupations and occupational homogamy in partnerships: 2006**

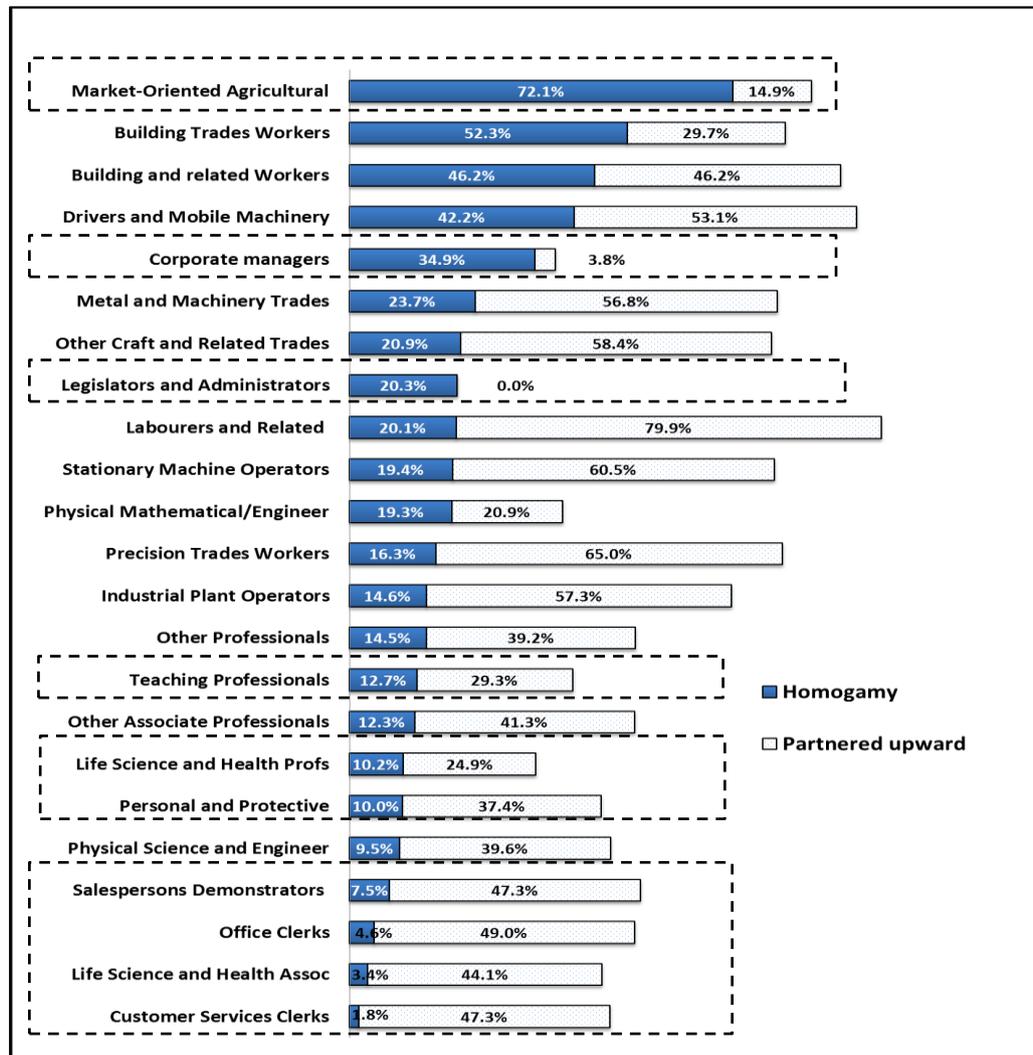
While the socialisation process and individual choice influence levels of homogamy, partnering upward and partnering downward, so do structural factors such as geographical location, joint business ventures and/or institutional links (Prandy and Lambert 2005). Some prominent and (pan societal) examples of these structural effects are: husband ‘farmers’ married to wife ‘agricultural workers’; husband ‘publicans’ married to wife ‘barmaids’; and husband ‘shopkeepers’ married to wife ‘shop assistants’. Each of these can be interpreted as the result of joint business ventures. Examples of more ‘institutional’ combinations are husband and wives who are both doctors, husband ‘doctors’ married to wife ‘nurses’, husband ‘teachers’ married to wife ‘teachers’ and husband ‘principals’ and wife ‘teachers’. Such combinations occur because institutional locations create more opportunities for social interaction. Put simply this ‘workplace’ effect places people with similar characteristics in the same physical space, allowing greater possibilities of repeated interaction and possible partner selection (Prandy and Lambert 2005, Lambert and Griffiths 2011).

Levels of occupational homogamy differ by gender, occupation, and partnership type. Figure 7.7 compares and contrasts the percentages of married females in each occupational group (such as market-oriented and agricultural workers) whose husbands had identical occupations, and those whose husbands held occupations of a higher or lower socioeconomic status.

While just one-fifth of female ‘legislators and administrators’ married homogamously, four-fifths married downward (there are no occupations of higher socioeconomic status on the scale). Almost one quarter (24.7 percent) of married female ‘legislators and administrators’ were partnered with ‘corporate managers’. In addition, a sizable proportion (38.7 percent) of married female ‘corporate managers’ were partnered with males with identical or higher socioeconomic status occupations (Statistics New Zealand Microdata 2011).

Married females in professional occupations such as ‘legislators and administrators’ and ‘corporate managers’ are constrained in the partnership market by the low supply of potential partners (Callister 2006). Being at the top of the occupational status scale must influence partner choice for female ‘legislators and administrators’.

**Figure 7.7 Occupational homogamy and partnering upward for married females: 2006** (ranked by descending levels of homogamy)



Source: Statistics New Zealand microdata 2011<sup>26</sup>

Figure 7.7 also shows that married females employed within the most gender-segregated occupational groups were much less likely to have a partner of equal social status than those in less gendered occupations. Married female ‘teaching professionals’, ‘salespersons and demonstrators’, ‘personal and protective workers’, ‘customer services clerks’, ‘office clerks’ and ‘life

<sup>26</sup> Bars in this figure do not total to 100 percent. The remainder are those who partnered downward and are not discussed here.

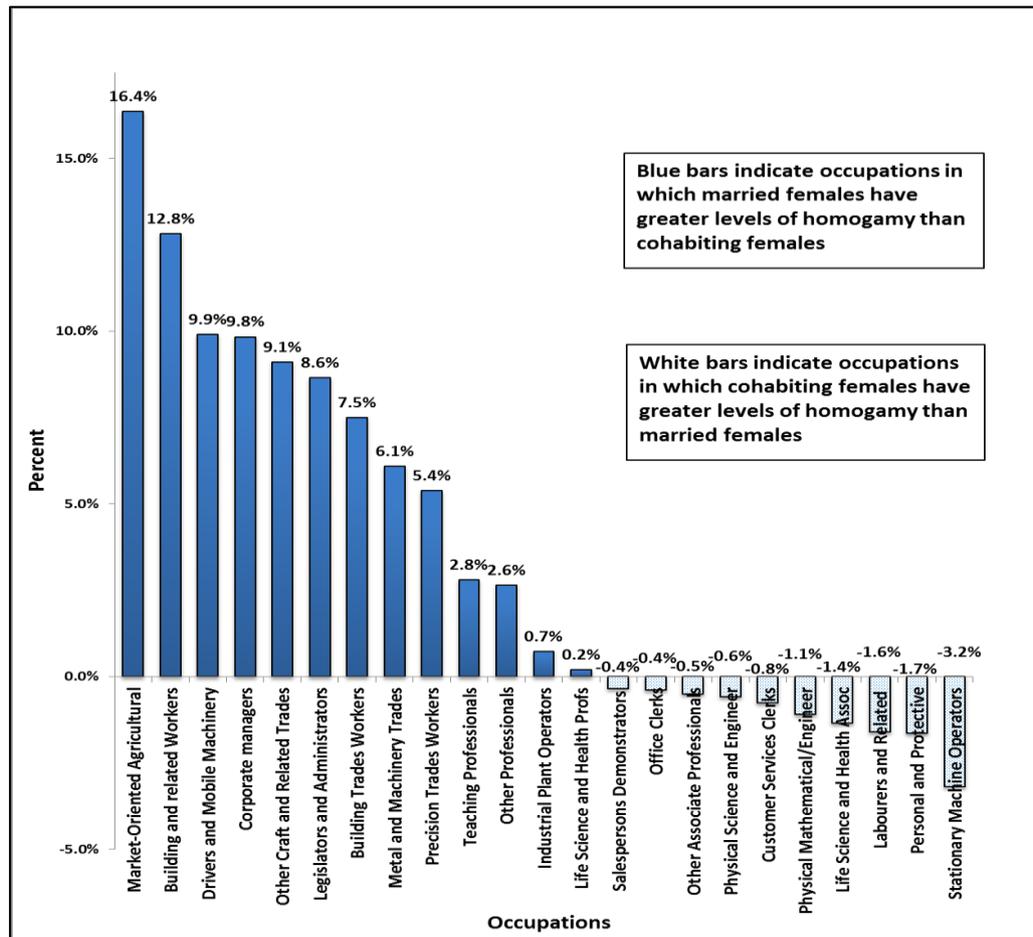
sciences and health associate professionals' were much more likely to have a partner with an occupation of higher or lower social status than one with equal social status (Statistics New Zealand Microdata 2011).

'Customer service clerks' were an excellent example of gendered job segregation and its consequences for partnership homogamy in 2006. Less than two percent of women in this occupational category had spouses with the same occupation. 47.3 percent were married upward while 50.9 percent had partners of lower occupational status. Interestingly, large differences in socioeconomic status between married partners do exist. Approximately 18 percent of married females employed as 'customer service clerks' were partnered with 'corporate managers' in 2006.

### **7.10 Differential occupational homogamy in marriage and cohabitation: 2006**

Equally importantly, census data show that levels of occupational homogamy also differ with partnership types (Statistics New Zealand Microdata 2011). Figure 7.8 compares levels of homogamy between married and cohabiting females employed in identical occupations. Across 13 occupations (52 percent), greater percentages of married females had a spouse with an identical occupation than did cohabiting females. Figure 7.8 also shows that homogamy levels varied among the 23 occupational categories and between partnership types. For example, levels of homogamy were much higher for married females than for cohabiting females in 'market-orientated and agricultural occupations'. Interestingly, this same homogamy differential between the partnership types was evident among women in some lower status occupations such as 'building trade workers', 'drivers and mobile machinery operators', and 'metal and machinery trades workers'. Female 'teaching professionals', 'other professionals', and 'salespersons and demonstrators' showed less discrepant levels of homogamy between the partnership types (Statistics New Zealand Microdata 2011).

**Figure 7.8 Differences in levels of occupational homogeneity for married and cohabiting females: 2006**



Source: Statistics New Zealand microdata 2011

In summary, paid work remains gender segregated and partnered males are more likely to be in full-time paid work than their partners. While greater percentages of females partner upward than partner homogeneously, levels of homogeneity are higher for married than for cohabiting couples. Furthermore, individuals with high status occupations are more likely to be married than cohabiting, and to be partnered with a spouse with a similar high status occupation than with one in a lower status job.

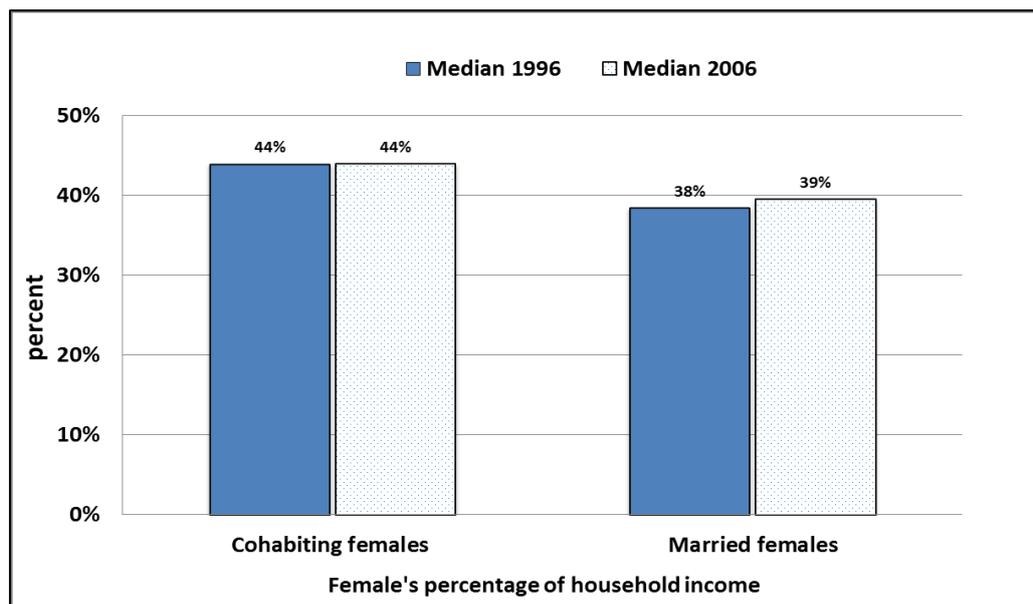
### 7.11 The gender wage gap in marriage and cohabitation with children: 1996–2006

While average earnings for females in New Zealand have increased over the decades, they remain lower than those of males. In June 2013, the median weekly earnings figure for females in full- or part-time paid work in New Zealand was 94 percent of the equivalent for males. This median (and wage

gap) varies in New Zealand and Australia by occupation, age, qualifications gained, and hours worked, and the presence of dependent children (Baxter, Gray et al. 2007, Families Commission 2013, Statistics New Zealand 2013e). The following section of this chapter shows that while partnered men continue to earn more on average than their spouses do, cohabiting women earn a greater proportion of the ‘couple earnings’ than do married women. I also show that the gender wage gap (on average) widens with motherhood.

Historically, partnered females in New Zealand earned less (on average) than their partners. As Figure 7.9 illustrates, the gender household earnings gap was relatively stable over the 1996–2006 period, and was wider for marriages than for cohabitations. In 2006, the wages of cohabiting females comprised 44 percent of couples’ earnings while married females’ wages constituted 39 percent. It is likely that married females contribute less to household earnings than cohabiting females, because of their typically higher child dependency rate consequential lower rates of labour force participation (see also Figure 7.3 of this thesis). The one percent increase in income contributions for married females between 1996 and 2006 may be attributed to the general increases in full time labour force participation of this group over time (Statistics New Zealand Microdata 2011, Statistics New Zealand 2011g).

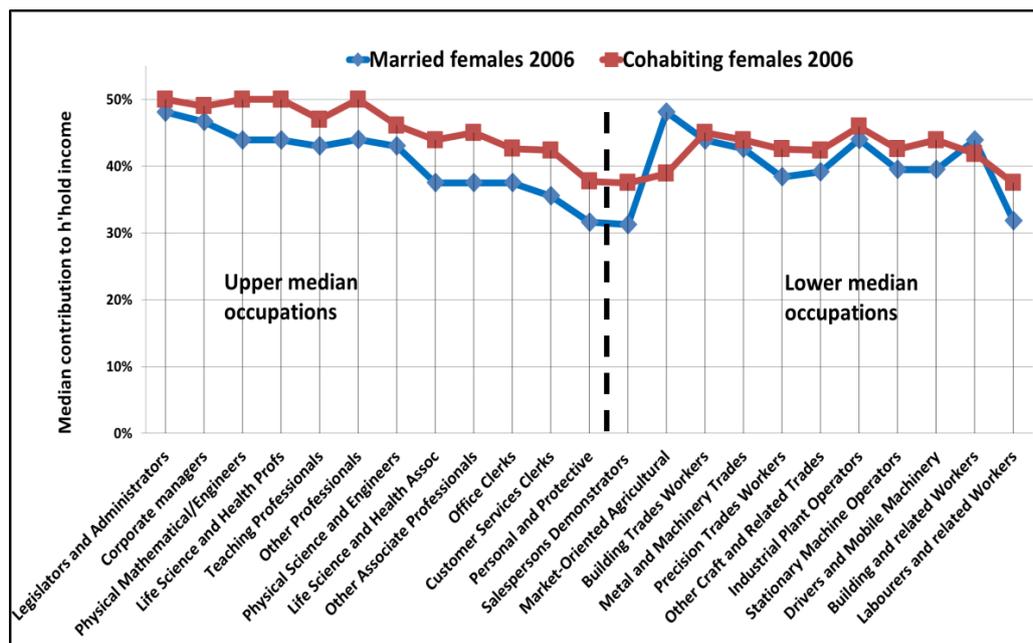
**Figure 7.9 Percentages of household earnings contributed by married and cohabiting females: 1996–2006**



Source: Statistics New Zealand microdata 2011

Figure 7.10 shows that in 2006 the household earnings gap was present in both partnership types, is greater in marriage than in cohabitation and that, the size of the household earnings gap varies by occupation type. Partnered women in the ‘upper median’ of the occupational hierarchy earn a greater proportion of the household income than in other occupations. Typically, the status level of a woman’s occupation has a direct effect on income disparity.

**Figure 7.10 Percentages of household earnings contributed by partnered females, by occupation type: 2006**



**Source:** Statistics New Zealand microdata 2011

For example, the wage gap between women in high status occupations such as ‘legislators and administrators’ and ‘corporate managers’ and their partners is small, regardless of partnership type. This relatively small earnings disparity for professional women is linked to the high rate of occupational homogamy for this group. In addition, these women are more likely to work full-time than females in more gendered occupations. Partnered females in the lower median of the occupational hierarchy typically experience a wider earnings disparity with their spouse than those in the upper median. Fertility rates have direct impact on paid work and income for women. Baker (2014) argues that fertility rates differ between social class strata. Professional women, for example, have fewer babies than those in lower status occupations/social class position.

Figure 7.10 also shows that married females in the market-oriented agriculture sector contribute on average 49 percent of the partnership income, while the equivalent cohabiting females contribute 39 percent. This 10 percent difference is dependent on a number of factors. Many of the market-orientated agriculture concerns are family businesses (i.e. jointly owned by husbands and wives). Therefore, it is likely that the profits from the business will be shared, leading to relative financial equality between males and females. While more than a quarter (28 percent) of the partnered females in market-orientated agriculture occupations were in cohabiting partnerships and it is likely that a considerable proportion of those would be co-managers or co-workers rather than co-owners of the business. Unlike partnered females in family businesses, those in waged labour will be subject to the gendered segregation of labour present in the wider labour force. Motherhood and dependent children also have a differential impact on labour force participation and level of earnings inequality in both partnership types.

### **7.12 Age, motherhood and earnings differences for partnered females: 1996–2006**

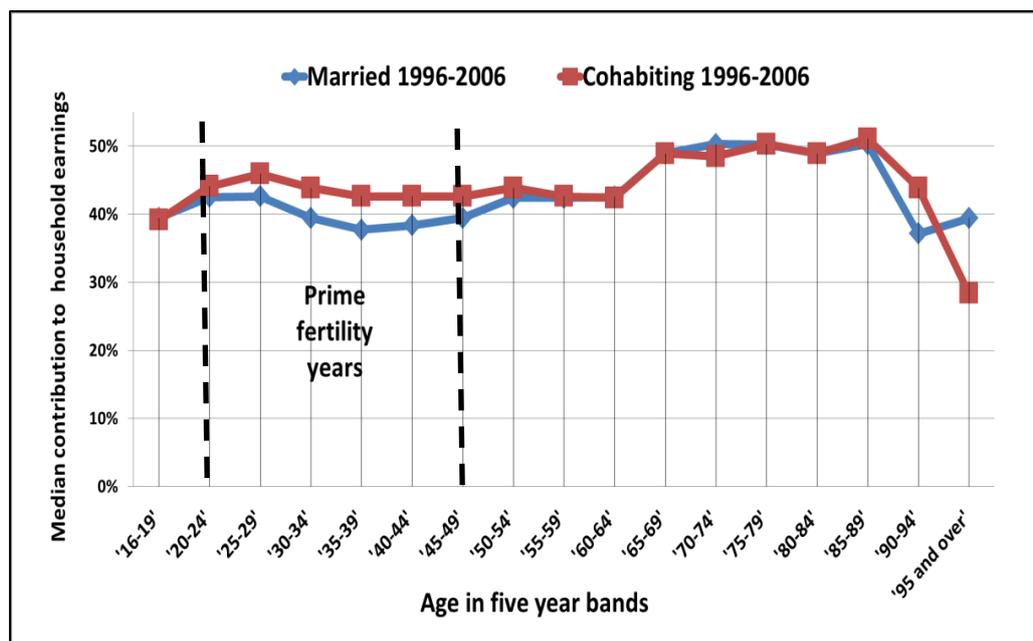
The proportion of mothers who leave paid work permanently to raise children in New Zealand is declining. In the past three decades, financial pressures including the rising cost of housing have encouraged increasing numbers of mothers back into paid work in New Zealand, often part-time but increasingly full-time. For mothers in lower socioeconomic circumstances, re-joining the paid workforce after motherhood has been a historical norm, born out of economic necessity. Although the proportion of New Zealand mothers in the labour force is expanding, it is still lower than in many other OECD countries (ranked 22 out of 29 countries in 2008) (Department of Labour 2010). Arguably, this figure is influenced by ‘low labour force participation of women with young children and sole mothers (compared to other OECD countries), high proportions of sole parent families and high fertility rates (Department of Labour 2010:14)’.

That considered, mothers returning to paid work in their previous position often find themselves out of step, in terms of promotion and career prospects

compared to single females and males (single or otherwise) who have remained working. Aisenbrey, Evertsson and Grunow's (2009) study showed that a 'motherhood penalty' was present in Germany, Sweden and the United States, and that the longer women were away from paid work, the greater was the negative effect on promotion and career momentum. Social connections and social capitals that other full-time workers have accumulated over time will be weaker for mothers who have taken time off work (England 2005, Dwyer 2006, Baker 2010b).

Episodic labour force participation, childcare, gendered occupations/wages, and unpaid domestic work and motherhood can all contribute to earnings levels across a woman's lifespan. Figure 7.11 shows the percentage of earnings contributed by female partners, by age group, and compares the results between the partnership types. As would be expected, married and cohabiting females showed similar patterns of earnings difference across the lifespan for the 1996-2006 period, but at different levels. Typically, cohabiting women earn a greater proportion of their household income (than married women) between the ages of 17 and 57 years. As is also evident in Figure 7.11, the gendered differences in household earning are very similar between married and cohabitating women when they enter their mid to late fifties.

**Figure 7.11 Proportions of household earnings contributed by partnered females by age group: 1996–2006**



Source: Statistics New Zealand microdata 2011

These variations in earnings over a lifetime can be correlated with motherhood and childcare for partnered females. In 2006, approximately 93 percent of all children born in New Zealand were born to women between the ages of 20 and 45 years, woman's prime childbearing period (Statistics New Zealand 2011k). As stated earlier, many mothers choose or need to work. Given that in 2006, 59 percent of married and 42 percent of cohabiting women in the labour force had at least one dependent child, their availability for full-time work and thus their ability to earn was limited (Statistics New Zealand Microdata 2011). Further influences on labour force participation for mothers include the high cost and gendered expectations of childcare (Crompton and Lyonette 2010, Baxter 2013a, Baker 2014).

### **7.13 Conclusions**

In conclusion, the two hypotheses: “*‘Professional’ individuals are more homogamous than ‘non-professional’ individuals*” and “*Married women are more likely than cohabiting women to work part-time and earn lower wages than their male partner*” were proven valid. This research has found significant occupational, paid work and income differences within and between marriage and cohabitation in New Zealand by gender over the past decades.

For many decades, occupational status, career longevity, earnings levels, and economic status have been attributes of high value (for males) within the partnership market. High levels of education and occupational status can facilitate both personal satisfaction and the economic and social status necessary for a materially comfortable partnership and family life. For some women, the choice of marriage partner is affected by the present and future earning capacity of their mate, especially when a family is planned (Becker 1973, 1974, 1993). Criteria for partner selection, however, are multiple and complex, and can differ between the sexes (Baker 2010a).

Nevertheless, circumstances have generally improved for many women in terms of paid work, wage levels, earnings parity, and occupational choice in the past four decades. Because of the increased educational participation of

females and the delaying of first marriage and first childbirth, increasing proportions of single women now hold occupations of much higher status and salary than the majority of women in the 1950s (Raymo and Xie 2000, Hamon and Ingoldsby 2003, Raymo and Iwasawa 2005).

These historical increases in educational achievement and earnings for females have changed the dynamic within the partnership market and in resulting partnerships. Males and females operate within a partnership market that is stratified by occupation type, paid work and level of earnings. Some males and females have greater accumulations of capital than do others. However, the social and economic systems that shape the dynamic of the marriage market, and the ranking of capitals within in it, remain socioeconomically and ideologically advantageous to males. Put simply, New Zealand society quietly encourages (and reproduces) a gendered division of labour in the home and in paid work (Roper 2005, Holmes 2013).

Despite an approximate 5.5 percent increase in full-time paid work occurred for all partnered females in the 2001 to 2006 period, large gender disparities remain. Partnered men are much more likely to work full-time than part-time and partnered women make up the largest share of the part-time workforce. Labour force participation also varies between partnership types and has shifted over time. Male wage earner-female homemaker marriages declined from 35.7 percent in 1981 to 13.7 percent in 2006 while cohabiting couples of this type declined from 30.2 percent in 1981 to 12.8 percent in 2006.

In contrast, the percentage of dual fulltime worker marriages increased from 25.5 percent in 1981 to 35.3 percent in 2006, while cohabitating partnerships of this type increased from 45.5 percent in 1981 to 49.4 percent in 2006. While some positive outcomes, such as personal satisfaction and limited economic autonomy, arrive out of these dual worker partnerships often women must do a double shift of paid work and domestic work (Pocock 2003, Baxter, Haynes et al. 2010). The socio-structural and cultural constraints that organise males and females into differing occupational and economic statuses also influences levels of occupational homogamy, partnering upward and downward in New Zealand, as do rational calculations and social exchanges by individuals.

These three partnership arrangements continue to coexist in New Zealand, but levels differ dependent on partnership type. In 2006, 21.3 percent of marriages were occupationally homogamous while 41.1 percent of married females partnered upward and 37.6 percent partnered downward. In the same year, 17.8 percent of cohabitations were homogamous while 36.9 percent of cohabiting females partnered upward and 45.4 percent partnered downward. There were some very small declines in homogamy (<2 percent) and levels of females partnering down (<2 percent) between 1996 and 2006 in both partnership types. Correspondingly, levels of females partnering upward increased by 2.8 percent for marriages and 3.4 percent for cohabitations over time.

Based on the above results I could argue that cohabitation remains more (occupationally) heterogeneous than marriage in partner selection over time and that homogamous partnerships are the smallest ‘arrangement’ proportionally in both partnership types. Furthermore, a significant proportion of married females (37.6 percent) and cohabiting females (45.4 percent) have higher status occupations than their partners.

That considered, the above data results are a (deceptively useful) meta view of occupational difference in marriage and cohabitation. Levels of homogamy, partnering upward and downward also vary widely between occupational types. By default, the gendered segregation of occupations in New Zealand places many females in positions that would benefit from partnering upwards, both economically and in terms of reflected status. This is especially true for those in lower status/lower earnings jobs. Despite these ‘possibilities of social mobility’, both the constraints of the partner market and the multiple gendered structural/ideological factors place partnered women in general at risk of earning less than their partners.

My research results show that partnered males have higher levels of personal earnings (on average) than their spouses do and that this wage gap is wider in marriages than it is in cohabitations and also varies dependent on, ages, fertility levels, career stage, child dependency status, level of paid work and the occupations of both partners. Gendered earnings difference also varies during the life course. My research results show that during women’s prime

childbearing and childcare years (20 to 44 years), personal earnings disparity between males and females is at its highest.

While the decision to return to work for mothers after childbirth is influenced by multiple psychological, ideological, moral, and sociological factors, economic factors also play a role. The demographic position of a couple, their family composition, partners' earnings, levels of child dependency, childcare costs, amount of paid parental leave (both state and private), all influence the return to work for mothers (Kahu and Morgan 2007). It is also likely that mothers in the high and low occupational groups will return to full-time work sooner after childbirth than those of the middle ranges. The lower status group will return quickly because of financial pressures whereas the high status group re-join the workforce to maintain career momentum, to remain in step with fellow full-time workers and to continue the relatively high level of living to which they have become accustomed (Baxter 2007).

It is likely that the average wage gap between cohabiting partners is smaller than for married couples because the former have lower fertility rates and higher full-time paid work. In addition, because of the age demographic, a considerable proportion of the population will be in the early stages of their careers, and so will have similar levels of earnings to the cohabiting partner. Importantly, gendered earnings disparity is less for women in high and low status jobs than for those in the middle occupational strata. This may be because levels of educational and occupational homogamy are higher in the high and low groups than in the middle group.

In conclusion, mate selection takes place within an evolving partnership market, whose meanings, values, and economic and social capitals are constituted in relation to social norms and changes within society. A person's position within the occupational strata is an awarded status by society, as is the ranking within the strata themselves. Love may be found within the marriage market (it is a cultural prerequisite for partnership success) but other, measurable criteria exist as currency within it. Occupation and earnings are two of these criteria. This research shows that in general males will hold and retain greater amounts of these capitals. The occupational schema of New

Zealand remains gendered in ideological and material terms. Where women and men work in similar jobs, in terms of skill levels, training and certification, women will still often earn less than males. Many female occupations are imbued with meanings that signify 'less value' and of 'secondary rank' to that of male occupations; skills that are linked to gendered ideas of nurturing, care and service, rather than of material production (Blackburn and Jarman 2006).

The following chapter offers a theoretically informed discussion of the causes and implications of gendered inequality, age difference, level of education, occupational status and earnings, and motherhood found within and between married and cohabiting partnerships in New Zealand.

## *CHAPTER EIGHT: DISCUSSIONS AND CONCLUSIONS*

### **8.1 Introduction**

This chapter begins with a restatement of the thesis goals and an explanation of their relevance to the study of marriage and cohabitation. I then outline the contributions and challenges this thesis makes to sociological research and theory. This is followed by an outline of the theoretical framework, methods and data used here. I then reiterate my hypotheses, explain their methodological and theoretical underpinnings and their relevance to the thesis goals.

The substantive section of this chapter discusses the changes and continuity of status differences within and between marriage and cohabitation over the past decades, drawing together the evidence gathered in the earlier chapters, international research, and social theory. The investigation of differences and similarities between marriage and cohabitation is important because through this one can map the intersection between social change, social formations, and individual agency. I argue that (gendered) status differences remain within marriage and cohabitation, but that they are evolving. I also maintain that cohabitation has become more heterogeneous over the decades, showing more discrepancies between the characteristics of partners than in the past and in relation to marriage, suggesting that cohabitations are not just *de facto* marriages. Cohabitation was once a practice of youth, but increasing proportions of the middle aged and older population now live together outside marriage.

Socio-cultural changes in norms in relation to education, paid work, birth control technology, and gender equity (among other things) over the past decades have influenced the formation and timing of intimate partnerships, and the dynamics of negotiation and equity within them. Resultant are increasing interconnections between marriage and cohabitation, and the growing heterogeneity of cohabitation as a social formation. Put simply, the range of status differences between cohabiting males and females is greater now than the mid-20<sup>th</sup> century. This is understandable, given that the age range of

cohabiters is greater than in the past, individual's statuses often change over the lifetime and that cohabitation may occur at many points of the life journey. That considered, in the late 20th century, partner selection in marriage has remained relatively homogamous and conservative, staying closer to the traditional (and heteronormative) arrangements of gender roles, motherhood, women's employment and earnings. Cross-cutting these patterns of homogamy in partnerships are the influence of social class. Men and women of the occupational and educational elite are much more likely to be partnered with each other than with those in the middle or lower classes, regardless of partnership type. The above arguments are first articulated in holistic terms within this chapter, then, given the possibility (and probability) of multidimensional 'status differences', the discussion is also located sequentially within age, education, occupation, paid work, and income, with particular attention given to the influence of motherhood on levels of many of these characteristics.

The implications of changing trends found within and between partnerships in New Zealand are then summarised, suggesting the need for social policies that reflect the changing needs of our society. This chapter concludes with a short discussion of the limitations of the thesis and suggests a number of future research projects to address these 'gaps'.

### **8.1.1 The goals of this thesis and their relevance to family studies**

In the past decades, formal marriage was the primary and socially accepted site for intimate partnerships and the raising of children. In the early 21<sup>st</sup> century, cohabitation is increasingly common and is now socially acceptable. The world has undergone a historical transformation of marriage (Coontz 2004). Non-marital cohabitation in today's society is one of multiple ways of organising adult life and family. Understanding cohabitation and its fluid relationship with marriage is an integral and important part of understanding society (Buchler, Baxter et al. 2009: 2). Cohabitation is at once the site of casual intimacy, family, de facto marriage, a path to marriage and an ideological alternative to marriage (among other forms). Premarital cohabitation, in can be argued, can also affect the longevity of marriages. The divorce rate is higher for those who cohabit before marriage than those who

don't (Teachman 2003, Hewitt, Baxter et al. 2005). Given that cohabitation is now the primary pathway to marriage, and that high similarity in the social statuses of partners (among other factors) is a good indicator of stable partnerships, the understanding of differences and similarities within and between marriage and cohabitation is essential for understanding families in New Zealand (Heaton 2002). Furthermore, little is known about the evolving nature and diversity within the cohabiting population (in material terms) in New Zealand. This work fills an important gap in family studies literature because it offers clear evidence of increasing demographic heterogeneity in the cohabiting population over time. In addition, cohabitation exhibits greater discrepancies in levels of age, education, occupation, paid work and wage homogeneity between partners than the married population.

Singlehood, partner selection, cohabitation, marriage, divorce, and remarriage are interrelated but are not necessarily part of a linear journey for men and women over the life course. While some people may move from the partnership market and dating to marriage, and stay there, other paths are taken. While the majority of marriages are preceded by a period of cohabitation, any particular cohabitation is as likely to end as transition, although this was not always the case. Other forms of cohabitation exist varying in purpose and meaning. These include, (among others), residential dating or partnerships that are lived as an ideological statements against the heteronormativity of formal marriage. Marriages also end and divorce can follow. While many people remarry, others choose to remain single or cohabit with others.

The understanding of intimate partnerships is of fundamental importance to sociology, family studies social science and policymakers. Partnerships are the basis of family, which remains the primary site of childbirth, socialisation, and the reproduction and challenging of social mores and social structures. To that end, partnerships often contain gendered differences in age, education, occupation, are the site for the distribution of paid and unpaid labour and the redistribution of income. Many of these characteristics (if not all) are potential sources of power that when used, singularly or in combination, can affect an individual's agency within partnerships (Bourdieu 1986a).

The goals of this thesis were multiple. I sought to reveal through empirical investigation, who was marrying or cohabiting with whom in late 20<sup>th</sup> and early 21<sup>st</sup> century New Zealand, and to understand how and why some patterns of mate selection were repeated over the decades. I also aimed to understand why substantive changes *and* enduring gendered differences occurred via the partner selection process. Given the substantial increases in cohabiting partnerships over time, a further goal was to ascertain differences and similarities between partners within and between marriage and cohabitation. I sought to uncover the artefacts of practices within partner selection, which are linked to gendered and socioeconomic differences between the two partnership types. The final goal was to understand how mate selection is influenced by changes to the ‘partnership market’, propinquity, social exchange, individual agency, changing gender roles, increased participation of females in education and paid work, gendered occupational schema, and motherhood.

This research is important as expands upon the existing models of homogamy/hypergamy theory, primarily developed for understanding mate selection and status differences in marriage, adapting them for the study of cohabitation. In essence, the ‘who marries whom’ and ‘who cohabits with whom’ questions asked in this thesis, have elicited different answers. The results show that cohabitation exhibits multiple levels of diversity in gendered status differences that can shift dependent upon the life stages of those involved. Given that levels of homogamy and hypergamy in New Zealand marriages have remained relatively similar over time, it is likely that within the ‘diverse’ cohabiting population, groups of couples with similar status profiles exist, some with greater degrees of difference and some that follow more conservative/ married patterns.

The research is also valuable, as it allows an expansion to marriage market theory and empirical research to include cohabiting couples. This ‘partnership market’ is constituted, I argue, by a more demographically and ideological and desirously diverse population than the marriage-centric model proposed by Becker. Importantly, the dynamic and value of women’s education and paid

work within this market has changed over time. This I argue has is visible in the changing patterns of mate selection in New Zealand over time.

The questions I posed in this thesis and the results of the research matter, both theoretically and substantively. We have an evolving population responsive to social change, making different decisions about when and whether they marry, and with whom they live. Importantly, partnerships are formed and constituted by individuals, themselves shaped by socialisation, circumstance, and ideology. Gender inequality may have shifted over time but still remains within New Zealand society. Individuals, and their choices, are constrained (but not totally limited) by slowly changing societal structures.

Because most men and women spend some time in cohabitation over their lifespan, and a significant proportion cohabit before marriage, couples marry much later now than in the past. Almost half of all children in New Zealand are now born ex-nuptial. Increasing proportions of families in New Zealand are, in the short and/or long term, outside of the traditional marriage arrangement. Given that the rearing and socialisation of children outside of marriage is increasingly socially accepted, and now takes place within two social institutions, it is imperative that sociologists, family studies scholars, and policy makers know in more detail, the contrasting social demographic shapes of the two partnership types. The findings of this thesis can better inform family policy because it shows greater diversity in social statuses within cohabitation than in marriage, necessitating more nuanced provision of family support to both groups.

### **8.1.2 This thesis fills an important gap in sociological knowledge**

The thesis treads new ground in substantive research into marriage and cohabitation. The heterosexual cohabiting population has increased over time in New Zealand, reflecting trends found in many Western countries (Statistics New Zealand 2001b, De Vaus, Qu et al. 2003b, Cherlin 2009). Cohabitation may occur before, or instead of, entering legal marriage. It is widely agreed that the meanings and purposes of the two partnership types have become increasingly interconnected (See Lewis 2001, Beck-Gernsheim 2002, Manning and Smock 2002, Cherlin 2004, Torr 2004, Coontz 2005, Baker 2010a).

However, this thesis has shown that while marriages remain similar in function and formation to the heteronormative norms of New Zealand's past, cohabitation has changed and is more discrepant (in material terms between partners) than marriage.

I have furthered understanding of the evolved and evolving status differences between males and females within and between marriage and cohabitation in New Zealand in the 20<sup>th</sup> and 21<sup>st</sup> centuries. Given that my thesis has examined the multidimensionality of difference over time within and between marriage and cohabitation, the results and discussion have also expanded and challenged a number of strands of marriage market, homogamy, and hypergamy theories. While fundamentally sound, Becker's marriage market theory warrants expansion. Shifting social attitudes and socio-structural changes, combined with increased agency (in multiple forms) for women, have changed the dynamics and desires of the partnership markets. One of the consequences of these socio-structural changes has been that many individuals are making different choices in partner selection to the generations before them. In particular, women face new possibilities because of evolving labour markets, changed discourses, legislation, and technologies related to marriage and cohabitation in society.

The thesis shows that we need to think of cohabitation in New Zealand in multidimensional terms. As cohabitation has multiple meanings and purposes and that these can vary along the life journey, the status levels, economic differences, and gender equity dynamics may also vary within the population—more so than in the married population. That given, cohabitation has an increasingly symbiotic relationship with marriage. Many cohabitations lead to marriage, but many do not. Increasingly they occur after divorces and or widowhood.

Cohabitation then can be theorised of being both long-term and short term.

It is no longer the bastion of the young. “Birds of a feather indeed continue to flock together” but changing social and economic conditions have affected the degree to which this occurs within New Zealand society. That considered, the thesis has also shown that significant proportions of women in New Zealand

continue to conform to older patterns of hypergamy, partnering upward in occupation, education, age, and labour force participation.

As with much positivist research, my thesis started with a series of questions informed by previous local and international research/theory on differences within marriage and to a lesser extent cohabitation. Little large scale, and to my knowledge, even less time series work or investigation into the evolution of cohabitation has taken place. While important qualitative work (and some quantitative work) has been undertaken on cohabitation in New Zealand, no large-scale population based work had been undertaken to this point. I produced a very large matrix of educational, occupational, age, and income similarities and differences for males and females within and between marriages and cohabitations. The data showed that (in simple terms) cohabitation has become more heterogeneous than marriage over time in all of the above characteristics, and that ‘difference’, within partnerships is also affected by class position, parenthood, and life stage.

I have produced an internationally replicable and comparable statistical model with which to study homogamy, hypergamy, and hypogamy. Further, I have demonstrated the utility of time series Census data analysis at low levels of aggregation, for investigating patterns in marriage and cohabitation. This thesis shows the benefits of using census data to show changes in intimate partnerships over the decades, allowing time series analysis of individual practices at the level of the household, something that sampling does not permit. Working with information about entire partnered populations of New Zealand, allowed me to make definitive statements about long-term changes in mate selection practices rather than defer to a series of significance tests and *p* values.

### **8.1.3 Theoretical framework, methods, and data**

I have used in this thesis both a macro-structural approach that includes social homogamy, propinquity, and marriage market theories, and a micro-individual approach that draws on social exchange theories (Esteve and McCaa 2008). Both approaches are used as a theoretical overlap exists between them but they address different levels of analysis.

Social homogamy theory argues that individuals tend to marry or cohabit endogamously, choosing partners of similar age, ethnicity, social class, level of education, occupation, taste, neighbourhood, and other learnt behaviour patterns among couples (Kalmijn 1994, Kalmijn and Vermunt 2007). The central arguments of social homogamy theory pertain to three aspects of mate selection: the preferences of people for particular qualities in a partner; the influence of third-party agents, families, and friends in the mate selection process; and the constraints of the partnership market in which potential mates are sought (Kalmijn 1998).

Economic social exchange theory argues that partner selection is a transactional process within the partnership market, in which men and women attempt to maximise their present and future life satisfaction and socioeconomic position, based on characteristics socially constructed as (gender specifically) 'valuable' within society. Importantly, the nature and dynamic of the partnership market is constituted by the (evolving) characteristics of those males and females that constitute it (See Goode 1970, Schoen, Wooldredge et al. 1989, Becker 1993, Esteve and McCaa 2008).

Emotional social exchange theory argues that 'transactions' occur at an even more intimate level within relationships and that levels of satisfaction are assessed on a moment by moment basis (Blau 1964, Becker 1973, Becker 1974, Barbalet 2001, Turner and Stets 2006). Importantly, the macro and micro theoretical approaches help explain the relationship between the larger social structures and conditions that shape the process of mate selection (and the partnerships that may follow), and how individuals may exercise agency in the formation and duration of marriages and cohabitations.

I used micro-level data drawn from six New Zealand Censuses of Population and Dwellings (1981–2006), as well as supplementary OECD, Statistics New Zealand and other local and international data to test the thesis hypotheses (discussed below). Using these data, I conducted a comparative/time series analysis of the educational achievements, occupational types, labour force participation, personal incomes, ages, parenthood, and child dependency rates within marriages and cohabitations. These data are the self-reported records of

many of the ascribed and achieved characteristics and statuses of all individuals within partnerships in New Zealand over the past decades. Bivariate and trivariate cross-tabulations were used to compare percentage differences of the above characteristics within and between marriage and cohabitation over time. These unique data sets and robust analysis methods allowed me to augment and challenge the existing theories on status differences within partner selection in marriage and cohabitation.

#### **8.1.4 Hypotheses and their links to social theories**

Homogamy theory argues that birds of a feather flock together, that like partners with like. International research argues that marriage is generally more homogamous in education, income, occupation, and age than is cohabitation (See Blackwell and Lichter 2004, Chan 2004, Hamplová 2005). I tested this argument in the New Zealand context by adding a time series variable and hypothesising that “Marriage remains more homogamous than cohabitation in New Zealand over time”. This is a null hypothesis, a “straw man” used in statistical testing. The aim of this is to either reject the hypothesis or not, based on rigorous significance testing (Bryman 2008). While the hypothesis suggests that a significant proportion of the New Zealand population continues to have homogamous partnerships, males and females often have partners with higher or lower statuses than themselves. Absolute homogamy across all statuses between partners does occur within societies but, as hypergamy theory argues, females have been historically more likely to partner with males of higher ages, and educational, occupational, and income statuses (Bottero 2005a, Baker 2014).

Marriage market theory suggests that people will try for the ‘best deal’ they can in the partner selection process (Becker 1993, Lloyd 2008). Education, income, occupation, and age are (among others) characteristics that people consider in partner selection. Each of these ascribed and achieved statuses holds a ‘social or economic value’ within and outside of the partnership market. These statuses/ characteristics are often gender related (Cherlin 2004). My research showed, for example, that substantial proportions of partnered women in New Zealand were still working in customer services, sales, teaching, life sciences professions, clerking and other traditionally ‘female-

orientated' occupations (OECD 1998, Statistics New Zealand Microdata 2011).

Newell and Callister (2008) argue that the accumulation of some of these statuses (particularly education, labour force participation and income have increased over time for women in New Zealand. These increases in statuses for many women have altered both their objective and subjective value (and therefore) the supply and demand dynamic of the partnership market (Hillcoat-Nallétamby and Baxendine 2004, McPherson 2004). Arguably, such increases in educational and occupational statuses, and labour force participation for women can lead to changes in status and (in)equities within partnerships (Blackwell and Lichter 2004, Chan 2004, Hamplová 2005).

Because of the complex and multidimensional nature of differences within and between marriage and cohabitation, four further hypotheses were designed and tested. In the following section, I discuss each hypothesis in turn, justifying their use, their historical precedence and their theoretical importance in the study of partnership selection.

(a) "The ages of individuals in marriage and cohabitation have become more homogamous over the decades".

This question was again driven by homogamy theory/research that shows that the social norms of dating and marriage are that males are usually slightly older than their partners (2010). International research shows that cohabiters usually follow the same social norms but they are more age heterogeneous than the married population (Bumpass and Sweet 1989, Waite and Gallagher 2002). This hypothesis tests the above research findings in a New Zealand context. This is important given that the average age of first marriages has increased significantly over the decades and the cohabitation age demographic has become more diverse over time.

#### ***8.1.4.1 Examining Educational and occupational differences***

Much socioeconomic status research shows a strong correlation between an individual's level of education and their occupation type in New Zealand (See Milne, Byun et al. 2012). Homogamy theory research however, does not usually conflate these two aspects, or use one as a proxy for the other. Levels of educational homogamy have been found to be higher than those of occupational homogamy in many countries (Kalmijn 1998).

Education and occupation are treated separately in this thesis for multiple reasons. Little is known about the changing levels of educational and occupational homogamy in marriage in New Zealand, and even less is known about their occurrence in cohabitation. Embarking on a time series analysis of multiple variables using contrasting categorical schemas (which occupation and education have) would mask very clear, understandable and generalisable social facts behind a plethora of statistical significance tests and *p* values.

Official statistics show that the increases in educational achievement for females over the past decades in New Zealand have by default, altered the expectations or 'shopping lists' of women in the partnership market, and therefore the dynamic of the partnership market itself. The following hypothesis tests whether looking for the 'best deal' based upon one's own level of education has raised levels of educational homogamy in marriages and to a lesser extent cohabitation.

(b) "Educational homogamy is more prevalent for males than for females and more prevalent amongst married couples than cohabiting couples".

The evolving nature of labour force participation and occupation type for women over the life journey is in contrast to that of males. While males have relatively linear job development over their lifespan, females can move in and out of employment and can "elect" for a status downgrade of their occupations in exchange for time flexibility for childcare and eldercare responsibilities. This by default alters the level of occupational homogamy within a partnership, while the educational similarity/difference between the partners is more likely to remain the same.

(c) ‘Professional’ individuals are more homogamous than ‘non-professional’ individuals, and more so in married couples than cohabiting couples”.

General occupational homogamy can be explained somewhat by social, workplace, and geographical proximity (Bozon and Heran 1989, Laumann, Gagnon et al. 1994, Kalmijn and Flap 2001, Lampard 2007, Haandrikman 2011). However, this hypothesis tests the theoretical assumption that the males and females of the professional/occupational elite partner more endogamously than those in mid-and low-level occupations. Arguably, males and females in the elite group practise higher levels of social closure, which contributes to the reproduction of social stratification within societies (Bourdieu 1984, McDonald 1985, Smits 2003, Schumacher and Lorenzetti 2005, Bottero 2005a, Weber [1921] 1978). This hypothesis, then, compares (using occupation as a proxy) the effect of class position upon levels of occupational homogamy within and between marriage and cohabitation.

(d) “Married women are more likely than cohabiting women to work part-time and earn lower wages than their male partners”.

This “double hypothesis” was constructed to compare the socio-structural effects of gender upon the distribution of paid work, income, and occupation type within and between partnership types (Mason 2012, Ministry of Women's Affairs 2013). On a second level, this hypothesis investigates the effect of child dependency/childcare upon paid work for women (Baker 2009). Arguably these gender arrangements of paid and unpaid labour reflect the social norms implicit in the gender pay gap and gendered nature of paid and unpaid work in New Zealand and other liberal societies (Blackburn and Jarman 2006).

#### **8.1.5 Discussion: Social change, the partnership market and the interdependence of cohabitation and marriage as social formations**

The meanings and practices of cohabitation have become more heterogeneous over time. The age demographic of cohabitation, for example, has become noticeably wider over the past three decades, which by default encompasses

more 'life stages' and consequential experiences than occurred in the past. Because individuals will/may have changes in social statuses over their lifespan and that an increasing proportion of middle age people are now cohabiting, the possibilities of heterogeneity are greater for this population than in the past.

I have highlighted that social class position, in the forms of occupational and educational status, has a significant effect on partner selection. Both professionals and those holding skilled occupations, for example, are more likely to partner homogamously than are those in mid-level jobs.

I have also shown that in many cases, mate selection still conforms to historical gendered social norms. Despite improvements in occupation, labour force participation, income, and educational attainment for women over the past four decades, many New Zealand women continue to partner homogamously or 'partner upward' in terms of age, occupation, education, and income. Importantly, my results also show that cohabiting women are generally less homogamous and less likely to partner upwards than are married women. Cohabiting women are also more likely to partner downward than are married women.

It is clear that differences exist within and between marriage and cohabitation, and it behoves government agencies to collect and make use of and or make available separate and transitioning information about them. Marriage and cohabitations are (among other things) *both* sites of family, childbirth and the socialisation of future citizens. They are also sites of the challenging of social norms- cohabitation more so. Yet cohabitation remains the major gateway to marriage. While policymakers have provided more legal rights to cohabiters, more understanding is needed about the interconnected and complex nature of the two partnership types and the fluid connections between them. This thesis shows that cohabitation is not just an extension of the dating process, a form of 'courtship', an ideological alternative, or indeed a 'DIY' marriage. In summary, cohabitation takes at least three forms: a temporary arrangement, a partnership that leads to legal marriage, and a long-term partnership that retains its cohabiting status. Importantly, the purpose, prevalence and duration

of cohabitations, and their relationship to legal marriage, is related to the cultural and legal context of different nation states (Rindfuss and VandenHeuvel 1990, Heuveline and Timberlake 2004, Duncan, Barlow et al. 2005, Buchler, Baxter et al. 2009, Baker and Elizabeth 2013). In many cases, cohabitating couples are raising children as an alternative or rejection of the social norms/constraints of marriage.

While information is routinely collected about the formalisation of partnerships in marriages, separation and divorce, little is available concerning the duration and qualities of cohabitations. Often, cohabiters with children enter into marriage, while other couples with children move in and out of cohabitation and marriage. Rather than being separate entities, partnerships and families can be conceptualised as existing on a continuum. Policymakers should therefore be concerned about the periods of economic, legal and social vulnerability that families may experience within the multiple and changing (family) formations that can occur along their life journeys.

Current literature and research indicates that gendered differences in paid employment, level of education, and the distribution of housework, childcare, control of finances and public sphere decision making continue within cohabiting and marriage partnerships in the new millennium (Blackwell and Lichter 2000, Domanski and Przybysz 2007, Chesters and Baxter 2009). While my analysis of Statistics New Zealand data serves to support many of the above findings, I have also demonstrated that differences exist *between* the two partnership types. Although marriage and cohabitation have become more interlinked over time, they are not materially identical. We can speculate then that the practices and material differences within the resultant partnerships may be, on average, dissimilar. That considered my findings have shown, that material differences between men and women can also change over the duration of a partnership and/or during the transition from cohabitation to legal marriage. For example, the average difference in wages and salaries between partners often fluctuates over the life course, reaching its lowest during women's prime fertility period. The fluctuations of earnings difference are less on average for cohabiters than for married couples, because of lower fertility rates and greater levels of labour force participation by women within them.

Partner selection patterns in late 20<sup>th</sup> century and early 21<sup>st</sup> century in New Zealand have been influenced by many factors, including ideas about romantic love and individual choice, the growth of individualism and feminism, and changing material conditions. As homogamy and social exchange theories show, these influences operate at both structural and individual levels. Partner selection, just as any social action by an individual, occurs at the intersection of biological, historical, material, and ideological conditions, and involves individual agency (Mills 1959). Social exchange theory argues that partner selection is a transactional act by which one attempts to maximise profits in terms of symbolic and material characteristics valued by society (Goode 1970, Schoen, Wooldredge et al. 1989, Becker 1993, Esteve and McCaa 2008, Lawton and Callister 2010). In many instances, these characteristics are gender specific and will differ dependent on culture, stage of socioeconomic development of a society, and historical period (Becker 1993, Kenrick, Groth et al. 1993, Sprecher 1998, Rosenfeld 2005, Clark and Gilman 2007, Huppatz 2009).

Traditionally, economic wealth, occupation, education and public sphere status were valuable characteristics for men on the partnership market. The dynamic of the market has changed because the practices and characteristics of the individuals that constitute it have changed. Although general levels of education in New Zealand improved during the post-WWII period, increases have been proportionally greater for women than for men, and more so in higher education. Conceivably, these educational improvements, plus time spent in paid work with commensurate salaries, have altered, or more correctly increased, women's subjective and objective value in the partnership market (Hillcoat-Nallétamby and Baxendine 2004, McPherson 2004, Newell and Callister 2008). Homogamy theory highlights that people normally prefer a partner to whom they are similar in terms of age, ethnicity, culture, education, occupation, socioeconomic status, taste, and geographical location (Bourdieu 1984, Kalmijn 1998, Blackwell and Lichter 2004, Fu and Heaton 2008).

Both physical and social location, it can be argued, have influenced who marries or cohabits with whom in the late 20<sup>th</sup> century and early 21<sup>st</sup> century in

New Zealand. As residential propinquity theory suggests, the social meaning of meeting places, and frequency of 'visits', will influence whom we will meet, mix with and possibly partner with. Geographical location and occupation provide or limit the chances of people meeting. In rural New Zealand, for example, the probability of agricultural workers marrying agricultural workers is high. Other high probability occupation-homogamous partnerships are among academics, nurses and doctors, schoolteachers, and bar managers and bar staff.

As Stevens (1991) and Strong, DeVault, and Cohen (2011) argue, we are more likely to visit places in which we are 'comfortable' or at ease. Hence, workplaces, universities, polytechnics and other places of shared interests and purposes are likely places for the meeting of homogamously aligned males and females. Given the steady increase in participation in post-school education in the past decade in New Zealand, it is likely that proportions of higher level educational homogamy will increase for the (younger cohabiting) population in the following years.

I further argue that socioeconomic class position continues to influence partner selection in New Zealand. Men and women occupying the upper and lower ranks of society are more likely to have partners of similar levels of educational, cultural, and occupational status, than are those in the middle class. I have shown here that 'professionals' are more likely to marry homogamously than any other occupational group. Social class position also influences partner selection.

This practice is a form of social, economic, and cultural protectionism that has remained unchanged over the past 30 years. Such behaviour limits the chances of mobility through marriage or cohabitation for those not in the professional class. Nevertheless, significant (but slowly diminishing) proportions of women throughout the social strata continue to 'choose' and are 'chosen' by a male partner of higher occupational status, education, income and age.

Despite increases in full-time paid employment and income for partnered women over the decades, my research has shown that patterns of gendered

income difference remain in New Zealand partnerships, and more so in marriages than cohabitations. Arguably, gendered occupations and commensurate salaries, and gendered norms of combining paid work with family responsibilities continue to constrain the labour force participation and wages of partnered women. The gendered income disparity rate is less (on average) for cohabiting than for married women, as the former are typically younger, have fewer children, and enjoy a higher rate of full-time labour force participation and lower levels of economic and occupational hypergamy in their partnerships. That considered, many cohabiting women marry shortly before or (increasingly) after childbearing (Heuveline and Timberlake 2004).

#### **8.1.6 Gender and age heterogeneity within marriage and cohabitation**

As Cribb (2009) argues, and as I have affirmed in chapter five, the age demographics of cohabitation in New Zealand have changed over time and differ to that of the married population. The cohabiting population is typically younger than the married population, and age difference between partners is more variable in first cohabitations than in first marriages. I argue that the changes over time in the ages of partnered males and females, and the age difference between partners are related to the rise in cohabitation. Many young couples today make their first partnership a cohabiting one. Those who get married will do so later in life, often after a period of cohabitation. First marriages are also delayed because of extended time spent in education and career development. While weddings can be cheap, the desire of many couples for an expensive wedding can also delay marriage. A further reason for delaying marriage is concern about divorce – individuals wanting to be sure about the security of their relationship (Baker and Elizabeth 2013b).

Consequently, the median age at first marriage increased from 24 years to 30 years for men and from 22 to 28 years for women over the 1981–2006 period (Statistics New Zealand Microdata 2011). Similar historical increases in age at first marriage can be found in Australia, Canada, England, and Wales (Australian Bureau of Statistics 2011, Human Resources and Skills Development Canada 2011, Office for National Statistics 2012). In contrast, average age at first cohabitation in New Zealand has changed little since 1995, when it was just over 24 years for men and 21 years for women (Ministry of

Social Development 2004).<sup>27</sup> A recent study of the United States in 2013 also demonstrated that age at first cohabitation had remained stable there for men and women over the past two decades (Manning, Brown et al. 2013).

Unlike some characteristics, age difference between partners cannot change over time. Only divorce, widowhood, and sequential re-partnering can effect change. Than considered, it is a cultural convention in many Western countries that women are usually younger than their male partner (Baker 2010a). As I showed in Chapter Five, these ‘older male-younger female’ partnerships were consistently more prevalent than ‘age similar/homogamous’ partnerships in New Zealand during the 1981–2006 period. These findings are similar to those of other New Zealand studies, and those in Australia, Japan, Taiwan, the United States, Canada, Britain, and many European societies (Callister 1998, Baker 2001, Bergman and Joye 2003, Blossfeld and Timm 2004, Rose 2004, Raymo and Iwasawa 2005, Chen and Huang 2007, Chiappori, Iyigun et al. 2009, Kippen, Chapman et al. 2009, Callister and Didham 2011). I also demonstrated that the majority of ‘older male-younger female’ partnerships had an age gap of three to five years, while a smaller but still sizeable group of these couples had an age gap of six to eleven years. ‘Older female-younger male’ partnerships were present in all time periods in this study, but they were consistently less prevalent than ‘older male-younger female’ and ‘age similar/homogamous’ partnerships.

While both ‘age similar’ and ‘age different’ partnerships are commonplace in New Zealand society, albeit in different formations for males and females, I have established that the levels of each ‘type’ have changed over time. Age difference between partners, arguably, is influenced by gender, life stage, partnership type, and the dynamics of the partnership market. I have established that average age difference for the married population depends on life stage, increasing sequentially from first marriage, to post-divorce remarriages, to post-widowhood marriages. Recent Australian research also showed that age difference between partners becomes more disparate in post-divorce partnerships (Kippen, Chapman et al. 2009). Unfortunately, calculating

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<sup>27</sup> Other data on ‘ages at first cohabitations’ in New Zealand are unavailable.

age difference resulting from sequential cohabitations was impossible with the census data available to me. I have shown, however, that age difference in couples varies between partnership types, and more so for those in middle to advanced age than for younger people.

The most novel finding has been that age difference patterns of the 50 years and over cohabiting population differ significantly from those of married couples in the same age group. I have established that, in 2006, married women in this age group were extremely likely to have a partner of a similar age (45.5 percent) or older (46 percent). Only 8.5 percent of these females had younger partners. In contrast, 31.3 percent of cohabiting women in this age group had partners of similar ages, 40.1 percent had older partners, and 28.6 percent were in ‘older female-younger male’ partnerships – more than triple the percentage for marriages in the same age group. While Lawton and Callister’s (2010) study of ‘older female-younger male’ partnerships in New Zealand found similar results, they used a combined population of married and cohabiting couples in their study, while my comparison of the two partnership type populations provided clearer and more differentiated results between the two.

Because the proportional distributions of ‘age similar’, ‘older male-younger female’ and ‘older female-younger male’ marriages are comparable between younger groups and those 50-plus, we can assume that many of these partnerships are long-term or first partnerships. This ‘continuity’ across age groups is not present in the cohabiting population. While some of the 50 years and over cohabitations are long-term, many of them will be new and/or short-term partnerships. My research shows that 28.6 percent of cohabiting women in this age group chose and were chosen by a younger partner- significantly less than the 8.5 percent of married couples with this ‘age arrangement’.

Given the relatively small proportions of ‘older female-younger male’ partnerships found in the 16–29 and 30–49 age groups (in both recent and past censuses), and the large proportions of them within the 50 plus age group, it follows that a significant proportion of these cohabitations will be relatively new, second or subsequent cohabitations, and/or short in duration. Changes in

age difference also occur in remarriages, but my analysis has shown that ‘older female-younger male’ marriages (including remarriages) are less common than ‘older female-younger male’ cohabitations.

These findings are similar to trends found in other societies. Increasingly, older single, divorced or widowed men and women in Europe, Japan, and the United States are cohabiting instead of marrying or remarrying, and cohabiting partners are less likely than married couples to adhere to age-related norms (Öberg 2004, Office for National Statistics 2012).

These cohabiting ‘older female-younger male’ re-partnerships are arguably (partially) resultant of a shortage of age suitable males for this age group within the partnership market, paired with a reluctance to remarry, based on (previous) negative experiences of this partnership form. Furthermore, younger males may be less conservative (than older males) and more willing to negotiate or accept a less traditional division of labour (Singleton and Maher 2007). Cohabitation with younger males can allow women greater control of their own lives, and their children’s, if involved. The criteria, by which potential mates are evaluated, both consciously and subconsciously, can shift with age, influenced by previous life and past partnership experiences. Furthermore, these experiences may influence the level of commitment within a relationship and whether a couple will cohabit or marry (White and Klein 2002). As in all mate selections, the above decisions will also be based on the assessment of individuals’ own values within the partnership market (Becker 1973, 1974).

I argue that the propensity for widowed/divorced men to marry women who are younger than their late or former wives also influences remarriage and cohabitation rates for older women. In 2010, the median age at divorce in New Zealand was 45.1 years for men and 42.5 years for women (Statistics New Zealand 2012a). Husbands were on average 2.1 years older than their wives in first-time marriages, 3.7 years older in remarriages after divorce, and 7.7 years older in remarriages after widowhood (Statistics New Zealand 2012a). These preferences and practices, and the fact that many males in the 50 plus group are already married (or have passed away), all contribute to a

marriage squeeze or shortage of ‘age suitable’ partners for widowed, divorced, and never-married middle-aged women (Bracher 1990, Greene and Rao 1995). Put plainly, the partner pool is much smaller and more constrained for women in middle age than it is for those in their teens, 20s, 30s and 40s.

These ‘50 years plus’ women in cohabiting partnerships with younger men may be responding to the constraints of the partnership market and taking what is available to them. Equally, they may be consciously ignoring or flouting the social conventions of gendered age difference. Lawton and Callister (2010) argue that social stigmas related to ‘older female-younger male’ couples may be gradually eroding in the 21<sup>st</sup> century – effectively allowing a new social arrangement to flourish. This, they suggest, is due in part to the changing attitudes of some young men, who have grown up within pro-feminist discourses, and to the high visibility of ‘older female-younger male’ partnerships within popular culture. Then considered, these partnerships are often presented as a derogate arrangement.

As with some divorced men, increasing proportions of divorced women in the ‘50 years plus’ age group may be reprioritising their partner selection criteria, albeit for different purposes and ends. While some divorced ‘50 years plus’ men will marry younger women and create new or blended families, divorced women of this age group may desire a new partner but choose not to remarry or start a new or blended family. One alternative to remarriage is cohabiting with their younger partner, and integrating them into their existing family (if children are present). This arrangement may suit some men and women on a temporary basis, but can also be long term. As with ‘older male-younger female’ partnerships, the aspirations of those within ‘older female-younger male’ partnerships may, but not always, diverge over time.

### **8.1.7 Educational changes within and between marriage and cohabitation**

While partner selection in Western society is idealised as being about love, respect, and individual agency, it ultimately occurs within, and can be understood through, the economic and gendered social processes, ideologies, conventions, and practices of the larger socioeconomic world. Capitalism, in

both its material and ideological forms, tends to perpetuate patriarchal domination and economic exploitation of females (Hartmann 1976, Roper 2005). Inequalities are manifest within the gendered distribution of housework, childcare, control of finances, and 'public sphere' decision making (Chesters and Baxter 2009). These inequalities are reflective of, and justified by, the gendered social structures and structuring of Western society. Ken Dempsey (1997) argues that Australian marriage and cohabiting relationships are often sites of unequal power relationships between the sexes. As in many liberal countries, feminist (and other) responses and resistances to these conditions of inequality flourished in New Zealand in the latter half of the 20<sup>th</sup> century. Feminist practices, ideologies, and theories showed how, where, why, and to whom occupational, economic, educational and other inequalities occurred. Integral to the limiting of potential or human capital for women is the ideological and structural control of education.

Historically, women's educational possibilities were shaped by patriarchal ideals of what constituted gender appropriate knowledge and practices (Nicholson 1986, Putnam-Tong 2002, Brickell 2006, Andersen and Witham 2009). As motherhood and homemaking for most women was inevitable, and ideologically constructed as desirable, educational participation often ended after a minimum of schooling, or they were channelled into female orientated occupational training. Typically, middle class women went into nursing or teaching while working class women retail or office work. These processes led most women back into female specific occupations and 'male breadwinner-female homemaker' marriages. Inevitably, the education system encouraged women to remain unequal to men and potentially dependent on them (Kasearu and Ainsaar 2010). By economic necessity, many women were careful who they fell in love with, choosing a partner with higher educational, occupational, and economic potential than their own. While strategising remains in the mate selection process in 2013, the playing field has become more level. Women have become less financially dependent on men. This strategising process, when it does occur, is usually based on a culturally informed evaluation by an individual of their partner's suitability, according to a variety of criteria.

Chapter Six of this thesis showed that, in 2006, 76 percent of married women and 68 percent of cohabiting women in New Zealand had partners with equal or greater educational qualifications. Notably, the data also showed that while educational homogamy had declined slightly over the 1986-2006 period for all males, ten percent of cohabiting males and six percent of married males had a partner of with a partner of higher educational status, suggesting that female education appears to have become more valuable on the partnership market over time. That considered, attempts to partner homogamously, upward, or downward in education are limited by the social and status structures in which they are made. Put simply, “educational mobility” through partnering is constrained by the education levels and statuses of the individuals involved, particularly for those with higher educational qualifications.

My research clearly shows that educational homogamy is typically greater in marriage than in cohabitations, but this raises an important question: how has this discrepancy occurred? Blackwell and Lichter (2004) argue that winnowing or ‘double selection’ (or sequential partnering) leads to more homogamous partnerships over time. The authors showed that levels of homogamy increased exponentially from (sexually intimate) dating couples, to cohabiting couples, to those who were married. While the winnowing process *may* lead to homogamous marriages, it might also lead to “more homogamous” cohabitations (Blackwell and Lichter 2004). While my thesis shows that this is generally not the case for the cohabiting population, this may be a limitation of my data. I argue that life stage also affects the levels of homogamy within cohabitation. It is possible that the winnowing process is more prevalent for the educational elite than for other groups- resulting in greater homogamy.

My research showed that highly educated individuals in New Zealand are becoming more likely to partner homogamously than people in other educational groups. As a strong link exists between occupation and education status, this practice among the highly educated can be interpreted as an act of social and economic closure, which serves to preserve cultural and economic resources (Bottero 2005a, Weber [1921] 1978).

High levels of homogamous partnering also occurred among those with few or no educational qualifications. Similar results have been found in many countries including Australia, Norway, Canada, and Britain (Smits, Ultee et al. 1998, Birkelund and Heldal 2003, Halpin and Chan 2003, Hamplova 2009). Traditionally, homogamy among those with no or few educational qualifications and low job skills is linked to their low aggregate value, in terms of partnership capitals, and hence their limited choices on the partnership market. Because of this, mobility through marriage or cohabitation is difficult, and more so for males than for females. Women with low or no educational qualifications can supplement their 'cache of capitals' with fertility, physical beauty and other attributes that enable them to partner upward. In contrast, increasing numbers of males with no or few educational qualifications, and in low skilled jobs, are unable to attract a homogamous partner or indeed one with higher qualifications, and are forced to remain single. While these men have traditionally partnered with women of low skills and/or education (of which there were plenty), the quantity of such women has been depleted due to their increasing educational achievement and labour force participation in general (Callister 1998, Hamon and Ingoldsby 2003, Lawton and Callister 2010, Callister and Lawton 2011a).

I have also illustrated that women of high education and/or in professional occupations are increasingly likely to partner with men with lower qualifications and/or in non-professional occupations, although some of these men may nevertheless earn high wages. Similar trends have been found in other studies in New Zealand, as well as in Australia and other countries (Callister 1998, Hamon and Ingoldsby 2003, Laugensen 2005, Lawton and Callister 2010, Callister and Lawton 2011a). As Smits, et al. (1998) suggest, partner selection is guided by preferences but constrained by the availability of potential partners with the desired attributes, such as educational level.

I argue that the proportional shifts in 'educationally similar' and 'educationally higher or lower' partner selection in New Zealand are linked to post-WWII changes in educational attainment, and the dynamic of the partnership market. Though a general improvement in educational participation has occurred in New Zealand over time, advances have been greater for women than for men.

While the proportions of partnered males in each of the educational strata have remained stable over time, increased proportions of partnered females now have school, vocational, or tertiary qualifications. This has had a flow-on effect for partner choice, particularly for women.

In the past, smaller proportions of single women in New Zealand were more highly educated than men. This meant that women with high levels of education had a relatively large pool of highly educated males from which to choose. My analysis of census data showed that while the proportion of partnered women with tertiary qualifications has increased over time, the likelihood of them choosing a partner with equal educational qualifications has declined, and consequently, more women within this group have been partnering with men of lower educational qualifications. This may be explained by the relative shortage of 'suitable' men within the partnership market. While the proportion of highly educated women in the general population has increased, the proportion of highly educated men has remained the same. Conversely, highly educated men have benefited from the increase in numbers of highly educated women in the partnership market, allowing them greater choice than in the past.

#### **8.1.8 Occupation and income difference within marriage and cohabitation**

My research shows that in 2006, occupational and income homogamy was higher in cohabitation than in marriage. However, declining but still significant proportions of married women and to a lesser extent, cohabiting women continue to have a partner of higher occupation and income. I argue that the heteronormative, gendered nature of paid work and income, motherhood and class position all influence the contrasting levels of occupational and income homogamy and hypergamy within and between marriage and cohabitation in New Zealand.

Historically, the economics of the partnership market were based on the gendered division of labour, in which women's paid work was treated as secondary and supplementary to that of males. Over recent decades, however,

women's occupational participation and incomes have increased, thus allowing them more agency within the partnership market and increasing their value as potential partners (Becker 1993, Siow, Botticini et al. 2003). While income differences within New Zealand couples remain, they have been mediated somewhat by the women's increases in labour force participation.

My analysis showed that the 'male breadwinner-female homemaker' family has become much less prevalent in New Zealand, their proportion decreasing by more than half between 1981 and 2006. By 2006, 66.0 percent of married women and more than 80 percent of cohabiting women in paid employment, worked full-time. My research also showed that in 2006, 59 percent of married women and 46 percent of cohabiting women in paid employment were mothers (Statistics New Zealand Microdata 2011). In contrast, almost all partnered men in this period were in the full-time workforce and stayed in fulltime work after childbirth. Clearly, partnered women are less likely than partnered males to work full-time, as many women remain in, or move in and out of, part-time gendered jobs of medium to low status (Statistics New Zealand 1998). While employment and earning power for women have improved, recent Time Use surveys conducted in New Zealand have shown that gendered differences in household production, relationship politics, and household economies of many partnerships are slow to change (Statistics New Zealand 2011c).

As it is in many countries, paid work remains gendered in New Zealand. Occupations are formally ranked by status and many remain segregated by gender (Else and Bishop 2003, Briar 2004, Blackburn and Jarman 2005, Booth and Leigh 2010). In many instances, female centred occupations garner less income and/or status than male occupations of similar skills and responsibilities (Advisory Committee on Equal Opportunities for Women and Men 2009). My research showed that many New Zealand women continue to work in nurturing, care and service jobs. These jobs are deemed by society as logical extensions of their 'female' abilities. Women's jobs regularly have links to domestic tasks, the supposedly 'natural' attributes of females, and are as such paid less than 'male orientated' occupations (Aronson and Neysmith 1996).

The structural and ideological justifications of gendered difference within the world of paid work reproduce economic constraints on women's lives. These constraints influence women's mate selection criteria, particularly in terms of future financial security, and more so if children are planned or already present. Women typically withdraw from the labour market at various life stages for childbirth, childcare and eldercare responsibilities (De Vaus 2004a).

My research showed that in 2006, partnered women in New Zealand between the ages of 20 and 45 years, (woman's prime childbearing period) are less likely to work full time and earned a lower percentage of the family income than did women younger or older than them. Importantly, greater proportions of cohabiting women worked full time and earn a greater proportion of the family income than married women did at most life stages (Statistics New Zealand Microdata 2011, Statistics New Zealand 2011k). In 2012, approximately three quarters of the part-time workforce in New Zealand were females, a weighty proportion of those were mothers and that there was evidence of the "child penalty effect" (See Waldfogel 1997, Budig and England 2001, Baker 2010c).

Large proportions of women in the 1981–2006 period continued to choose partners with higher incomes, occupations and educational qualifications. In 2006, partnered women were almost twice as likely to have a job of lesser status than their partner's as they were to have an occupation of equal status to them. Given that the average female wage in New Zealand remains lower than the male wage, many females benefit financially from partnering upward occupationally.

Nevertheless, partnering upward potentially places women at risk of economic inequality and dependency on their partners (Sorensen and McLanahan 1989). While many partnerships begin as materially (and symbolically) 'unequal', others become this way over time. Motherhood, unemployment, differing career developments, childbirth, childcare and eldercare duties often mean a reduction in labour force participation, occupational status and personal

income for partnered women, effectively transforming a partnership of relatively equal economic power to one of differential power.

Society still condones, but masks with ideology, the trading of greater earning potential, status, and physical protection by males for lesser earning capacity, youth, physical beauty, fertility, nurturing and homemaking skills, femininity and femaleness, love, sex, respect, companionship, commitment and emotional support by women (Becker 1993, Sprecher 1998, Rosenfeld 2005, Huppatz 2009). This trading of attributes, skills and abilities, according to Becker (1974), creates a partnership based on cooperation and egalitarianism rather than one of difference and/or conflict. Of course, Becker's economic model of the family unit is one that is classist, gender unequal and exploitative of women's labour. While a declining proportion of marriages in New Zealand were male breadwinner-female homemaker (13.7 percent) in 2006, the majority of them (55.5 percent) were dual earner. However, partnered women are more likely to work part time and earn less than their partner. In many of these marriages, women do a greater share of domestic tasks than does their partner (Statistics New Zealand Microdata 2011, Statistics New Zealand 2011c).

As I demonstrated in Chapter Seven, in 2006, workforce participation and levels of income remained typically different for partnered men and women in New Zealand. This is partly a product of the dynamic relationship of the gendered differences in paid work and wages. Importantly these phenomena were more prevalent for married than for cohabiting females. In 2006, cohabiting females earned a greater proportion of the median household income (44 percent) than married women (39 percent). While the extent of the income gap between partners is certainly influenced by their occupation type and individual income levels, labour force participation levels and fertility rates may better explain the overall income patterns within heterosexual partnerships.

My research showed that between the ages of 25 and 45, the prime fertility period for females, cohabiting women regularly earned a greater proportion of the household income than married women did. At age 25, cohabiting females

earned 46 percent of the household income, compared to 41.5 percent for married women. At age 35, cohabiting women earned 42 percent compared to 38 percent, and at age 45, cohabiting women earned 42 percent of the household income compared to 40 percent for married women. These differences in earnings between married and cohabiting can be correlated to the married women having more (dependent and independent) children than cohabiting women. This constrains married women's availability for paid work. Typically, married women are less likely to work full time and more likely to work part time than cohabiting women are, which limits how much married women may earn. Married women then are more likely to be in economically hypergamic partnerships than are cohabiting women and are therefore more reliant on their husband's income. This imbalance in earning power allows males greater influence in the redistribution of family income and decision-making as in does in partnerships where females earn more than males (Fleming, Taiapa et al. 1997, Woolley 2000).

I have further shown that a woman's occupation type has a strong bearing on her personal income level and the income gap between her and her partner. The size of the income gap differs among occupational groups, being wider for those in middle status jobs than for those in high and low status jobs. It follows that a woman's occupation type influences whom she will marry or cohabit with (in terms of their occupation), and the width of the income gap within their partnership.

Typically, there are correlations between a person's level of education, occupation type, and socioeconomic status. Furthermore highly educated women are the most likely (of all women) to have a partner of equal education (Statistics New Zealand Microdata 2011, Milne, Byun et al. 2012). Given that links can be made among an individual's occupation type, level of income, age, and socioeconomic status, it can be argued that class homogamy is present in New Zealand society (Milne, Byun et al. 2012).

It is of no surprise that my analysis showed that a large proportion of women in professional occupations had a partner of equal or similar occupation status and/or salary. This tendency for homogamous marriages among professionals

has also been found in Britain, Switzerland and other Western countries (Schumacher and Lorenzetti 2005, Bottero, Lambert et al. 2009). Correspondingly, my research established that in all time periods of this study, the average income gap within professional couples was the smallest of all occupational groups.

While occupational homogamy between partners does reduce the income gap, this does not fully explain why the gap is smallest for professional couples. My research showed that large proportions of partnered female workers in other occupations were also in occupationally homogamous partnerships but had (on average) greater income gaps with their partners than professional women did. The income gap may be smaller for professional couples because professional women are more likely to work full-time than are women employed in more gendered occupations.

Professional women are also more likely to delay childbirth because of the extended time they have spent in education and career development. Because of their capacity to pay for childcare, they are also more able to return to full-time work soon after childbirth, an option less available to mothers from other occupational groups. While motherhood and childcare may have minimal effects on the earning capacity of some professionals, they can change and constrain the labour force participation, occupation type, and income levels of many other women (Craig 2006). That considered, many OECD countries (including New Zealand) offer relatively small childcare subsidies for low income families to encourage women back into paid work (Jaumotte 2003).

### **8.1.9 Motherhood, paid work and income disparities**

Nearly five decades ago it was usual for childbirth and childrearing to occur within marriage. Especially in New Zealand, most mothers stayed home and looked after the children while fathers went out to work (Baker 2010a). It can be argued that women in New Zealand and other similar countries have increased their education, labour force participation, and hence their economic power within partnerships (Winkler 1998). The accumulation of these capitals and skills has changed women's experiences of singlehood, marriage and cohabitation. Increasing proportions of women 'want it all' (Hoffnung 2004).

It follows that the subjective social and economic experiences of motherhood have changed. For some women, the desire for self-fulfilment and realisation of educational and occupational capabilities plus external economic pressures are in conflict with the real and perceived responsibilities of home and childcare (Uttal 1996, Guendouzi 2006, Craig 2007).

For ideological and material reasons, the male breadwinner-female homemaker model marriage is becoming less prevalent, being supplanted by dual income partnerships. For many partnered mothers, returning to work is now an economic necessity. Recent fluctuations in world economics have meant that dual incomes are (usually) necessary for a family's economic sustainability and/or the maintenance of its lifestyle. That notwithstanding my research (shown in Chapter Six) has established that dual earner partnerships do not necessarily mean equal labour force participation, equal status occupations or equal earnings between partnered males and females. On average, male partners still contribute more to the family income than do females.

Arguably, motherhood, child dependency, type of paid work, and to a lesser extent partnership type continue to have significant influences on paid and unpaid labour for women in the 21<sup>st</sup> century. Paid labour is at once a path to relative autonomy for mothers and partnered women and (typically) the first half of a double shift of paid and unpaid labour (Hochschild and Machung 1989, Esping-Andersen, Boertien et al. 2013). In the 2009/2010 period, New Zealand females spent 65 percent of their time in unpaid productive activities<sup>28</sup> that included housework, care of family, purchasing household goods and services, and unpaid community work. In contrast, males spent 63 percent of their productive time in paid work. Males spent an average of 8.3 hours per day in paid employment while females spent 6.8 hours (Statistics New Zealand 2011c: 5).

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<sup>28</sup> Productive activities include labour force activities, household work, child and family care, purchasing goods and services, community services, and all other types of unpaid work. Non-productive activities are for personal benefit only, and include education and training, personal care, and free-time activities. Statistics New Zealand (2011c). Time Use Survey: 2009/10. Statistics New Zealand. Wellington.

Employed mothers with dependent children will tend to suffer a ‘child penalty’ or ‘family gap’ in wages. Put simply, they will typically earn less than women without children (Felfe 2006, Baker 2010c). In addition, women and mothers in New Zealand, Australia, and Canada regularly work part-time or full-time for pay and then do a large percentage of the household tasks and childcare (Conway 2003, Pocock 2003, Callister and Singley 2004, Baxter, Gray et al. 2007, Chen, Conconi et al. 2007, Chesters and Baxter 2009, Statistics New Zealand 2011c).

Domínguez-Folguera’s (2013) study of five European countries showed that cohabitations had a more egalitarian division of labour than marriages, but levels varied between countries. Baxter’s (2000) and Baxter, et al.’s (2010) Australian research also demonstrated that the division and nature of labour in the home was not only gendered but varied with partnership type. Males in cohabiting partnerships were likely to do a greater proportion of inside tasks than those that were married. This is likely because cohabiting males are usually younger and childless and may be less conventional than married males in their attitude toward the division of labour (Elizabeth 2000). However, unpaid labour inside the home typically remains women’s work while property maintenance and outside tasks are usually the responsibility of men (Baxter, Haynes et al. 2010).

Motherhood and childcare have transforming effects on women’s lives. Among other things, they influence the dynamics of social exchange within partnerships and the division of labour in the private and public spheres. In New Zealand, women remain the primary caregivers in children’s lives (Fursman and Callister 2009). In Chapter Six of this thesis, I demonstrated that ‘gendered income differences’ within marriage and cohabitations fluctuated over the family life cycle, increasing and peaking during women’s prime fertility years. Arguably, these oscillations in women’s income are related to the ebbs and flows of women’s paid employment and occupational changes, which are in turn linked to women’s childbirth, childcare and eldercare duties.

In 2006, approximately 93 percent of children were born to women in the 20-44 age bracket (Statistics New Zealand 2011k). My research showed that

during this life stage, the average personal income of married women dropped, essentially widening the gender pay gap. This increased inequity in general remains until married women reach their early 50s. Economic equity comes closest again when both partners reach retirement age. At this point, women have few childcare duties (if any), more secure earnings and similar levels of labour force participation to their male partners. While cohabiting women also experience an increased gender pay gap during their prime fertility years, it is consistently less than for married women. This difference, it can be argued, is linked to the cohabiting population having fewer children and greater proportions of women in paid work than the married population (Statistics New Zealand Microdata 2011).

While some new mothers return to their original jobs in a full- or part-time capacity, others will take new jobs of lower status and/or less pay that allow greater time flexibility (Baxter 2005, 2008). My analysis of the New Zealand census data showed that of all working mothers in New Zealand in 2006, those with 'dependent children only' were the most likely to work part-time. In contrast, those with 'adult children only' were the most likely to work full-time. Previous New Zealand and Australian research supports these findings (Mumford and Parera-Nicolau 2003, Johnston 2005, Baxter, Gray et al. 2007, Baxter 2008).

The above research further found that mothers' level of paid employment was constrained by occupation type, amount of time spent in paid work prior to childbirth, number of children, and children's ages. Further research suggests that the age of the youngest dependent child, combined with the availability of affordable and adequate childcare, and work experience, have significant effects on a mother's labour force participation and salary (Baxter 2005, Dwyer 2006, Gray and Baxter 2011).

Gender inequity in paid employment and earning power can influence financial decision making within a partnership. A general rule is that the highest earner will hold greater influence in the decision-making processes within a family, particularly in financial decisions (Fleming, Taiapa et al. 1997, Woolley 2000). Income pooling and its redistribution may also vary by ethnicity and family

type in New Zealand (Fleming, Taiapa et al. 1997, Baker 2010a). Alternatively, couples will haggle over how they want the family or pooled income to be spent (Woolley 2000). Baker (2010a) argues that income pooling is less prevalent in British and New Zealand cohabitations than it is in marriages. Cohabiting women are more likely to have their own incomes and bank accounts than those who are married. This practice allows cohabiting females greater economic and symbolic independence from their partners (Winkler 1998, Elizabeth 2001).

## **8.2 Conclusions, implications, and social policy**

Coontz (2004) argued that western society had seen a historical transformation of marriage. My research, I argue has shown we have seen a transformation of not only couplehood and families, but also the pathways that lead to them. No longer is marriage the only socially and legally sanctioned site for intimate partnerships and the raising of children. Non-marital cohabitation is also one of multiple ways of organising adult life and family. To some degree, the thesis confirms popular academic discussions about the conservative nature of marriage and the heteronormative gender(ed) structures/roles that continue within them.

The thesis research results also agree with literature that suggests cohabitation is less conservative than marriage. Traditionally, marriages in New Zealand have followed more closely patriarchal norms of the division of labour. More recently, cohabitation has been seen as more gender-egalitarian, and can be the space of greater agency for females (Smock, Casper et al. 2008). Cohabiting women remain (in material terms at least) better off than those who are married as they are more likely to work full time and earn, on average, a greater proportion of the family income (than married women do). That considered, male breadwinner, female-homemaker couples, are relatively rare in both partnership types. Yet, paid work and income remains gendered. My research shows that despite increases in paid work and wages equity for all partnered women, males continue to contribute a larger proportion of the family income.

Cohabitation is now one of multiple sites of family that may transition to marriage, to subsequent cohabitations or to singlehood that can occur multiple times in a life journey. Cohabitation and its fluid relationship with marriage and family is an important part of society. Rather than understanding the social formations as separate entities we need to better understand symbiotic relationship between them and the transition process.

Importantly, Buchler, Baxter et al. (2009), argue that cohabitation is becoming increasingly diverse in its demographic makeup necessitating the need for more nuanced data collection and analysis. While taking on some of the characteristics of legal marriage, cohabitation continues to evolve as a social institution. As Heuveline and Timberlake (2004) argue, cohabitation now has (or perhaps has always had) multiple purposes and meanings. In addition, significant proportions of the population cohabit at some point in their life, and the age demographic of cohabitation has widened significantly over the decades. Given these diversities or heterogeneity in forms and purpose, and their relation to the forming of families and the raising and socialisation of children, greater attention is needed from social policymakers.

The traditional, linear pathways to family formation have shifted over time. Both males and females may move in and out of singlehood, the partnership market, cohabitation, marriage, separation, widowhood, and divorce, multiple times over their life journey. These various life stages/episodes affect both individual statuses and material differences within partnerships – sometimes in ways directly related to the differences in social and economic statuses of the partners.

The gendered nature of paid and unpaid work and occupations in New Zealand remains apparent in both partnership types (See Statistics New Zealand Microdata 2011, Statistics New Zealand 2011c: 5). While having both partners in paid work has been a historical constant for working and lower class families, increasing proportions of middle and upper class families are now dual-earner. More women are in paid work: while for some it is for the realisation of educational potential, for most it is due to the economic pressures of mortgages, and consumption.

Proportions of occupational and educational homogamy differ within marriage and cohabitation, but are also influenced by socioeconomic status. The occupational and educational elite in particular are more homogamous than other groups. Levels of homogamy, partnering upward, and partnering downward differ in first marriages and remarriages. While no data is available to measure changing levels of homogamy in sequential cohabitations (or from cohabitations to marriage) at this time, my research shows that it varies more greatly across the life stage than it does for the married population.

Levels of paid work and occupation types often fluctuate over women's life courses, particularly when dependent children are present. The achievements of partnered women, particularly those who are married, are still secondary in status to those of men, and are less likely to be fully realised (by women) for the sake of the family.

While mate selection remains couched in romantic love, it is also the result of strategic decision-making and/or negotiations. An individual's 'possibilities' of partner selection, however, are dependent on their life stage, educational levels, occupational group, and partnership type. Levels of homogamy and partnering upward are reflected in this way. Rosenfeld (2005), for example, argues that persons with high levels of education, occupation, or socioeconomic status (among other criteria), are the most desirable on the partnership market, and will generally end up with partners of similar attributes.

The possibility of educational homogamy/partnering upward for women has become increasingly limited, brought on by greater proportional increases in educational achievement for women than for men over the past decades (Lawton and Callister 2010). It can be argued that enduring financial inequalities are reproduced within an aggregate of ideological and structural formations. The socioeconomic strata (or class system) and heteronormativity are reproduced through partner selection in New Zealand. As my research shows, the occupational and economic elite and those in the lower class positions are much more likely to partner homogamously than the middle

classes. Class position and gender ideologies with their inherent inequalities and advantages are reproduced as normative within family units .

Gender and class inequalities and bounded agency for individuals will remain as long as learnt criteria or habituses of mate selection linger. The great hope of cohabitation as a social transformer may have lost some steam just as the various contested ideologies within feminist politics have. Assuming that labour force participation and occupation type remain gendered and unevenly rewarded, the economic but still gendered logics of public and private sphere work will impede true equity between the sexes.

Giddens (1997) argues however that we can be hopeful, suggesting that modern marriage has taken on some/many of the 'equitable' characteristics found in cohabitation. Perhaps these changes in social exchange within cohabitation will result in a different model of marriage, where gender equity might improve. It can be also argued that the dynamics of social exchange processes have evolved within the partnership unit. Women have seen increasing occupational, economic, and educational capitals in the past decades. In essence this has increased agency for partnered women in the negotiating process, and decision making within the everyday lives of families.

The thesis has shown that regardless of occupation type, cohabiting women earn a greater proportion of the household income over their lifespan than do married women. While dual career families are now common arrangements in New Zealand than male breadwinner female-homemaker couples, the former are even more common in cohabitation than in marriage, whether driven by economic necessity, ideological position, or personal choice. Gender role differences continue in both marriage and cohabitation. It can be argued, however, that women may retain greater economic and personal agency within cohabitation as they are more likely to work full time and have greater control over their wages/income than married women (Elizabeth 2001, Smock, Casper et al. 2008, Statistics New Zealand Microdata 2011). However, as my thesis has shown, even in cohabitation, the presence of children and child dependency can reintroduce the heteronormative, gendered division of labour in New Zealand families. Policymakers should be concerned about the

equitable access of assistance to these evolving new family formations and the emerging/increasing proportion of the older female population who cohabit rather than marry following divorce.

In conclusion, economic and sociocultural changes over time have changed the demographic shapes of partnerships/families in New Zealand. Some women, (more than others) have increased in educational, occupational, and ideological agency and have greater choice in partner selection than in the past (albeit within the constraints of the partnership market). That considered, social policy makers need to be aware of the transitional, multidimensional nature of cohabitation. Social policy often conflates married and cohabiting families. Evidence in this thesis has shown that marriage and cohabitation contain contrasting economic and social status differences between males and females, and that these differences are mediated by the social class positions of families.

When I reflected on my own family situation in the opening anecdote in Chapter One, I asked how mate selection and intimate partnerships differ today than when my mother and father married in 1949. How are marriages and cohabitations different today to when my five sisters cohabited and married and or divorced in the 1970s, 1980s and 1990s? The short answer is that the social meanings and functions of marriage and cohabitation have both changed over the decades, but gendered differences remain in many partnerships. Furthermore, social class position continues to influence who partners with whom.

This thesis has shown that while partner selection in marriage has remained relatively conservative over the past decades, partner selection in cohabitation has changed considerably. Wider discrepancies in levels of education, occupations, labour force participation, age, and salaries and income (between partners) are more typical in the cohabiting population than in the married population. Cohabitation has become more materially heterogeneous in partner selection over time.

The social and economic meaning of marriage and the gender relationships within have also changed over the decades. The companionate model of the

partnerships necessary for the functioning of the male breadwinner-female homemaker family is on the decline in western society. Over the past decades, we have seen the emergence of individualised marriages and cohabitations (Secombe and Warner 2003, Cherlin 2005). Giddens (1997) argues that individuals within these relationships are more likely to evaluate their own levels of material and emotional satisfaction than people had done in the companionate and transactional marriages and cohabitations of the past. (White and Klein 2002). As Giddens (1997) might suggest, marriage has inherited some of the ideological/individualistic characteristics of cohabitations.

Cohabitation has become the prevalent path to marriage for heterosexual males and females in many western countries. Significant proportions of people in Australia, New Zealand, Canada, Sweden, the United States and other liberal countries experience cohabitation, whether or not they eventually marry (De Vaus, Qu et al. 2003a, Brown 2005, Smock, Manning et al. 2006, Guzzo 2008, Thomson and Bernhardt 2010, Baker 2010a). Heuveline and Timberlake (2004) argue that 60.5 percent of cohabiting women ages 15–44 years in New Zealand will separate before marriage. This separation rate was second only to Canada's 63.9 percent, in their consideration of nine European countries, the United States, Canada, and New Zealand (Heuveline and Timberlake 2004).

Hixson (2008) proposes that cohabitating partnerships are neither ideologically, functionally nor structurally homogenous, nor are they an homogenous experience, especially when compared to marriage. Cohabitation was once understood a practice of youth before marriage but my research shows that increasing proportions of the middle aged and older population now live in intimate partnerships outside of marriage. Furthermore, my research shows that cohabitation exhibits more discrepancies in age difference, levels of education, occupations, levels of paid work and income between partners than does the married population. It can be argued that the heterogeneity in the above characteristics is linked to the multiple forms of cohabitation that we now know to exist.

It has been argued that few young people make deliberate decisions to cohabit (Lindsay 2000, Manning and Smock 2005, Rhoades, Stanley et al. 2009, Gold 2012). Nevertheless, moving in together, regardless of conscious reflection on the act by individuals, does mean something for those involved. Reasons, motivations and decisions are always present in social interactions. Therefore, the level of commitment within a cohabitation arrangement can differ dependent on the purpose of the partnership itself (Heuveline and Timberlake 2004).

Cohabitation can act as a 'prelude to marriage': it can be a period in which relationships are trialled because people are concerned about high divorce rates. Choices to cohabit before marriage can also be affected by the availability of reliable contraception and/or affordable housing. If children are born in societies that frown on children born out of wedlock, these relationships are likely short term and will be either converted into legal marriage or terminated (Heuveline and Timberlake 2004). Importantly, the fundamental purpose of cohabitation differs between men and women. For cohabiting women, the ultimate goal of living together is typically marriage, but this is less so for cohabiting males (Smock, Manning et al. 2006).

Conception and pregnancy can influence a partnership's purpose, future, and status (See Rindfuss and VandenHeuvel 1990, Manning 1993, Smock 2000, Kiernan 2001, Casper and Bianchi 2002). In 2011, 48 percent of births in New Zealand were ex-nuptial. A significant number of these births occurred within cohabiting partnerships. Heuveline and Timberlake (2004) suggest that 'marginal cohabitations' take place within countries where cohabitation is frowned on for cultural reasons, and official sanctions may apply. Marginal cohabiters are likely to be short term and relatively rare in New Zealand given the small percentages of highly conservative/fundamentalist groups.

Cohabitation can also function as a stage in the marriage process. In this ideal type, couples may decide to have a child but are not concerned unduly about the timing of the childbearing – marriage process. The proportions of couples within this ideal type may increase as cultural sanctions against out of wedlock births are further eroded. Others may cohabit as an alternative to being single.

This type of cohabitation includes couples who want to live together during the courtship period but want to postpone starting a family.

Others may choose cohabitation as an alternative to marriage. Couples within this ideal type who choose to cohabit and raise a family simultaneously outside legal marriage (for ideological reasons). Other couples will raise families following the seemingly apolitical, but heteronormative ideologies present in many legal marriages (Elizabeth 1997, Heuveline and Timberlake 2004). This form of cohabitation in particular is chosen by some cohabiters as a political, ideological and material resistance to the patriarchal, hegemonic ideologies of gendered inequalities located within legal marriages (Crawford 2004, Barlow and Smithson 2010). These men and women will have a stronger commitment to cohabitation than others, believing in its socially transformative possibilities. Some long term cohabiters may be included in this group (See Kingdom 1996, Manting 1996, Elizabeth 2000, 2003, Willetts 2003, Cunningham 2005, Stavrova, Fetchenhauer et al. 2012). A further cohabitation type is 'indistinguishable from marriage'. This model is similar to the 'alternative to marriage' model as it is about creating a family, but is not built on an ideological (or other) resistance to formal marriage. (Heuveline and Timberlake 2004).

While both cohabitation and marriage are relational contexts of interdependency, cooperation, conflict and negotiations between two people, these interactions and social exchanges between males and females differ in terms of fairness and power within the partnership types described above. Typically, gendered inequality exists in both partnership types but to a lesser degree in cohabitation, seemingly based on structural factors. Because each partnership type will have differing goals and purposes, the dynamics of power will be contingent on (among other things) socio-political agendas, socioeconomic constraints, individual habituses, life stages of partners, historical location and the presence of children.

In both partnership types, men and women are (culturally) expected to invest time into skill development in either paid work and/or private sphere labour. Core to this arrangement is the socially accepted gendered division of labour.

Mutual (gendered) interdependence develops from this specialisation of labour arrangement (Hamplová 2002: 772). Degrees of interdependency and levels of social exchange, however, may differ between partnership types. Bumpass, Sweet et al's (1991) research found that one of the net benefits of cohabitation over marriage was more flexibility in terms of work. Ressler and Waters (1995) argued that this desire for flexibility, especially for females, was linked to increases in labour force participation and general acceptance of women in the workplace. This 'desire', among other things, has contributed to the proportional increases in cohabitation, and the decline in proportions of new marriages within the partnered population (See Becker 1981, Ressler and Waters 1995).

While increases in labour force participation for females are certainly influential, power dynamics within both partnership types are likely to have shifted because of other factors, which, in harmony, have influenced increases in cohabitation rates themselves. These include: increasing secularisation; changes to the meaning and social function of marriage; risk reduction; the separation of sex and reproduction; and the cultural significance of kin (Coast 2009: 2).

In conclusion, differences between cohabitation and legal marriage are multiple and complex in both material and ideological ways. While some individuals perceive cohabitation as a space for creating their own 'biographies of love' outside of social norms, (although cohabitation is becoming more normal every year), many couples will shift from cohabitation to a legal marriage to create a secure environment for children. Other reasons for a transition from cohabitation to marriage include a shift from private to public commitment, developing a firm economic and legal basis for the relationship, traditional or legal orientation, improving the relationship quality, or simply a celebration or party with those close to them (Baker and Elizabeth 2013a).

### **8.3 Limitations of the thesis and future research**

This thesis has relied on quantitative data to demonstrate changing patterns of mate selection in New Zealand. The breadth of the thesis was constrained by

the types of variables contained within the New Zealand Censuses. These large-scale data sets, by default, tell us a moderate amount about many people – in this instance the entire population of New Zealand over a twenty-five-year period.

While all information was taken from self-completion questionnaires, and tells us about changes to the acquired statuses of individuals in intimate partnerships in the New Zealand population over time, the data sets do not include information about negotiation and compromise, or power, intent, and meaning, which can all be important within these partnerships. Nor do they include data on the personal motivations, emotions, or conscious/subconscious evaluations involved in partner selections. Further, the data cannot show how differences in material resources and practices, such as income, household labour, and childcare, are managed within partnerships.

The limitations in my data were offset somewhat by the inclusion and discussion of other national and international literature and research. Furthermore, my data allowed me to interpret my findings in a meaningful way. In essence, the data told me what was occurring, how it was changing over time, and what material differences existed within and between the partnership types. Multiple theoretical perspectives and other qualitative studies allowed me to explain these differences, who would benefit from them and who would not. The thesis was informed by structural theory, and was structural in design. It gave structural answers. The results, while significant in themselves, also generated many questions that would lend themselves to further qualitative and quantitative research.

My thesis results have shown that many single women now have more educational and occupational capital with which to bargain in the partnership market than in the past. They have extended their earning potential by delaying first childbirth, or forgoing reproduction entirely (Simpson 2006, Department of the Prime Minister and Cabinet 2008, Boddington and Didham 2009). Further research is needed to understand how New Zealand women resolve their new potentials and expectations with the possibilities of cooperation, and dependencies and inequalities inherent within marriages and cohabitations.

Future research could ask men and women for their perceptions of their place, value and opportunities within the evolved partnership market. It could investigate how people in differing socioeconomic positions subjectively evaluate their potential within a partnership market and determine their expectations of what constitutes a suitable partner. It would be useful to know to what degree emotions and rational decisions influence partner selection in the present day. How much do commitment, security, forward planning and personal freedom influence the mate selection process? If so, do these factors differ between the two partnership types and/or by gender? One strand of this research would be to investigate why a large proportion of New Zealand women continue to choose partners of higher education and/or occupation, comparing the results between the two partnership types.

A second strand of investigation would be to replicate my thesis research on an international level. I envision a comparative analysis of occupational and educational homogamy and partnering upward in marriage and cohabitation in Australia, Canada, Great Britain, Ireland and New Zealand.

A third research project could be to investigate the mate selection practices of the professional occupations/educational elite in New Zealand in more depth. While this thesis has shown high levels of occupational and educational homogamy within this group, a more highly gradational examination of the jobs of partnered men and women, I argue, would show that significant proportions of married and cohabiting women in this group are still partnering upwards (See Baker 2012a, 2012b). This research could investigate the gender gap within academia in New Zealand. Using a qualifications/promotions schema spanning the undergraduate to full professorship continuum, the research could examine homogamy and hypergamy levels within and between the differing sciences and disciplines. Where possible, the research would use 'couple linked' data to measure occupational/educational differences changes to individual couples over time.

Because of the 'population snapshot/time series' nature of census data, the investigation of transition patterns between singlehood, the partnership market,

cohabitation, marriage, separation, divorce, remarriage, and widowhood over lifespans was not possible in this thesis. Little large-scale empirical information exists concerning the durations and frequencies of cohabitations in New Zealand. A very recent cooperation between Statistics New Zealand and Dr Barry Milne (2012) of COMPASS at the University of Auckland may make the above research possible (Milne, Byun et al. 2012). Statistics New Zealand has created a data set that contains all variables used in this thesis (about individuals and their partners) linked over time across census periods (Didham, Nissen et al. 2014).

A fourth research project therefore, would use the above data set to further investigate differences in homogamy levels between cohabiting and married couples. In essence, it would test the double selection hypothesis and see its relevance over the lifespans of individuals (Schwartz 2010). It would also investigate the hypothesis using differing cohorts across time to test for a period effect.

*APPENDICES*

**Appendix One: Comparability of census variables 1981–2006**

<b>Variable present or info imputed</b>	<b>1981</b>	<b>1986</b>	<b>1991</b>	<b>1996</b>	<b>2001</b>	<b>2006</b>	<b>Comparability</b>
Age	Y	Y	Y	Y	Y	Y	Total
Sex	Y	Y	Y	Y	Y	Y	Total
Education	Y	Y	Y	Y	Y	Y	Good
Marriage	Y	Y	Y	Y	Y	Y	Total
De facto	Y	Y	Y	Y	Y	Y	High
Ethnicity	Y	Y	Y	Y	Y	Y	Poor
Religion	Y	Y	Y	Y	Y	Y	High
Occupation	Y	Y	Y	Y	Y	Y	High/Average
Employment	Y	Y	Y	Y	Y	Y	Total
Labour force status	Y	Y	Y	Y	Y	Y	Total

Adapted from (Milligan, Fabian et al. 2006).

## Appendix Two: SAS programme code for creating data sets

```
*****;
* (2006 example)
Project: Marriage and Cohabiting patterns: Stephen McTaggart;
*
* SAS code Program: 2006 Census
*
* Adapted from Lyndon Walker - 10 December 2010
*
* External Macros: FWWPmacros.sas
* Note: Ethnicity variables were constructed but not used
* for this thesis
*****;

*****Macros*****;
%include 'F:/FWWPmacros.sas';
%include 'F:/additional_formats.sas';
%include 'F:/MoSC Data Sets/MOSC_2006_Formats.sas';
%each_session(action=A);
libname Stephen 'F:\stephen_data';

*****Get each data set*****;
data mosc06sm;
set ro.mosc_2006_final_dep;

* Adults living in residence;
where recode_family_role_code not in ('41','42')
    and dwell_rec_type_code = '1' and recode_family_grp_code ne '55'
    and individual_rec_type_code in ('1','3','5');

* Mixed ethnicity indicator;
format mixedeth $mixedeth.;
if ethnic_rand6_grp2_code > "90000" then mixedeth = '0';
else mixedeth = '1';

* Ethnicity as per Stats NZ protocol;
length ethnicity $2;

* 1 = Euro only;
if substr(ethnic_rand6_grp1_code,1,1) = '1' and mixedeth='0' then
    ethnicity = '01';
else if substr(ethnic_rand6_grp1_code,1,1) = '1'
    and substr(ethnic_rand6_grp2_code,1,1) = '1'
    and ethnic_rand6_grp3_code > '90000'
    and ethnic_rand6_grp4_code > '90000'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity='01';
else if substr(ethnic_rand6_grp1_code,1,1) = '1'
    and substr(ethnic_rand6_grp2_code,1,1) = '1'
    and substr(ethnic_rand6_grp3_code,1,1)
    and ethnic_rand6_grp4_code > '90000'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity='01';
else if substr(ethnic_rand6_grp1_code,1,1) = '1'
    and substr(ethnic_rand6_grp2_code,1,1) = '1'
    and substr(ethnic_rand6_grp3_code,1,1)='1'
    and substr(ethnic_rand6_grp4_code,1,1)='1'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity='01';
else if substr(ethnic_rand6_grp1_code,1,1) = '1'
    and substr(ethnic_rand6_grp2_code,1,1) = '1'
```

```

    and substr(ethnic_rand6_grp3_code,1,1)='1'
    and substr(ethnic_rand6_grp4_code,1,1)='1'
    and substr(ethnic_rand6_grp5_code,1,1)='1'
    and ethnic_rand6_grp6_code > '90000'
    then ethnicity='01';
else if substr(ethnic_rand6_grp1_code,1,1) = '1'
    and substr(ethnic_rand6_grp2_code,1,1) = '1'
    and substr(ethnic_rand6_grp3_code,1,1)='1'
    and substr(ethnic_rand6_grp4_code,1,1)='1'
    and substr(ethnic_rand6_grp5_code,1,1)='1'
    and substr(ethnic_rand6_grp6_code,1,1)='1' then ethnicity='01';
else if ethnic_rand6_grp1_code = '61118' then ethnicity = '01';

* 2 = Māori only;
else if ethnic_rand6_grp1_code = '21111' and mixedeth='0'
    then ethnicity = '02';
else if ethnic_rand6_grp1_code = '21111'
    and ethnic_rand6_grp2_code = '21111'
    and ethnic_rand6_grp3_code > '90000'
    and ethnic_rand6_grp4_code > '90000'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity='02';
else if ethnic_rand6_grp1_code = '21111'
    and ethnic_rand6_grp2_code = '21111'
    and ethnic_rand6_grp3_code = '21111'
    and ethnic_rand6_grp4_code > '90000'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity='02';
else if ethnic_rand6_grp1_code = '21111'
    and ethnic_rand6_grp2_code = '21111'
    and ethnic_rand6_grp3_code = '21111'
    and ethnic_rand6_grp4_code = '21111'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity='02';
else if ethnic_rand6_grp1_code = '21111'
    and ethnic_rand6_grp2_code = '21111'
    and ethnic_rand6_grp3_code = '21111'
    and ethnic_rand6_grp4_code = '21111'
    and ethnic_rand6_grp5_code = '21111'
    and ethnic_rand6_grp6_code > '90000' then ethnicity='02';
else if ethnic_rand6_grp1_code = '21111'
    and ethnic_rand6_grp2_code = '21111'
    and ethnic_rand6_grp3_code = '21111'
    and ethnic_rand6_grp4_code = '21111'
    and ethnic_rand6_grp5_code = '21111'
    and ethnic_rand6_grp6_code = '21111' then ethnicity='02';

* 3 = Pacific only;
else if ethnic_rand6_grp1_code >= '30000'
    and ethnic_rand6_grp1_code < '40000'
    and mixedeth='0' then ethnicity = '03';
else if (ethnic_rand6_grp1_code >= '30000'
    and ethnic_rand6_grp1_code < '40000')
    and (ethnic_rand6_grp2_code >= '30000'
    and ethnic_rand6_grp2_code < '40000')
    and ethnic_rand6_grp3_code > '90000'
    and ethnic_rand6_grp4_code > '90000'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity = '03';
else if (ethnic_rand6_grp1_code >= '30000'
    and ethnic_rand6_grp1_code < '40000')

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```

    and (ethnic_rand6_grp2_code >= '30000'
    and ethnic_rand6_grp2_code < '40000')
    and (ethnic_rand6_grp3_code >= '30000'
    and ethnic_rand6_grp3_code < '40000')
    and ethnic_rand6_grp4_code > '90000'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity = '03';
else if (ethnic_rand6_grp1_code >= '30000'
    and ethnic_rand6_grp1_code < '40000')
    and (ethnic_rand6_grp2_code >= '30000'
    and ethnic_rand6_grp2_code < '40000')
    and (ethnic_rand6_grp3_code >= '30000'
    and ethnic_rand6_grp3_code < '40000')
    and (ethnic_rand6_grp4_code >= '30000'
    and ethnic_rand6_grp4_code < '40000')
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity = '03';
else if (ethnic_rand6_grp1_code >= '30000'
    and ethnic_rand6_grp1_code < '40000')
    and (ethnic_rand6_grp2_code >= '30000'
    and ethnic_rand6_grp2_code < '40000')
    and (ethnic_rand6_grp3_code >= '30000'
    and ethnic_rand6_grp3_code < '40000')
    and (ethnic_rand6_grp4_code >= '30000'
    and ethnic_rand6_grp4_code < '40000')
    and (ethnic_rand6_grp5_code >= '30000'
    and ethnic_rand6_grp5_code < '40000')
    and ethnic_rand6_grp6_code > '90000' then ethnicity = '03';
else if (ethnic_rand6_grp1_code >= '30000'
    and ethnic_rand6_grp1_code < '40000')
    and (ethnic_rand6_grp2_code >= '30000'
    and ethnic_rand6_grp2_code < '40000')
    and (ethnic_rand6_grp3_code >= '30000'
    and ethnic_rand6_grp3_code < '40000')
    and (ethnic_rand6_grp4_code >= '30000'
    and ethnic_rand6_grp4_code < '40000')
    and (ethnic_rand6_grp5_code >= '30000'
    and ethnic_rand6_grp5_code < '40000')
    and (ethnic_rand6_grp6_code >= '30000'
    and ethnic_rand6_grp6_code < '40000') then ethnicity = '03';

* 4 = Asian only;
else if ethnic_rand6_grp1_code >= '40000'
    and ethnic_rand6_grp1_code < '50000'
    and mixedeth='0' then ethnicity = '04';
else if (ethnic_rand6_grp1_code >= '40000'
    and ethnic_rand6_grp1_code < '50000')
    and (ethnic_rand6_grp2_code >= '40000'
    and ethnic_rand6_grp2_code < '50000')
    and ethnic_rand6_grp3_code > '90000'
    and ethnic_rand6_grp4_code > '90000'
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity = '04';
else if (ethnic_rand6_grp1_code >= '40000'
    and ethnic_rand6_grp1_code < '50000')
    and (ethnic_rand6_grp2_code >= '40000'
    and ethnic_rand6_grp2_code < '50000')
    and (ethnic_rand6_grp3_code >= '40000'
    and ethnic_rand6_grp3_code < '50000')
    and ethnic_rand6_grp4_code > '90000'

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        and ethnic_rand6_grp5_code > '90000'
        and ethnic_rand6_grp6_code > '90000' then ethnicity = '04';
else if (ethnic_rand6_grp1_code >= '40000'
        and ethnic_rand6_grp1_code < '50000')
        and (ethnic_rand6_grp2_code >= '40000'
        and ethnic_rand6_grp2_code < '50000')
        and (ethnic_rand6_grp3_code >= '40000'
        and ethnic_rand6_grp3_code < '50000')
        and (ethnic_rand6_grp4_code >= '40000'
        and ethnic_rand6_grp4_code < '50000')
        and ethnic_rand6_grp5_code > '90000'
        and ethnic_rand6_grp6_code > '90000' then ethnicity = '04';
else if (ethnic_rand6_grp1_code >= '40000'
        and ethnic_rand6_grp1_code < '50000')
        and (ethnic_rand6_grp2_code >= '40000'
        and ethnic_rand6_grp2_code < '50000')
        and (ethnic_rand6_grp3_code >= '40000'
        and ethnic_rand6_grp3_code < '50000')
        and (ethnic_rand6_grp4_code >= '40000'
        and ethnic_rand6_grp4_code < '50000')
        and (ethnic_rand6_grp5_code >= '40000'
        and ethnic_rand6_grp5_code < '50000')
        and ethnic_rand6_grp6_code > '90000' then ethnicity = '04';
else if (ethnic_rand6_grp1_code >= '40000'
        and ethnic_rand6_grp1_code < '50000')
        and (ethnic_rand6_grp2_code >= '40000'
        and ethnic_rand6_grp2_code < '50000')
        and (ethnic_rand6_grp3_code >= '40000'
        and ethnic_rand6_grp3_code < '50000')
        and (ethnic_rand6_grp4_code >= '40000'
        and ethnic_rand6_grp4_code < '50000')
        and (ethnic_rand6_grp5_code >= '40000'
        and ethnic_rand6_grp5_code < '50000')
        and (ethnic_rand6_grp6_code >= '40000'
        and ethnic_rand6_grp6_code < '50000') then ethnicity = '04';

* 5 = Middle Eastern, Latin American or African (MELAA) only;
else if ethnic_rand6_grp1_code >= '50000'
        and ethnic_rand6_grp1_code < '60000'
        and mixedeth='0' then ethnicity = '05';
else if (ethnic_rand6_grp1_code >= '50000'
        and ethnic_rand6_grp1_code < '60000')
        and (ethnic_rand6_grp2_code >= '50000'
        and ethnic_rand6_grp2_code < '60000')
        and ethnic_rand6_grp3_code > '90000'
        and ethnic_rand6_grp4_code > '90000'
        and ethnic_rand6_grp5_code > '90000'
        and ethnic_rand6_grp6_code > '90000' then ethnicity = '05';
else if (ethnic_rand6_grp1_code >= '50000'
        and ethnic_rand6_grp1_code < '60000')
        and (ethnic_rand6_grp2_code >= '50000'
        and ethnic_rand6_grp2_code < '60000')
        and (ethnic_rand6_grp3_code >= '50000'
        and ethnic_rand6_grp3_code < '60000')
        and ethnic_rand6_grp4_code > '90000'
        and ethnic_rand6_grp5_code > '90000'
        and ethnic_rand6_grp6_code > '90000' then ethnicity = '05';
else if (ethnic_rand6_grp1_code >= '50000'
        and ethnic_rand6_grp1_code < '60000')
        and (ethnic_rand6_grp2_code >= '50000'
        and ethnic_rand6_grp2_code < '60000')

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```

    and (ethnic_rand6_grp3_code >= '50000'
    and ethnic_rand6_grp3_code < '60000')
    and (ethnic_rand6_grp4_code >= '50000'
    and ethnic_rand6_grp4_code < '60000')
    and ethnic_rand6_grp5_code > '90000'
    and ethnic_rand6_grp6_code > '90000' then ethnicity = '05';
else if (ethnic_rand6_grp1_code >= '50000'
    and ethnic_rand6_grp1_code < '60000')
    and (ethnic_rand6_grp2_code >= '50000'
    and ethnic_rand6_grp2_code < '60000')
    and (ethnic_rand6_grp3_code >= '50000'
    and ethnic_rand6_grp3_code < '60000')
    and (ethnic_rand6_grp4_code >= '50000'
    and ethnic_rand6_grp4_code < '60000')
    and (ethnic_rand6_grp5_code >= '50000'
    and ethnic_rand6_grp5_code < '60000')
    and ethnic_rand6_grp6_code > '90000' then ethnicity = '05';
else if (ethnic_rand6_grp1_code >= '50000'
    and ethnic_rand6_grp1_code < '60000')
    and (ethnic_rand6_grp2_code >= '50000'
    and ethnic_rand6_grp2_code < '60000')
    and (ethnic_rand6_grp3_code >= '50000'
    and ethnic_rand6_grp3_code < '60000')
    and (ethnic_rand6_grp4_code >= '50000'
    and ethnic_rand6_grp4_code < '60000')
    and (ethnic_rand6_grp5_code >= '50000'
    and ethnic_rand6_grp5_code < '60000')
    and (ethnic_rand6_grp6_code >= '50000'
    and ethnic_rand6_grp6_code < '60000') then ethnicity = '05';

* 6 = Other single ethnicity;
else if mixedeth = '0' then ethnicity = '06';

* 7 = Māori & European;
else if maori_ethnic_ind_code = '2'
    and european_ethnic_ind_code = '2' then ethnicity = '07';

* 8 = 'Māori and Pacific';
else if maori_ethnic_ind_code = '2'
    and pacific_island_ethnic_ind_code = '2' then ethnicity = '08';

* 9 = 'Pacific and European';
else if pacific_island_ethnic_ind_code = '2'
    and european_ethnic_ind_code = '2' then ethnicity = '09';

* 10 = 'Asian and European';
else if asian_ethnic_ind_code = '2'
    and european_ethnic_ind_code = '2' then ethnicity = '10';

* 11 = 'Two groups not elsewhere';
else if ethnic_rand6_grp3_code > '90000' then ethnicity = '11';

* 12 = 'Māori and Pacific and European';
else if maori_ethnic_ind_code = '2'
    and european_ethnic_ind_code = '2'
    and pacific_island_ethnic_ind_code = '2' then ethnicity = '12';

* 13 = '3 or more groups';
else if ethnic_rand6_grp3_code ^= '99999' then ethnicity = '13';

* 14 = Other;
else ethnicity = '14';
format ethnicity $ethnicity.;

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* Age codes;
age = age_code;
if age_code > '017' and age_code < '031' then age1830 = '1';
else age1830 = '0';
if age_code > '019' and age_code < '035' then age2034 = '1';
else age2034 = '0';
if age_code > '022' and age_code < '036' then age2335 = '1';
else age2335 = '0';

* Immigrant for consistency using birthplace rather than year in NZ;
* if years_in_nz_code < age_code then immigrant = '1';
* else immigrant = '0';
if birth_country_code2d = 12 then immigrant = '0';
else immigrant = '1';

* North island;
if URRegC06 < '10' then north = '1';
else if URRegC06 > '10' and URRegC06 < '20' then north = '0';

* Auckland indicator;
if URRegC06 = '02' then auckland_ind = '1';
else auckland_ind = '0';

* NZSCO99 level 1;
length nzsc0991 $2;
if nzsc099 < '200' then nzsc0991 = '01';
else if nzsc099 < '300' then nzsc0991 = '02';
else if nzsc099 < '400' then nzsc0991 = '03';
else if nzsc099 < '500' then nzsc0991 = '04';
else if nzsc099 < '600' then nzsc0991 = '05';
else if nzsc099 < '700' then nzsc0991 = '06';
else if nzsc099 < '800' then nzsc0991 = '07';
else if nzsc099 < '900' then nzsc0991 = '08';
else if nzsc099 < '950' then nzsc0991 = '09';
else nzsc0991 = '10';
format nzsc0991 $nzsc0.;
if nzsc099 => '111' and nzsc099 = < '114'
    then nzsc0992 = '11 Legislators and Administrators';
else if nzsc099 => '121' and nzsc099 = < '122'
    then nzsc0992 = '12 Corporate managers';
else if nzsc099 => '211' and nzsc099 = < '214'
    then nzsc0992 = '21 Physical Mathematical and Engineering';
else if nzsc099 => '221' and nzsc099 = < '223'
    then nzsc0992 = '22 Life Science and Health Professionals';
else if nzsc099 => '231' and nzsc099 = < '235'
    then nzsc0992 = '23 Teaching Professionals';
else if nzsc099 => '241' and nzsc099 = < '245'
    then nzsc0992 = '24 Other Professionals';
else if nzsc099 => '311' and nzsc099 = < '315'
    then nzsc0992 = '31 Physical Science and Engineering Associate';
else if nzsc099 => '321' and nzsc099 = < '323'
    then nzsc0992 = '32 Life Science and Health Associate';
else if nzsc099 => '331' and nzsc099 = < '338'
    then nzsc0992 = '33 Other Associate Professionals';
else if nzsc099 => '411' and nzsc099 = < '414'
    then nzsc0992 = '41 Office Clerks';
else if nzsc099 => '421' and nzsc099 = < '422'
    then nzsc0992 = '42 Customer Services Clerks';
else if nzsc099 => '511' and nzsc099 = < '515'
    then nzsc0992 = '51 Personal and Protective Services Workers';
else if nzsc099 => '521' and nzsc099 = < '523'
    then nzsc0992 = '52 Salespersons Demonstrators and Models';

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else if nzsc099 => '611' and nzsc099 = < '614'
    then nzsc0992 = '61 Market-Oriented Agricultural and Fishery';
else if nzsc099 => '711' and nzsc099 = < '713'
    then nzsc0992 = '71 Building Trades Workers';
else if nzsc099 => '721' and nzsc099 = < '724'
    then nzsc0992 = '72 Metal and Machinery Trades Workers';
else if nzsc099 => '731' and nzsc099 = < '733'
    then nzsc0992 = '73 Precision Trades Workers';
else if nzsc099 => '741' and nzsc099 = < '744'
    then nzsc0992 = '74 Other Craft and Related Trades Workers';
else if nzsc099 => '811' and nzsc099 = < '816'
    then nzsc0992 = '81 Industrial Plant Operators';
else if nzsc099 => '821' and nzsc099 = < '829'
    then nzsc0992 = '82 Stationary Machine Operators and Assemblers';
else if nzsc099 => '831' and nzsc099 = < '834'
    then nzsc0992 = '83 Drivers and Mobile Machinery Operators';
else if nzsc099 => '841' and nzsc099 = < '842'
    then nzsc0992 = '84 Building and related Workers';
else if nzsc099 => '911' and nzsc099 = < '916'
    then nzsc0992 = '91 Labourers and Related Elementary Service';
else if nzsc099 => '970' and nzsc099 = < '971'
    then nzsc0992 = '97 Response Unidentifiable';
else if nzsc099 => '990' and nzsc099 = < '991'
    then nzsc0992 = '99 Response Outside Scope or not stated';

* Pacific indicators;
if ethnic_rand6_grp1_code = '31111'
    or ethnic_rand6_grp2_code = '31111'
    or ethnic_rand6_grp3_code = '31111'
    or ethnic_rand6_grp4_code = '31111'
    or ethnic_rand6_grp5_code = '31111'
    or ethnic_rand6_grp6_code = '31111' then samoan_ind_code = '1';
else samoan_ind_code = '0';
if ethnic_rand6_grp1_code = '32100'
    or ethnic_rand6_grp2_code = '32100'
    or ethnic_rand6_grp3_code = '32100'
    or ethnic_rand6_grp4_code = '32100'
    or ethnic_rand6_grp5_code = '32100'
    or ethnic_rand6_grp6_code = '32100' then cook_ind_code = '1';
else cook_ind_code = '0';
if ethnic_rand6_grp1_code = '33111'
    or ethnic_rand6_grp2_code = '33111'
    or ethnic_rand6_grp3_code = '33111'
    or ethnic_rand6_grp4_code = '33111'
    or ethnic_rand6_grp5_code = '33111'
    or ethnic_rand6_grp6_code = '33111' then tongan_ind_code = '1';
else tongan_ind_code = '0';

* Prioritised ethnicity;
format prioreth $prioreth.;
if maori_ethnic_ind_code = '1' then prioreth='1';
else if pacific_island_ethnic_ind_code = '1' then prioreth='2';
else if asian_ethnic_ind_code = '1' then prioreth='3';
else if european_ethnic_ind_code = '1' then prioreth='4';
else prioreth = '5';
* Highest qualification;
length highestqual $1;
if highest_qual_code = '00' then highestqual = '1';
else if highest_qual_code in ('01', '02', '03', '04')
    then highestqual = '2';

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else if highest_qual_code in ('05','06', '07', '08', '09','10')
    then highestqual = '3';
else if highest_qual_code in ('11', '12', '13','14')
    then highestqual = '4';
else highestqual='5';
format highestqual $highestqual.;
run;

* Adding % of own ethnicity in area unit;
proc freq data = mosc06sm noprint;
table ethnicity * Id_UR_Area_Unit /out = percents06asm OUTPCT;
run;

proc sort data = mosc06sm;
by Id_UR_Area_Unit ethnicity;
run;

proc sort data = percents06asm;
by Id_UR_Area_Unit ethnicity;
run;

data stephen.mosc06sm;
merge mosc06sm percents06asm (keep = pct_col Id_UR_Area_Unit
    ethnicity);
by Id_UR_Area_Unit ethnicity;
owneth_cau = pct_col;
run;

* Adding % of own ethnicity in region;
proc freq data = stephen.mosc06sm noprint ;
table ethnicity * CNRegC06 /out = percents06bsm OUTPCT;
run;

proc sort data = stephen.mosc06sm;
by CNRegC06 ethnicity;
run;

proc sort data = percents06bsm;
by CNRegC06 ethnicity;
run;

data stephen.mosc06sm;
merge stephen.mosc06sm (drop = pct_col) percents06bsm
    (keep = pct_col CNRegC06 ethnicity);
by CNRegC06 ethnicity;
owneth_reg = pct_col;
run;

***** Match 2006 couples *****;
proc sort data = stephen.mosc06sm out = smcouples06;
by id_family;
run;

data smcouples06_A;
set smcouples06;
by id_family;
* Delete those under 16;
if age_code < '016' then delete;

* Adults who live at the residence;
where dwell_rec_type_code = '1'
    and recode_family_grp_code ne '55'
    and recode_family_grp_code ne '54'

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        and individual_rec_type_code in ('1','3','5')
        and recode_family_role_code in ('11','31');

* Delete singles;
if (first.id_family = 1 and last.id_family = 1) then delete;
run;

***** Renaming variables to create female data set *****;
data fem_couples06;
set smcouples06_A;
where sex_code = '2';
fnzsco992 = nzsco992;
fprioreth = prioreth;
fmixedeth = mixedeth;
fethnicity = ethnicity;
format fethnicity $ethnicity.;
fage1830 = age1830;
fage2034 = age2034;
fage2335 = age2335;
fimmigrant = immigrant;
fnorth = north;
fsamoan_ind_code = samoan_ind_code;
fcook_ind_code = cook_ind_code;
ftongan_ind_code = tongan_ind_code;
fnzsco991 = nzsco991;
fauckland_ind = auckland_ind;
fpct_col = pct_col;
fhighestqual = highestqual;
format fhighestqual $highestqual.;
fCNRegC06 = CNRegC06;
fCNTA06 = CNTA06;
fId_Dwell = Id_Dwell;
fId_ExtFamily = Id_ExtFamily;
fId_Family = Id_Family;
fId_Person = Id_Person;
fId_UR_Area_Unit = Id_UR_Area_Unit;
fNZDep2006 = NZDep2006;
fNZDep_score_2006 = NZ Dep_score_2006;
fSQKM = SQKM;
fURRegC06 = URRegC6;
fURTA06 = URTA06;
fage_code = age_code;
fage_monitor_code = age_monitor_code;
fanzsco2006 = anzsco2006;
fanzsic96 = anzsic96;
fanzsic2006 = anzsic2006;
fasian_ethnic_ind_code = asian_ethnic_ind_code;
fbedroom_count_code = bedroom_count_code;
fbirth_country_code2d = birth_country_code2d;
fcensus_year = census_year;
fchild_depend_code = child_depend_code;
fchild_depend_family_type_code = child_depend_family_type_code;
fdwell_rec_type_code = dwell_rec_type_code;
fdwell_substitute_code = dwell_substitute_code;
fdwell_type_code = dwell_type_code;
femp_status_code = emp_status_code;
fethnic_rand6_grp1_code = ethnic_rand6_grp1_code;
fethnic_rand6_grp2_code = ethnic_rand6_grp2_code;
fethnic_rand6_grp3_code = ethnic_rand6_grp3_code;
fethnic_rand6_grp4_code = ethnic_rand6_grp4_code;
fethnic_rand6_grp5_code = ethnic_rand6_grp5_code;

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```

fethnic_rand6_grp6_code = ethnic_rand6_grp6_code;
feuropean_ethnic_ind_code = european_ethnic_ind_code;
fextended_family_type_code = extended_family_type_code;
ffamily_grp_code = family_grp_code;
ffamily_role_code = family_role_code;
ffamily_type_code = family_type_code;
ffertility_code = fertility_code;
fheat_fuel = heat_fuel;
fhhld_composn_code = hhld_composn_code;
fhighest_qual_code = highest_qual_code;
fincome_srce10_code = income_srce10_code;
fincome_srce10_ext_family_code = income_srce10_ext_family_code;
fincome_srce10_family_code = income_srce10_family_code;
fincome_srce10_hhld_code = income_srce10_hhld_code;
fincome_srce11_code = income_srce11_code;
fincome_srce11_ext_family_code = income_srce11_ext_family_code;
fincome_srce11_family_code = income_srce11_family_code;
fincome_srce11_hhld_code = income_srce11_hhld_code;
fincome_srce12_code = income_srce12_code;
fincome_srce12_ext_family_code = income_srce12_ext_family_code;
fincome_srce12_family_code = income_srce12_family_code;
fincome_srce12_hhld_code = income_srce12_hhld_code;
fincome_srce13_code = income_srce13_code;
fincome_srce13_ext_family_code = income_srce13_ext_family_code;
fincome_srce13_family_code = income_srce13_family_code;
fincome_srce13_hhld_code = income_srce13_hhld_code;
fincome_srce14_code = income_srce14_code;
fincome_srce1_code = income_srce1_code;
fincome_srce1_ext_family_code = income_srce1_ext_family_code;
fincome_srce1_family_code = income_srce1_family_code;
fincome_srce1_hhld_code = income_srce1_hhld_code;
fincome_srce2_code = income_srce2_code;
fincome_srce2_ext_family_code = income_srce2_ext_family_code;
fincome_srce2_family_code = income_srce2_family_code;
fincome_srce2_hhld_code = income_srce2_hhld_code;
fincome_srce3_code = income_srce3_code;
fincome_srce3_ext_family_code = income_srce3_ext_family_code;
fincome_srce3_family_code = income_srce3_family_code;
fincome_srce3_hhld_code = income_srce3_hhld_code;
fincome_srce4_code = income_srce4_code;
fincome_srce4_ext_family_code = income_srce4_ext_family_code;
fincome_srce4_family_code = income_srce4_family_code;
fincome_srce4_hhld_code = income_srce4_hhld_code;
fincome_srce5_code = income_srce5_code;
fincome_srce5_ext_family_code = income_srce5_ext_family_code;
fincome_srce5_family_code = income_srce5_family_code;
fincome_srce5_hhld_code = income_srce5_hhld_code;
fincome_srce6_code = income_srce6_code;
fincome_srce6_ext_family_code = income_srce6_ext_family_code;
fincome_srce6_family_code = income_srce6_family_code;
fincome_srce6_hhld_code = income_srce6_hhld_code;
fincome_srce7_code = income_srce7_code;
fincome_srce7_ext_family_code = income_srce7_ext_family_code;
fincome_srce7_family_code = income_srce7_family_code;
fincome_srce7_hhld_code = income_srce7_hhld_code;
fincome_srce8_code = income_srce8_code;
fincome_srce8_ext_family_code = income_srce8_ext_family_code;
fincome_srce8_family_code = income_srce8_family_code;
fincome_srce8_hhld_code = income_srce8_hhld_code;
fincome_srce9_code = income_srce9_code;
fincome_srce9_ext_family_code = income_srce9_ext_family_code;

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fincome_srce9_family_code = income_srce9_family_code;
fincome_srce9_hhld_code = income_srce9_hhld_code;
fincome_srce_count_code = income_srce_count_code;
fincome_srce_family_count_code = income_srce_family_count_code;
fincome_srce_hhld_count_code=income_srce_hhld_count_code;
fincome_support_count_code = income_support_count_code;
fincome_support_family_code = income_support_family_code;
fincome_support_hhld_count_code = income_support_hhld_count_code;
findividual_rec_type_code = individual_rec_type_code;
findividual_substitute_code = individual_substitute_code;
fjob_ind_code = job_ind_code;
flandlord_code = landlord_code;
flanguage1_code = language1_code;
flanguage2_code = language2_code;
flanguage3_code = language3_code;
flanguage4_code = language4_code;
flanguage5_code = language5_code;
flanguage6_code = language6_code;
flanguages_count_code = languages_count_code;
flegal_marital_status_recode = legal_marital_status_recode;
fmaori_ethnic_ind_code = maori_ethnic_ind_code;
fmelaa_ethnic_ind_code = melaa_ethnic_ind_code;
fmotor_vehicle_count_code = motor_vehicle_count_code;
fnzsc099 = nzsc099;
fnzsei96 = nzsei96;
fofficial_language_code = official_language_code;
fother_ethnic_ind_code = other_ethnic_ind_code;
fpacific_island_ethnic_ind_code = pacific_island_ethnic_ind_code;
fpost_school_qual_code2d = post_school_qual_code2d;
fprior_eth = prior_eth;
frecode_family_grp_code = recode_family_grp_code;
frecode_family_role_code = recode_family_role_code;
frecode_maori_descent_code = recode_maori_descent_code;
frelated_family_grp_code = related_family_grp_code;
frelated_family_role_code = related_family_role_code;
freligion1_code = religion1_code;
freligion2_code = religion2_code;
freligion3_code = religion3_code;
freligion4_code = religion4_code;
fscndry_school_qual_code = scndry_school_qual_code;
fsex_code = sex_code;
fsex_monitor_code = sex_monitor_code;
fsmoke_ever_code = smoke_ever_code;
fsmoke_regular_code = smoke_regular_code;
fsmoking_status_code = smoking_status_code;
fsocial_marital_status_recode = social_marital_status_recode;
fstd_highest_qual_code = std_highest_qual_code;
ftelecomm1_code = telecomm1_code;
ftelecomm2_code = telecomm2_code;
ftelecomm3_code = telecomm3_code;
ftelecomm4_code = telecomm4_code;
ftelecomm5_code = telecomm5_code;
ftenure_code = tenure_code;
ftenure_holder_code = tenure_holder_code;
ftotal_income_code = total_income_code;
ftotal_income_family_code = total_income_family_code;
ftotal_income_hhld_code = total_income_hhld_code;
ftotal_work_hrs_code = total_work_hrs_code;
fusual_resdnt_code = usual_resdnt_code;
fusual_resdnt_count_code = usual_resdnt_count_code;
fusual_resdnt_monitor_code = usual_resdnt_monitor_code;

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fvisitor_only_dwelling_code = visitor_only_dwelling_code;
fweekly_rent_code = weekly_rent_code;
fwkflfs_code = wkflfs_code;
fwkflfs_monitor_code = wkflfs_monitor_code;
fyears_at_addr_code = years_at_addr_code;
fyears_in_nz_code = years_in_nz_code;

format freligion1_code $c01reli.;
format freligion2_code $c01reli.;
format freligion3_code $c01reli.;
format freligion4_code $c01reli.;

drop highestqual pct_col nzsc0991 nzsc0992 auckland_ind
samoan_ind_code cook_ind_code tongan_ind_code north ethnicity
immigrant age1830 age2034 mixedeth prioreth age2335 CNRegC06
CNTA06 Id_Dwelling Id_ExtFamily Id_Person Id_UR_Area_Unit NZDep2006
NZDep_score_2006 SQKM URRegC06 URTA06 age_code age_monitor_code
anzsc02006 anzsic96 anzsic2006 asian_ethnic_ind_code
bedroom_count_code birth_country_code2d census_year
child_depend_code child_depend_family_type_code
dwelling_rec_type_code dwelling_substitute_code dwelling_type_code
emp_status_code ethnic_rand6_grp1_code ethnic_rand6_grp2_code
ethnic_rand6_grp3_code ethnic_rand6_grp4_code
ethnic_rand6_grp5_code ethnic_rand6_grp6_code
european_ethnic_ind_code extended_family_type_code family_grp_code
family_role_code family_type_code fertility_code heat_fuel
hhld_composn_code highest_qual_code income_srce10_code
income_srce10_ext_family_code income_srce10_family_code
income_srce10_hhld_code income_srce11_code
income_srce11_ext_family_code income_srce11_family_code
income_srce11_hhld_code income_srce12_code
income_srce12_ext_family_code income_srce12_family_code
income_srce12_hhld_code income_srce13_code
income_srce13_ext_family_code income_srce13_family_code
income_srce13_hhld_code income_srce14_code income_srce1_code
income_srce1_ext_family_code income_srce1_family_code
income_srce1_hhld_code income_srce2_code
income_srce2_ext_family_code income_srce2_family_code
income_srce2_hhld_code income_srce3_code
income_srce3_ext_family_code income_srce3_family_code
income_srce3_hhld_code income_srce4_code
income_srce4_ext_family_code income_srce4_family_code
income_srce4_hhld_code income_srce5_code
income_srce5_ext_family_code income_srce5_family_code
income_srce5_hhld_code income_srce6_code
income_srce6_ext_family_code income_srce6_family_code
income_srce6_hhld_code income_srce7_code
income_srce7_ext_family_code income_srce7_family_code
income_srce7_hhld_code income_srce8_code
income_srce8_ext_family_code income_srce8_family_code
income_srce8_hhld_code income_srce9_code
income_srce9_ext_family_code income_srce9_family_code
income_srce9_hhld_code income_srce_count_code
income_srce_family_count_code income_srce_hhld_count_code
income_support_count_code income_support_family_code
income_support_hhld_count_code individual_rec_type_code
individual_substitute_code job_ind_code landlord_code
language1_code language2_code language3_code language4_code
language5_code language6_code languages_count_code
legal_marital_status_recode maori_ethnic_ind_code
melaa_ethnic_ind_code motor_vehicle_count_code nzsc099 nzsei96

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official_language_code other_ethnic_ind_code
pacific_island_ethnic_ind_code post_school_qual_code2d prior_eth
recode_family_grp_code recode_family_role_code
recode_maori_descent_code related_family_grp_code
related_family_role_code religion1_code religion2_code
religion3_code religion4_code scndry_school_qual_code sex_code
sex_monitor_code smoke_ever_code smoke_regular_code
smoking_status_code social_marital_status_recode
std_highest_qual_code telecomm1_code telecomm2_code telecomm3_code
telecomm4_code telecomm5_code tenure_code tenure_holder_code
total_income_code total_income_family_code total_income_hhld_code
total_work_hrs_code usual_resdnt_code usual_resdnt_count_code
usual_resdnt_monitor_code visitor_only_dwell_code weekly_rent_code
wklfs_code wklfs_monitor_code years_at_addr_code years_in_nz_code;
run;

data male_couples06;
set smcouples06_A;
where sex_code = '1';
run;

proc sort data = male_couples06;
by id_family;
run;

proc sort data = fem_couples06;
by id_family;
run;

data stephen.mergedcouples06;
merge male_couples06 fem_couples06;
by id_family;

* Partners of same ethnicity;
if ethnicity = fethnicity then sameeth = '1';
else sameeth = '0';

* Mixed couple indicator;
mixed = 1 - sameeth;

* Delete same sex couples;
if sex_code = '1' and fsex_code='2' then het = '1';
else delete;

* Both immigrants;
if immigrant = 1 and fimmigrant = 1 then immcoup = 1;
else immcoup = 0;

* Age difference;
length agediffcat $1;
agediff = age_code - fage_code;
if agediff < -3 then agediffcat = '2';
else if agediff > -3 and agediff < 0 then agediffcat = '3';
else if agediff = 0 then agediffcat = '1';
else if agediff > 0 and agediff < 4 then agediffcat = '4';
else agediffcat = '5';
format agediffcat $agediffcat.;

if asian_ethnic_ind_code = 1 then lasian_ethnic_ind_code = 1;
else l asian_ethnic_ind_code = 0;
if fasian_ethnic_ind_code = 1 then lfasian_ethnic_ind_code = 1;
else lfasian_ethnic_ind_code = 0;
if european_ethnic_ind_code = 1 then leuropean_ethnic_ind_code = 1;

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else leuropean_ethnic_ind_code = 0;
if feuropean_ethnic_ind_code = 1 then lfeuropean_ethnic_ind_code = 1;
else lfeuropean_ethnic_ind_code = 0;
if maori_ethnic_ind_code = 1 then lmaori_ethnic_ind_code = 1;
else lmaori_ethnic_ind_code = 0;
if fmaori_ethnic_ind_code = 1 then lfmaori_ethnic_ind_code = 1;
else lfmaori_ethnic_ind_code = 0;
if pacific_island_ethnic_ind_code = 1
    then lpacific_island_ethnic_ind_code = 1;
else lpacific_island_ethnic_ind_code = 0;
if fpacific_island_ethnic_ind_code = 1
    then lfpacific_island_ethnic_ind_code = 1;
else lfpacific_island_ethnic_ind_code = 0;

* Married;
if legal_marital_status_recode = '2'
    or legal_marital_status_recode = '3' then married = '1';
else married = '0';
run;

* Add % of interethnic couples in region;
proc freq data = stephen.mergedcouples06 noprint;
table mixed * CNRegC06 / out = percents06c OUTPCT;
run;

data percents06c;
set percents06c;
if mixed = 1;
run;

proc sort data = stephen.mergedcouples06
    out = stephen.mergedcouples06;
by CNRegC06;
run;

proc sort data = percents06c out = percents06c;
by CNRegC06;
run;

data stephen.mergedcouples06;
merge stephen.mergedcouples06 percents06c (keep = CNRegC06 pct_col);
by CNRegC06;
mixedeth_reg = pct_col;
run;

data stephen.mergedcouples06;
set stephen.mergedcouples06 (drop = pct_col);
run;

* Add % of interethnic couples in CAU;
proc freq data = stephen.mergedcouples06 noprint;
table mixed * Id_UR_Area_Unit /out = percents06d OUTPCT;
run;

data percents06d;
set percents06d;
if mixed = 1;
run;

proc sort data = stephen.mergedcouples06;
by Id_UR_Area_Unit mixed;
run;

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```

proc sort data = percents06d;
by Id_UR_Area_Unit mixed;
run;

data stephen.mergedcouples06;
merge stephen.mergedcouples06 percents06d
      (keep = pct_col Id_UR_Area_Unit mixed);
by Id_UR_Area_Unit mixed;
mixedeth_cau = pct_col;
run;

/***** Create de facto and married variables *****/
data stephen.mergedcouples06;
set stephen.mergedcouples06;

if social_marital_status_recode = 13
   and fsocial_marital_status_recode = 13 then Defacto06 = '1';
run;

data stephen.mergedcouples06;
set stephen.mergedcouples06;

if legal_marital_status_recode = 2
   and flegal_marital_status_recode = 2 then Married06 = '1';
run;

/***** Create age groups *****/
data stephen.mergedcouples06;
set stephen.mergedcouples06;
if age_code => 16 and age_code <= 19 then Agex = '16-19';
if age_code => 20 and age_code <= 24 then Agex = '20-24';
if age_code => 25 and age_code <= 29 then Agex = '25-29';
if age_code => 30 and age_code <= 34 then Agex = '30-34';
if age_code => 35 and age_code <= 39 then Agex = '35-39';
if age_code => 40 and age_code <= 44 then Agex = '40-44';
if age_code => 45 and age_code <= 49 then Agex = '45-49';
if age_code => 50 and age_code <= 54 then Agex = '50-54';
if age_code => 55 and age_code <= 59 then Agex = '55-59';
if age_code => 60 and age_code <= 64 then Agex = '60-64';
if age_code => 65 and age_code <= 69 then Agex = '65-69';
if age_code => 70 and age_code <= 74 then Agex = '70-74';
if age_code => 75 and age_code <= 79 then Agex = '75-79';
if age_code => 80 and age_code <= 84 then Agex = '80-84';
if age_code => 85 and age_code <= 89 then Agex = '85-89';
if age_code => 90 and age_code <= 94 then Agex = '90-94';
if age_code => 95 and age_code <= 120 then Agex = '95-over';
run;

data stephen.mergedcouples06;
set stephen.mergedcouples06;
if fAge_code => 16 and fAge_code <= 19 then fAgex = '16-19';
if fAge_code => 20 and fAge_code <= 24 then fAgex = '20-24';
if fAge_code => 25 and fAge_code <= 29 then fAgex = '25-29';
if fAge_code => 30 and fAge_code <= 34 then fAgex = '30-34';
if fAge_code => 35 and fAge_code <= 39 then fAgex = '35-39';
if fAge_code => 40 and fAge_code <= 44 then fAgex = '40-44';
if fAge_code => 45 and fAge_code <= 49 then fAgex = '45-49';
if fAge_code => 50 and fAge_code <= 54 then fAgex = '50-54';
if fAge_code => 55 and fAge_code <= 59 then fAgex = '55-59';
if fAge_code => 60 and fAge_code <= 64 then fAgex = '60-64';
if fAge_code => 65 and fAge_code <= 69 then fAgex = '65-69';
if fAge_code => 70 and fAge_code <= 74 then fAgex = '70-74';

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if fAge_code => 75 and fAge_code <= 79 then fAgex = '75-79';
if fAge_code => 80 and fAge_code <= 84 then fAgex = '80-84';
if fAge_code => 85 and fAge_code <= 89 then fAgex = '85-89';
if fAge_code => 90 and fAge_code <= 94 then fAgex = '90-94';
if fAge_code => 95 and fAge_code <= 120 then fAgex = '95-over';
run;

/***** Create younger and older age groups *****/
data mosc06sm;
set ro.mosc_2006_final_dep;

* Age codes;
if age_code => '016' and age_code <= '029' then age1629 = '1';
else age1629 = '0';
if age_code => '030' and age_code <= '049' then age3049 = '1';
else age3049 = '0';
if age_code => '050' and age_code <= '120' then age50plus = '1';
else age50plus = '0';
run;

data stephen.mergedcouples06;
set stephen.mergedcouples06;

* Age codes;
if fage_code => '016' and fage_code <= '029' then fage1629 = '1';
else fage1629 = '0';
if fage_code => '030' and fage_code <= '049' then fage3049 = '1';
else fage3049 = '0';
if fage_code => '050' and fage_code <= '120' then fage50plus = '1';
else fage50plus = '0';
run;

data stephen.mergedcouples06;
set stephen.mergedcouples06;

* Age codes;
if age_code => '016' and age_code <= '029' then age_grpx = 'age1629';
if age_code => '030' and age_code <= '049' then age_grpx = 'age3049';
if age_code => '050' and age_code <= '120' then age_grpx =
    'age50plus';
run;

data stephen.mergedcouples06;
set stephen.mergedcouples06;
* Age codes;
if fage_code => '016'
    and fage_code <= '029' then fage_grpx = 'age1629 ';
if fage_code => '030'
    and fage_code <= '049' then fage_grpx = 'age3049';
if fage_code => '050'
    and fage_code <= '120' then fage_grpx = 'age50plus';
run;

/***** Creating variables for income difference *****/
data stephen.mergedcouples06_income;
set stephen.mergedcouples06;

if total_income_code = '03' then male_total_income_code = 1600;
else if total_income_code = '04' then male_total_income_code = 7800;
else if total_income_code = '05' then male_total_income_code = 12300;
else if total_income_code = '06' then male_total_income_code = 17100;
else if total_income_code = '07' then male_total_income_code = 22200;
else if total_income_code = '08' then male_total_income_code = 27200;

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else if total_income_code = '09' then male_total_income_code = 32100;
else if total_income_code = '10' then male_total_income_code = 37100;
else if total_income_code = '11' then male_total_income_code = 44200;
else if total_income_code = '12' then male_total_income_code = 57500;
else if total_income_code = '13' then male_total_income_code = 80700;
else if total_income_code = '14'
    then male_total_income_code = 135000;
else if ftotal_income_code = '03' then fem_total_income_code = 1600;
else if ftotal_income_code = '04' then fem_total_income_code = 7800;
else if ftotal_income_code = '05' then fem_total_income_code = 12300;
else if ftotal_income_code = '06' then fem_total_income_code = 17100;
else if ftotal_income_code = '07' then fem_total_income_code = 22200;
else if ftotal_income_code = '08' then fem_total_income_code = 27200;
else if ftotal_income_code = '09' then fem_total_income_code = 32100;
else if ftotal_income_code = '10' then fem_total_income_code = 37100;
else if ftotal_income_code = '11' then fem_total_income_code = 44200;
else if ftotal_income_code = '12' then fem_total_income_code = 57500;
else if ftotal_income_code = '13' then fem_total_income_code = 80700;
else if ftotal_income_code = '14'
    then fem_total_income_code = 135000;
run;

data stephen.mergedcouples06_income;
set stephen.mergedcouples06_income;
if fem_total_income_code in ( . 0 ) then delete;
if fem_total_income_code in ( '' ) then delete;
if male_total_income_code in ( . 0 ) then delete;
if male_total_income_code in ( '' ) then delete;
if fnzsco992 = '' then delete;
if nzsco992 = '' then delete;
if nzsco992 = '97 Response Unidentifiable' then delete;
if nzsco992 = '99 Response Outside Scope or not' then delete;
if fnzsco992 = '97 Response Unidentifiable' then delete;
if fnzsco992 = '99 Response Outside Scope or not' then delete;
run;

data stephen.mergedcouples06_income;
set stephen.mergedcouples06_income;
male_plus_fem_inc = fem_total_income_code + male_total_income_code;
run;

data stephen.mergedcouples06_income;
set stephen.mergedcouples06_income;
Fem_Prop_income = fem_total_income_code / male_plus_fem_inc;
run;

data stephen.mergedcouples06_income;
set stephen.mergedcouples06_income;
Male_Prop_income = male_total_income_code / male_plus_fem_inc;
run;

/*****/

```

### Appendix Three: stephen.mergedcouples06 data set variables

<b>Variable</b>	<b>Census codes</b>	<b>Description</b>
Census year	Census_year	Census year
Sex	Sex_code	Gender of individual
Age	Age_code	Age in years
Education	School_qual (1981) Highest_school_qual Tertiary_qual1–3 (1986) Highest_school_qual Tertiary_qualA–D (1991) Highest_qualification_gained (1996) Highest_qual_code (2001) Highest_qual_code (2006)	Level of education
Occupation	NZSCO (1981, 1986) NZSCO91 (1991) NZSCO95 (1996) NZSCO99 (2001) ANZSCO (2006)	Occupational info at five levels of aggregation
Employment status	EmpSt	Employed/unemployed
Labour force status	LFS	Part-time/full-time/ unemployed/not in labour force
Legal marriage	MarStL	Legally married
Cohabitation	MarStS	De facto relationship
Dwelling identifier	Dwell_id_nbr	Links individual to household
Family identifier	Family_id_nbr	Links individual to family
Family code	Family_code	Position within family
<b>Religion</b>	Religion	Aggregated into 6 major groups

Adapted from Walker (2010: 63).

### Appendix Four: Individual variables taken from 2006 Census

<b>Code</b>	<b>Sex (2)</b>
1	Male
2	Female
<b>Code</b>	<b>Age – Single Years (121)</b>
000	Less than One Year
001 to 119	In Single Years
120	120 Years and Over
<b>Code</b>	<b>Legal Marital Status (8)</b>
1	Never Married and Never Joined in a Civil Union
2	Married (Not Separated)
3	Joined in a Civil Union (Not Separated)
4	Separated
5	Divorced
6	Widowed or Bereaved Civil Union Partner
7	Response Unidentifiable
9	Not Stated
<b>Code</b>	<b>Social Marital Status (10)</b>
10	Partnered NFD
11	Spouse
12	Civil Union Partner
13	Other Partnership
20	Non-Partnered NFD
21	Non-Partnered, Never Married and Never Joined in a Civil Union
22	Non-Partnered, Separated
23	Non-Partnered, Divorced
99	Non-Partnered, Widowed or Bereaved Civil Union Partner
<b>Code</b>	<b>Highest Qualification (Time Series) (15)</b>
00	No Qualification
01	Level 1 Certificate Gained at School
02	Level 2 Certificate Gained at School
03	Level 3 or 4 Certificate Gained at School
04	Overseas Secondary School Qualification
05	Level 1, 2 or 3 Certificate Gained Post-school
08	Level 4 Certificate Gained Post-school
09	Level 5 Diploma
10	Level 6 Diploma
11	Bachelor Degree and Level 7 Qualifications
12	Post-Graduate and Honours Degree
13	Masters Degree
14	Doctorate Degree

<b>Code</b>	<b>Religious Affiliation – Level 1, World Religions (10)</b>
0	No Religion
1	Buddhist
2	Christian
3	Hindu
4	Islam/Muslim
5	Judaism/Jewish
6	Māori Christian
7	Spiritualism and New Age Religions
8	Other Religions
9	Residual Categories
<b>Code</b>	<b>Status in Employment (5)</b>
11	Paid Employee
12	Employer
13	Self-Employed and Without Employees
14	Unpaid Family Worker
77	Response Unidentifiable
99	Not Stated
<b>Code</b>	<b>Work and Labour Force Status (5)</b>
1	Employed Full-time
2	Employed Part-time
3	Unemployed
4	Not in the Labour Force
9	Work and Labour Force Status Unidentifiable
<b>Code</b>	<b>Occupation (NZSCO99 V1.0) (25) Level 2 – Sub-Major Group</b>
11	Legislators and Administrators
12	Corporate Managers
21	Physical, Mathematical and Engineering Science Professionals
22	Life Science and Health Professionals
23	Teaching Professionals
24	Other Professionals
31	Physical Science and Engineering Associate Professionals
32	Life Science and Health Associate Professionals
33	Other Associate Professionals
41	Office Clerks
42	Customer Services Clerks
51	Personal and Protective Services Workers
52	Salespersons, Demonstrators and Models
61	Market Oriented Agricultural and Fishery Workers
71	Building Trades Workers
72	Metal and Machinery Trades Workers
73	Precision Trades Workers
74	Other Craft and Related Trades Workers
81	Industrial Plant Operators
82	Stationary Machine Operators and Assemblers

83	Drivers and Mobile Machinery Operators
84	Building and Related Workers
91	Labourers and Related Elementary Service Workers
97	Response Unidentifiable
99	Response Outside Scope/Not Stated
<b>Code</b>	<b>Total Personal Income (15)</b>
01	Loss
02	Zero Income
03	\$1 – \$5,000
04	\$5,001 – \$10,000
05	\$10,001 – \$15,000
06	\$15,001 – \$20,000
07	\$20,001 – \$25,000
08	\$25,001 – \$30,000
09	\$30,001 – \$35,000
10	\$35,001 – \$40,000
11	\$40,001 – \$50,000
13	\$70,001 – \$100,000
14	\$100,001 or more
99	Not stated

**Source:** Statistics New Zealand (2006f).

## Appendix Five: Family variables taken from 2006 Census

Code	Family Type (3)
1	Couple Without Children
2	Couple With Child(ren)
3	One Parent With Child(ren)
Code	Family Type by Child Dependency Status – Level 2 (15)
11	Couple Without Children
21	Couple With Dependent Child(ren) Only
22	Couple With Adult Child(ren) Only
23	Couple With Adult and Dependent Children Only
24	Couple With Dependent Child(ren) and at Least One Child With UDS*
25	Couple With Adult Child(ren) and at Least One Child With UDS*
26	Couple With Adult and Dependent Children and at Least One Child With UDS*
27	Couple With Child(ren), All With UDS*
31	One Parent With Dependent Child(ren) Only
32	One Parent With Adult Child(ren) Only
33	One Parent With Adult And Dependent Children Only
34	One Parent With Dependent Child(ren) and at Least One Child With UDS*
35	One Parent With Adult Child(ren) and at Least One Child With UDS*
36	One Parent With Adult and Dependent Children & at Least One Child With UDS*
37	One Parent With Child(ren), All UDS*

\* UDS = Unknown Dependency Status

**Source:** Statistics New Zealand (2006f).

## **Bibliography**

Advisory Committee on Equal Opportunities for Women and Men (2009). Opinion on the effectiveness of the current legal framework on Equal pay for equal work or work of equal value in tackling the gender pay gap, European Commission Employment, Social Affairs and Equal Opportunities.

Agresti, A. (2002). Categorical Data Analysis. New Jersey, John Wiley & Sons.

Aisenbrey, S., M. Evertsson and D. Grunow (2009). "Is There a Career Penalty for Mothers' Time Out? A Comparison of Germany, Sweden and the United States." Social Forces **88**(2): pp 573-605.

Amato, P. (2004). "Tension Between Institutional and Individual Views of Marriage." Journal of Marriage and Family **66**(November): pp 959-965.

Andersen, M. and D. Witham (2009). Thinking About Women: Sociological Perspectives on Sex and Gender. Boston, Pearson.

Aronson, J. and S. Neysmith (1996). "'You're Not Just In There To Do The Work'" Depersonalizing Policies and the Exploitation of Home Care Workers' Labor." Gender and Society **10**(1): pp 59-77.

Arroyo, J., K. Payne, S. Brown and W. Manning (2011). Crossover in Median Age at First Marriage and First Birth: Thirty Years of Change, National Center for Family & Marriage Research.

Augustin, B. (1994). "Mixed Marriages: Some Key Questions." International Migration Review **32**(4): pp 571-586.

Australian Bureau of Statistics (2007). Lifetime marriage and divorce trends. Australian Social Trends. Australian Bureau of Statistics. Canberra, Australian Government.

Australian Bureau of Statistics (2011). Fifty Years Of Labour Force: Now And Then. Australian Bureau of Statistics. Canberra.

Australian Bureau of Statistics (2011). Marriages and Divorces, Australia, 2010. Australian Bureau of Statistics. Canberra, Australian Government.

Australian Bureau of Statistics (2012). Australian Social Trends, March Quarter 2012. Australian Bureau of Statistics. Canberra, Australian Government.

Australian Bureau of Statistics (2012). Year Book Australia, 2012. Australian Bureau of Statistics. Canberra, Australian Government.

Baker, D. (2011). The wage-penalty effect: The hidden cost of maternity leave. The Australian Institute. Australia, The Australian Institute. **Policy Brief No. 24**.

- Baker, M. (2001). Families, Labour and Love. Crows Nest, Allen and Unwin.
- Baker, M. (2009). "Working their Way Out of Poverty? Gendered Employment in Three Welfare States." Journal of Comparative Family Studies **40**(4): pp 617-634.
- Baker, M. (2010a). Choices and Constraints in Family Life (2nd ed.). Toronto, Oxford University Press.
- Baker, M. (2010b). Marriage markets and priority of choices: personal correspondence. Auckland.
- Baker, M. (2010c). "Motherhood, employment and the "child penalty"." Women's Studies International Forum: pp 215-224.
- Baker, M. (2011). "The Political Economy of Child Care Policy: Contradictions in New Zealand and Canada." Policy Quarterly **7**(1): pp 39-47.
- Baker, M. (2012a). Academic Careers and the Gender Gap. Vancouver, UBC Press.
- Baker, M. (2012b). "Gendered families, academic work and the 'motherhood penalty'." Women's Studies Journal **26**(1): pp 11-24.
- Baker, M. (2014). Choices and Constraints in Family Life (3rd ed.). Ontario, Oxford University Press.
- Baker, M. and V. Elizabeth (2012). "Second-Class Marriage? : Civil Union in New Zealand." Journal of Comparative Family Studies **43**(5): pp 633-645.
- Baker, M. and V. Elizabeth (2013). 'Tying the Knot: The Impact of Formalization after Long-Term Cohabitation'. Canadian Sociology Association Meeting. University of Victoria, British Columbia.
- Baker, M. and V. Elizabeth (2013a). "'A Brave Thing to Do' or A Normative Practice? Marriage After Long-Term Cohabitation." Journal of Sociology: pp 1-15.
- Baker, M. and V. Elizabeth (2013b). "'Did you just ask me to marry you?': The gendered nature of heterosexual relationship progressions." Women's Studies Journal **27**(2): pp 32-43.
- Baker, M. and V. Elizabeth (2014). Marriage in an Age of Cohabitation: How and When People Tie the Knot in the Twenty-First Century. Canada, Oxford University Press.
- Barbalet, J. (2001). Emotion, social theory, and social structure: A macrosociological approach. New York, Cambridge University Press.
- Barlow, A. and J. Smithson (2010). "Legal assumptions, cohabitants' talk and the rocky road to reform." Child & Family Law Quarterly **22** pp 328-350.

- Batalova, J. and P. Cohen (2002). "Premarital Cohabitation and Housework: Couples in Cross-National Perspective." Journal of Marriage and Family **64**: pp 743-755.
- Baxter, J. (2000) "UQ study finds married women carry greatest housework burden." University of Queensland News.
- Baxter, J. (2001). "Marital status and the division of household labour: Cohabitation vs Marriage " Family Matters **58** (Autumn): pp 16-21.
- Baxter, J. (2005). "Mothers' employment transitions following childbirth." Family Matters **71** (Winter): pp 11-17.
- Baxter, J. (2007). Timing of mothers' return to work after childbearing: Variations by job characteristics and leave use. The Australian Institute of Family Studies. Victoria, Australian Government.
- Baxter, J. (2008). "Is Money The Main Reason Mothers Return To Work After Childbearing?" Journal of Population Research **25**(2): pp 141-160.
- Baxter, J. (2013a). Parents working out work: Australian Family Trends No. 1. Australian Institute of Family Studies. Australia, Australian Government.
- Baxter, J. and M. Gray (2008). Work and family responsibilities through life Australian Institute of Family Studies. Melbourne, Australian Government.
- Baxter, J., M. Gray, M. Alexander, L. Strazdins and M. Bittman (2007). Mothers and fathers with young children: Paid employment, caring and wellbeing. Department of Families Community Services and Indigenous Affairs. Canberra, Australian Government.
- Baxter, J., M. Haynes and B. Hewitt (2007). Assessing Change in the Distribution of Domestic Labour over the Lifecourse: Pathways out of Relationships. HILDA Conference. University of Melbourne.
- Baxter, J., M. Haynes and B. Hewitt (2010). "Pathways into Marriage: Cohabitation and the Domestic Division of Labour." Journal of Family Issues **31**(11): pp 1507-1529.
- Beaujouan, E. and M. Bhrolcháin (2011). "Cohabitation and marriage in Britain since the 1970s." Population Trends **145**(Autumn): pp 1-25.
- Beck-Gernsheim, E. (2002). Reinventing the Family. Oxford, Polity.
- Beck, U. and E. Beck-Gernsheim (1995). The Normal Chaos of Love. Cambridge, Polity Press.
- Becker, G. (1965). "A Theory of the Allocation of Time." Economic Journal **75**(299): pp 493-515.
- Becker, G. (1973). "A Theory of Marriage: Part I." Journal of Political Economy **81**(4): pp 813-846.

- Becker, G. (1974). "A Theory of Marriage: Part II." Journal of Political Economy **82**(2): pp 11-26.
- Becker, G. (1981). "Altruism in the Family and Selfishness in the Market Place." Economica **48**(189): pp 1-15.
- Becker, G. (1991). A Treatise On The Family. Cambridge, MA, Harvard University Press.
- Becker, G. (1993). A Treatise on the Family: Enlarged edition. United States Of America, Harvard University Press.
- Bell, R. and L. Blumberg (1959). "Courtship Intimacy and Religious Background." Marriage and Family Living, **21**(4): pp 356-360.
- Benzecri, J. (1992). Correspondence Analysis Handbook. New York, Marcel Dekker.
- Bergman, M. and D. Joye. (2003). "Comparing Social Stratification Schemas: Camsis, CSP-CH, Goldthorpe, ISCO8-88, Trieiman, and Wright." Cambridge Studies in social Research, 2005, from [http://www.sidos.ch/publications/e\\_mb\\_dj\\_comparing.pdf](http://www.sidos.ch/publications/e_mb_dj_comparing.pdf).
- Bernado, F. and E. Owens (2000). Love. Encyclopedia of Sociology. E. F. Borgatta. New York, Macmillan Reference USA. **Vol 1**.
- Bernard, J. (1982). The Future of Marriage. New Haven, Yale University Press
- Berscheid, E. and H. Reis (1998). Attraction and close relationships. The Handbook of Social Psychology. New York, McGraw-Hill: pp 193-281.
- Bianchi, S., M. Milkie, L. Sayer and J. Robinson (2000). "Is Anyone Doing the Housework? Trends in the Gender Division of Household Labor." Social Forces **79** (1): pp 191-228.
- Birkelund, G. and J. Heldal (2003). "Who Marries Whom? Educational Homogamy in Norway." Demographic Research **8**(1): pp 1-30.
- Blackburn, R. and J. Jarman (2005). "Stratification and Gender." GeNet Working paper.
- Blackburn, R. and J. Jarman (2006). "Gendered Occupations: Exploring the Relationship between Gender Segregation and Inequality." International Sociology **21**(2): pp 289-315.
- Blackwell, D. and D. Lichter (2000). "Mate selection among married and cohabiting couples." Journal of Family Issues **21**(3): pp 275-302.
- Blackwell, D. and D. Lichter (2004). "Homogamy Among Dating, Cohabiting, and Married Couples." The Sociological Quarterly **45**(4): pp 719-737.
- Blau, P. (1964). Exchange and power in social life. New York, Wiley.

- Blau, P., T. Blum and J. Schwartz (1982). "Heterogeneity and Intermarriage." American Sociological Review **47**(1): 45-62.
- Blau, P. and O. Duncan (1967). The American Occupational Structure. New York, John Wiley and Sons.
- Blossfeld, H. (2009). "Educational Assortative Marriage in Comparative Perspective." Annual Review of Sociology **35**(1): pp 513-530.
- Blossfeld, H. and A. Timm (2004). Who Marries Whom? Educational Systems as Marriage Markets in Modern Societies. Chicago, Springer.
- Boddington, B. and R. Didham (2009). "Increases in childlessness in New Zealand." Journal of Population Research **26**: pp 131-151.
- Bohle, P., J. Buchanan, T. Cooke, G. Considine, M. Jakubauskas, M. Quinlan, M. Rafferty and R. Ryan (2008). The Evolving Work Environment In New Zealand: Implications For Occupational Health And Safety. Department of Labour. Wellington.
- Booth, A. and A. Leigh (2010). "Do Employers Discriminate by Gender? A Field Experiment in Female-Dominated Occupations " Economics Letters **107**(2): pp 236-238.
- Bossard, J. (1932a). "Occupational Propinquity as a Factor in Marriage Selection." American Statistical Association **16**(123): pp 131-150.
- Bossard, J. (1932b). "Residential Propinquity as a Factor in Marriage Selection." American Journal of Sociology **38**(2): pp 219-224.
- Bottero, W. (2005a). Stratification: Social division and Inequality. London, Routledge.
- Bottero, W., P. Lambert, K. Prandy and S. McTaggart (2009). Occupational Structures: The Stratification Space of Social Interaction. Quantifying Theory: Pierre Bourdieu. Karen Robson and Chris Sanders. Amsterdam, Springer: pp 141-150.
- Bottero, W. and K. Prandy (2003). "Social interaction distance and stratification." British Journal of Sociology **54**(2): pp 177-197.
- Bourdieu, P. (1984). Distinction: A Social Critique of The Judgement of Taste. London, Routledge and Kenan Paul.
- Bourdieu, P. (1985). "The Social Space and the Genesis of Groups." Theory and Society **14**(6): pp 723-744.
- Bourdieu, P. (1986a). The Forms of Capital. Handbook of Theory and Research for the Sociology of Education. J. Richardson. New York, Greenwood: pp 241-258.
- Bourdieu, P. (1990b). The Logic of Practice. Cambridge, Polity Press.
- Bourdieu, P. (2005). Habitus: a Sense of Place. Aldershot, Ashgate Publishing.

- Bozon, M. and F. Heran (1989). "Finding a spouse: a survey of how French couples meet." Population: An English Selection **44**(1): pp 91–121.
- Bracher, M. (1990). "Explaining first marriage trends in Australia." Journal of Population Research **7**(2): pp 128-150.
- Briar, C. (2004). "New Zealand Conference On Pay And Employment Equity For Women." The Social Policy Journal of New Zealand Te Puna Whakaaro **23**: pp 215-218.
- Brickell, C. (2006). "The sociological construction of gender and sexuality." The Sociological Review **54**(1): pp 87-113.
- Brien, M., L. Lillard and S. Stern (2006). "Cohabitation, marriage, and divorce in a model of match quality." International Economic Review **47**(2): pp 451-494.
- Brown, S. (2005). "How Cohabitation is Reshaping American Families." Contexts **4**(33): pp 33-37.
- Bryman, A. (2008). Social Research Methods (3rd ed.). Oxford, Oxford University Press.
- Buchler, S., J. Baxter, M. Haynes and M. Western (2008). The Social and Demographic Characteristics of Cohabitors in Australia: Towards a Typology of Cohabiting Couples. The 10th Institute of Family Studies Conference. Melbourne.
- Buchler, S., J. Baxter, M. Haynes and M. Western (2009). "The Social and Demographic Characteristics of Cohabitors in Australia: Towards a Typology of Cohabiting Couples." Family Matters **82**: pp 22-29.
- Budig, M. and P. England (2001). "The Wage Penalty For Motherhood." American Sociological Review **66**(April): pp 204-225.
- Bumpass, L. and H. Lu (2000). "Trends in cohabitation and implications for children's family contexts in the United States." Population Studies **54**(1): pp 29-41.
- Bumpass, L. and J. Sweet (1989). "National Estimates of Cohabitation." Demography **26**(4): pp 615-625.
- Bumpass, L., J. Sweet and A. Cherlin (1991). "The Role of Cohabitation in Declining Rates of Marriage." Journal of Marriage and the Family **53**(4): pp 913-927.
- Burgess, E. and P. Wallin (1943). "Homogamy in Social Characteristics." American Journal of Sociology **XLIX**(2): pp 109-124.
- Burkitt, I. (1997). "Social Relationships and Emotions." Sociology **31**(1): pp 37-55.
- Callister, P. (1998). "The "Meet" market: Education and assortative mating patterns in New Zealand." New Zealand Population Review **24**: pp 43-70.

Callister, P. (2006). The potential effect of changes in sex ratios on the 'marriage market', fertility and employment: A review of theory and evidence. Department of Labour. Wellington.

Callister, P. and T. Blakely (2004). "Ethnic classification, intermarriage and mortality: Some methodological issues in relation to ethnic comparisons in Aotearoa/New Zealand." Working Paper.

Callister, P. and R. Didham (2011). "The 'Meet Market': A Research Update." New Zealand Population Review **36**: pp 103-115.

Callister, P., R. Didham and R. Bedford (2006). "Changing Sex Ratios in New Zealand: Real Change or a Statistical Problem?" New Zealand Population Review **32**(1): pp 21-33.

Callister, P., R. Didham and D. Potter (2005). "Analytical frameworks in ethnic analysis: Using non-prioritized data for research on ethnic intermarriage - A research note." New Zealand Population Review **32**(1): pp 49-67.

Callister, P., R. Didham and D. Potter. (2007a). "Ethnic intermarriage in New Zealand." Official Statistics Research Series.

Callister, P. and Z. Lawton (2011a). "The New Zealand 'man drought' Is it real, what are its causes, and what are the implications for partnering?" Working paper.

Callister, P., J. Newell, M. Perry and D. Scott (2006). "The Gendered Tertiary Education Transition: When Did It Take Place and What Are Some of the Possible Policy Implications?" Policy Quarterly **2**(3): pp 13.

Callister, P. and S. Singley (2004). A double burden or the best of both worlds? A research note on simultaneous paid work and childcare in New Zealand. Callister & Associates.

Callister, P., M. von Randow and G. Cotterell (2011). Women, men and the new economics of partnering in New Zealand: A research note. Wellington.

Carmichael, G. (1984). "Living together in New Zealand: Data on coresidence at marriage and on de facto unions." New Zealand Population Review **10**(3): pp 41-53.

Casper, L. and S. Bianchi (2002). Continuity and Change in the American Family. Thousand Oaks, Sage Press.

Chan, T. (2004) "Demographic Trends and Educational Homogamy in Britain."

Chen, N., P. Conconi and C. Perroni (2007) "Women's Earning Power and the "Double Burden" of Market and Household Work." Economic Research Papers.

Chen, Y. and M. Huang (2007). Social Inequality and Intercultural Marriage in Taiwan. ISA 2006 Congress: The Quality of Social Existence in a Globalising World, Durban.

- Cherlin, A. (2004). "The Deinstitutionalization of American marriage." Journal of Marriage and Family **66**(4): pp 848-861.
- Cherlin, A. (2005). "American Marriage in the Early Twenty-First Century." The Future of Children **15**(2): pp 33-55.
- Cherlin, A. (2009). The Marriage-Go-Round: The State of Marriage and Family in America Today. Toronto, Knopf.
- Chesters, J. and J. Baxter (2009). "Paid and Unpaid Work in Australian Households: Trends in the Gender Division of Labour, 1986-2005." Australian Journal of Labour Economics **12**(1): pp 89-107.
- Chiappori, P., M. Iyigun and Y. Weiss (2009). "Investment in Schooling and the Marriage Market." American Economic Review **99**(5): pp 1689-1713.
- Choo, E. and A. Siow (2006). "Who Marries Whom and Why." Journal of Political Economy **114**(1): pp 175-201.
- Cigno, A. (1991). Economics of the Family. Oxford, Oxford University Press.
- Clark, S. and E. Gilman (2007). Fairness and Multicultural Competence in the Child Welfare System. Multicultural Approaches in Caring for Children, Youth, and Their Families. N. Cohen and S. Rhee and T. Tran. California, Pearson.
- Coast, E. (2009). Currently cohabiting: relationship attitudes, expectations and outcomes. Fertility, living arrangements care and mobility: understanding population trends and processes. J. C. Stillwell, Ernestina and Kneale, Dylan. Dordrecht, Springer.
- Collins, R. (2000). Comparative and Historical Patterns of Education. Handbook of the Sociology of Education. M. Hallinan. New York, Springer: pp 213-239.
- Conway, J. (2003). The Double Burden. The Canadian Family in Crisis. J. Conway. Toronto, James Lorimer & Company.
- Cook, K. and E. Rice (2003). Social Exchange Theory. Handbook of Social Psychology. J. Delamater. New York, Kluwer Academic/Plenum publishers.
- Coombs, R. (1961). "A Value Theory of Mate Selection." Family Life Coordinator **10**(3): pp 51-54.
- Coontz, S. (2004). "The World Historical Transformation of Marriage." Journal of Marriage and Family **66**(4): pp 974-979.
- Coontz, S. (2005). Marriage, A History: From Obedience to Intimacy, or How Love Conquered Marriage. New York, Penguin.
- Coontz, S. (2006). Marriage, A History: How Love Conquered Marriage. New York, Penguin.

- Coser, L. (1977). Masters of Sociological Thought: Ideas in Historical and Social Context: Second Edition. New York, Harcourt Brace Jovanovich, Inc.
- Cotterell, G., M. Von Randow and S. McTaggart (2009). "Using Census Data to Examine Changes in Wellbeing for Samoan, Cook Island, Tongan and Niuean Households." Social Policy Journal Of New Zealand **35**: pp 39-111.
- Cotterell, G., M. Von Randow, S. McTaggart, T. Sua'ali'i-Sauni, D. Patrick and P. Davis (2009). Pacific families now and in the future: changing Pacific households. Wellington, Families Commission.
- Cotterell, G., M. Weldon and S. Milligan (2008). "Measuring Changes in Family Wellbeing in New Zealand 1981 to 2001." Social Indicators Research **86**(3): pp 453-467.
- Craig, L. (2006). "Children and the revolution. A time-diary analysis of the impact of motherhood on daily workload." Journal of Sociology **42**(2): pp: 125-143.
- Craig, L. (2007). "How Employed Mothers in Australia Find Time for Both Market Work and Childcare." Journal of Family and Economic Issues **28**(1): pp 69-87.
- Craig, L. and P. Siminski (2010). "Men's Housework, Women's Housework, and Second Births in Australia." Social Politics **17**(2): pp 235–266.
- Crawford, M. (2004). "Marriage: The Telling and the Doing." Feminism & Psychology **14**(2): pp 313-318.
- Cribb, J. (2009). "Focus on families: New Zealand families of yesterday, today and tomorrow." Social Policy Journal of New Zealand(35): pp 4-16.
- Crompton, R. and L. Lyonette (2010). Family, class and gender 'strategies' in mothers employment and childcare. Gender Inequalities in the 21st Century: New Barriers and Continuing Constraints. J. Scott and R. Crompton and C. Lyonette. Cheltenham, Edward Elgar Publishing Ltd.
- Cunningham, M. (2005). "Gender in Cohabitation and Marriage: The Influence of Gender Ideology on Housework Allocation Over the Life Course." Journal of Family Issues **26**: pp 1036-1061.
- Davis, M. (2012) "Mate selection as social exchange " [margaretdavisbooks.com](http://margaretdavisbooks.com).
- Davis, P., G. Jenkin and P. Coope (2003). New Zealand Socioeconomic Index 1996: An update of the New Zealand Socio-economic Index of Occupational Status. Wellington, Statistics New Zealand.
- Davis, S., T. Greenstein and J. Gerteisen-Marks (2007). "Effects of Union Type on Division of Household Labor: Do Cohabiting Men Really Perform More Housework?" Journal of Family Issues **28**(9): pp 1246-1272.

- de Oliveira, V. and C. Ahenakew (2007). Educating. Being Sociological. S. Matthewman and L. West Newman and B. Curtis. London, Palgrave McMillan.
- De Vaus, D. (2002). Surveys in Social Research. Sydney, Allen and Unwin.
- De Vaus, D. (2004a). Diversity and change in Australian families: Statistical Profiles. Australian Institute of Family Studies. Melbourne.
- De Vaus, D. (2004b). Marriage and Remarriage. Diversity And Change In Australian Families. Australia, Australian Institute of Family Studies.
- De Vaus, D. (2005). "Ex-nuptial Children in Australia: An Empirical Analysis of Nonmarital Births." Journal of Family Studies **11**(1): pp 36-45.
- De Vaus, D. (2013). Number 35: Marriage Breakdown In Australia: Social Correlates, Gender And Initiator Status. Department of Social Services. Canberra, Australian Government.
- De Vaus, D., L. Qu and R. Weston (2003a). "Changing patterns of parenting." Family Matters **64**: pp 10-15.
- De Vaus, D., L. Qu and R. Weston (2003b). "Premarital cohabitation and subsequent marital stability." Family Matters **65**: pp 34-39.
- DeJong-Gierveld, J. (2002). "The Dilemma Of Repartnering: Considerations Of Older Men And Women Entering New Intimate Relationships In Later Life." Ageing International **27**(4): pp 61-78.
- Dempsey, K. (1997). Inequalities in marriage: Australia and beyond. Melbourne, Oxford University Press.
- Dempsey, K. and D. De Vaus (2004). "Who Cohabits in 2001?: The Significance of Age, Gender, Religion and Ethnicity." Journal Of Sociology **40**(2): pp 157-178.
- Denzin, N. and Y. Lincoln (2005). Introduction. The Sage handbook of qualitative research Norman Denzin and Yvonne Lincoln. Los Angeles, SAGE Publications, Inc
- Department of Labour (2010). Labour force participation in New Zealand: Recent trends, future scenarios and the impact on economic growth. Department of Labour. Wellington.
- Department of the Prime Minister and Cabinet (2008). Families in Australia: 2008. Canberra, Australian Government.
- Dharmalingam, A., I. Pool, J. Sceats and R. Mackay (2004). Patterns of Family Formation and Change in New Zealand in New Zealand Wellington, Ministry of Social Development.
- Didham, R., K. Nissen and W. Dobson (2014). Linking censuses: New Zealand longitudinal census 1981–2006. Statistics New Zealand. Wellington.

Dinitz, S., F. Banks and B. Pasamanick (1960). "Mate Selection and Social Class: Changes during the Past Quarter Century." Marriage and Family Living **22**(4): pp 348-351.

Dixon, S. (2000). Pay Inequality between Men and Women in New Zealand. Department of Labour. Wellington.

Domanski, H. and D. Przybysz (2007). "Educational homogamy in 22 European countries." European Societies **9**(4): pp 495-526.

Domínguez-Folguera, M. (2013). "Is Cohabitation More Egalitarian? The Division of Household Labor in Five European Countries." Journal of Family Issues **34**(12): pp 1623-1646.

Drachler, J. (1920). Democracy and Assimilation: The Blending of Immigrant Heritages in America. New York, Macmillan.

Dribe, M., J. Bavel and C. Campbell (2012). "Social mobility and demographic behavior: Long term perspectives." Demographic Research **26**(8): pp 173-190.

Dribe, M. and C. Lundh (2009). "Status Homogamy in the Preindustrial Marriage Market: Partner Selection According to Age, Social Origin, and Place of Birth in Nineteenth-Century Rural Sweden." Journal of Family History **34**(4): pp 387-406.

Dribe, M., J. Van-Bavel and C. Campbell (2012). "Social mobility and demographic behavior: Long term perspectives." Demographic Research **26**(8): pp 173-190.

Du Plessis, R. (2012). Love and romance - Marriage arrangements and dating. Te Ara - the Encyclopedia of New Zealand.

Duncan, S., A. Barlow and G. James (2005). "Why Don't They Marry - Cohabitation, Commitment and DIY Marriage." Child & Family Law Quarterly **383**: pp 383 to 398.

Dwyer, M. (2006). The Economic Rationales for Narrowing of the Gender Pay Gap. National Advisory Council on the Employment of Women. Wellington, New Zealand Government.

Edin, K. (2000). "What Do Low-Income Single Mothers Say about Marriage?" Social Problems **47** (1): pp 112-133.

Education Counts (2013a). Statistics: Provider-Based-Enrolments. Ministry of Education. Wellington.

Education Counts (2013b). 1 July 2000 - 2012 roll by Student Gender. Ministry of Education. Wellington.

Edwards, J. (1969). "Familial Behavior as Social Exchange." Journal of Marriage and Family **31**(3): pp 518-526.

- Elizabeth, V. (1997). Something Old. Something Borrowed. Something New: Heterosexual Cohabitation as Marriage Resistance? A Feminist Deconstruction. Phd, Canterbury.
- Elizabeth, V. (2000). "Cohabitation, Marriage, and the Unruly Consequences of Difference." Gender & Society **14**(1): pp 87-110.
- Elizabeth, V. (2001). "Managing Money, Managing Coupledom: A Critical Examination of Cohabitants' Money Management Practices." The Sociological Review **49**(3): pp 389-411.
- Elizabeth, V. (2003). "To Marry, or Not to Marry: That is the Question." Feminism & Psychology **13**: pp 426-431.
- Elizabeth, V. and M. Baker (2010). Negotiating the Transition from Cohabitation to 'Marriage'. Annual TASA Conference. Macquarie University, Sydney.
- Elizabeth, V. and M. Baker (2013). Conditional Partnerships or Trial Marriage? Cohabitation in the 21st Century. Annual TASA Conference, Monash University, Melbourne.
- Else, A. and B. Bishop (2003). Occupational Patterns for Employed New Zealand Women: An analysis of the 2001 census data. Wellington, Ministry of Women's Affairs.
- Emerson, R. (1962). "Power-dependence relations." American Sociological Review **2**(7): pp 31-41.
- Engels, F. (1972). The Origin of the Family, Private Property and the State. Moscow, Progress Publishers.
- England, P. (2005). "Gender Inequality in Labor Markets: The Role of Motherhood and Segregation." Social Politics **12**(2): pp 264-288.
- England, P. and G. Farkas (1986). Households, Employment and Gender. New York, Aldine.
- Epstein, E. and R. Guttman (1984). "Mate selection in man: Evidence, theory, and outcome." Biodemography and Social Biology **31**(3-4): pp 243-278.
- Equalities Review Panel (2007). Fairness and Freedom: the final report of the Equalities Review. Equalities Review Panel. London, The Crown.
- Erikson, R. and J. Goldthorpe (1992). The Constant Flux: A Study of Class Mobility in Industrial Societies. Oxford, Clarendon Press.
- Errington, C., G. Cotterell, M. von Randow and S. Milligan (2008). Census Data Guide: A guide to using data from the New Zealand Census: 1981-2006. Wellington, Statistics New Zealand and The University of Auckland.
- Esping-Andersen, G., D. Boertien, J. Bonke and P. Gracia (2013). "Couple Specialization in Multiple Equilibria." European Sociological Review **29**(6): pp 1280-1294.

- Esteve, A., J. Garcia and I. Permanyer (2011) "The reversal of the gender gap in education and its impact on union formation: the end of hypergamy."
- Esteve, A. and R. McCaa (2008). Assortative mating patterns in the developing world. IUSSP Seminar on Changing Transitions to Marriage: gender implications for the next generation. New Dehli.
- Families Commission (2013). New Zealand Families Today: A brief demographic profile. Families Commission. Wellington.
- Felfe, C. (2006). The Child Penalty - A Compensating Wage Differential? Research report 22. Brussels, Enepri Research: pp 1-33.
- Flatau, P., I. James, R. Watson, G. Wood and P. Hendershott (2003). Leaving the Family Home: Household Formation and Housing Tenure Patterns in Australia. HILDA Conference. Melbourne.
- Fleming, R., J. Taiapa, A. Pasikale and S. Kell-Easting (1997). The common purse: income sharing in New Zealand families Auckland, Auckland University Press.
- Fraboni, R. (2000). Marriage market and homogamy in Italy: an event history approach Dissertation, University of Rome.
- Fraboni, R. (2004). The Marriage Market and Homogamy by Age in Italy, National Statistical Office (ISTAT).
- Friendly, M. (1995). "Correspondence analysis." Retrieved 18/09/10, 2010, from [http://www.math.yorku.ca/SCS/Courses/grcat/grc5.html#H2\\_81:PROC](http://www.math.yorku.ca/SCS/Courses/grcat/grc5.html#H2_81:PROC).
- Frommer, S. (2008). "On the Subjectivity of Lustful States of Mind." Psychoanalytic Dialogues **16**(6): pp 639-664.
- Fu, X. and T. Heaton (2008). "Racial and Educational Homogamy: 1980 to 2000." Sociological Perspectives **51**(4): pp 735-758
- Fursman, L. and P. Callister (2009). Men's participation in unpaid care: A review of the literature. Department of Labour. Wellington.
- Garrod, J. (2007). "Can't Buy Me Love: An Analysis of Love, Marriage, and Economics." Lethbridge Undergraduate Research Journal **1**(2): pp 1-9.
- Garson, D. (2006). "Correspondence Analysis." Retrieved 26/03/06, from <http://www2.chass.ncsu.edu/garson/pa765/correspondence.htm>.
- Garson, D. (2010). "Log-Linear, Logit, and Probit Models." Retrieved August 1, 2012, from <http://faculty.chass.ncsu.edu/garson/PA765/logit.htm>.
- Geher, G. (2000). "Perceived and Actual Characteristics of Parents and Partners: A Test of a Freudian Model of Mate Selection." Current Psychology **19**(3): pp 194-214.
- Gemici, A. and S. Laufer (2010). Marriage and Cohabitation. New York, New York University.

- Giddens, A. (1997). The Transformation of Intimacy: Sexuality, Love and Eroticism in Modern Societies. Cambridge, Polity Press.
- Gimenez, M. (2000). "What's material about materialist feminism? A Marxist feminist critique." Radical Philosophy **101**: pp 18-19.
- Glass, D. (1954). Social Mobility in Britain. London, Routledge & Kegan Paul.
- Glick, P. and H. Carter (1958). "Marriage patterns and educational level." American Sociological Review of Economic Dynamics **23**(3): pp 294-300.
- Gold, J. (2012). "Typologies of Cohabitation: Implications for Clinical Practice and Research." The Family Journal **20**: pp 315-321.
- Goldin, C. and L. Katz (2000). "The Power of the Pill: Oral Contraceptives and Women's Career and Marriage Decisions." Working Paper No. 7527 NBER Program(s):LS DAE.
- Goode, W. (1951). Family and Mobility. Class, Status and Power: Social Stratification in Comparative Perspective. Reinhard Bendix and Seymour Martin Lipset. New York, Free Press: pp 582-601.
- Goode, W. (1970). World Revolution and Family Patterns. New York, Free Press.
- Goody, J. (1971). "Class and Marriage in Africa and Eurasia." American Journal of Sociology **76**(4): pp 585-603.
- Gray, M. and J. Baxter (2011). The Longitudinal Study of Australian Children Annual Statistical Report Australian Institute of Family Studies. Melbourne, Australian Government.
- Greenacre, M. (1984). Theory and Applications of Correspondence Analysis. London, Academic Press.
- Greenacre, M. and A. Torres (2003). "Measuring Asymmetries in Brand Associations Using Correspondence Analysis." Journal of Economic Literature **C19**(C88): pp 1-26.
- Greene, E. and V. Rao (1995). "The marriage squeeze and the rise in informal marriage in Brazil." Social Biology **42**(1-2): pp 65-82.
- Grossbard-Shechtman, S. and X. Fu (2002). "Women's Labor Force Participation and Status Exchange in Intermarriage: A Model and Evidence for Hawaii." Journal of Bioeconomics **4**: pp 241-268.
- Grossbard, S. (2009). "How "Chicagoan" are Gary Becker's Economic Models of Marriage?" Journal of the History of Economic Thought **32**(3): pp 377-395.
- Grusky, D. (2001). Social Stratification. Boulder, Westview Press.
- Guendouzi, J. (2006). "'The Guilt Thing': Balancing Domestic and Professional Roles." Journal of Marriage and Family **68**(4): pp 901-909.

- Gunter, B. (2008). "Internet dating: a British survey." Aslib Proceedings **60**(2): pp 88-98.
- Guzzo, K. (2008). "Marital Intentions and the Stability of First Cohabitations." Journal of Family Issues **30**(2): pp 179-205.
- Haandrikman, K. (2011). "Window On The Netherlands: Spatial Homogamy: The Geographical Dimensions Of Partner Choice." Journal of Economic and Social Geography **102**(1): pp 100-110.
- Haandrikman, K. and C. Harmsen (2006). Spatial homogamy in the Netherlands: Distances between partners before cohabitation. The European Population Conference, Liverpool.
- Halpin, B. and T.-W. Chan (2003). "Educational homogamy in Ireland and Britain: trends and patterns." The British Journal of Sociology **54**(4): pp 473-495.
- Hamon, R. and B. Ingoldsby (2003). Mate Selection Across Cultures. London, Sage Publications.
- Hamplova, D. (2009). "Educational Homogamy Among Married and Unmarried Couples in Europe: Does Context Matter?" Journal of Family Issues **30**(1): pp 28-52.
- Hamplová, D. (2002). "Marriage and Cohabitation: Qualitative Differences in Partnership Arrangements." Sociologický Časopis / Czech Sociological Review **38**(6): pp 771-788.
- Hamplová, D. (2005). Educational Homogamy in Marriage and Cohabitation in Selected European Countries. International Sociological Association Research Committee 28 (RC28) on Social Stratification and Mobility: Inequality and Mobility in Family, School, and Work. Los Angeles.
- Hamplova, D. and C. Le Bourdais (2008). "Educational Homogamy of Married and Unmarried Couples in English and French Canada." Canadian Journal of Sociology/Cahiers canadiens de sociologie **33**(4): pp 845-872.
- Harkness, S. and J. Waldfogel (1999). The Family Gap in Pay: Evidence from Seven Industrialised Countries. Paper 29. Centre for Analysis of Social Exclusion, London School of Economics.
- Hartmann, H. (1976). "Capitalism, Patriarchy, and Job Segregation by Sex." Signs **1**(Women and the Workplace: The Implications of Occupational Segregation (Spring)): pp 137-169.
- Harvey, D. (2009). A Brief History of Neoliberalism. Oxford, Oxford University Press.
- Haveman, R. and T. Smeeding (2006). "The Role of Higher Education in Social Mobility." The Future of Children, Opportunity in America **16**(2): pp 125-150.

- Hayes, B. and F. Jones (2007). "Education and Marriage Patterns in Australia." International Journal of Sociology and Social Policy **11**(4): pp 1-16.
- Hayford, S. and P. Morgan (2008). "The Quality Of Retrospective Data On Cohabitation." Demography **45**(1): pp 129-141.
- Heaton, T. (2002). "Factors Contributing to Increasing Marital Stability in the United States." Journal of family Issues **23**(3 ): pp. 392-409.
- Heuveline, P. and J. Timberlake (2004). "The Role of Cohabitation in Family Formation: The United States in Comparative Perspective." Journal of Marriage and Family **66**(6): pp 1214-1230.
- Hewitt, B. and J. Baxter (2012). "Who gets married in Australia? The characteristics associated with a transition into first marriage: 2001-6." Journal of Sociology **48**: pp 43-61.
- Hewitt, B., J. Baxter and M. Western (2005). "Marriage breakdown in Australia: The social correlates of separation and divorce." Journal of Sociology **41** (no. 2 ): pp 163-183.
- Hillcoat-Nallétamby, S. and S. Baxendine (2004). "New Zealand Women's Employment Patterns: Diversity or Homogeneity?" New Zealand Population Review **30**(1&2): pp 111-130.
- Hixson, L. (2008). Reconceptualizing Cohabitation: Commitment Among Nonmarried Heterosexual Couples. PhD, State University of New York.
- Hochschild, A. and A. Machung (1989). The Second Shift: Working Parents and the Revolution at Home. New York, Viking Penguin.
- Hoffnung, M. (2004). "Wanting It All: Career, Marriage, and Motherhood During College-Educated Women's 20s." Sex Roles **50**(9-10): pp 711-723.
- Hollingshead, A. (1950). "Cultural Factors in the Selection of Marriage Mates." American Sociological Review **15**(5): pp 619-627.
- Holmes, M. (2013). Gendering Being Sociological (2nd ed.). S. Matthewman and L. West Newman and B. Curtis. London, Palgrave MacMillan.
- Homans, G. (1958). "Social behavior as exchange." American Journal of Sociology **62**: pp 597-606.
- Homans, G. (1961). Social behavior and its elementary forms. New York, Harcourt, Brace.
- Homans, G. (1964). Contemporary Theory in Sociology. Handbook of Modern Sociology. Robert E Lee Faris. Chicago, Rand McNally and Company: pp 951-977.
- Hout, M. and T. DiPrete (2006). "What we have learned: RC28's contributions to knowledge about social stratification." Research in Social Stratification and Mobility **24**(1): pp 1-19.

Human Resources and Skills Development Canada (2011). Indicators of Well-being in Canada: Family Life - Marriage, Human Resources and Skills Development Canada.

Huppatz, K. (2009). "Reworking Bourdieu's `Capital': Feminine and Female Capitals in the Field of Paid Caring Work." Sociology **43**(45): pp 45-66.

Hutchinson, B. (1957). "Some Evidence Related to Matrimonial Selection and Immigrant Assimilation in Brazil." Population Studies **11**(2): pp 149-156.

Hyman, P. (1994). Women and Economics: A New Zealand feminist perspective. Wellington, Bridget Williams Books.

Illouz , E. (1997). Consuming the romantic utopia: Love and the cultural contradictions of capitalism. Berkley, University of California press.

Isen, A. and B. Stevenson (2010). "Women's Education And Family Behavior: Trends In Marriage, Divorce And Fertility." National Bureau of Economic Research(Working Paper 15725).

Jackson, S. (1993). "Even Sociologists Fall in Love: An Exploration in the Sociology of Emotions." Sociology **27**(2): pp 201-220.

Jacobsen, V., L. Fursman, J. Bryant, M. Claridge and B. Jensen (2004). Theories of the Family and Policy. New Zealand Treasury. Wellington.

Jaumotte, F. (2003). Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries. Working Paper No. 376, OECD.

Jenkins, R. (2002). Pierre Bourdieu: revised edition. London, Routledge.

Jepsen, L. and C. Jepsen (2002). "An Empirical Analysis of the Matching Patterns of Same-Sex and Opposite-Sex Couples." Demography **39**(3): pp 435-453.

Johnson, M., J. Caughlin and T. Huston (1999). "The Tripartite Nature of Marital Commitment: Personal, Moral, and Structural Reasons to Stay Married." Journal of Marriage and Family **61**(1): pp 160-177.

Johnston, G. (2005). Women's Labour Force Participation in New Zealand and the OECD. New Zealand Treasury. Wellington.

Jones, D. (1928). "Like Father Like Son-In-Law." The Scientific Monthly **26**(6): pp 557-560.

Jones, F. (1987). "Educational Homogamy since the 1930s: Trends in Marriage Patterns and the Stratification System." Journal Of Sociology **23**(2): 185-198.

Jones, F. and P. Davis (1986). Models of Society:Class, Stratification and Gender in Australia and New Zealand. Sydney, Croom Helm.

Jones, F. and J. McMillan (2001). "Scoring Occupational Categories for Social Research: A Review of Current Practice, with Australian Examples." Work, Employment & Society **15**(3): pp 539-563

- Jones, H. (1929). "Homogamy in Intellectual Abilities." American Journal of Sociology **35**(3): pp 369-382.
- Kahu, E. and M. Morgan (2007). "A critical discourse analysis of New Zealand government policy: Women as mothers and workers." Women's Studies International Forum **30**: pp 134-146.
- Kalmijn, M. (1991). "Status Homogamy in the United States." American Journal of Sociology **97**(2): pp 496-523.
- Kalmijn, M. (1994). "Assortative Mating by Cultural and Economic Occupational Status." The American Journal of Sociology **100**(2): pp 422-452.
- Kalmijn, M. (1998). "Intermarriage and Homogamy: Causes, Patterns, Trends." Annual Review of Sociology **24**(1): pp 395-421.
- Kalmijn, M. and H. Flap (2001). "Assortative Meeting and Mating: Unintended Consequences of Organized Settings for Partner Choices." Social Forces **79**(4): pp 1289-1312.
- Kalmijn, M. and J. K. Vermunt (2007). "Homogeneity of social networks by age and marital status: A multilevel analysis of ego-centered networks." Social Networks **29**(1): 25-43.
- Kasearu, K. and M. Ainsaar (2010). Mate selection characteristics and fertility. The European Population Conference. Vienna.
- Katz, A. and R. Hill (1958). "Residential Propinquity and Marital Selection: A Review of Theory, Method, and Fact." Marriage and Family Living **20**(1): pp 27-35.
- Kaufman, G. and F. Goldscheider (2007). "Do men need a spouse more than a women?: perception of the importance for marriage form men and women." The Sociological Quarterly **48**: pp 29-46.
- Kennedy, R. (1952). "Single or triple melting pot? Intermarriage trends in New Haven, 1870-1940." American Journal of Sociology **58**(1): pp 56-59.
- Kenrick, D., G. Groth, M. Trost and E. Sadalla (1993). "Integrating Evolutionary and Social Exchange Perspectives on Relationships: Effects of Gender, Self appraisal, and Involvement Level on Mate Selection Criteria." Journal of Personality and Social Psychology **64**: pp 951-969.
- Kerckhoff, A. (1964). "Patterns of Homogamy and the Field of Eligibles." Social Forces **42**(3): pp 289-297.
- Kerckhoff, A. and K. Davis (1962). "Value Consensus and Need Complementarity in Mate Selection." American Sociological Review **27**(3): pp 295-303.
- Khoo, S. (1987). "Living Together as Married: A Profile of De Facto Couples in Australia." Journal of Marriage and Family **49**(1): pp 185-191.

- Kiernan, K. (2001). "The rise of cohabitation and childbearing outside marriage in Western Europe." International Journal of Law, Policy and the Family **15**(1): pp 1-21.
- Kingdom, E. (1996). "Cohabitation Contracts and the Private Regulation of Time." Time & Society **5**(47): pp 47-60.
- Kippen, R., B. Chapman and P. Yu (2009). What's love got to do with it? homogamy and dyadic approaches to understanding marital instability. Biennial HILDA Survey Research Conference. Melbourne.
- Kirkpatrick, C. and J. Cotton (1951). "Physical Attractiveness, Age, and Marital Adjustment." American Sociological Review **16**(1): pp 81-86.
- Kornblum, W. (2008). Sociology in a changing world. Belmont, Wadsworth Publishing.
- Kramarow, E. and A. Biddlecom (1995). Married Women's Headship: The Relationship between Economic Power and Status in the Household. Michigan, Population Studies Center University of Michigan.
- Lamanna, M. and A. Riedmann (2009). Marriages & Families: Making Choices in a Diverse Society: Making Choices in a Diverse Society. Belmont, Thompson Wadsworth.
- Lambert, P. and D. Griffiths (2011). Dimensions and boundaries: Comparative analysis of occupational structures using social network and social interaction distance analysis. Spring meeting of the ISA Research Committee 28 on Social Stratification and Mobility. University of Essex.
- Lambert, P., K. Prandy and W. Bottero (2007). "By Slow Degrees: Two Centuries of Social Reproduction and Mobility in Britain." Sociological Research Online **12**(1).
- Lampard, R. (2007). "Couples' Places of Meeting in Late 20th Century Britain: Class, Continuity and Change." European Sociological Review **23**(3): pp 357-371.
- Landis, P. and K. Day (1945). "Education as a factor in mate selection." American Sociological Review (August): pp 558-560.
- Laugensen, R. (2005). Expect marriages, births to change. Sunday Star Times. Auckland.
- Laumann, E., J. Gagnon, R. Michael and S. Michaels (1994). The Social Organization of Sexuality: Sexual Practices in the United States. Chicago, University of Chicago Press.
- Lawler, E. (2001). "An Affect Theory of Social Exchange." American Journal of Sociology **107**(2): pp 321-352.
- Lawler, E. and S. Thye (1999). "Bringing Emotions Into Social Exchange Theory " Annual Review of Sociology **25**: pp 217-244.

- Lawler, E. and J. Yoon (1996). "Commitment in Exchange Relations: Test of a Theory of Relational Cohesion." American Sociological Review **61**: pp 89-108.
- Lawler, E. and J. Yoon (1998). "Network structure and emotions in exchange relations." American Sociological Review **63**: pp 871-894.
- Lawler, E., J. Yoon and S. Thye (2000). "Emotion and group cohesion in productive exchange." American Sociological Review **106**: pp 616-657.
- Lawton, Z. and P. Callister (2010). Older Women-Younger Men Relationships: the Social Phenomenon of 'Cougars'. A Research Note. Working Paper. Institute of Policy Studies : Victoria University of Wellington.
- Lawton, Z. and P. Callister (2011a). "'Mail-order brides': are we seeing this phenomenon in New Zealand? 'Missing men' Background Paper." Institute of Policy Studies : Victoria University of Wellington.
- Lazarsfeld, P. and R. Merton (1954). "Friendship as a social process: a substantive and methodological analysis." Freedom and control in modern society **18**: pp 18-66.
- Lee, S. (2004). Women's Work Supports, Job Retention and Job Mobility. Institute for Women's Policy Research. Washington.
- Lehrer, E. (2000). Religion as a Determinant of Entry into Cohabitation and Marriage. The Ties That Bind: Perspectives on Marriage and Cohabitation. L. Waite. New York, Walter de Gruyter, Inc.
- Leslie, G. and A. Richardson (1956). "Family versus Campus Influences in Relation to Mate Selection." Social Problems **4**(2): pp 117-121.
- Levine, R., S. Sato, T. Hashimoto and J. Verma (1995). "Love and Marriage in Eleven Cultures." Journal of Cross-Cultural Psychology **26**(5): pp 554-577.
- Lewis, J. (2001). The end of marriage? Individualism and intimate relations. Cheltenham, Edward Elgar.
- Lewis, J. (2003). Should we worry about family change? Toronto, University of Toronto Press.
- Licher, D. and Z. Qian (2008). "Serial Cohabitation and the Marital Life Course." Journal of Marriage and Family **70**(4): pp 861-878.
- Lichter, D., R. Anderson and M. Hayward (1995). "Marriage Markets and Marital Choice." Journal of Family Issues **16**(4): pp 412-431.
- Light, L. (2004). "Gender Differences in the Marriage and Cohabitation Income Premium." Population Association of America **41**(2): pp 263-284.
- Lindholm, C. (1998). The Future of Love. Romantic Love and Sexual Behavior: Perspectives from the Social Sciences Victor De Munck. Westport, Greenwood publishing group.

- Lindsay, J. (2000). "An ambiguous commitment: Moving into a cohabiting relationship." Journal of Family Studies **6**(1): pp 120-134.
- Lloyd, K. (2008). *Marriage Markets*. Washington, Washington State University.
- Loughran, D. and J. Zissimopoulos (2004). Are There Gains to Delaying Marriage? The Effect of Age at First Marriage on Career Development and Wages. RAND: Labor and Population. National Institute for Child Health and Human Development.
- Loving, R., S. Aragón, N. Santamaria and A. Ardila (2011). "Acta de Investigación Psicológica."
- Macdonald, C. (1999). Too many men and too few women: Gender's 'fatal impact' in nineteenth-century colonies. The Gendered Kiwi. Caroline Daley & Deborah Montgomerie. Auckland, Auckland University Press: pp 17-35.
- Mäenpää, E. and M. Jalovaara (2013). "The effects of homogamy in socio-economic background and education on the transition from cohabitation to marriage." Acta Sociologica **56**(3): pp 247-263.
- Majone, G. (1972). "Social space and social distance: Some remarks on metric methods in data analysis." Quality and Quantity **6**(2): pp 239-252.
- Manning, W. (1993). "Marriage and cohabitation following premarital conception." Journal of Marriage and the Family **55**(4): pp 839-850.
- Manning, W., S. Brown and K. Payne (2013). Two Decades of Stability and Change in Age at First Union Formation. Population Association of America. New Orleans: pp 1-28.
- Manning, W., M. Longmore and P. Giordano (2007). "The Changing Institution of Marriage: Adolescents' Expectations to Cohabit and to Marry." Journal of Marriage and Family **69**(3): pp 559-575.
- Manning, W. and P. Smock (2002). "First Comes Cohabitation and then Comes Marriage?" Journal of Family Matters **23**(8): pp 1065-1087.
- Manning, W. and P. Smock (2005). "Measuring and modeling cohabitation: New perspectives from qualitative data." Journal of Marriage and Family **67**(4): pp 989-1002.
- Manting, D. (1996). "The changing meaning of cohabitation and marriage." European Sociological Review **12**(1): pp 53-65.
- Marches, J. and G. Turbeville (1953). "The Effect of Residential Proximity on Marriage Selection." American Journal of Sociology **58**(6): pp 592-595.
- Mare, R. (1991). "Five Decades of Educational Assortative Mating." American Sociological Review **56**(1): pp 15-32.
- Marks, G., J. McMillan, F. Jones and J. Ainley (2000). The Measurement of Socioeconomic Status for the Reporting of Nationally Comparable Outcomes

of Schooling Draft Report National Education Performance Monitoring Taskforce. Melbourne, Australian Council for Educational Research & Sociology Program Research School of Social Sciences Australian National University.

Marshall, W. and I. Sawhill (2006). *Progressive Family Policy in The Twenty First Century. he Future of the Family*. D. Moynihan and T. Smeeding and L. Rainwater. New York, Russell Sage Foundation.

Mason, C. (2012). Gender pay gap widens in New Zealand. New Zealand Herald. Auckland, New Zealand Herald.

McDonald, K. (1985). "Social Closure and Occupational Registration." Sociology **19**: pp 541-556.

McGinnis, S. (2003). "Cohabiting, Dating, and Perceived Costs of Marriage: A Model of Marriage Entry." Journal of Marriage and Family **65**(1): pp 105-116.

McPherson, M. (2004). "Demographic Change and Labour Force Participation: Implications for Workplace and Social Policy." New Zealand Population Review **31**(2): pp 91-115.

McPherson, M., L. Smith-Lovin and J. Cook (2001). "Birds of a Feather: Homophily in Social Networks." Annual Review of Sociology **27**: 415-444.

McTaggart, S. (2004). Persistent unemployment in different population groups: A one way street for some? (unpublished). SAANZ, Wellington.

Michel, A. (1964). "Mate Selection in Various Ethnic Groups in France." Acta Sociologica: pp 163-176.

Michielutte, R. (1972). "Trends in Educational Homogamy." Sociology of Education **45**(3): pp 288-302.

Milligan, S., A. Fabian, P. Coope and C. Errington (2006). *Family Wellbeing: Indicators from the 1981-2001 New Zealand Censuses*, Unpublished.

Mills, C. (1959). The Sociological Imagination. London, Oxford University Press.

Milne, B., U. Byun and A. Lee (2012). *New Zealand Socio-economic Index 2006 (NZSEI-06): An update and revision of the New Zealand Socio-economic Index of Occupational Status*, Centre of Methods and Policy Application in the Social Sciences (COMPASS), University of Auckland.

Ministry of Social Development (2004). *New Zealand Families Today: A Briefing for the Families Commission*. Ministry of Social Development. Wellington.

Ministry of Social Development (2006). *Work, Family and Parenting Study: Research Findings*. Ministry of Social Development. Wellington.

Ministry of Women's Affairs (2013). *Gender pay gap*. Ministry of Women's Affairs. Wellington.

- Miret-Gamundi, P., M.-J. González and R. Treviño-Maruri (2009). Are Cohabiting and Being Married Different? Differences in the socio-demographic composition of partnerships in Western European countries. XXVI IUSSP International Population Conference. Morocco.
- Morgan, B. (1981). "A Contribution to the Debate on Homogamy, Propinquity, and Segregation." Journal of Marriage and the Family **43**(4): pp 909-921.
- Mumford, K. and A. Parera-Nicolau (2003). "The Labour Force Participation of Married Mothers: A Tale of International Catch-Up." Australian Journal of Labour Economics **6**(4): pp 619-630.
- Murstein, B. (1967). "Empirical Tests of Role, Complementary Needs, and Homogamy Theories of Marital Choice." Journal of Marriage and Family **29**(4): pp 689-696.
- Murstein, B. (1970). "Stimulus. Value. Role: A Theory of Marital Choice." Journal of Marriage and Family **32**(3): pp 465-481.
- Murstein, B. (1974). Love, Sex, and Marriage Through the Ages. New York, Springer.
- Nair, B., W. Smart and R. Smyth (2007). "How Does Investment In Tertiary Education Improve Outcomes For New Zealanders?" Social Policy Journal of New Zealand **31**: pp 195-217.
- Nationmaster. (2012). "Divorces per 100 marriages." from [http://www.nationmaster.com/graph/peo\\_div\\_per\\_100\\_mar-people-divorces-per-100-marriages](http://www.nationmaster.com/graph/peo_div_per_100_mar-people-divorces-per-100-marriages).
- New Zealand Government (2009). Family Proceedings Act 1980. New Zealand Legislations: Acts. Wellington.
- Newell, J. and P. Callister (2008). The gender transition in tertiary education in New Zealand and Australia. Australian Population Association Conference. Alice Springs.
- Nicholson, L. (1986). The Contemporary Women's Movement. Gender & History. New York, Columbia University Press.
- Nock, S. (2001). "The marriages of equally dependent spouses." Journal of Family Issues **22**: pp 756-777.
- NZ. Stat (2013a). Earnings from main wage and salary job by occupation (ANZSCO2006), sex, and broad age groups (2009 onwards). Statistics New Zealand. Wellington.
- NZ. Stat (2013b). Filled Jobs by ANZSIC Group, Sex and Employment. Statistics New Zealand. Wellington.
- NZ. Stat (2013h). Number of Children Born Alive and Work and Labour Force Status by Age Group of Mother, for the Female Census Usually Resident Population Count Aged 15 Years and Over, 1996 and 2006. Statistics New Zealand. Wellington.

- Öberg, B.-M. (2004). Changing Worlds and the Ageing Subject: Dimensions in the Study of Aging and Later Life. London, Ashgate.
- OECD (1998). The Future of Female-dominated Occupations. France, OECD.
- OECD (2003). Babies and Bosses - Reconciling Work and Family Life (Volume 3) New Zealand, Portugal and Switzerland: New Zealand, Portugal and Switzerland, OECD.
- OECD (2004) "Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries." OECD Economics Department.
- OECD (2006). Mothers in Paid Employment. Society at a Glance 2006 OECD Social Indicators, OECD.
- OECD (2008). The Future of the Family to 2030: A Scoping Report OECD International Futures Programme. Paris, OECD.
- OECD (2009). Marriage and Divorce. Society at a Glance 2009: OECD Social Indicators, OECD.
- OECD (2010). Cohabitation rate and prevalence of other forms of partnership. Social Policy Division, OECD.
- OECD (2010a). Dataset: Full-time part-time employment - common definition: incidence in Part time female employment. OECD, OECD iLibrary.
- OECD (2010b). Dataset: Full-time part-time employment - common definition: incidence in female share of part time employment. OECD, OECD iLibrary.
- OECD (2011). Doing Better for Families. Paris, OECD.
- Office for National Statistics (2012). Cohabitation in the UK. Office for National Statistics: UK. England: pp 1-7.
- Office for National Statistics (2012) "Marriages in England and Wales, 2010."
- Ono, H. (2003). "Women's Economic Standing, Marriage Timing, and Cross-National Contexts of Gender." Journal of Marriage and Family **65**(2): pp 275-286.
- Ono, H. (2004). "Marital history homogamy between the divorced and the never married among non-Hispanic whites." Social Science Research **34**(2): pp 333-356.
- Oppenheimer, V. (2000). The Continuing Importance of Men's Economic Position in Marriage Formation. The Ties that Bind: Perspectives on Marriage and Cohabitation. L. Waite, C. Bachrach, M. Hindin, E. Thomson and A. Thornton. New York, Aldine de Gruyter: pp 320-342.
- Osborne, C. (2005). "Marriage Following the Birth of a Child Among Cohabiting and Visiting Parents." Journal of Marriage and Family **67**(February): pp 14-26.

- Parsons, T. (1949). The social structure of the family. The family: Its function and destiny. R. Anshen. New York, Harper: pp 173-201.
- Parsons, T. (1951). The Social System. New York Free Press.
- Pearson, D. (1980). Johnsonville: Continuity and Change in a New Zealand Township. Sydney and Boston, Allen and Unwin.
- Peck, J. and A. Tickell (2002). "Neoliberalizing Space." Antipode **34**(3): pp 380-404.
- Pocock, B. (2003). The work/life collision: what work is doing to Australians and what to do about it. Annadale, Federation Press.
- Pool, D., A. Dharmalingam and J. Sceats (2007). The New Zealand family from 1840: a demographic history. Auckland, Auckland University Press.
- Poole, M. (2005). Family: changing families, changing times. Changing families, changing times. Marilyn Poole. Crows Nest, Allen & Unwin.
- Prandy, K. (1998). "Class and Continuity in Social Reproduction: An Empirical Investigation." Sociological Review **46**: pp 340-364.
- Prandy, K. (1999). "The Social Interaction Approach to the Measurement and Analysis of Social Stratification." International Journal of Sociology and Social Policy **19**(9-11): pp 215-249.
- Prandy, K. (2003). "Social interaction distance and stratification." British Journal of Sociology **54**(2): pp 177-197.
- Prandy, K. and F. Jones (2001). "An international comparative analysis of marriage patterns and social stratification " International Journal of Sociology and Social Policy **21**(4/5/6): pp 165-183.
- Prandy, K. and P. Lambert (2001). A comparative measure of social stratification based on patterns of occupational homogeneity. 5th Conference of the European Sociological Association, University of Helsinki.
- Prandy, K. and P. Lambert. (2005). "CAMSSIS: Social Interaction and Stratification Scale." Retrieved 2006-2013, from <http://www.camsis.stir.ac.uk/>.
- Prandy, K., P. Lambert and W. Bottero (2003a). By Slow Degrees: Two centuries of Social Reproduction and Mobility in Britain. International Sociological Association Research Committee on Social Stratification and Mobility. Oxford.
- Proulx, N., S. Caron and M. Logue (2006). "Older Women/Younger Men: A Look at the Implications of Age Difference in Marriage." Journal of Couple & Relationship Therapy: Innovations in Clinical and Educational Interventions **5**(4): pp 43-64.
- Pullum, T. and A. Peri (1999). "A multivariate analysis of homogamy in Montevideo, Uruguay." Population Studies **77**(53): pp 361-377.

- Putnam-Tong, R. (2002). Feminist Thought: A More Comprehensive Introduction, Second Edition. New York, Westview Press.
- Qian, Z. and S. Preston (1993). "Changes in American Marriage, 1972 to 1987: Availability and forces of attraction by age and education." American Sociological Review **58**(4): pp 482-495.
- Queiroz, B. (2004). The Impacts of Sex Ratios on Marriage Markets in the United States. Population Association of America (PAA) 2004 Annual Meeting Boston.
- Raley, S., M. Mattingly and S. Bianchi (2006). "How dual are dual-income couples? Documenting change from 1970 to 2001." Journal of Marriage & Family **68**(1): pp 11-28.
- Raymo, J. and M. Iwasawa (2005). "Marriage Market Mismatches in Japan: An Alternative View of the Relationship between Women's Education and Marriage." American Sociological Review **70**(5): pp 801-822.
- Raymo, J. and Y. Xie (2000). "Temporal and Regional Variation in the Strength of Educational Homogamy." American Sociological Review **65**(5): pp 773-781.
- Regan, P. (2008). The Mating Game: A Primer on Love, Sex, and Marriage SAGE Publications
- Regnerus, M. (2012). "Mating Market Dynamics, Sex-Ratio Imbalances, and Their Consequences." Society **49**(6): pp 500-505.
- Reinhold, S. (2010). "Reassessing the link between premarital cohabitation and marital instability " Demography **47**(3): pp 719-733
- Ressler, R. and M. Waters (1995). "The Economics of Cohabitation." Kyklos **48**(4): pp 577-592.
- Rhoades, G., S. Stanley and H. Markman (2009). "Couples' Reasons for Cohabitation Associations With Individual Well-Being and Relationship Quality." Journal of Family Issues **30**(2): pp 233-258.
- Richard, B. and L. Prince-Cooke (2004). The Persistence of the Gendered Division of Domestic Labour. Oxford, Nuffield College.
- Rindfuss, R. and A. VandenHeuvel (1990). "Cohabitation: A precursor to marriage or an alternative to being single?" Population and Development Review **16**: pp 703-726.
- Röhler, K. and J. Huinink (2010). Pair Relationships and Housework. Dividing the Domestic: Men, Women, and Household Work in Cross-National Perspective. Judith Treas & Sonja Drobnic. Stanford, Stanford University Press: pp 192-213.
- Rolf, K. and J. Ferrie (2008). The May-December relationship since 1850: Age homogamy in the U.S. Population Association of America: 2008 Annual meeting. New Orleans.

- Roper, B. (2005). Ethnicity, gender and movements for change. Prosperity for all? Victoria, Thomson Dunmore Press: pp 55-85.
- Roper, B. (2005). Prosperity for all?: economic, social and political change in New Zealand since 1935. Melbourne, Thomson/Dunmore Press.
- Rose, E. (2004). "Education and Hypergamy in Marriage Markets." Department of Economics, University of Washington Seattle, WA.
- Rose, E. (2006). Education, Hypergamy and the "Success Gap". Seattle, WA, Department of Economics, University of Washington.
- Rosen, L. (2008). "The Impact of Emotionality and Self-disclosure on Online Dating Versus Traditional Dating." Computers in Human Behavior **24**(5): pp 2124-2157.
- Rosenfeld, M. (2005). "A Critique of Exchange Theory in Mate Selection." American Journal of Sociology **110**(5): pp 1284-1325.
- Rosenfeld, M. and R. Thomas (2012). "Searching for a Mate: The Rise of the Internet as a Social Intermediary." American Sociological Review **77**(4): pp 523-547.
- Rubin, Z. (1968). "Do American Women Marry Up?" American Sociological Review **33**(5): pp 750-776.
- Ryan, M., B. Boddington and K. Dunstan (2005). Age differences between partners at the time of marriage: 1963, 1983 and 2003. Demographic Trends 2004. S. N. Zealand. Wellington, Statistics New Zealand: pp 3-8.
- Scanzoni, J. (1967). "Occupation and Family Differentiation." The Sociological Quarterly **8**(2): pp 187-198.
- Schoen, R., J. Wooldredge and B. Thomas (1989). " Ethnic and Educational Effects on Marriage Choice." Social Science Quarterly **70**(3): pp 617-630.
- Schrag, F. (1992). "In Defense of Positivist Research Paradigms." Educational Researcher **21**(5): pp 5-8
- Schumacher, R. and L. Lorenzetti (2005). ""We Have No Proletariat" : Social Stratification and Occupational Homogamy in Industrial Switzerland, Winterthur 1909/10–1928." International Institute for Social History **50**(Supplement S13): pp 65-91.
- Schwartz, C. (2010). "Pathways to Educational Homogamy in Marital and Cohabiting Union." Demography, **47**(3): pp 735-753.
- Schwartz, C. and R. Mare (2005). "Trends in educational assortative marriage from 1940 to 2003." Demography **42**(4): pp 621-646.
- Secombe, K. and R. Warner (2003). Marriages and families: Relationships in social context, Wadsworth Publishing Company.

- Seltzer, J. (2000). "Families Formed outside of Marriage." Journal of Marriage and Family **62**(4): pp 1247-1268.
- Seltzer, J. (2004). "Cohabitation in the United States and Britain: Demography, kinship, and the future." Journal of Marriage and Family **66**(4): pp 921-928.
- Shepard, J. (2009). Sociology. Belmont, Wadsworth.
- Shin, T.-J. (2005). Occupational Sex Segregation and Chances for Upward Mobility: Consequences of Job Shifts Within and Across Boundaries. Research Committee 28 on Social Stratification and Mobility Los Angeles.
- Simpson, J., B. Campbell and E. Berscheid (1986). "The Association between Romantic Love and Marriage: Kephart (1967) Twice Revisited." Personality and Social Psychology Bulletin **12**(3): pp 363-372.
- Simpson, R. (2006). Childbearing On Hold: A Literature Review. University of Edinburgh, Centre for Research on Families and Relationships.
- Singleton, A. and J. Maher (2007). "The "New Man" Is in the House: Young Men, Social Change, and Housework." The Journal of Men's Studies **12**( 3): pp 227-240
- Siow, A., M. Botticini, E. Choo, G. Hamilton, M. Peters and X. Zhu (2003). The Economics of Marriage 30 Years after Becker. Canadian Economics Association. Ottawa.
- Smith, M. (1941). "Similarities of Marriage Partners in Intelligence." American Sociological Review **6**(5): pp 697-701.
- Smits, J. (2003). "Social closure among the higher educated: trends in educational homogamy in 55 countries." Social Science Research **32**(2): pp 251-277.
- Smits, J., W. Ultee and J. Lammers (1998). "Educational Homogamy in 65 Countries: An Explanation of Differences in Openness Using Country-Level Explanatory Variables " American Sociological Review **63**(2): pp 264-285.
- Smits, J., W. Ultee and J. Lammers (2000). "Occupational Homogamy in Eight Countries of the European Union 1975-89." Acta Sociologica **42**(1): pp 55-68.
- Smock, P. (2000). "Cohabitation in the United States: An appraisal of research themes, findings, and implications." Annual Review of Sociology **26**(1): pp 1-20.
- Smock, P., L. Casper and J. Wyse (2008). Nonmarital Cohabitation: Current Knowledge and Future Directions for Research. A Multidisciplinary Examination of Change and Variation in Romantic Unions. University of Southern California.
- Smock, P., W. Manning and C. Bergstrom (2006). Heterosexual Cohabitation in the United States: Motives for Living Together among Young Men and Women: Report 06-606. Michigan, Population Studies Center Research: University of Michigan.

Sorensen, A. and S. McLanahan (1989). Women's Economic Dependency and Men's Support Obligations: Economic Relations Within Households. Symposium on Life Histories and Generations. Nederlands Institute for the Advanced study in the Humanities and Behavioural Sciences.

Sprecher, S. (1998). "Social Exchange Theories and Sexuality." The Journal of Sex Research **35**(1): pp 32-43.

Sprecher, S., Q. Sullivan and E. Hatfield (1994). "Mate selection preferences: gender differences examined in a national sample." Journal of Personality and Social Psychology **66**(6): pp 1074-1080.

Stafford, L., S. Kline and C. Rankin (2004). "Married individuals, cohabiters, and cohabiters who marry: A longitudinal study of relational and individual well-being." Journal of Social & Personal Relationships **21**(2): pp 231-248.

Stanley, S., G. Rhoades and H. Markman (2006). "Sliding Versus Deciding: Inertia and the Premarital Cohabitation Effect." Family Relations **55**: pp 499-509.

Stanley, S., S. Whitton and H. Markman (2004). "Maybe I Do: Interpersonal Commitment and Premarital or Nonmarital Cohabitation." Journal of Family Issues **25**(4): pp 496-519.

Statistics Canada. (2007). "Changing role of education in the marriage market in Canada and the United States." The Daily, from <http://www.statcan.gc.ca/daily-quotidien/070518/dq070518b-eng.htm>.

Statistics Canada (2013). Vital Statistics - Marriage Database. Canada, Statistics Canada.

Statistics New Zealand (1994). New Zealand Now: Families. Statistics New Zealand. Wellington.

Statistics New Zealand (1996). More employed mothers in two-parent families. Statistics New Zealand. Wellington.

Statistics New Zealand (1998). New Zealand Now: Women. Statistics New Zealand. Wellington.

Statistics New Zealand (1999). New Zealand Now - Incomes (Census 96) (1999) - Reference Reports. Wellington.

Statistics New Zealand (2001a). Key Statistics 2001. Statistics New Zealand. Wellington.

Statistics New Zealand (2001b). Marriage and Divorce in New Zealand. Statistics New Zealand. Wellington.

Statistics New Zealand (2006f). Data Dictionary 2006 Census of Population and Dwellings. Statistics New Zealand. Wellington.

Statistics New Zealand (2006g). Marriages Maintain Momentum. Media Release. Statistics New Zealand. Wellington.

Statistics New Zealand (2007a). Marriages Civil Unions and Divorces: Year ended December 2006. Hot off the Press. Statistics New Zealand. Wellington.

Statistics New Zealand (2007c). Guidelines for using ethnicity data: 2006 census. Statistics New Zealand. Wellington.

Statistics New Zealand (2009a). One-third of marriages end in divorce. Marriages, Civil Unions and Divorces: Year ended December 2008. Statistics New Zealand. Wellington.

Statistics New Zealand (2009c). Demographic Trends. Statistics New Zealand. Wellington.

Statistics New Zealand (2010b). Marriages, Civil Unions, and Divorces: Year ended December 2009. Excel Tables (1-6). Wellington, Statistics New Zealand.

Statistics New Zealand (2010c). Marriages, Civil Unions, and Divorces: Year ended December 2009. Statistics New Zealand. Wellington.

Statistics New Zealand (2011b). Marriages, Civil Unions, and Divorces: Year ended December 2010. Wellington, Statistics New Zealand.

Statistics New Zealand (2011c). Time Use Survey: 2009/10. Statistics New Zealand. Wellington.

Statistics New Zealand (2011e). Demographic Trends: 2011: Marriage, civil union, and divorce. Statistics New Zealand. Wellington.

Statistics New Zealand (2011f). Marriage rate drops to a historic low. Media release. Statistics New Zealand. Wellington.

Statistics New Zealand (2011g). New Zealand Income Survey: June 2011 quarter. Statistics New Zealand. Wellington.

Statistics New Zealand (2011h). Data Lab Output Guide. Statistics New Zealand. Wellington.

Statistics New Zealand (2011i). Group: Marriage and Divorce Rates - DMR Table: Age-specific divorce rate by sex (Annual-Dec). Wellington.

Statistics New Zealand (2011k). Regional birth rates (1996-2006). Statistics New Zealand. Wellington.

Statistics New Zealand (2012a). Demographic Trends 2011. Statistics New Zealand. Wellington.

Statistics New Zealand (2012c). Marriages, Civil Unions, and Divorces: Year ended December 2011. Statistics New Zealand. Wellington.

Statistics New Zealand (2013a). Demographic Trends: 2012: Marriage, civil union, and divorce. Statistics New Zealand. Wellington.

Statistics New Zealand (2013b). Demographic Trends: 2012. Statistics New Zealand. Wellington.

Statistics New Zealand (2013c). New Zealand Official Yearbook 2012: Tertiary Education. Statistics New Zealand. Wellington.

Statistics New Zealand (2013d). Classifications and standards: Hours Worked in Employment. Statistics New Zealand. Wellington.

Statistics New Zealand (2013e). New Zealand Income Survey: June 2013 quarter. Statistics New Zealand. Wellington.

Statistics New Zealand (2014a). 2013 Census QuickStats about national highlights: Income. Statistics New Zealand. Wellington, Statistics New Zealand.

Statistics New Zealand (2014b). Statistical standard for child dependency status. Statistics New Zealand. Wellington: pp 1-5.

Statistics New Zealand Microdata (2011). Microdata derived from Census outputs: SNZ Datalab (1981-2006). Wellington, Statistics New Zealand.

Statsoft. (2005a). "Correspondence Analysis." Retrieved 28/10/2011, from [www.statsoft.com/textbook/stcoran.html](http://www.statsoft.com/textbook/stcoran.html).

Stavrova, O., D. Fetchenhauer and T. Schlösser (2012). "Cohabitation, Gender, and Happiness: A Cross-Cultural Study in Thirty Countries." Journal of Cross-Cultural Psychology **43**(7): pp 1063-1081.

Stevens, G. (1991). "Propinquity and educational homogamy." Sociological Forum **6**(4): pp 715-726.

Stevenson, B. and J. Wolfers (2007). "Marriage and Divorce: Changes and their Driving Forces." NBER Working Paper No. 12944.

Stewart, A., K. Prandy and R. Blackburn (1980). Social stratification and occupations. London, Macmillan.

Strong, B., C. DeVault and T. Cohen (2011). The Marriage and Family Experience: Intimate Relationships in a Changing Society. Canada, Linda Schreiber-Ganster.

Sundal, A. and T. McCormick (1951). "Age at Marriage and Mate Selection: Madison, Wisconsin, 1937-1943." American Sociological Review **16**(1): pp 37-48.

Sussman, M. (1953). "Parental Participation in Mate Selection and Its Effect upon Family Continuity." Social Forces **32**(1): pp 76-81.

t'Mannetje, A., T. Slater, D. Mclean, A. Eng, C. Briar and J. Roen-Douwes (2009). Women's Occupational Health And Safety In New Zealand. Department of Labour. Wellington.

Teachman, J. (2003). "Premarital Sex, Premarital Cohabitation, and the Risk of Subsequent Marital Dissolution Among Women." Journal of Marriage and Family **65**(2): pp 444-455.

The World Bank. (2011). "World Development Indicators: Labor force structure." Labor participation rate, female (% of female population ages 15+) Retrieved 18 september, 2013, from <http://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>.

Thomson, E. and E. Bernhardt (2010). "Education, Values, and Cohabitation in Sweden." Marriage & Family Review **46**(1): pp 1-21.

Thornton, A., W. Axinn and Y. Yu-Xie (2007). Marriage and Cohabitation. Chicago, University of Chicago Press.

Torr, B. (2004). The Marriage Gradient Transition: Changing Selection into Marriage by Race, 1940-2000. Annual meeting of the American Sociological Association. San Francisco.

Turner, J. (1985). "In Defense of Positivism." Sociological Theory **3**(2): pp 24-30.

Turner, J. and J. Stets (2006). "Sociological Theories of Human Emotions." Annual Review of Sociology **32**: pp 25-52.

Udry, J. (1966). The Social Context of Marriage. Philadelphia, JB Lippincott Company.

UNESCO. (2013). "Correspondence Analysis." Retrieved 30-September, 2013, from [http://www.unesco.org/webworld/idams/advguide/Chapt6\\_5.htm](http://www.unesco.org/webworld/idams/advguide/Chapt6_5.htm).

Uttal, L. (1996). "Custodial Care, Surrogate Care, And Coordinated Care: Employed Mothers And The Meaning Of Child Care." Gender and Society **10**(3): pp 291-311.

Uzzi, B. (1996). "The sources and consequences of embeddedness for the economic performance of organizations: The network effect." American Sociological Review **61**(4): pp 674-698.

Vaid, D. (2005). Class Mobility - An Indian Perspective. RC28, Los Angeles.

Vellekoop, C. (1969). Social strata in New Zealand. Social Process in New Zealand. John Forster. Auckland, Longman Paul: pp 233-271.

Verbakel, E. and P. de Graaf (2007). The association between spouses' occupational status: developments over the life course and over cohorts. RC28. Montréal.

Waite, L. and G. Gallagher (2002). The Case for Marriage. New York, Doubleday.

Waldfogel, J. (1997). "The Effect of Children on Women's Wages." American Sociological Review **62** (2): pp 209-217.

- Walker, L. (2010). Modelling Inter-Ethnic Partnerships in New Zealand 1981-2006: A Census-Based Approach. PhD, University of Auckland.
- Warren, B. (1966). "A multiple variable approach to the assortative mating phenomenon." Eugenics Quarterly **13**: pp 285-290.
- Wattis, L. and L. James (2010). "Exploring order and disorder: Women's experiences balancing work and care." European Journal of Women's Studies **20**(3): pp 264-278.
- Weber, M. ([1921] 1978). Economy and Society: An Outline of Interpretive Sociology (2 vols). Berkeley, University of California Press.
- Weiss, Y. (1997). The Formation and Dissolution of Families: Why Marry? Who Marries Whom? And What Happens Upon Divorce. Handbook of Population and Family Economics. Mark R. Rosenzweig and O. Stark. Amsterdam, Elsevier Science.
- White, J. and D. Klein (2002). Family Theories. Thousand Oaks, Sage Publications.
- Wiik, K., E. Bernhardt and T. Noack (2010). "Love or Money? Marriage Intentions among Young Cohabitors in Norway and Sweden." Acta Sociologica **53**(3): pp 269-287.
- Willets, M. (2003). "An Exploratory Investigation of Heterosexual Licensed Domestic Partners." Journal of Marriage and Family **65**(4): pp 939-952.
- Williams, S. and W. Hill-Williams (2005). My Family, Past, Present and Future: A personal exploration of marriage and the family, Pearson Custom Publishing.
- Wilson, G. and P. Barrett (1987). "Parental Characteristics and Partner Choice: Some Evidence for Oedipal Imprinting." Journal of Biological Science **19**(2): pp 157-161.
- Winch, R. (1958). Mate-Selection, A Study of Complementary Needs New York, Harper and Brothers.
- Winkler, A. (1998). "Earnings of husbands and wives in dual-earner families." Monthly Labor Review **121**: pp 42-48.
- Winslow-Bowe, S. (2009). Spousal Wage Gaps: Income Disparities in Couples. Work and Family Encyclopedia. S. Sweet and J. Casey. Chestnut Hill, Sloan Work and Family Research.
- Wirth, L. and H. Goldhamer (1944). The hybrid and the problem of miscegenation. Characteristics of the American Negro. O. Klineberg. New York, Harper: pp 251-369.
- Wollock, J. (2012). Rethinking Chivalry and Courtly Love. California, Greenwood Publishing Group.

Woolley, F. (2000). "Control over money in marriage." Carleton Working Papers.

Working for Families. (2013). "Childcare Assistance." Retrieved 15 August, 2013, from <http://www.workingforfamilies.govt.nz/childcare-assistance/>.

Wu, Z. (1999). "Premarital Cohabitation and the Timing of First Marriage." Canadian Review of Sociology **36**(1): pp 109-127.

Zafirovski, M. (2003). "Some Amendments to Social Exchange Theory: A Sociological Perspective." Theory & Science **4**(2): pp 1-3.

Zhao, S. (2006). "The Internet and the Transformation of the Reality of Everyday Life: Toward a New Analytic Stance in Sociology." Sociological Inquiry **76**(4): pp 458–474.