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Conceptualising Boys (and) Video Gaming: 'Communities of Practice'?

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The present investigation aimed to apply Wenger's (1998) conceptualisation of the 'communities of practice' concept (being one concept within the broader framework of social learning theory) to video gaming, based on Gee's (2003) suggestion that video gaming could be viewed as a 'community of practice'. In addition, Paechter's (2003a) recommendation that masculinities (after Connell, 1995, and inclusive of a Foucaultian notion of knowledge/power relations), could be additionally conceptualised as 'communities of masculinities practice' was explored in relation to video gaming. The choice of 'communities of practice' as the unifying concept for this study was favoured due to the application of the concept to a number of New Zealand, Ministry of Education initiatives. The research project aimed to evaluate the usefulness of the 'communities of practice' concept for application to boys (and) video gaming as a model for how the concept might be applied to a range of education-related social learning environments. A total of 284 Year 9 boys (13-14 years old), from five New Zealand schools were surveyed about their video gaming behaviours and understandings, and further 42 boys from a selection of these same schools took part in 'lessons' to discuss in detail aspects of their video gaming. Evidence supported that; video gaming in itself cannot be conceptualised as a 'community of practice' because there is no sense of *mutual engagement* in a *joint enterprise* in the playing of video games, (that was, there is no evidence to support the conceptual understanding of 'community' or 'practice'); and in addition, that while masculinities can be convincingly conceptualised as 'communities of practice', it is only when the activity of video gaming is seen as a resource within the shared repertoire of the 'communities of masculinities practice', in which masculinities, both hegemonic and less hegemonic are performed and reproduced, that video gaming can be linked with the 'communities of practice' concept. The implications of the findings are discussed in relation to where the conceptual and analytical lens offered by the 'communities of practice' concept, appear to be more applicable to the world of boys and video gaming. Also reiterated is that romanticised notions of 'community', applied to the likes of an educational environment but devoid of conceptual foundation, can be little more than rhetoric when not carefully considered and supported by empirical evidence.

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PART A: THE BIGGER PICTURE The conceptual framework

Chapter 1: Rationale for the study

We all belong to communities of practice. At home, at work, at school, in our hobbies – we belong to several communities of practice at any given time. And the communities of practice to which we belong change over the course of our lives. In fact, communities of practice are everywhere.

Etienne Wenger (1998, p6)

In Communities of practice: Learning meaning and identity

Introduction

The New Zealand education sector is one example of a large, socially organised system that has adopted notions of 'community' as part of the repertoire of concepts that give shape to, and explain some of the business and workings of the sector. Arguably, most claims to 'community' in school environments are in reference to populist understandings of the notion insofar as 'community' is about people working together for a common purpose to help young people learn and achieve at school. Searching the Ministry of Education government website, or the Ministry's education resources website Te Kete Ipurangi, identifies a liberal peppering of ideas related to 'community'. However, digging deeper into the education sector literature reveals that at least some claims to 'community' are (or are supposed to be) based on conceptualisations of community with a more defined sense of purpose and meaning. 'Communities of learners', and 'learning communities' are expressions popular among the range of documentation like that related to the Early Childhood Education Centres of Innovation initiative (for example Ministry of Education, 2008; Meade, Ryder, & Henriod, 2004) that derives from the work of Rogoff, (1994) and more recently Rogoff, Turkanis & Barlett, (2001), whereas 'communities of practice' (after Lave & Wenger, 1991; Wenger, 1998) features more among the education literature focusing on teacher professional development (for example Ministry of Education, 2006) and the development of online communities of practice (Lai, Pratt, Anderson & Stigter, 2006).

These conceptualisations of community offer researchers exploring educationally related learning contexts a diversity of investigative opportunities, as the application of these concepts is not limited to formal learning environments, albeit that to date, that is where they have been predominantly applied. In a sense, the usefulness of these concepts is in their flexibility and their 'wrap-around' potential in that such theories of community-based learning can 'wrap around' a whole range of learning contexts both formal and informal. The rationale for this investigation then, was not so much to continue with research in the social learning contexts where work utilising concepts of 'community' was already in progress (that is, early childhood, the development of teacher professional knowledge, and online communities) but to explore how one of these conceptualisations of 'community' could be applied to other aspects of the educational world. Of particular interest for this investigation were those aspects of learning that do not belong exclusively to the classroom or playground, but span the breadth of young people's informally organised social worlds, part of which happens in their school time (regardless of whether or not schools embrace such 'crossover' learning). The thinking is therefore, that if teachers (and other people working in education) are going to become increasingly familiar with more conceptual understandings of 'community', and develop more detailed meanings about the social processes of learning, how might these same concepts be applied to offer teachers new ways to make different sense of the social learning occurring in the school environment? The environments in question here are those related to aspects of young people's social, cultural and personal lives where adult 'understanding' is frequently dominated by uncritical, populist and often quite negative and deficit focused discourses.

Either of these concepts (that is 'communities of learners' or 'communities of practice') could have application to the present investigation, but the selection of Wenger's (1998) 'communities of practice' concept (and the subsequent application of the concept to specific contexts) was decided by two key pieces of literature sourced during the review of the literature. The first work to catalyse the decision on which concept to found this investigation was from American linguist, John Paul Gee and his book 'What video games have to teach us about learning and literacy' (Gee, 2003) which made links between social learning theory (with 'communities of practice' being one such concept within this theoretical framework) and video gaming. The second work that cemented the decision came from English post-structural feminist educationalist, Carrie Paechter and her succession of articles linking the 'communities of practice' concept with Connell's (1995) concept of masculinities (Paechter, 2003a, 2003b and later 2006). Consequently, the contexts of boys and video gaming became the vehicle for evaluating the usefulness of the 'communities of practice' concept in an education-related environment, and in which there was a deliberate focus on informally organised 'communities of practice', not the more formally constructed (or claimed) ones that dominate current Ministry of Education work. While perhaps stating the obvious, the very nature of the 'communities of practice' concept means it needs to be put into a social learning context for the purpose of investigation, rather than exploring the concept only as a concept and in isolation of its application. This consideration was illustrated by Wenger in his seminal work *Communities of* practice: Learning meaning and identity (Wenger, 1998) where throughout the text, he applies his intended conceptual meaning to the social learning environment of the real life of a claims department.

It is useful to point out in these introductory passages that the contexts chosen for evaluating the application of the 'communities of practice' concept in relation to the informal aspects of social learning could just as well have been applied to selected features of young people's lives such as sports, arts and cultural groups, current youth culture interests, hobby groups, particular social groups and so on, but the combination of boys and video gaming was undeniably politic and of current interest not only in education, but to wider society as well. Consequently, this evaluation of the usefulness of the 'communities of practice' concept to explain aspects of boys' worlds and their video gaming could be seen as something of a 'model' for investigating other aspects of social learning, with the potential to draw parallels between the findings of this research and the ways subsequent research projects may want to conceptualise aspects of educational experience as 'communities of practice'. In addition, this investigation models the use of the 'communities of practice' concept as an analytical lens in a way that could be repeated across a variety of social learning contexts in the education sector. That said, it is not being presented as a one-size-fits-all model to explain and interpret every social learning aspect of education, as such approaches can be limiting in situations where the model or concept is not the most appropriate for meeting the unique and diverse needs of such a complex sector of society.

The remainder of this rationale then expands on the reasons *why* the combination of the 'communities of practice' concept and the contexts of boys (with the additional conceptualisation of masculinities) and video gaming were selected for this investigation. The rationale closes with an overview of the dissertation.

Why social learning theory?

The association between social learning theories, such as Bandura's Social Cognitive Theory (Bandura, 1977), and the effects media has on human thoughts and behaviours, became well established in the 1990s (eg Bandura, 1994). Much of the early video gaming research utilised literature based on the findings from investigations into mass communication technologies like TV, and film. However, researchers soon found that generalising these understandings to the new medium of video gaming and the internet may not hold, given the interactive nature of these technologies (see for example Kinder, 1999). Throughout the decade, the preoccupation with 'media effects' and theories of causation meant that this way of approaching video gaming research became cemented in the burgeoning video gaming literature. Based on the popular social-cognitive theories of the 1990s, this literature leaned heavily toward the psychology of individuals influenced and 'affected' by these apparently undesirable and negatively focused media forces. As study after study tried to show the detrimental effects of video gaming on the minds and behaviour of children and adolescents, another voice was being added to the literature pointing out the methodological short comings of this research, particularly that the

range of social environmental factors that mediate violent behaviour, cannot and were not being controlled for in these video gaming studies.

By the end of the decade and the start of the new millennium, the rapid increase in the sophistication of video gaming technologies and associated game design, and people's ready access to these technologies, seemed to invite a new approach to researching video gaming, and to frame it in terms of its positive contribution to learning and social development. Internationally, schools were being encouraged to embrace information technologies as a tool integral to teaching and learning and the adult world (parents, teachers, policy makers and researchers), were being coaxed into better understanding the technological world that young people were being born into.

The late 1990s saw the rise in popularity of other social learning theories, in particular, the concept of 'communities of practice' proposed initially by Lave and Wenger (1991) and later elaborated on by Wenger (1998). New Zealand education has ideas about 'communities of learners', and 'learning communities' (after Rogoff, 1994; Rogoff, Turkanis, & Bartlett, 2001) woven through many aspects of its current practice (see for example *The New Zealand Curriculum*, Ministry of Education, 2007, 2008, Alton-Lee, 2003) and although direct reference to the original concepts may have been lost in application, other Ministry of Education research and policy documentation are explicitly founded on Wenger's (1998) 'communities of practice' concept (eg Lai, et al, 2006; Ministry of Education, 2006).

That 'communities of practice' as a concept is being tied with the context of video gaming for this investigation is not without foundation, with the possibility for such a conceptualisation being posited by Gee (2003) in his book 'What video games have to teach us about learning and literacy'. As a linguist, Gee places a somewhat different theoretical lens on the world of video gaming to that being pursued in this study, but his critique of social learning theory and its application to video gaming have provided some useful parallels for the development of this investigation.

Whereas earlier social learning theories like Bandura's (1977) kept the focus on the individual, a 'communities of practice' approach places emphasis on the shared aspects of the learning, by considering what knowledge, skills and understandings are required for membership by any and all individuals in such a community, and how this learning is achieved. Consequently, the choice of 'communities of practice', as the social learning theory around which this study on video gaming is based, is very deliberate. Firstly, this project utilises and applies the concept

¹ To denote text where Wenger's concept of 'communities of practice' is being specifically referred to throughout this dissertation, the phrase is indicated by inverted commas. The reason for this is to identify the phrase in the text as separate to situations where the terms 'community(ies)' and 'practice' are being used without the application of the full conceptual meaning of 'communities of practice'. Some literature abbreviates 'communities of practice' to 'CoP' or 'CofP' but as these conventions differ slightly for each knowledge discipline, it was decided not to follow this practice to avoid confusion about any theoretical alignment that might be inferred through the use of such abbreviations.

in a way not yet explored in the literature, and secondly, it gives the research some currency with contemporary developments in New Zealand education.

Why video gaming?

Walking into the world of boys' video gaming presents the researcher with a wide range of theoretical and conceptual opportunities to tell a story about this predominantly male, social and cultural phenomenon. For the last decade of the twentieth century, these stories typically attempted to show causal links between the playing of violent games and subsequent violent behaviour, or some other assumed psychological and social damage that video gaming would cause players to experience. However, the methodological challenges inherent in trying to show such causal relationships remain unresolved throughout this literature.

The start of the new millennium was marked by a shift in focus for a number of researchers beginning to explore a wider range of aspects of video gaming and account for the reasons for the massive increase in its popularity. Leaving behind assumptions about the negative impacts of video gaming, these new stories focus on the many purposes video gaming appears to serve, such as how it educates and enriches, and how it enlightens and entertains lives (eg Gee, 2003; Prenksy, 2001).

In little more than quarter of a century, the video gaming industry has gone from being non-existent, simply because the technology didn't exist, to being bigger than film industry. The popularity of video gaming as a global phenomenon has created a video-gaming 'culture' with some people in the academic community calling for a recognised research discipline focusing on the importance and significance of this 'culture' in contemporary western society. Those advocating for the evolution of an academic basis for research and critique of video gaming (eg Wolf & Perron, 2003; Wolf, 2006; Gee 2006; Williams, 2006; Steinkuehler, 2006) instigated the *Games and Culture* journal at the beginning of 2006. The scope for this journal is stated by the publishers to include the 'socio-cultural, political and economic dimensions of gaming from a wide variety of perspectives, including textual analysis, political economy, cultural studies, ethnography, critical race studies, gender studies, media studies, public policy, international relations, and communication studies' (Sage Publications, 2006). Which theoretical framework(s) this journal will eventually favour and promote remains to be seen, although the offerings and recommendations from all of the inaugural authors would suggest a multi-disciplinary approach is needed to explore and understand the many facets of this global phenomenon.

Confronted with this breadth of theoretical and research opportunities, this investigation looks to contemporary social learning theories to tell a different story about boys' video gaming.

Why boys?

Continuing the education links already signalled with the choice of social learning theory, the focus on boys is also politic. A recurrent theme and preoccupation in education literature during the early 2000s has been the reactive panic about the assumed underachievement of boys in education, not just in New Zealand, but internationally in a range of Western nations (responses to this panic are featured in Australian research, for example see the work of Mills, Martino & Lingard, 2007; and in Britain, for example see Skelton 2001, 2003). Similarly, the recurrent sensationalistic media focus on the anti-social behaviour of adolescents, especially boys (in relation to boy-racers, drinking and driving, excessive alcohol and other drug use, suicide rates, aggression, and sexual and mental health) portrays boys only for their deficits and with no recognition or honouring of their strengths. Such a portrayal is at odds with government policy (see *Youth Development Strategy Aotearoa*, Ministry of Youth Development, 2004), so rather than tell yet another story about what's wrong with boys, this study aims to make some different sense of an aspect of boys lives, and the video gaming that almost all of them engage in for fun and pleasure.

As to the inevitable question, 'why boys not girls?'; there is a body of literature (see for example Kinder, 1999) that looks at gendered aspects of computer use and video gaming, most of it concerned with comparing differences between boys and girls use of the technology. Observations of gaming arcades, customers in electronic hardware and games shops, delegates at gaming conventions, and overheard conversations around the school playground, would indicate that video gaming is predominantly (albeit not exclusively) a world dominated by boys (and men). Rather than make another gender comparison study, this investigation aims to explore the world of boys' video gaming as part of their boys' world, which is an understanding missing from the current literature.

Although there is a dearth of literature on girls and video gaming, what little research does exist suggests the profile of boy and girl gamers is different (Cassell & Jenkins, 1998). Detailed investigation into girls gaming warrants research independent of boys, possibly premised on some different research questions given that far fewer girls than boys play video games and when they do play, the games girls choose to play are usually different to the gaming choices made by boys.

Why this age group?

The choice of Year 9 boys for this study (13-14 year olds in the New Zealand schooling system) was made for a combination of reasons. International research (eg Rideout, Foehr, Roberts, & Brodie, 1999) is showing that this age group probably spend the greatest amount of time of all *teenage* boys playing video games (some of these studies have also shown adult males may spend more time playing), the suggested reason for this is that older teenage boys have more commitments to school and study, sport and socialising (and girlfriends); Year 9 represents the boys first year of secondary school education where they are exposed to a diversity of experiences

involving adolescent boys older themselves; Year 9 boys are developmentally 'interesting' in that it represents the first year of being a 'teenager' and the social stigma about what that might mean.

Definition of terms

The term 'video gaming' is inclusive of all games played on electronic technologies and is used in preference to terms like 'computer games' which is suggestive only of those played on a machine called a 'computer'. 'Video gaming' is also the term being used by the likes of Wolf & Perron (2003) in the establishment of a 'video gaming' literature.

For this investigation 'video gaming' refers to the practice of playing video games. It is not about the design aspects of gaming software, or the technologies (the hardware) on which the games are played such as a personal computer, console or platform games attached to a TV screen (eg X Box, Playstation, Nintendo), hand held personal (or portable) media players (PMPs), arcade games like 'spacies' and those games played on machines whereby the player may be required to be physically positioned in a seat or other contraption relevant to the game (a racing car or fighter pilot seat, a golfer or skier).

General aims of this research

Using the concept 'communities of practice' as a conceptual lens through which to tell a story of boys' and video gaming, the general aim of this research was therefore, to 'model' how this increasingly popular concept of social learning may be applied to aspects of educational (social learning) environments. Such an aim required asking boys to tell their version of such a story which in turn guided the methodology selected for this investigation.

Overview of the chapters

PART A

This chapter introduced the general research aims for this project and the factors that guided the process from the initial choice of conceptual framework ('communities of practice'), through to the selected context for the investigation (boys and video games).

The following chapter (Chapter two) establishes the conceptual framework on which this study is based, that is Wenger's (1998) conceptualisation of communities of practice', and the social learning theoretical orientation this is concept is positioned in. Additional consideration is given to the sociological concept of 'masculinities' and the way Paechter (2003a) proposes that masculinities can be viewed as a 'community of masculinities practice'. In common to both and providing links between these concepts is a Foucaultian notion of knowledge/power relations

and how such an understanding is important in a maintaining a 'community of practice', and for the production of masculinities. The chapter concludes with the statement of the overall research questions for this investigation and a diagrammatic model for the conceptualisation of the project.

PART B

The literature that has informed this investigation is analysed over three chapters (Chapters three through five). This analysis considers a diversity of research that has relevance to the study and the three key features of the research questions; 'communities of practice' as a concept within the broad field of social learning theory, video gaming as an individual and social activity, and masculinities.

Chapter three briefly considers Lave and Wenger's (1991) original conceptualisation of 'communities of practice', and in detail Wenger's (1998) subsequent refinement and detailing of the concept, to establish the essential aspects of the concept that form the conceptual core of the present investigation. Ways in which the concept has been applied and critiqued by other researchers is also considered in context of this study. Discussion around aspects of a Foucaultian notion of knowledge/power relations is also included, as an addition to the 'communities of practice' concept, as was suggested by Wenger (1998) but never elaborated on by him.

Chapter four analyses a range of literature related to the central context for this investigation, that is, the practice and phenomenon of video gaming. Much of this literature is psychologically focused in its concepts and theoretical orientation, but it has been read in a way so as to provide some insights into (the potential for) viewing video gaming as a 'community of practice'. A review of the most recent video gaming literature, coming from researchers who are starting to tell different stories about video gaming using alternative theoretical perspectives (such as Gee, 2003, 2007), identify some additional theoretical and conceptual opportunities for video gaming research, which is the literature from which this investigation has taken its direction.

The final part of the literature analysis in **Chapter five** considers the masculinities literature and how aspects of this sociological concept could be utilised in conjunction with social learning theory. Paechter (2003a) opened the door on such an opportunity proposing that an understanding of 'masculinities' could be approached as a 'community of masculinities practice'. The literature analysed will consider a range of ways Connell's (1995) often quoted and referenced conceptualisation of masculinities, and in particular 'hegemonic masculinities' has been applied by researchers working across a range of theoretical frameworks and in diversity of social contexts. The Foucaultian notion of knowledge/power relations, raised in Chapter three, is also revisited to consider what knowledge is 'important' for membership in a 'community of masculinities practice'.

PART C

The methodology for the investigation is explained in **Chapter six**. The discussion covers the rationale for the multi-methods approach (that is, a combination of quantitative and qualitative data), the selection of the sample and the ethical considerations given the age of the boys in the investigation, details of the quantitative and qualitative methods selected, and the reasons for the development and subsequent administering of these methods. This chapter also details the types of analysis selected and the reasons for these analyses are explained in relation to the research aims and the conceptual framework of the investigation.

The results are presented across two chapters. **Chapter seven** documents the quantitative results from the anonymous pen and paper survey. These data are mainly in the form of descriptive statics to identify the findings that informed the qualitative research methods. **Chapter eight** reports data collected by qualitative methods that was analysed using inductive analysis (based on Thomas, 2006).

PART D

Chapter nine discusses the findings of the research in relation to the research aims, and the conceptual framework through which the story of this investigation is being told. Also discussed are the strengths and limitations of the present investigation. Chapter ten makes a range of concluding statements about the significance and implications of the present research based on findings emerging from the results and the subsequent discussion.

The concept of 'communities of practice' (Wenger, 1998) is both the basis for the conceptual framework of this study and an integral component of the research questions, hence, it is useful to articulate an understanding of the concept from the outset of this dissertation. This chapter discusses 'communities of practice' as a concept within the broader understanding of social learning theory, and the essential features of the concept utilised in this investigation. To provide more specific and detailed opportunities for exploring features of a 'community of video gaming practice', Foucault's conceptualisation of knowledge/power relations is considered in relation to the way membership is attained within a 'community of practice', a possibility suggested by Wenger (1998) but not elaborated on by him. In conjunction with this consideration of knowledge/power relations, Connell's (1995) concept of masculinities is discussed to show how it can be incorporated into 'communities of practice' (to talk about 'communities of masculinities practice' after Paechter, 2003a), and how this same Foucaultian notion of knowledge/power can explain the production of masculinities in a 'community of masculinities practice' (after Paechter, 2006).

Communities of practice

Excerpt from the South Park cartoon

Randy (Stan's Dad): You've been on your computer all weekend. Shouldn't you go out and socialise with your

friends?

Stan: I am socialising r-tard. I'm logged onto an MMORPG with people from all over the world

and getting XP with my party using Teamspeak.

South Park², Episode 1008, 'Make love not Warcraft .Comedy Central, 2006.

Stan's response to his father, noted in the above transcript from a scene in the *South Park* cartoon, hints at a number of reasons why video gaming may be viewed as a 'community of practice' (after Wenger, 1998). Stan is *mutually engaged* in, and interacting with other members of the online gaming community; he is contributing to a

² South Park is a cartoon notorious for being politically incorrect especially on the subjects of sex and gender, religion and politics. The series is written by Trey Parker and Matt Stone, and produced by Comedy Central. Designed by a company called Blizzard, *World of Warcraft* is one of the most commercially successful MMORPG (massive multi-player online role-playing game) to date, with a reported seven million online players in 2006. A number of the Blizzard executives contributed their voices to this episode of *South Park*.

joint enterprise whereby members of the community are engaged in similar practice or common endeavour to achieve goals and win campaigns in the game; and the members of the community have developed a *shared repertoire* of language and resources to be able to identify with the group and be a full member of that community. On this last point, Stan's response to his father may need translation; an MMORPG is a massive multi-player online role-playing game; 'getting xp' means gaining experience points in the game (said 'ex-p' and written as 'xp') to be able to advance to higher levels; and 'Teamspeak' is the name of a software package that allows players to speak directly to each other as the game is played online.

Wenger (1998) considers that 'communities of practice' are everywhere. The social and cultural world is where work gets done, where meaning is constructed, where learning takes place and identities are formed. Communities come together for the purpose of learning such as in formally organised settings like educational institutions, or that learning could be the unplanned outcome of the interactions by community members within these organised communities, or even the learning that happens to be part of a less formally organised community such as groups of youths with a shared practice like video gaming.

There are three essential features of a 'community of practice':

- A community of practice must have a domain or a shared interest and therefore a shared competence
 that differentiates members of the community from other people outside the community, and that these
 members value their collective competence. For this investigation this feature of a community of practice
 will be referred to as 'joint enterprise'.
- As a community, members must engage in collaborative activities to help each other and share information, and build the type of relationships that allow them to learn from each other. For this investigation this feature of a 'community of practice' will be referred to as 'mutual engagement'.
- Finally, the practice the members are engaged in is more than just an interest in something they 'do' in common. They are actual practitioners of what they do and they share a repertoire of resources, experiences, stories and strategies as a way of addressing relevant issues. In other words, they have a shared practice which for this investigation will be referred to as a 'shared repertoire'.

Membership in a 'community of practice' is based on participation, and less so on official status – people must take part in the shared practice of their community, membership is not conferred by passive association. Consequently, membership in such communities is empowering because as members engage in the activities of the community, they individually and collectively build, sustain and transform knowledge, and create new knowledge, all of which means that the community itself becomes the repository of knowledge. This also means that communities of practice tend to organise themselves around what matters to the members, which may be at

odds with external directives or pressures (such as local or national policies, accepted cultural norms) so while such constraints can influence the community, members still develop their own responses to their needs.

'Communities of practice' fulfil a number of functions for its members. They are sites for the exchange and interpretation of information because the community of practice has a shared understanding about what is deemed relevant to communicate to its members. Communities of practice preserve knowledge in 'living' ways meaning tacit knowledge, (which is not necessarily the knowledge promoted outside of the community) is passed on to other members.

'Communities of practice' also provide a 'home' for identities in that the core of knowledge the community supports and promotes, and the subsequent boundaries it places on the meaning and acceptability of such knowledge, helps members of the community to determine what they need to pay attention to, what to participate in, and what to stay away from. These functions of a 'community of practice' are particularly pertinent to this investigation when considering a 'community of video gaming practice' and a 'community of masculinities practice'.

Excerpt from the *South Park* cartoon [Randy (Stan's Dad) is playing *World of Warcraft* at work when a colleague comes into his office.]

Nelson: Randy, you working on that sediment analysis?

Randy: Not now Nelson, I just joined a big party of night elves. We're going to explore the Tower

of Azora together.

Nelson: Is that a computer game?

Randy: No r-tard, it's a MMORPG, these are real people I'm playing with. See, I'm a hunter, level

two. I can chat with all these other people. I can even wave to this guy ... see hello in the outside world I'm a simple geologist, but in here, I am Velcor, defender of the Alliance, I have braved the Fargo-deep mine to feed on the blood fish of the Jared's

landing ... Aaaaargh [as Randy's character is killed]

South Park, Episode 1008, 'Make love not Warcraft. Comedy Central, 2006.

In the *South Park* extract above, what matters to Randy is his contribution to his online community, to help them achieve success in the game. Through his engagement with the game, Randy has developed game-related skills and a vocabulary of place names and character knowledge to communicate with other players in this virtual world. In other words he has developed an identity as a member of a community of video gamers engaged in playing a MMORPG.

Theoretical positioning of the study

Social learning theory, which umbrellas concepts like 'communities of practice', is premised on the idea that there is a social component to learning. Learning is not just a cognitive exercise carried out by individuals in isolation of their social environment. Understanding learning as a human activity means going beyond only a psychological explanation of such cognitive processes. Consequently, the theoretical foundations of social learning theory draw from across psychological and sociological understandings. In Wenger's (1998) conceptualisation this foundation includes contributions from theories of practice and identity, theories of collectivity and subjectivity, theories of meaning and power, theories of social structure and situated experience.

With this diversity of theories informing the concept of 'communities of practice', many practitioners working in or with the social, educational and management sciences, have found the concept very accommodating, and the reported 'usefulness' (Barton & Tusting, 2005) of the concept has seen it applied to a wide range of education-related settings such as schools, industry training and work place organisation. Wenger (1998) also signalled the potential for this concept to be applied to learning communities where people were not necessarily in the physical presence of each other, a notion that educators and managers in the IT (information technology) industry have made good use of when they promote the idea of communities being able to exist in the virtual world (Hildreth and Kimble, 2000).

Taking the concepts away from their more common research application (where more formal learning is being investigated) and into people's lived worlds where the learning has no formal agenda, is a far less common focus in the literature. Research around informal learning in 'communities of practice' tends to be the learning that goes on within formally organised settings, for example Creese (2005) looked at racism in schools; Ruuska & Vartiainen (2003) investigated informal knowledge sharing in a consultancy company. Considering 'communities of practice' in social contexts where there is no formal organisational structure, as would exist in a school or workplace, is far less frequently reported in the literature.

With specific reference to video gaming, Gee (2003) briefly considers the way social learning theories like 'communities of practice' are relevant to the investigation of learning in video gaming, and it is from his suggestion that the present research project in part takes its inspiration. In his subsequent critique of this notion, Gee (2005a) makes an alternative suggestion about ways to conceptualise video gaming, based on ideas derived from linguistic theories and concepts. However, his shift in thinking is made without apparent empirical evidence to back up why he is dispensing with the conceptualisation of video gaming as a 'community of practice' to instead favour another conceptualisation he calls 'affinity spaces'.

With reference to males, Paechter (2003a, 2003b) explored the potential for using the 'communities of practice' concept in relation to masculinities and learning to be male, although this work aimed only to explore the possibilities for such a conceptualisation, and was not developed into a planned project to test such an idea. It is Paechter's work that brought the remainder of the framework for this project together which places video gaming and boys (being boys) under the umbrella of the 'community of practice' concept.

Why 'communities of practice' (within social learning theory) as the choice of concept for this study?

Using social learning theories to explain the influence of, or connections between media and learning, featured in the literature well before video gaming technologies, the likes of which are present in most homes today, were even invented. Bandura's Social Cognitive Theory (Bandura, 1977), proposed a causation model founded on 'reciprocal triadic determinism' whereby the reciprocal relationship between a person's characteristics (be they biological or cognitive in nature), their social environment, and their behaviour, all influence and mediate one another. The application of this model to the causal effects of media on behaviour, especially TV and film violence (being an aspect of the social environment), extended Bandura's established interest in aggressive behaviour (Bandura, 1973). The use of Social Cognitive Theory as the basis of a (behaviour) causation model, meant that researchers focused heavily on the psychological foundations on which the theory was based, and in turn, it helped fuel the 'media effects' research that became popular in the 1990s (eg Bandura, 1994). Although there is a social environment aspect to this model, the use of it for research purposes, and the reported outcomes from such studies tended to place greatest focus on the individual's behaviour and the assumed harm caused by viewing violence in TV or film media. The emphasis was far less about what was going on in the social environment that may have contributed to any observed aggressive behaviour.

The methodological shortcomings recurrently noted in the 'media effects' literature (see one such summary of these challenges in Sternheimer, 2003) has meant that investigations using social learning theories like Bandura's Social Cognitive Theory have become less popular. However, the idea of social learning theory has by no means lost acceptance, especially in primary and secondary school education. This is a sector who, in pursuit of being 'future focused' and preparing and resourcing learners for participation in a knowledge society (Ministry of Education 2007), place importance on the social aspects of learning.

The language of social learning theory pervades a good deal of the current New Zealand education literature which focuses on 'communities of learners', and 'learning communities' (see for example *The New Zealand Curriculum*, Ministry of Education, 2007; Alton-Lee, 2003) although direct reference to the original theories and concepts this language and understanding is based on have largely been lost in application. It is the emphasis on 'communities' that indicates that the conceptual source of these educational developments is social learning

theory like Wenger's (1998) concept of 'communities of practice'. Some Ministry of Education research and policy documentation however is explicitly founded on this 'communities of practice' concept (eg Lai, et al, 2006).

Consequently, the choice of 'communities of practice' as the social learning theory for this investigation, in preference to earlier established theories like Social Cognitive Theory to make links between media and learning (of behaviour), is about being contemporary and having currency with the stated intentions of the New Zealand Curriculum. The choice of 'communities of practice' also invites a way to conceptually frame the research project that avoids the methodological challenges associated with the use of causation models based on earlier understandings of social learning theory.

Knowledge/power

Excerpt from the *South Park* cartoon. [The South Park boys are planning an online campaign to retaliate against a higher level player who keeps killing off their characters when they are playing online.]

Eric: To victory.

Butters: I don't play World of Warcraft.

Eric: Butters. You said you're on your computer all the time.

Butters: Yeah, but I'm playing *Hello Kitty Island Adventure*.

Eric: Butters, go and buy World of Warcraft and install it and join the online sensation before

we all murder you.

Butters: Oh alright then.

South Park, Episode 1008, 'Make love not Warcraft. Comedy Central, 2006.

In this scene from *South Park*, the character Butters is very much the novice in the *World of Warcraft* gaming community. He quickly comes to realise that Eric and the other boys (as masters of the game) have the sort of knowledge and skills that are required for being a part of (or 'members') of this community. He learns from the other boys that participating in the gaming practices associated with *World of Warcraft* (the name of the game alone suggests that it contains popular male-dominated themes like war and violence) will impart more acceptance and community membership than if he continues to play *Hello Kitty Island Adventure* (the name of which suggests it is a game for children and girls). He conforms to Eric's demands in the knowledge that not to do so will bring a great deal of scorn, derision and rejection by his group of friends.

To attain membership in a 'community of practice', or to move from the position of being an 'apprentice' in the community to that of a 'master', as originally conceptualised by Lave and Wenger (1991), requires the learning of

knowledge, skills and understandings specific to the nature of the joint enterprise of the community, which in this study, is video gaming. This means that some knowledge has priority or 'power' over other knowledge, because it helps define just what the joint enterprise of the community of video gaming practice is; it defines what it means for a player to be mutually engaged in the gaming process; and it defines what knowledge and resources (such as language use and terminology, and knowledge of gaming technology) are needed to have a shared repertoire. Whether this 'prioritised' knowledge is explicitly and actively taught and learned, or whether it is tacitly acquired, as well as the very nature of this knowledge, is what is of interest to a researcher.

Wenger identified the central importance of power to social theory in general, and his subsequent conceptualisation of social learning theory.

'The challenge is to find conceptualizations of power that avoid simply conflictual perspectives (power as domination, oppression, or violence) as well as simply consensual models (power as contractual alignment or as collective agreement conferring authority to, for instance, elected officials).' (Wenger, 1998, p15)

In his own notes he offers some further thinking about the way power could be conceptualised within the concept of 'communities of practice':

'My own conception is more in line with theories that consider power relations in the symbolic realm: [such as] pervasive forms of discipline sustained by discourses that define knowledge and truth (Foucault, 1971, 1980). Of course, the different forms of power in a society interact, sometimes reinforcing each other sometimes creating spaces of resistance.' (Wenger, 1998, p284)

Wenger chose not to elaborate on such conceptualisations of power (something he has been criticised for in the literature, see Paechter, 2003a), but in the knowledge that he had considered a range of ideas about power, the influences of such thinking can be inferred when reading in his text.

This investigation draws on just one conceptualisation of power, noted by Wenger for possible consideration in relation to communities of practice, and that is a Foucaultian notion of power (after Foucault 1980, 1983, and interpreted by Danaher, Schirato & Webb, 2000). This concept of power has been added to Wenger's 'communities of practice' concept in this investigation to help make sense of the way knowledge is learned for membership of a community of video gaming or masculinities practice, and how such knowledge contributes to the identity of community members.

A Foucaultian conceptualisation of power (based on Foucault,1983) differs from conventional notions of power which would consider that power is something that is 'held' by individuals, groups or institutions over others in a dominating and oppressive way. Integral to a Foucaultian understanding is that power can only exist where there is (an) action, that is, it is not some abstract and intangible 'something' that is held over people. Subsequently, this conceptualisation of power is not a negative one as Foucault sees power as being productive, power in this sense produces knowledge and hence the Foucaultian premise that power and knowledge are inextricably bound together.

'Foucault moved to a position that [he] denied that power was a repressive force, was located in particular institutions, or came from a dominating class, gender or race Foucault defined power as productive in the sense of producing knowledge, rather than repression'.

Ramazanoglu & Holland 2002, p95-96, interpreting Foucault).

Different discourses privilege or prioritise different types of knowledge over others. The power of privileged knowledge is in that it has better understood meaning, or it has more social and cultural acceptance. However, the type of privileged knowledge present in discourse can also be contested or resisted, bringing about a shift or change to knowledge. Through context specific discourses, people's subjectivities are produced because of the way power produces knowledge, for example, the knowledge of knowing what to do (or not to do) and what to say to be able to operate meaningfully and 'acceptably' in a particular social or cultural context. To this end, power (which produces knowledge) can be a self-regulating concept, regardless of whether the knowledge produced (for example, about acceptable ways to operate socially) comes from passive compliance to, or agreed acceptance of the situation (that is, how people are positioned in discourse). Recognition of where power is located, and hence the subjectivities being produced, evidenced in the 'truths' of which people speak, is integral to understanding a Foucaultian notion of power.

To elaborate on this it is worth considering what Foucault (1983) called 'dividing practices' (p.208) when he refers to situations where subjects are *divided in themselves* or *divided from others*. In other words, people can be the *subject of power* by being tied to their own identity by conscience or self-knowledge, and/or *subject to power* by the particular meanings of dominant (societal) discourses. Because of such dividing practices, people can also be both subject to and the subject of power in the very same situation. In a video gaming situation for example, a boy might say and do what he knows to be 'acceptable' (to other boys) when playing video games, such as using jargon related to the gaming technology, playing certain violent games in preference to other types of games, using coarse and sexualised language in response to success or failure in the game, and being competitive. In this way the boy is the *subject of power from his own self knowledge* by knowing what is deemed by his male peers to be 'acceptable' video gaming behaviour, and what it means to be a member of a video gaming

community of practice; but then, at the same time, *he is subject to power* from the dominant meanings of discourses around masculinities, such as the use of certain language and playing for competition and to win.

Another important and recurrent feature of this Foucaultian conceptualisation of power is that power is always relational. For example, to say that some knowledge is privileged over other knowledge and therefore has more power, suggests a relational understanding of what knowledge is more/less privileged. To be a member of a 'community of practice' means that there must be a relational position of power in order that members can comply with what is known or accepted practice, or whether they contest and resist the knowledge for some reason. This relational aspect of power also contributes to how identities are both constructed and how they can change, because if the power (as privileged knowledge, exercised through discourse) shifts, so do people's identities (Danaher, Schirato, & Webb, 2000). The slippage between the use of the terms 'subjectivities' and identities' (and the different theoretical bases for these) is noted and is addressed in context of this investigation later in this chapter.

Masculinities

Excerpt from the South Park cartoon [the South Park boys are playing World of Warcraft online]

Eric: [role playing as a dwarf] Ah dude, I just took the biggest crap. Hey where are you guys?

Kyle: [role playing as an attractive, tall, We're over here by the cart.

slim, large breasted female human] .

Stan: [role playing as a tall, handsome Dude, we've been waiting forever.

male human .

Eric: Well I'm sorry, I had to take a dump.

Kyle: If you didn't eat so much you wouldn't have diarrhoea all the

time, fat ass.

Eric: Hey, I don't have to take any lip from a frickin' girl.

South Park, Episode 1008, 'Make love not Warcraft. Comedy Central, 2006.

The *South Park* boys' choice of game characters show some rather stereotypical young adolescent male preferences, which if considered in light of the following discussion could also be said to reflect a range of hegemonic masculinities (after Connell, 1995). Dwarves, according to the *World of Warcraft* official website (WOW, 2007), are a stoic race of robust humanoids who have always been keen allies with the Humans, and they revel in the prospects of battle and storytelling. When the call to battle sounds, they rise up to defend their friends and allies with unmatched courage and valour. Humans are a resilient race, with some of the human heroes considered to be among the fiercest warriors in the land. They remain staunch in their responsibilities to maintain

the honour and might of humanity. Kyle has chosen to play a human female character, with an exaggerated hourglass figure - large breasts, slim waist and curved hips. Eric's response to Kyle (about Eric's real life action of going to the toilet) is made to Kyle as his female character when Eric says 'Hey, I don't have to take any lip from a frickin' girl'. What it means to be a boy and assert a masculine identity is played out by Eric both in real life and in the game.

'Masculinities' as a concept is premised on the notion that there is more than one way of 'performing' masculinity, and that boys and men have many different ways of being male depending on the social context they are in (Connell, 1995). With such a conceptualisation, these ways of being male, be that they reflect the culturally exalted norms about what it means to be a man (typically anything deemed heterosexual and not female), or that they are more subordinated ways of being male (as in anything deemed as non-heterosexual or feminine), are all considered to be expressions of masculinity.

Connell's conceptualisation of 'masculinities', detailed in the seminal work *Masculinities* (Connell, 1995) is the most widely and often quoted work on the subject. 'Masculinities' is a useful concept for this investigation because, as a sociological perspective, it works from the basis that gender is a social construction. As a concept it places focus on the social practices that determine what it means to be male, and attempts to leave behind the essentialist traditions that would attempt to found maleness on biology alone. Masculinities also avoids the problem inherent with defining 'a' masculine identity from a purely psychological perspective, and although there is still talk of masculine identity within the masculinities literature, it is more likely to be about multiple masculine *identities*, and to see identity as being a consequence of social processes, and not something that comes intrinsically from within.

As a concept, 'masculinities' has been informed by feminist theory and the study of gendered power relations, and this study of power relations can be considered not only between genders, but also within genders. Throughout the literature, this conceptualisation of power regularly draws on the Foucaultian notion of power previously discussed.

Working from a feminist theoretical position, Paechter (2003a, 2003a, 2006) combines ideas from the concept of 'communities of practice' with the concept of 'masculinities'. She has proposed approaching masculinities as 'communities of masculinities practice', although to date her work has only theorised the possibilities of such a project, as she rereads existing research and applies this conceptual lens. Her critique of Wenger's (1998) theory notes his lack of focus on concepts of power and suggests that such an inclusion be an important addition to

future work. Consequently, Paechter's ideas have given impetus to this study which seeks to combine concepts of 'communities of practice' with the concept of 'masculinities' in the context of video gaming.

Hegemonic masculinity3

One particular feature of the masculinities concept that Connell (1995) is most commonly credited with, is the additional concept of 'hegemonic masculinity'. Connell defined 'hegemonic masculinity' as:

The configuration of gender practices which embodies the currently accepted answer to the problem of legitimacy of patriarchy which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women Hegemony is likely to be established only if there is some correspondence between cultural ideal and institutional power, collective if not individual... It is the successful claim to authority more than direct violence that is the mark of hegemony. Connell (1995, p77)

Although 'dominant' maybe a synonym for hegemony, as a concept 'hegemonic masculinities' is about more than just dominant male practices. Hegemony is about culturally exalted practices associated with being male. This implies that hegemony is not just about doing masculinity, it is the reasons for the practices associated with being male and what sustains them; the 'what' sustaining them in this case being the way in which knowledge/power relations feature in social interactions and institutional structures. In practice this means that males collectively promote ways of being male based on what is socially constructed as being acceptably male, which may include practices like; having and being in control, being a decision maker, being assertive and confident, being competitive, being a leader, knowing what to do, aspiring to success, being able-bodied and physically competent, and so on, *even when* males do not personally or individually have the resources or abilities to do such, and regardless of whether or not their personal life circumstances reflect this.

Hegemonic masculinity is about those practices that males collectively endorse as a way of being male which when put in Foucaultian terms means that hegemony is about males being subject to power through their own self-knowledge about what society deems is important for being male, and simultaneously the subject of power by control from societal discourses that privilege particular masculine practices over others. The self-knowledge of

³ Hegemony is not to be confused with 'stereotypical' masculinity. Stereotyping is about labelling or pigeonholing based on some assumed and often exaggerated personal characteristics, whereas hegemony is about culturally exalted ways of being male and the way knowledge/power reproduces these masculinities; the 'typical kiwi bloke' for example, as personified and caricatured by comedian John Clark as Fred Dagg in the 1970s, prevails as the archetypal physical image of the New Zealand male still today. But is not an image many men actually conform to or even promote as being a viable or desirable expression of masculinity. Hence, the Fred Dagg persona is more appropriately considered a masculine stereotype and not so much a form of hegemonic masculinity. That said, there were a number of ways of being masculine the Fred Dagg character displayed that could be said to be hegemonic – his iconic 'she'll be right mate' catch phrase would reflect the hegemonic masculine position of being in control, knowing what to do, take things in your stride and not to let things get on top of you.

most males about the negative consequences for individuals displaying less hegemonic or subordinated masculinities, either through active and deliberate resistance or more passive non-compliance, means the power of knowing what it means to be male in the world sustains many patterns of hegemonic masculinity.

The additional focus on hegemony for this investigation is in consideration of the notion that video gaming potentially contains a range of hegemonic masculine practices, be they practices associated with the mastering and control of technology (with electronic technologies being the machines of the twenty-first century), the choice of video games (such as action games featuring significant levels of gratuitous violence, and games with heterosexual themes where the male is dominant), or the reasons why video games are played (such as the competitive aspects of gaming and the desire to win).

Addressing the challenges and limitations of other possible theoretical frameworks

Carrying out an investigation related to boys and video gaming presents the researcher with a wide range of possible theoretical and conceptual opportunities for making sense of this world. This project will be founded on Wenger's (1998) concept of the social learning theory 'communities of practice', with the addition of a Foucaultian notion of knowledge/power relations to explore the nature of boys membership in this (conceptualised) 'community of practice'. In conjunction with the concept of masculinities, there are two points of clarification that need to be made to avoid misrepresenting the theoretical positioning of this research.

Firstly, the discussion in this chapter on the conceptual framework for the investigation has repeatedly used the term 'identity', yet it has been signalled that the focus is taken away from psychological processes of individuals (as relevant to the cognitive aspects of learning and masculine identity development) to the collective processes of social world where there is mutual engagement in a joint enterprise of being male, begging the question, 'why is 'identity' still a feature of the discussion?'. Secondly, the term 'culture' as in 'video gaming culture', or 'culturally exalted' practices (in reference to hegemonic masculinity) is also repeatedly used. This section will briefly address possible theoretical challenges or limitations related to the use of these terms and stipulate the intended meaning when such terms are used.

Identity

Wenger (1998) places a great deal of importance on identity as membership in 'communities of practice' dedicating half his book *Communities of practice: learning meaning and identity* to his conceptualisation of identity and the understanding of 'identity' as a function of membership in a community of practice.

One of the acknowledged tensions around the use of terminology for this investigation comes as a consequence of social learning theory (and concepts like 'communities of practice') blending selected aspects of psychology

and sociology. This reconceptualisation of pre-existing concepts results in a shift in the previously understood meanings of some terminology. Taken as a psychological term, 'identity' is used predominantly in relation to individuals and their self-concept (such as Harter, 1990, Kroger, 2004), whereas some of the sociological and particularly the feminist literature dispenses with the term to talk more in terms of 'subjectivities' (such as Weedon, 1987). Subjectivity in Wenger's explanation is 'the nature of individuality as an experience of agency ... [and] the experience of subjectivity rises out of engagement in the social world' (Wenger, 1998, p15). As researchers and theorists combine ideas from across the psycho-social understandings of these concepts, another literature, social learning theories being one example, emerge and establish meanings of 'identity' somewhere between the original disciplinary based understandings of 'identity' and 'subjectivity'.

To resolve this tension around the use terminology for the purpose of this study, the lead will be taken from Wenger (1998) as it is his 'communities of practice' concept that forms the foundation for the study. That is, that the term identity in context of social learning theory is understood to mean that the focus is on 'the person, but from a social perspective', and that the focus on identity can extend beyond 'communities of practice' as a concept, 'calling attention to broader processes of identification and social structures' (Wenger, 1998, p145). In other words, when Wenger uses the term 'identity' he is thinking about people in their social context. Also, that the knowledge and skills that a person may need to draw on to function within, and identify as, a member of a particular 'community of practice', may well extend beyond just the mutual engagement in the joint enterprise, and the shared repertoire of that community.

'Culture' or 'community of practice'?

The prevalence of the term 'culture' in the video gaming literature would suggest that studying the practice from a cultural perspective (and using theories and concepts typically associated with a research project about 'culture') would be an obvious theoretical position to come from. However, as a concept for application to this investigation, a 'community of practice' approach eliminates the theoretical complications and limitations of calling a shared practice like video gaming a 'culture'. This section explains why the concept of 'communities of practice' offers a more useful theoretical framework for this investigation, than conventional understandings and analyses of culture.

Defining the complex notion of 'culture' has occupied anthropologists and sociologists⁴ for many decades. Literature emerging from these disciplinary bodies repeatedly reports the pursuit of such a definition as being an ongoing task for researchers and theorists in these fields. Given the large volume of work contributing to the

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⁴ For the purpose of this discussion, the disciplines of anthropology and sociology are accorded traditional understandings, that is, that anthropology is the study of humankind, especially the study of societies and cultures and human origins; sociology is the study of the development, structure, and functioning of human society (Oxford English Dictionary, 2007).

conceptualising and defining of 'culture', it is useful in the context of this investigation to look at just one statement that captures the commonly represented features of such a definition, and in addition, a definition which could feasibly have application to an investigation on boys and video gaming. For this purpose, anthropologist Daniel Bates' (1996) frequently cited statement defining culture has been selected.

'Broadly defined, culture is a system of shared beliefs, values and customs, behaviours, and material objects that the members of society use to cope with their world and with one another, and that are transmitted from generation to generation through learning.' Bates (1996, p5)

The key components of this general definition include a focus on; the *learned* meanings about the world in which people live, made possible through language use; the *values and beliefs* that help people address life issues; the *behaviour norms* established on the basis of what is considered to be appropriate and inappropriate for a particular group of people; the *patterns of behaviour* or social roles or social systems that result (usually from a combination of norms and the behavioural expectations associated with these) and which are *passed (as learning) from one generation to the next*, the *material objects* (the tools and technologies) that a particular group of people use in day to day life, and the skills needed to use these materials. With such a definition it would be possible to investigate the world of boys' video gaming by examining the learned knowledge, values, beliefs and patterns of behaviours associated with the practice.

However, it is the focus on determining *patterns* and *norms of behaviour*, which an understanding of culture emphasises, that is a limiting feature of such an approach for this investigation. Trying to categorise and systematise boys' knowledge, values, beliefs and behaviours in relation to their video gaming in order to describe *patterns* and *norms* about video gaming practice provides little opportunity for exploring the *diversity* of features that may contribute to such a community of practice. While some of these diverse features may in fact reflect what is considered to be the cultural 'norm' or 'appropriate', some features of the practice may not. Without some additional or alternative conceptual tools for analysis, which allow a researcher to consider how or why some members of a society practice (for example) 'unacceptable' behaviour, or choose non-conformist roles that challenge or resist the dominant culture, a potentially significant part of the picture may be ignored.

It is worth briefly noting, that while a practice like video gaming may be more the focus of a 'sub-culture', that is, a culture that for one reason or another may have values and practices different to, or at odds with the dominant culture of the society, the analysis of such sub-*cultures* still comes back to looking for patterns and norms of behaviour among its members.

When a culture is analysed, the focus is on all members of the culture with the patterns and norms of behaviour being what most of the people do and what is accepted or at least understood by the majority. The research is less about the learning and meaning making that is contributing to the development of a *diverse* range of individual identities within that culture. This is not to say that an analysis of culture ignores 'abnormal', 'strange' or 'deviant' behaviours (terms used by Bates, 1996, p35) which are a recognised force of cultural change, but the analysis of these is at the level of whole groups within society, with little or no consideration of the individual purpose of such behaviours.

Analysis of patterns and norms of practice tend to hide what is going on for individuals. Whether or not an individual actually agrees with the collective values and beliefs, and the accepted behavioural norms of the culture, and whether or not they as individuals conform, is not the focus of such an analysis. The consequence of ignoring the diversity of individual identities when analysing culture can be that non-normative values and behaviours, by research design, or by default, are labelled for their (presumed) anti-social (or anti-societal) stance and relegated to the lists of 'unacceptability' within a particular culture.

Consequently, a focus only on culture can *hinder* the exploration of possibilities for bringing about change, when arguably change may be needed to address significant societal issues, gender related issues being one such example accorded substantial attention in a wide range of literature. This is not to say that culture doesn't change, but at the level of analysis, an investigation of culture would place emphasis on the adaptive forces present in the environment that brought about the change, rather than considering (for example) an analysis of the knowledge/ power relations that exist in actions between individuals in particular social situations.

A recurrent and frequent illustration of these academic concerns about *cultural* analyses of gender in particular, considers the limited opportunities for males to perform or practice diverse forms of masculinity, because a culture, with all of its established values and norms and expected 'gender roles' tends to marginalise and render unacceptable any behaviour (and its associated values and beliefs) that does not fit a generationally sustained and accepted, pattern or norm of masculine behaviour (see for example *So what's a boy?* by Martino and Pallotta- Chiarolli, 2003, and *Young masculinities* by Frosh, Phoenix and Pattman, 2002). A narrow range of 'acceptable' behaviours then continue to be perpetuated from generation to generation even if they disadvantage a minority, or sometimes a majority of males, who practice more diverse forms of masculinity. An examination of such diversity, sits outside the intentions described by the definition, and therefore, outside the analysis of culture.

Important for this investigation therefore, is a theoretical framework that provides opportunity to consider the diversity of why boys do what they do in their male dominated video gaming world, and why this might be similar or different to other practices in other life situations and other social contexts. This means utilising conceptual and

analytical tools to examine the knowledge/power configurations that determine which masculine practices are learned, conformed with, accepted and passed on, and which are challenged, contested and resisted, in their video gaming world.

Shifting the emphasis to the theoretical approach offered by the concept of 'communities of practice' (Wenger, 1998), sidesteps the need to analyse practices like video gaming in terms of accepted patterns and norms of behaviour, the learning of values and beliefs that underpin these and how these are passed on. Instead, the focus is on how people learn (multiple) identities in order to become full members of their various 'communities of practice'. 'Communities of practice' still determine what is 'acceptable' and 'unacceptable', but it is within the context of each specific community, and these communities may have quite similar or very different accepted practices, and any norms or patterns of behaviour that may be practiced in one community may not apply to another.

Notions of 'culture' and 'communities of practice' however, do share features such as learning in common, but it is the different conceptual emphases that separates them at the level of definition and analysis. The generation to generation transmission of learning in cultural terms maybe directly from person to person in everyday practices, or it may be modelled indirectly through wider societal processes, practices and organisations (such as mass media, church/religion, or sporting events for example). This learning helps people to attach meaning to events in their life and in their wider environment. In a sense, culture provides a 'set of guidelines' (Bates, 1996, p35) for people to use to interpret their situations. A 'community of practice' on the other hand is typically much more localised, if not geographically, at least in terms of its members being in some form of communication with one another. In other words the transmission of knowledge and the resulting learning in a community of practice tends to happen interpersonally – directly between people - and it is learning specific to the situation.

Participation in different 'communities of practice' means that situation specific knowledge is learned, and more specific learning means greater mastery of the shared practice of each community, resulting in the development of situation-specific identities (knowing what to do and say, what to value and support, what is important and how to 'be' in each community), eventually culminating in full membership to the community. Paechter's (2003a, 2006) theorising of communities of *masculinities* practice introduces the need to analyse the way that specific and situated learning produces these identities, and that the theoretical foundations for this need to be derived from a Foucaultian notion of power.

In summary, for the purpose of conceptualising this investigation, a 'community of practice' offers a more useful theoretical framework because it provides opportunity to explore a *diversity* of (masculine) identities that may be associated with boys' video gaming, and not be bound by the limitations of analysing cultural patterns and norms.

Although culture might directly or indirectly influence the behaviours within a 'community of practice', there is no attempt at a 'cultural' analysis of any recurring patterns or norms related to the shared practice of the community. In contrast to the type of analysis carried out for the purpose of describing culture, an objective of analysing a 'community of practice', is to examine how a diversity of identities may be formed through social learning in a diversity of situations, where the purpose of the learning and identity development is to achieve full membership in the 'community of practice'. Whereas an individual person may have a few 'cultural identities' as a consequence of the processes that make up a culture (given that culture is about meanings and practices whole societies or groups within societies live by), they may have many different (and overlapping) 'communities of practice' and therefore, many different situation-specific identities. It is this point in particular that makes the concept of 'communities of practice' an appealing option for exploring how video gaming, as a shared practice is a situation where potentially many masculine identities are produced.

Summary of the conceptual framework selected for this investigation and the overall research questions

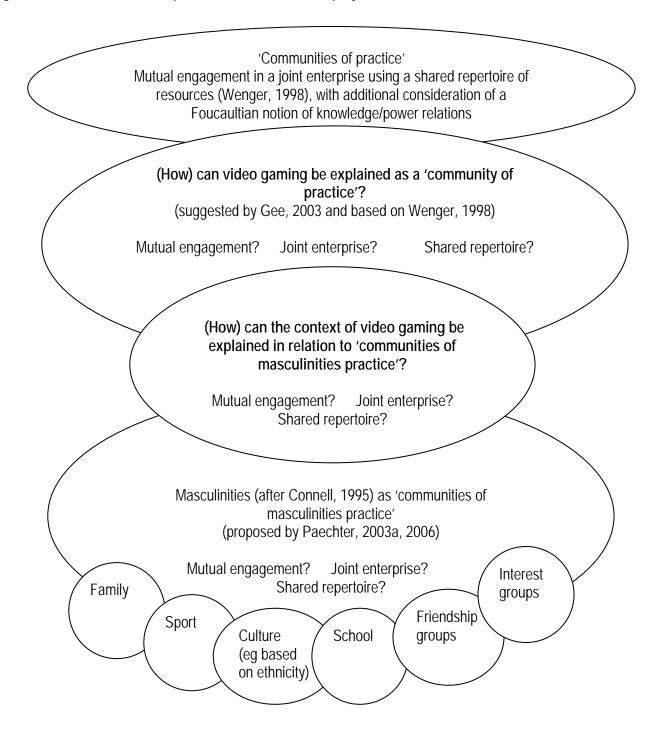
The concept of 'communities of practice', (an an example of a concept within social learning theory), with the addition of a Foucaultian notion of knowledge/power relations, has some useful intersections with the concept of masculinities, in that the focus is taken away from psychological processes of individuals (as relevant to the cognitive aspects of learning and masculine identity development) to the collective processes of social world where (conceptually at least) there is mutual engagement in a joint enterprise of playing video games and being masculine.

This investigation utilises Wenger's (1998) concept of 'communities of practice' to explore two overall research questions; (how) can boys video gaming be explained as a 'community of practice' (suggested by Gee, 2003) and how video gaming can be explained in relation to 'communities of masculinities practice' (after Paechter 2003a, 2006). The selection of this conceptual framework has also determined the research methodology, the analysis of the data, and discussion of the research findings.

The conceptualisation of this project is summarised by the model in Figure 1 (see following page).

- The top section of the model identifies the central concept for the investigation, Wenger's (1998) conceptualisation of 'communities of practice'.
- The next section identifies the overarching question for the project (how) can video gaming be explained as a 'community of practice'? as suggested by Gee (2003), and based on Wenger's, (1998) conceptualisation of 'communities of practice'. This question is asking what evidence is there of mutual engagement in a joint enterprise, using a shared repertoire of resources in (boys) video gaming?
- The third section identifies the more focused research question (how) can the context of video gaming be explained in relation to 'communities of masculinities practice'?, based on Paechter (2003a, 2006). In other words, what evidence is there of mutual engagement in a joint enterprise, using a shared repertoire of resources to be masculine in a video gaming context?
- The lower section identifies Paechter's (2003a) proposal that masculinities can be conceptualised as a
 'community of practice', and the identification of a likely list of other localised contexts in which
 masculinities may be produced, such as those related to family, sport, culture, school, friendship groups,
 interest groups (etc).

Figure 1. Model for the conceptualisation the research project



PART B: EXPLORING WAYS TO FOCUS THE (CONCEPTUAL) LENS Analysis of the literature

In nineteenth century boy culture, play activities were seen as opportunities for social interactions and bonding. Boys formed strong ties that were the basis for adult affiliations, for participation in men's civic clubs and fraternities, and for business partnerships. The track record of contemporary video game culture providing a basis for similar social networking is more mixed. In some cases, the games constitute both play space and playmates, reflecting the physical isolation of contemporary children from each other. In other cases, the games provide the basis for social interactions at home, at school, and at the video arcades. Children talk about the games together, over the telephone or, now, over the Internet, as well as in person, on the playground, or at the school cafeteria. Boys compare notes, map strategies, share tips, and show off their skills, and this exchange of video game lore provides the basis for more complex social relations.

Henry Jenkins (1998, p274-275)

"Complete freedom of movement": Video games as gendered play spaces In *From Barbie to Mortal Kombat: Gender and computer games*

The literature informing this project draws from across a range of knowledge disciplines; the literature exploring the phenomenon of video gaming draws mainly from the field of psychology, along with some recent contributions from education-related research; the branch of sociology in which gender studies is positioned is the main source of literature on masculinities; and the connections between these understandings are made specifically through the concept, 'communities of practice' which comes from the field of social learning theory (in itself a blend of psychological and sociological concepts).

Literature review or analysis of the literature?

While some aspects of the literature have been approached and reported across Chapters three through five in the usual sense of a literature review, the absence of any literature combining 'communities of practice', and video gaming, and masculinities has meant that a story has had to be pieced together in a way that could more appropriately called an analysis of this literature, rather than a review. As previously established, the threads of this story were initially drawn from the work of Gee (2003) and his linking of social learning theory (in particular

'communities of practice') with video gaming, and likewise Paechter (2003a) and her exploration of masculinities as 'communities of practice'. However, no further *development* of these ideas was found among the literature that linked the concepts in the ways already theorised by these authors, much less literature that integrated this selection of concepts and contexts. Consequently, in ways that parallel how the general aims of the research emerged from this identified gap in the literature, the literature informing the research needed to be (re)read with an analytical eye to consider how this gap *might* be (partly) filled. The gap identified here is primarily taken to be a conceptual one, hence the reason for the central concept of 'communities of practice' being integral to the very research questions. The exercise to 'review' the supporting literature then became a case of reading related research 'around' the concepts ('communities of practice' and masculinities) and contexts (video gaming and boys worlds), to consider in a more analytic way, which aspects of the 'communities of practice' literature could have relevance and *application* for the world of boys video gaming, and how the 'communities of practice' concept, when used as a conceptual and analytical lens can *explain* the world of boys and video gaming.

Overview of literature analysis (see Figure 2. following)

- Chapter three considers in detail the aspects of Wenger's (1998) conceptualisation of 'communities of
 practice' that have greatest application to the present investigation, and the ways the concept has been
 used across a range of research contexts.
- Chapter four shifts and refines the focus of the discussion to take a view of the research context, that is, video gaming and reread this largely psychological based body of literature to consider the potential for conceptualising video gaming as a 'community of practice'.
- Chapter five shifts the focus again, this time to view the research subjects, the boys, and how their boys' world could be conceptualised as 'communities of masculinities practice'.

Figure 2. Overview of the literature analysis

Chapter 3: 'Communities of practice' Mutual engagement in a joint enterprise using a shared repertoire of resources to produce identity for membership

Chapter 4: Video gaming as a 'community of practice'?

Mutual engagement in the joint enterprise of video gaming using a shared repertoire of resources?

Chapter 5: Masculinities as 'communities of practice'?

Mutual engagement in the joint enterprise, using a shared repertoire of resources to produce masculine identities?

'Being alive as human beings means that we are constantly engaged in the pursuit of enterprises of all kinds, from ensuring our physical survival to seeking the most lofty pleasures. As we define these enterprises and engage in their pursuit together, we interact with each other and with the world and we tune our relations with each other and with the world accordingly, In other words, we learn. Over time, this collective learning results in practices that reflect both the pursuit of our enterprises and the attendant social relations. These practices are thus the property of a kind of community created over time by the sustained pursuit of a shared enterprise. It makes sense therefore, to call these kinds of communities, communities of practice.'

Etienne Wenger (1998, p45)

In Communities of Practice: Learning meaning and identity

Introduction

Part one of the analysis of the literature elaborates on Wenger's (1998) conceptualisation of 'communities of practice' introduced in the Conceptual Framework (Chapter 2) and considers in detail the aspects of that concept that have greatest application to the present investigation.

Chapter 3: 'Communities of practice'

Mutual engagement in a joint enterprise using a shared repertoire of resources to produce identity for membership (Wenger, 1998)

Video gaming as a 'community of practice'?

Masculinities as 'communities of practice'?

The centrality of the 'communities of practice' concept to the conceptualisation of this project, and the very research questions being explored, means that the aspects of Wenger's (1998) work that have particular application for this investigation need to be identified, and an explanation given as to the reasons for the selection of these features in particular. This was deemed to be an essential step before the concept is explored in context of video gaming and masculinities because this level of conceptual meaning is central to the analysis of the data collected for this project. Included in this discussion is consideration of Foucault's notion

of knowledge/power relations to explain how and why certain knowledge becomes privileged in a 'community of practice'. Additionally, ways in which the concept has been applied in organisational settings such as the New Zealand education system, and the limited critique of the concept, will be discussed.

Wenger's (1998) conceptualisation of 'communities of practice'

The popularity and often cited 'usefulness' of Lave and Wenger's (1991) and Wenger's (1998) conceptualisation of 'communities of practice' has tended to mean that the majority of literature referencing the concept is in relation to its application and use, and far less frequently an exploration and critique of the concept itself. The research focus tends to be on 'how to' or 'how well' an organisation puts the concept into practice (eg Wenger, McDermott & Snyder 2002) rather than a deconstruction or critique and redevelopment/reconceptualisation of the foundation thinking. Consequently, this analysis leans heavily on Wenger's (1998) seminal work *Communities of* Practice: Learning meaning and identity as there has been relatively little challenge, much less modification by others to the conceptualisation of the 'communities of practice' concept. What modifications have been reported, or at least recommended, tend to be context specific and related to the very nature of the theoretical discipline of the researcher adopting the generalised concept and applying it to a specific social learning environment (eg the sociolinguistic approach of Tusting 2005, or the gender and masculinities focus of Paechter 2003a). Although this investigation considers the application of the concept, it is not application in an organised setting like an educational institution or a workplace, but to explore the usefulness of 'communities of practice' to conceptualise informally organised aspects of people's social worlds, that is, boys and video gaming. It needs to be noted that although Wenger's earlier work with Jean Lave, titled Situated learning: legitimate peripheral participation (Lave & Wenger, 1991) establishes much of the social learning-related foundations for the development of the 'communities of practice' concept, it is Wenger's (1998) subsequent work that has provided far greater detail of understanding the concept, making it the more useful work on which to base this investigation.

Repeated readings of Wenger's (1998) work identified a number of essential passages of text that formed the core of the conceptualisation for this project. As the 'communities of practice' concept is central to the research questions, it is important to establish the reason for these selected passages and what they are taken to mean. Affording higher priority to these passages, to help connect various aspects of video gaming and boys worlds, has meant significant passages of material have been bypassed, but within the scope of this project, it was a decision that needed to be made.

Social learning theory

Wenger (1998) positions the 'communities of practice' concept within the broad and diverse framework of social learning theory which makes it an attractive prospect for exploring the world of boys and the pastime of video gaming. Social learning theory places learning 'in the context of our lived experience of participation in the world'

(Wenger 1998, p3). With this understanding, learning is not seen as a separate activity to be done only in organised settings like schools, it is integral to everything people do. This means that 'communities of practice' are everywhere and Wenger considers that they are 'so informal and so pervasive they rarely come into explicit focus' (p7). To paraphrase Wenger (p4), as social beings people cannot help but learn through social interaction, the knowledge they learn is a consequence of what is deemed to be valuable to know in relation to any given human enterprise. Knowing is a function of actively participating in such enterprises, consequently peoples' experience of the world and engagement in it is meaningful. In other words, making meaning is the outcome of learning. This means that the knowledge created is not (necessarily) the sort that can be found in scholarly texts, but the sort of knowledge that has meaning for people in their day to day lives. What boys learn about being a boy through social interaction, and what they may learn from the practice of video gaming is helping build the sort of knowledge that makes their day to day experiences meaningful. However, the diversity of understandings offered by social learning theory is too broad a construct to work with for the purpose of carrying out research hence it makes more sense to refine the focus to one concept within this theoretical framework, that is, 'communities of practice'.

'Community' and 'practice'

The phrase 'communities of practice', by which all of Wenger's work seems to be referenced, is actually only part of his conceptualisation. That it is the mostly commonly cited and applied aspect of the concept is the first and most obvious reason for the selection of this part of Wenger's work. Wenger (1998) notes that the notion of 'communities of practice' is more a point of entry into a much broader framework, but to engage with these broader aspects in their entirety would exceed the practical constraints of this project. To unpack the meaning of the concept in preparation for application to this investigation requires looking to the very meanings of the words and phrases that make up both the name of the concept, and the components of the concept.

'Community' 'is way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognizable as competence' (Wenger 1998 p5). Whereas common place meanings of 'community' might focus more on people living or working together, or people with a common background or shared interests within society, Wenger's notion of community places emphasis not just on the 'doing' or 'being' (part of) such a social structure, but draws attention to the very nature and meaning of the valued activities of a community, and what is important to know and be able to do, to belong to (or be a member of) such a community.

Adding to this, 'practice' according to Wenger, is 'a way of talking about the shared historical and social resources, frameworks and perspectives that can sustain mutual engagement in action' (p5), which again, emphasises that 'practice' is not just about 'what' people do, it is also about why people do what they do to sustain the business or enterprise of the community. In saying that 'practice' is not just about 'doing' an activity,

but it is about 'doing' in a historical and social context it gives structure and meaning to what people do. In other words practice is always *social* practice. Doing can be both implicit (what is not said, or what is passively assumed), and explicit (what is said and done). Practice is what gives a community *coherence*, it is the reason for its existence.

'Community' adds to 'practice' to take the meaning beyond just the doing of an activity or the existence of a social organisation or structure, or culture. 'Practice' is what holds the community together, expressed by Wenger as being about *mutual engagement* in a *shared enterprise* using a *common repertoire of resources* and it is these three features that define a 'community of practice'. When the 'communities of practice' concept is applied to the workings and business of institutions and organisations, it is these features that repeatedly dominate and give shape to claims about the institution or organisation functioning as a 'community of practice' (eg Lai et al 2006). It is at this level of understanding that the concept becomes more manageable for the purpose of research and analysis, and the reason for the emphasis given here. The meanings of these three mutually defining features used for this investigation follows.

Membership in a 'community of practice' requires **mutual engagement** which is about being 'engaged in actions whose meanings are negotiated with one another' (Wenger, 1998, p73). Reflecting the previous meaning of 'community', 'mutual engagement' is not so much a function of social allegiance or social relationships, social status or belonging to an organisation, nor is it defined by who knows who and it is not bound by geographic proximity (mutual engagement could happen, for example, in a virtual video gaming community). That said, mutual engagement does build relationships between people and by its very definition implies that these interpersonal relationships are sustained over time. However, it is the emphasis on the negotiated meanings of the actions of the community that are critical to this understanding, especially when considered in conjunction with the next feature of a 'community of practice', that of **joint enterprise** which Wenger, (1998) states 'is the result of a collective process of negotiation that reflects the full complexity of mutual engagement' and it is 'defined by the participants in the very process of pursuing it'..... 'it is not just a stated goal but creates among participants relations of mutual accountability that become an integral part of the practice' (p77). Again the idea of negotiated meaning surfaces:

'Negotiating a joint enterprise gives rise to relations of mutual accountability among those involved. These relations of accountability include what matters and what does not, what is important and why it is important, what to do and not to do, what to pay attention to and what to ignore, what to talk about and what to leave unsaid, what to justify and what to take for granted, what to display and what to withhold, when actions and artifacts are good enough and when they need improvement or refinement. (Wenger, 1998, p81)

Members of a 'community of practice' are not necessarily an homogenous group, nor is homogeneity a requirement for definition. The fact that any one person will have 'multi-membership' to a 'constellation' of practices (in other words people belong to many 'communities of practice' and these may cluster together and overlap) means that learning and meaning from one 'community of practice' may spill over and be used in another. If anything, Wenger (1998) sees diversity as being useful, as diverse meanings established in other 'communities of practice' can carry over to help negotiate meaning in a different 'community of practice'. Since mutual engagement does not require homogeneity, a joint enterprise therefore may not mean agreement by all members in the usual sense (for example in passive compliance with standardised understandings of the practice) and if anything, disagreement can be productive – 'the enterprise is joint not that in everybody believes the same thing or agrees with everything, but that it is communally negotiated' (p78).

The point of this part of the discussion is to stress that negotiated meaning is a process whereby certain knowledge is, or becomes privileged for a range of reasons related to the enterprise of the community. Negotiating meaning of the joint enterprise of a 'community of practice', according to Wenger, is a process not so much for reaching a fixed understanding or agreement, but to advance practice forward as well as keeping it in check, negotiated meaning directs people's energy, it encourages action and gives focus to the enterprise of the 'community of practice'.

The previously noted ideas of multi-membership to, and constellations of, 'communities of practice', means that communities do not exist in isolation of each other and that they develop in wider contexts in response to historic, cultural, social and institutional influences. Each of these wider contexts brings with it a range of resources - and limitations - some explicit, some implicit. While the practice of a community may be significantly influenced by external forces beyond the control of the members, the day to day reality of the members of any one 'community of practice' means that additional constraints and resources may result in the development of 'indigenous enterprises'. That is, in spite of external influences on a 'community of practice', people respond uniquely to the conditions they are in therefore it becomes their own ('indigenous') enterprise. Consequently, 'the local coherence of a community of practice can be both a strength and a weakness' 'the indigenous production of practice makes communities of practice the locus of creative achievements and the locus of inbred failures; the locus of resistance to oppression and the locus of reproduction of its conditions' (Wenger, 1998, p85). All of which provides great potential for conceptualising boys worlds and the world of video gaming as 'communities of practice'.

Community coherence is also dependent on the development of a **shared repertoire of resources**. These resources are inclusive of *'routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts that the community has produced or adopted in the course of its existence'* (Wenger, 1998,

p83). It is tempting to use the word 'culture' here (echoing the discussion in Chapter 2), but for the association that an emphasis on culture might want to focus on norms and patterns and ignore the possibility for contesting such norms and producing change that would be achieved through negotiated meaning. The shared set of resources used by a community is the repertoire, and this repertoire comes as a consequence of a history of mutual engagement in that what has been done before is used as a point of reference for things deemed useful and not useful. It is also important for purpose of definition, that the repertoire 'remains inherently ambiguous' (Wenger, 1998, p83) which means that there is an intrinsic uncertainty of meaning, or having more than one meaning, suggesting that the repertoire can change over time, or new meanings can emerge rather than be stifled by fixed understandings and ways of doing things. Consequently, a shared practice does not imply harmony or collaboration and so 'communities of practice' are not (necessarily) emancipatory.

'Communities of practice are not intrinsically beneficial or harmful. They are not privileged in terms of positive or negative effects' ... 'As a locus of engagement in action, interpersonal relations, shared knowledge, and negotiation of enterprises, such communities hold the key to real transformation – the kind that has real effects on people's lives. From this perspective, the influence of other forces are no less important, but they must be understood as mediated by the communities in which their meanings are to be negotiated in practice'. (Wenger, 1998, p85)

Foucault on knowledge/power relations

Having established which aspects of Wenger's (1998) conceptualisation of 'communities of practice' are most central to this investigation, it is useful at this point to introduce another layer of understanding which Wenger briefly introduces and then alludes to in his notes but did not develop, the role of power in the way meanings are negotiated in a 'community of practice'. The inclusion of this concept of power in the discussion at this point is also in response to Paechter's (2003a) challenge, that a shortcoming of Wenger's 'community of practice' conceptualisation did not sufficiently consider the importance of the way power produces knowledge in gendered relations. Consequently, the purpose of including this additional discussion here is to provide some connection between the 'communities of practice' concept and the masculinities section featured in Chapter 5.

The previous passages that established the meaning of the defining aspects of a 'community of practice', that is, that a 'community of practice' is about *mutual engagement* in a *shared enterprise* using a *common repertoire of resources*, is peppered with examples of how Wenger's conceptualisation could be paralleled with a Foucaultian notion of power⁵ (Foucault, 1983). As outlined in the conceptual framework (Chapter 2), a Foucaultian notion of

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⁵ Foucault still acknowledged that there are oppressive forms of power and his conceptualisation represents an additional view, not a replacement of the understanding that power can be oppressive.

power is that power can be productive (as in power produces knowledge), power in this sense is not an oppressive force or 'something' that is held over someone.

Wenger's explanation of negotiated meaning for example to determine '... what matters and what does not, what is important and why it is important, what to do and not to do, what to pay attention to and what to ignore, what to talk about and what to leave unsaid, what to justify and what to take for granted, what to display and what to withhold' (Wenger, 1998, p81) illustrates Foucault's (1983) notion that power then produces knowledge because when people negotiate meaning to establish what is or is not important in a 'community of practice', what needs to be said and what stays unsaid, and what to justify and what to accept, privileges some knowledge over other knowledge. When some knowledge is privileged, it establishes the nature of the mutual engagement in the joint enterprise of the 'community of practice'. This is negotiated meaning of knowledge and the power that sustains this knowledge is therefore important for maintaining the 'community of practice'. Members of a 'community of practice' are the subject of power through their personal knowing of the shared practice and what is acceptable to do or say for membership. In addition, they are subject to power by other members of the 'community of practice' who are themselves mutually engaged in the shared practice, doing and saying what is acceptable and appropriate for the 'community of practice'.

However, when Wenger talks about the way the shared repertoire of resources 'remains inherently ambiguous' (Wenger, 1998, p83) and that there is an intrinsic uncertainty of meaning about the repertoire of resources, or that there is more than one meaning for the 'routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts' the 'community of practice' uses, it suggests that meaning can be contested. If there is power in the nature of the challenge to established meanings (as in there is acceptability and purpose to the challenge), the repertoire can change and new meanings can emerge – in other words, power has produced a change in the knowledge (the repertoire) of the 'community of practice'. This means that 'communities of practice' need not be static entities, they can change in response to the needs of community members.

Additionally, Wenger (1998) acknowledges that participation in a 'community of practice can be conflictual and not collaborative or cooperative, that 'communities of practice' are not intentionally emancipatory, all of which means that the knowledge/power relations within a 'community of practice' (and gendered practices are an obvious example here) make some knowledge far more privileged over other knowledge. This knowledge is then continuously (re)negotiated, and the most accepted and privileged aspects of this knowledge (as in what it means to be male for example), is perpetuated as part of the repertoire and shared practice of the community. While contesting knowledge, as an integral part of community participation, can transform 'communities of practice', when the power of such culturally held knowledge (as in what it means to be male) is so rigorously and

continuously renegotiated by community members, change can be very difficult to achieve. Aspects of this Foucaultian conceptualisation of power will resurface in the masculinities chapter (Chapter 5).

One aspect of Wenger's 'communities of practice' concept focuses on 'reification', which he considers a 'useful concept to describe our engagement with the world as productive of meaning' (p58). Reification for conceptual purposes is 'the process of giving form to our experience by producing objects that congeal this experience into "thingness". In so doing we create points of focus around which the negotiation of meaning becomes organized' (p58). However, very little of the reviewed literature (Paechter 2003a being an exception) picks up on this notion of reification favouring instead to focus on negotiated meaning in different ways, be that a sociolinguistic approach to look at the role of language within the processes of negotiation and meaning (eg Tusting, 2005) or as in the present investigation, to consider knowledge/power relations in such negotiation of meaning. This is not to say these alternative concepts are any more valid than Wenger's notion of reification, but when the 'communities of practice' concept is applied to specific research contexts (like gender studies or sociolinguistics) the more familiar, or the more accepted and established, perhaps more important concepts typically used by researchers in their field of study, seem to be used in preference. Also, it is not implied that these alternative concepts are serving exactly the same purpose as Wenger's conceptualisation of reification, but when a generic concept like 'communities of practice' is applied to specific research contexts, some aspects of the concept may need adapting to help them 'fit' and have relevance for that field of study.

Wenger on identity

It is not the stated intention of this investigation to explore the half of Wenger's (1998) book that focuses on his conceptualisation of identity, but it is difficult not to (at least briefly) acknowledge this part of his conceptualisation, as not to do so feels like leaving the story incomplete. To be a member of a 'community of practice' means to engage with, and participate in, the enterprise of the community, and through the social processes of that community to learn how to belong and be a member of that community – the newcomer or apprentice learning how to be a master (echoing Lave and Wenger, 1991). Through multi-membership of their many 'communities of practice' people reconcile their various forms of membership into one identity. Identity for Wenger's (1998) purposes places the focus on the person 'but from a social perspective' and calls 'attention to broader processes of identification and social structures' (p145) rather than the individualised and internalised focus that might be considered with a more traditional psychological interpretation of identity. 'Talking about identity in social terms is not denying individuality but viewing the very definition of individuality as something that is part of the practices of specific communities (p146). Wenger's conceptualisation of identity invites social constructs like gender into the discussion which gives some connection with, and relevance for, the following discussion on masculinities where the term 'identity' reappears in some of the literature.

Identity then, is about the social formation of the person because 'building an identity consists of negotiating the meanings of our experience of membership in social communities' (p145) and 'identity [is] a form of competence' (p153) within and across various 'communities of practice' that a person is a member. Paraphrasing Wenger (p163), identity is a product of lived experience, it is negotiated and ongoing, and it is a learning process incorporating both past and future into meaning of the present. It is also a nexus combining many forms of membership and reconciling meanings from multi-membership, it is a local-global interplay whereby identity is not limited only to local activities or only a reflection of only global understandings, but an interplay of both, identity 'is a way of 'being in the world' (p151). Such an understanding would lend itself comfortably to conceptualising masculine identities or masculinities as 'communities of practice'.

However, the present investigation places emphasis on determining whether or not video gaming can even be conceptualised as a 'community of practice', and then how video gaming might be explained in relation to 'communities of masculinities practice'. Wenger's point that 'communities of practice' is an entry point into a much broader framework is noted here, as without 'entry' (that is, without evidence that video gaming and masculinities can be conceptualised as 'communities of practice' in the first place), any subsequent exploration of his ideas around identity become redundant. To engage meaningfully and in depth with Wenger's (1998) work on identity would seem to be another research project in itself, and would presume that video gaming and masculinities are 'communities of practice'.

Application and critique of the 'communities of practice' concept

Analysing the 'communities of practice' literature beyond Wenger's own work presents a number of challenges as the concept has been taken up by a diverse range of knowledge disciplines spanning the likes of management sciences, education, information technology and other virtual world applications. The management sciences (as in the management of knowledge particular to businesses/organisations where the knowledge bases of large corporate and government bodies needs to be maintained for the effective functioning of such a workplace) are reported to have the most developed *practical* application of the concept (as noted by Barton and Tusting, 2005). However, as this has the least application for this investigation which looks at the way the 'communities of practice' concept can be applied to informally organised aspects of boys' lived worlds, this body of literature will only be acknowledged for its existence rather than what it has contributed to developing understanding of 'communities of practice' at a more conceptual level. Interestingly, much of Wenger's work post-1998 (eg Wenger, et al, 2002; Wenger, 2004) seems to be supporting organisations on *how to* adopt and nurture a 'community of practice' model, and not the application of the concept to less formally organised situations which seems to have been taken up by a range of researchers utilising theoretical frameworks drawn from various branches of social theory.

Lave and Wenger (1991)

Reading *across* the 'communities of practice' literature, it was noted that reference was made more frequently to Lave and Wenger's (1991) original development of the 'community of practice' concept, than to Wenger's subsequent work (Wenger, 1998). The greater appeal of this earlier work seems to be associated with the relative familiarity, and ready application of the concept to employment and career-related situations. While not the preferred or chosen conceptualisation for this investigation, the recurrence of references to this earlier work in the reviewed literature meant that some consideration of it was needed to give context to this literature analysis, to show the development of the concept, and consequently why Wenger's subsequent conceptualisation (Wenger, 1998) was selected for this project. This passage briefly documents Lave and Wenger's (1991) work.

Learning viewed as situated activity has as its central defining characteristic a process we call legitimate peripheral participation. By this we mean to draw attention to the point that learners inevitably participate in communities of practitioners and that the mastery of knowledge and skill requires newcomers to move forward toward full participation in the sociocultural practices of a community. 'Legitimate peripheral participation' provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice. It concerns the process by which newcomers become part of a community of practice. (Lave and Wenger, 1991, p29)

Through this conceptualisation, Lave and Wenger (1991) view the act and process of learning as a socially practiced activity in which members learn what matters to become, and be, a member of any given community. Situated learning within Lave and Wenger's (1991) work considers how learning (being the acquisition of knowledge) is a social practice and therefore a situated activity. With an understanding such as this, learning is considered to be a feature of all activity, occurring in any situation.

Legitimate peripheral participation involves analysing relations of power implicit in any activity within a 'community of practice'. Lave and Wenger (1991) state that *legitimate peripheral participation* is as much an 'analytical perspective' (p39) as it is a concept, in that it invites a way to explore the concrete relations and the actual interconnectedness of the many features of a 'community of practice'. They do not specifically mention how relations of power implicit in any activity within a 'community of practice' could be analysed, however their work hints at the possibility of introducing something like a Foucaultian notion of knowledge/power relations to their conceptualisation of legitimate peripheral participation, but they do not expand on this.

To explain further the concept of *legitimate peripheral participation*; when a person first engages with a 'community of practice' they are the newcomer, the novice, the apprentice, who, with learning from the old-timers,

the experts, the masters, (as well as learning from other novices) in time becomes an expert as well. Participation in some of the practices of the community initially provides a person with membership to the community. With increasing participation in more of the shared practices, the once-novice gradually becomes a full member of a 'community of practice'. This process is described as *legitimate peripheral participation*. The novice is not yet a full member by virtue of not having learned all the knowledge needed to be an expert – that is, they are working peripherally. Peripherality in this sense is therefore seen as a positive term as new members have an opening into the 'community of practice' and access to it, even though they don't yet have all the knowledge they require for full membership. However, peripherality is a rather fluid and dynamic understanding, as learning to become a full member of a 'community of practice' is not necessarily a linear progression of development. Different features of the community of practice may mean mastery of some practices within the community happen at different times to others. In addition to this, it is understood that some knowledge, and therefore learning, changes over time, so even the masters may occasionally find themselves peripheral participants in some specific situations within their 'community of practice'. It is also important to make clear that there is no place in the community considered to be 'the periphery' just as there is no specific place identified as 'the central core' as such a rigid designation would challenge the very idea of 'community' and all its complexities.

Furthermore, all *participation* in a 'community of practice' is legitimate (the alternative position is non-participation, not illegitimate participation with Lave and Wenger (1991) suggesting there is no such thing as illegitimate participation). What there is, is a novice who needs to learn to become a full participatory member of the 'community of practice', but what they contribute, even as a novice, is not 'illegitimate'. With this in mind, children for example, could be viewed as peripheral participants in the social world of adults, who, among other adult ways of being, are learning how to become adult males and females.

Wenger's (1998) work acknowledges the emphasis he and Jean Lave accorded legitimate peripheral participation in their original conceptualising of their social learning theory, but that he subsequently shifted the focus of his work toward the concepts of *practice* and *identity*. While Lave and Wenger's (1991) conceptualisation has found favour with many work-related applications of the concept (for seemingly obvious reasons with talk about apprenticeship and becoming expert practitioners), this foundation work, which illustrated the concepts with actual studies of people in the manufacturing trades, does not offer the researcher the range of analytical opportunities that are available through Wenger's subsequent and specific development of the 'communities of practice' concept.

Challenges arising from application of the 'communities of practice' concept

Having relied heavily on Wenger's conceptualisation of 'communities of practice' thus far in the discussion (given the centrality of Wenger's work to the very research questions for this investigation), it is useful to consider how the 'communities of practice' concept has been explored in research situations not only, but particularly in education-related studies. This literature has been given priority due to a range of related considerations between this research and the present investigation. One substantial body of literature referencing 'communities of practice' that will not be paid much attention in this section of the review is that from the management sciences. This literature places far more focus on how to establish and maintain a 'community of practice' model in a business environment, an application of the concept which sits well beyond the scope of this project.

As noted, the multi-disciplinary application of the 'communities of practice' concept means that identifying recurring themes in the research is fraught with challenges given the disparate and sometimes unrelated theoretical traditions each discipline draws from. When researchers make some claim to the application of the 'communities of practice' concept there is a tendency for them to emphasise certain aspects of the concept at the expense of others, apparently related to the very nature of the different theoretical or knowledge disciplines their work draws upon (which, as signalled, this investigation will also need to do). Some researchers acknowledge the flexibility of such a multi-disciplinary model and take advantage of the opportunities that a 'community of practice' concept can offer to take them beyond their usual boundaries of disciplinary practice, a feature of the concept that has been well used for the present investigation. However, two main areas of critique emerge among the reviewed literature that have potential relevance for this project, one related to the perceived shortcomings of the concept when applied to specific situations, and the other around misrepresented research claims to the very existence of a 'community of practice'.

The literature which challenges that aspects of Wenger's concept are not sufficiently developed for specific application to a particular field of study, tend to come from researchers working with various social theories (eg Tusting, 2005 a sociolinguist, considers ways to elaborate on Wenger's model to develop a clearer understanding of the role of language within the processes of negotiation and meaning, and Paechter, 2003a, comments on the need to focus on the role of power in gendered social situations). While these challenges are usually reported as shortcomings or inadequacies of the concept, this thinking could be reframed to view these necessary additions to the basic concept as being the sorts of adaptations that inevitably need to be made when any generic model is applied to specific settings, rather than seeing it as a failing of the original concept. The fact that Wenger's conceptualisation allows such modifications to be made could be seen as a strength, not a weakness of the concept.

In addition to the reported inadequacies of the concept, another challenge comes from researchers cautioning about unsubstantiated claims to the very existence of a 'community of practice', that is, that the increasingly

popular and romanticised notions of 'community' present across literature related to most social organisational settings have invited too many authors to assume that any community can be considered a 'community of practice', as conceptualised by Wenger (1998). A selection of such challenges is documented in the following passage to illustrate these areas of critique.

Sociolinguistic application of the 'communities of practice' concept

Sociolinguists, for whom language use and meaning is central to theory and practice, have considered the 'community of practice' concept as an alternative to their indigenous speech-community model. In looking at the role of language in gendered identity practices, Bucholtz, (1999) notes the limitations of such indigenous models, especially when drawing on and incorporating other disciplinary understandings (like those associated with the study of gender) and proposes how a concept like 'communities of practice', and its potential for application to a broad range of contexts, can extend the scope of the work of sociolinguist. In a related but different project, Bergvall (1999) suggests that coming from a 'communities of practice' position to develop a theory of language and gender 'naturalizes intragroup variation, not marking it as deviant' (p273) and in so doing considers the ways gender is negotiated through constructive practices rather than be bound by traditional and limiting approaches to studying gender. Eckert and McConnell-Ginet (1999) in a similarly related piece of research use a 'communities of practice' approach to look at the way adolescent communities (of practice) co-construct gender and identity through language.

A recurrent feature of this sociolinguistic work is the baseline assumption that a 'community of practice', as conceptualised by Lave and Wenger (1991) and/or Wenger (1998) exists among a group or community of adolescents where gender is being constructed, that is, the notion that such a group is a 'community of (gendered) practice' is a given and not challenged. Picking up on this very concern, Holmes and Meyerhoff (1999) (and reiterated up by Meyerhoff, 1999), compare a sociolinguistic understanding and use of the 'community of practice' concept with other theoretical approaches available to sociolinguists. They caution that it cannot be assumed that 'speech communities' are also 'communities of practice' given the defining characteristics of each concept.

For these sociolinguists it appears that the opportunity offered by a 'communities of practice' approach allows the researcher or theorist to step back from the sometimes limiting conventions of their own knowledge discipline and approach research problems through a less restrictive conceptual framework. This sociolinguistic work has parallels with the present investigation in so much as the application is to informally organised or indigenous 'communities of practice', not ones that are purposefully developed and nurtured in the workplace, and for reasons related to business and employment.

Educational application of the 'communities of practice' concept

The application of the 'communities of practice' concept to educational research is varied. The most overt application is more to communities of professional practice (eg Avis and Fisher 2006, Fuller, Hodkinson, Hodkinson & Unwin, 2005), which hark back to ideas around apprenticeship and illustrations of professional learning in Lave and Wenger's (1991) original work, rather than viewing the students in educational settings as members of a 'community of practice'. The linkage between students and notions of community tends to be more in the form of popularly used phrases like 'communities of learners' (after Rogoff, Turkanis, & Bartlett, 2001) which is a different conceptualisation altogether. Eraut (2002) explores the concepts of 'learning community' and 'communities of practice' and how well they help researchers clarify critical thinking in investigative work and whether these are indeed useful frameworks for researching learning environments. The cautionary note reported in this paper is that without empirical evidence to validate claims to an adherence to the principles of a 'community of practice', the reality of the situation may be somewhat different to the one perceived, and that alternative theoretical frameworks, other than the likes of 'communities of practice', may be more appropriate for some research projects.

Other educational research applications of the 'communities of practice' concept comes from authors like Buyusse, Sparkman and Wesley (2003) who recommend 'communities of practice' as a framework for integrating educational research and practice. By implication, the members of such a community would include researchers and teachers to 'co-construct knowledge as part of common enterprise, rather than through separate endeavours' (p275), a grand plan but one currently lacking much evidence. Complicating factors for such a recommendation come from the likes of Hammersley (2005) who challenges whether educational research is a single 'community of practice' or a field containing multiple such communities.

Some educational research falls into the trap previously identified by assuming that 'communities of practice' are a 'given' by virtue of an organisation like a school being a learning environment. Haberman (2006) for example notes how communication needs to be effectively transferred between computer science teachers in such a 'community of practice', but posits no such community exists if there is no effective communication in the first place, because if knowledge is not being transferred, meaning is not being negotiated. McLaughlin (2003) reports on the willingness with which teacher education is talked about in terms of its 'practice' component and as a 'community of practice' but again, without empirical evidence to validate such claims there may well be a mismatch between the claim and the reality.

As an observation, the many populist and often touted ideas related to 'community' that pervade current teaching practice and education management could be said to be more well-intended rhetoric rather than well-substantiated claims. In support of this sentiment, Roth & Lee (2006) caution that as these concepts have 'filtered'

into Western scholarship, some of their defining characteristics have been lost or downplayed' (p.27). Linehan and McCarthy (2001) too challenge that notions of community (be they 'communities of learners' after Rogoff, 1994, or Lave and Wenger's, 1991, 'communities of practice' concept) have become too much of a metaphor, and without clearer conceptualisation of such community models, the complex relationships between individuals, and individuals in communities, who contribute to the very social practice of the communities, remains poorly understood. In other words, given the familiarity and comfort of the 'community' metaphor, there is the risk that people (practitioners) will miss the conceptual point of the construct, because unless such models of practice are carefully conceptualised and backed up by evidence (that the model(s) are indeed being used as conceptualised) the claims around community are hollow and relatively meaningless.

Among the 'communities of practice' literature reviewed there was a dearth of education material that considered students as members of educational 'communities of practice', with one exception from Miles (2007) who considered using a 'community of practice' approach working with socially excluded students as a means to encourage ownership of their learning experiences. The favoured application of the concept seems to be more with teachers own professional practice, which could be viewed with 'interest' given the current and popular claims to classrooms and whole schools working as learning communities.

Educational application of the 'communities of practice' concept in New Zealand

As noted in the rationale (Chapter 1), the choice of Wenger's (1998) 'community of practice' concept for this project was in a small way a politic decision, in that some recent New Zealand Ministry of Education literature makes reference to this concept. Among the literature reviewed for the above education-related discussion, priority was given to literature that offered some sort of critique of the concept, or illustrated the very points being made about the failings of some research claiming to be based on the 'communities of practice' concept. The Ministry of Education, Inservice Teacher Education Practice Project or INSTEP (Ministry of Education, 2006), to support the development of teachers' professional knowledge, is one example of this New Zealand education literature where the application of the 'community of practice' concept features. Again the members of the 'community of practice' are the professional body of teachers, much like the studies previously cited. As this project is still in progress, any critique of it in relation to the 'communities of practice' concept is premature. However, the second example of New Zealand literature cited for this review (Lai, et al, 2006) is in itself a review of the online 'communities of practice' literature and does engage with some of the critical debate.

Online communities (but are they 'communities of practice'?)

The focus on the application of the 'communities of practice' concept to IT (Information Technology) communities and virtual communities, at this stage of the discussion, is not so much about the fact video gaming uses electronic technologies and that some games are played in virtual communities, but more because of the way

researchers in this field have challenged the concept of community and particularly claims made about such communities being 'communities of practice'. Schwen and Hara (2003) for example, caution against the romanticising of the 'community of practice' construct when considering online communities. Their point is that just because information technology seems to be a natural vehicle around which to develop 'community of practice' it cannot be assumed that any such 'community' that develops in relation to the use of online communities meets with the definition of a 'community of practice'. Similarly, Kling and Courtright (2003) challenge the uncritical use of the word 'community' in IT environments where project developers (in this case developing an online community for science and mathematics teachers) expected a 'community of practice' to develop autonomously. They concluded that transforming a group requires special processes and practices and that a 'community of practice' does not spontaneously evolve in online public forums. Lueg (2000) questions where learning and doing (as required in a 'community of practice') happen in the virtual world and challenges that uncritically transferring a concept like 'community of practice' from the lived world to the virtual world may assume too much.

Some researchers seemingly circumvent such challenge by establishing 'community of practice' definitions that suit their particular context. The oft-cited work of Hildreth and Kimble (2000) and Kimble, Wright and Hildreth (2001) in the IT online community literature establishes how 'communities of practice' can exist in a virtual world, based on Lave and Wenger's (1991) work. As this work contains far less conceptual detail than Wenger's subsequent conceptualisation (Wenger 1998), Kimble et al (2000, 2001) may avoid such challenge by being less specific in terms of the principles on which the claims to being a 'community of practice' are based.

These cautions and related issues are usefully summarised in the New Zealand Ministry of Education report, Literature Review and Synthesis: Online Communities of Practice (Lai et al, 2006). Part of the task for the writers was to clearly and explicitly determine what an online 'community of practice' needs to have in order to claim that it is a 'community of practice' (based on the existing literature), something that would seem to be a very useful task for many researchers before laying claim to such. One aspect of this report that has potential relevance for this investigation, draws on Wenger's point that people are members of many overlapping 'communities of practice' and that claims to 'online communities of practice' specifically need to consider if in fact the 'community of practice' is actually an online one, or indeed a 'co-located' one (as in other 'communities of practice' within a constellation of related 'communities of practice'). To differentiate a truly online 'community of practice' from the many other communities that a person may belong to, Lai et al (2006) summarise that 'online communities of practice' are usually designed top-down whereas co-located 'communities of practice' usually emerge from existing groups; have open membership whereas co-located 'community of practice' membership is closed; leaders are recruited whereas in other 'communities of practice' they may emerge from the community; communication is computer-mediated whereas in co-located 'communities of practice' it is usually face to face;

take longer to develop than other communities; and technological support is essential but not for co-located 'communities of practice'. The useful message gained from this report for the purpose of this investigation is that, when considering whether or not something like video gaming can be conceptualised as a 'community of practice', the question needs to be asked, is it the very act of playing video games where the 'community of practice' exists, or is video gaming a context or a resource within and across constellations of 'communities of practice' (and integral to what might be popularly called the culture of video gaming)?

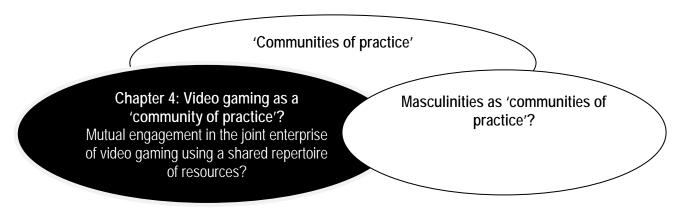
With this last point in mind, it is an opportune time to shift the focus of this literature analysis to the context for the project, that of video gaming, and explore the potential for conceptualising video gaming as a 'community of practice'.

Video games are at the very beginning of their potential – we "ain't seen nothin' yet". They will get deeper and richer. Eventually some form of conversation between real people and computer-created characters will occur alongside the conversations among people in their virtual and real identities that already take place in Internet gaming. There are and will be vile games, and eventually there will be some "canonical" games, games that lend themselves powerfully to elevating the aspirations and imaginings of all people for better and more just worlds. These may be new aspirations and imaginings or ones that fill old visions with new meanings and hope.

James Paul Gee, (2003, p205)

In 'What video games have to teach us about learning and literacy'

Chapter 4 of the literature analysis shifts and refines the focus of the discussion to take a view of the research context of video gaming and reread this largely psychological based body of literature to consider the potential for conceptualising video gaming as a 'community of practice'.



Introduction

It was Jenkins' (1998) writing (an extract from which was used to open Part B of this dissertation) that seeded the thinking for the present investigation which aims to tell a different story about boys and video gaming. Gee's (2003) work helped cement these ideas and provided the necessary impetus to link the practice of video gaming with social learning theory, especially the concepts that made connections with situated learning. Out of this emerged the possibility for viewing video gaming as a 'community of practice'. Although Gee himself has since

dispensed with the idea to favour a different conceptualisation (see Gee, 2005a, discussed later in this chapter) it was deemed to be a notion still worth pursuing given the theoretical reasons, rather than empirical evidence, that appear to have moved Gee away from his earlier thesis of viewing video gaming as a 'community of practice'.

However, voices like Jenkins (1998), Gee, (2003, 2005a, 2007), and Prensky (2001), which focus on the positive and constructive aspects of (non-educational) video gaming, are still in the minority in the academic literature. Gee (2007) notes how he has received extensive criticism from reactive lobby groups and others who do not support his constructive views on the place of video gaming, challenging instead that he should focus on the (assumed) negative effects related to game violence. Surfing around the popular video gaming 'culture' literature (the Internet being a natural vehicle for such) paints a similarly (largely) positive picture of the world of video gaming. While the nature of such popular sources of information about video gaming would not be deemed appropriate in an academic environment, Internet websites, magazines, advertising, TV shows that review games, and video gaming conventions are all integral parts of a video gaming world which have something to say about the practice. Those authors that took up the challenge to establish a theoretically based video gaming literature reflecting this wider popular culture (eg the edited volumes by Wolf, 2000, Wolf & Perron, 2003) have initially focused more on individualised gaming practice and technical aspects of game design, rather than the social aspects of video gaming, but generally discuss video gaming in positive terms. However, the dominant messages among the popular 'literature' and these early efforts to establish a video game literature, in comparison with the body of academic literature coming from predominantly psychological traditions, are invariably at odds with each other. To date it tends to be the highly publicised and politically endorsed literature 'what's wrong with video games', which is sustaining and perpetuating the headline-grabbing reactive negativity about video gaming.

Consequently, reading across the academic literature on video gaming to consider the potential for viewing the playing of video games as a 'community of practice' means having to reinterpret research reported by others for a different purpose, and changing the focus to view the literature through a different lens. As no empirical evidence linking the concept of 'communities of practice' to video gaming was found for this analysis, the emphasis of this part of the discussion, is to look at a *diversity* of approaches to video gaming related research, and across the breadth of this literature, consider the potential for viewing video gaming as a 'community of practice', rather than to make a detailed critique of only the most dominant and recurrent approaches to research (such as the assumed negative effects of violent games).

The gamer revolution

At the time of writing this dissertation, a Canadian documentary titled *Gamer Revolution: Blood, Sweat and Code* (De Guerre, 2007) screened in New Zealand. While not the first documentary of the subject of video gaming, and undoubtedly not the last, it provided a useful framework to organise this chapter as it illustrated a number of insights into video gaming that have relevance to the 'communities of practice' concept previously discussed. The

stated purpose of the documentary was to consider ways video gaming is changing people's lives, both in their career-related training and work, and their leisure time, with a good deal of attention being paid to social aspects of video gaming. The selection of this particular documentary for mention, is not so much about any intellectual rigour and merit it may (or may not) be deemed to possess, but simply that it was contemporary with this investigation and that the likes of Henry Jenkins (cited elsewhere in this literature review) and other academic scholars with established reputations in the video gaming research field, were among those interviewed for their perspectives on aspects of the gaming revolution. Hence, to give shape to this discussion, the succession of internationally-located stories featured in the *Gamer Revolution* documentary will be briefly recounted, accompanied by an analysis of the potential for viewing video gaming as a 'community of practice', based on what was reported in these stories. Additional literature is reviewed and analysed alongside each account, as relevant to the context of each storyline.

Setting the scene – the statistics

To give the viewer a sense of scale for the video gaming phenomenon, *Gamer Revolution* noted that US\$25billion is now spent annually on gaming hardware and software, and some 800 million people play video games internationally. Introductory quotes from the likes of MIT professor Henry Jenkins⁶ note that one trend revealed in recent research is that among 18-34 year old males, the amount of TV viewing time has decreased to just 27 minutes per day and video gaming has increased to an average of two hours a day. While there were no claims to a causal link between these observations, it illustrated that what people choose to spend their time and money on has changed in recent years. Jenkins acknowledges the popularity of video games is the fact that the interactive nature of gaming rewards engagement, in contrast to the passive engagement with TV viewing. Will Wright (developer of the Sims games, the most successful game title to date with a reported 60 million copies sold) challenges that video gaming can support young people to learn complex ideas, because by 'randomly pushing buttons and looking at the results', young learners can see what needs to be done to achieve a particular outcome. This is leading to some speculation about the way video games are changing the ways people learn and actually think (eg Turkle, 2004). These claims need to be carefully interpreted as the suggestion is not that people's brains are some how functioning differently at a biological level, more that what information and skills people give priority, and the ways they then process, organise, store, and transmit representations of this information to others, has changed.

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⁶ Henry Jenkins is noted for his co-authored book *From Barbie to Mortal Kombat*, (Cassell and Jenkins, 1998) which was one of the first compilations of academic articles on gendered aspects of video gaming (especially related to girls), and which took a constructive view of video gaming with little emphasis on the perceived deficits of the practice.

Motivation for gaming

Games, by any popular definition are activities whereby players compete against the self, or each other (or against a machine like a computer) in accordance with a set of rules to achieve a particular outcome (and to win). Games can be played alone or with other people and they are played for fun. Prensky (2001) lists twelve functions of games, which he stresses are at their most acute in video game play. Games are: fun and give pleasure and enjoyment; are a form of play which gives intense and passionate involvement; have rules that give structure; have goals that motivate; are interactive which makes people 'do'; are adaptive to give flow and continuity; have outcomes and feedback which results in learning; have win states which give ego gratification; have conflict, competition, challenge and opposition which gives adrenaline; have problem solving which sparks creativity; have interaction which promotes social grouping; and have representation and story and that gives emotion (summarised from Prensky, 2001, p.5-1). Gee (2003, 2007) too waxes lyrical about the pleasurable aspects of video gaming echoing many of these ideas. Griffiths (1997) in an earlier study found the young adolescents played video games for fun, challenge and when there was nothing else to do. The Canadian Media Awareness Network (2005) reported that teenagers found video gaming produced a pleasant, exciting challenging and interesting experience. Viewed as having multiple purposes and functions for individuals, there is little in this literature to indicate that video gaming involves any form of *mutual engagement* in a *joint enterprise* that would support the activity being conceptualised as a 'community of practice'. In other words, the personal fulfilment of game play says nothing about the social learning of knowledge and skills that could impart membership to a community with a collective purpose related to video gaming.

Population statistics on video gaming

During the course of this study, population data on video gaming kept changing as annual reports (predominantly from large North American research foundations) were published. A relevant selection of this data is being reported here in the absence of any equivalent New Zealand research and to provide a point of comparison for data collected for this investigation. While statistics in isolation do not provide evidence of any sense of 'community', they nonetheless offer a profile of a population and some indication of the nature of video gaming. Furthermore, the sheer numbers of people invested in video gaming may suggest that some sense of community could exist somewhere within this practice. If, as Wenger says, 'communities of practice are everywhere' and popular hobbies (like video gaming) are the context where 'communities of practice' can exist (Wenger, 1998, p6), it would seem reasonable to consider the idea that video gaming can be conceptualised as a 'community of practice'.

As a snapshot of such data, contemporary with the finalising of this dissertation, The Entertainment Software Association (an industry based organisation supported by many of the game design and marketing companies)

reported these statistics (TheESA, 2007): 67% of all American households play video or computer games⁷, with 33% of homes having a gaming console; the average game player age is 33 years (up from 29 years in the 2004 TheESA report), with 28.2% under 18 years, 47.6% 18-49 years, and 24.2% over 50 years old; 38% of players are female, 62% are male; the average age of the most frequent game purchaser is 38 years; the average number of years adults gamers have been playing is 13 years (14 years for males and 11 years females); the most popular game genres for console gaming were action (27.5%), sports (17%), racing (10.8%) and shooting (10.6%); the most popular games played on a computer were strategy (35.4%), role playing (13.9%), family entertainment (12.7%) and shooter (10.6%); 91% of parents (with children under 18) reported being present when games were purchased or rented, 55% of parents thought games had a positive effect on their children, 86% of the time children received their parents' permission before purchasing or renting a game, 90% of parents report they always or sometimes monitored the games their children were playing. Looking specifically at online gaming, 53% of online gamers were male, 47% female, with the most common game being puzzle/board/card/ trivia/ game-show (50% - popular sources of information would suggest the popularity of this genre is accounted for by many of the older players, and many of the females players), followed by action/sports/strategy/role playing (15%). However, as this game-genre data reports whole population statistics, the game genres preferred by teenage boys is not apparent in this research.

Reporting data much closer to the focus for this study, the Kaiser Family Foundation (KFF) collected data from American children and youths aged 8-18 years in 1999 (Rideout, Foehr, Roberts & Brodie, 1999), and again in 2004 (Roberts, Foehr & Rideout, 2005). This organisation has no stated gaming industry connections and the choice of data collected, and reported methodology, gives it rather more rigour and validity than the industry data above. The more recent of these KFF surveys notes significant shifts in young people's use of media over the five year period between surveys, summarised as a shift from young people living in 'media rich' households to 'media saturated' households (Roberts, et al, 2005, p10). One limiting aspect of the data collection is that video game data (as in games played specifically on a gaming platform or console) were collected separate to computer use data (with no distinction as to what leisure activities the computer was being used for), hence the gaming aspect of such leisure time computer use is unclear in all but one aspect of the reported data. This was apparently an oversight as the report notes how in the eyes of young people, there is no distinction between games played on a console or those played on a computer. That aside, the results provided some comparison for this study.

The cross-sectional sample for the KFF 2004 research numbered 2032, with interviews being conducted to collect data about media use on the previous day, and a further 694 young people kept week-long diaries of their media use. In 2004, 83% of US households had a video console (31% owned three of more consoles) and 86% had a

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⁷ TheESA data reports 'video' games, as those played on a console like an X-Box or Playstation, separate to 'computer' games where software is purchased and played specifically on a computer. For the present investigation, the game genres, not the technology on which it was played was the focus, hence the different reporting is noted.

computer (15% had three or more computers); broken down by age, for the 11-14 year old age group specifically, 84% of their homes had a video console (35% owned three of more) and 89% had a computer (14% had three or more). Among this same age group, 52% had a video console in their bedroom and 31% a computer. When broken down by gender (not age), boys were twice as likely as girls to have a video console in their room (63% of boys and 33% of girls). Furthermore, the increase in the numbers of boys having their own video gaming console or computer in their room has approximately doubled in the five years between surveys (for video consoles the number increased from 30% to 63% and for computers 22% to 35%). The average time boys in the 11-14 year old age group spent playing video games on console or computer was just over one and a half hours per day; on any given day boys were more likely to play video games than girls (63% boys and 40% girls, the gender differences are even larger for console games where 55% of boys and of 27% girls play video games on any given day) and boys played for about three times longer per day. Overall, the youngest boys (8-10 years) played in greater numbers (65%) and for longer each day (1 hour 25 minutes), than older boys (15-18 years) who were fewer in number (49%) and played for the least time (52 minutes), the 11-14 year old boys fell between the two (63% playing on any given day, for an average of 1 hour 9 minutes). Race-based differences were also noted: among white family households, 82% owned at least one video gaming console, and 89% owned a computer; among black families 87% had a video gaming console and 78% of homes had a computer, and among Hispanic families 82% of homes had a video gaming console and 80% had a computer. White families who are typically more affluent than black or Hispanic families were more likely to have computers that could be used for activities other than leisure.

While none of this introductory material in *Gamer Revolution*, or in the large-scale population media use surveys indicated much sense of community in the world of video gaming, they do illustrate how video gaming practice is integral to the lives of many people, young boys being no exception. The following stories in the documentary did however reveal some consideration of 'community', but the question that needed to be repeatedly asked was whether the 'community' (and hence any subsequent claim to being a 'community of practice') was in the very act of video gaming, or was it with the various social and cultural practices that surrounded the act of video gaming?

Video gaming as a spectator sport

The *Gamer Revolution* documentary reports that the most popular 'spectator sport' for young Koreans at present is watching video gaming teams compete. Several large telecommunication companies in Korea provide financial backing for the training, marketing and promotion of young male professional video game players. Teams of players compete in video gaming tournaments playing one-on-one with a member of an opposing team. The games are projected onto large screens at a stadium where thousands of fans sit and watch. The audience is a mix of young males and females, with the female audience being targeted by the marketers (representing the cell phone companies), with the deliberate choice of handsome male players. There is potentially a 'community of

practice' in operation here, but not so much in the act of gaming itself as this is little more than two males, individually playing each other in a winner-loser competition that takes some fifteen minutes to complete. When the 'communities of practice' lens is focused specifically on the two opposing players playing the video games, the nature of the competition defies any sense of community as there is no discernable learning for membership of a community. The sense of community (if it exists) is among thousands of young Koreans participating in the cultural phenomenon of video gaming as a spectator sport. While there is clearly a shared repertoire of resources among this 'community' of young fans in terms of what they say and do as spectators, whether such spectator activity could be conceptualised as *mutual engagement* in a *joint enterprise* would need investigation as the 'enterprise' as such seems to be little more than an elaborate marketing exercise. However, if the video gaming competition is viewed as a social and cultural activity participated in by many for the purpose of enhancing national identity, then feasibly the learning that comes from collective participation in video gaming as a spectator sport could be seen as a 'community of practice' (and the knowledge of the video game playing is part of the repertoire of the 'community of practice').

Gender issues

Girls and video gaming

What the Korean video-gaming-as-spectator-sport storyline in *Gamer Revolution* did illustrate, albeit unintentionally, was the differential engagement in, and access to video gaming as a function of gender. Interestingly (and perhaps not surprisingly) almost all interviewees in the documentary, be they academic, marketing, game developers, and gamers were male with the exception of just two female academics and one game player. That was, until the final segment on the newest frontier in video games, those games featuring virtual sex. Only female gamers and psychologists were interviewed for this short final segment, as if to echo the reported claim that whereas the video game industry had no problems with violence, sex was a different story (although the pornography industry is apparently making very fast inroads into this genre). In light of the purpose of the documentary, which was to report on ways video games were changing people's lives, this profile of women and the claims that such games were being promoted as safe place for women to try out new things and find out what they like, that virtual sex was experimentation without consequences. That testing out fantasies meant they lost their power (the implication being that women would not then need to do it for real and find themselves in trouble) still seemed loaded with messages and images to titillate men. If video gaming was being explored as a gendered play world, then this documentary would certainly support the claim that it is (still) predominantly a world for the men and the boys.

Gender has been a recurrent feature of video gaming research and a diverse range of approaches have been reported across the video gaming literature, although the 'diversity' is more apparent in the different research questions posed about girls' video gaming, rather than boys' video gaming. To continue the stated exercise,

looking at the potential for conceptualising video gaming as a 'community of practice', a sample of this gender-related and girl-specific literature has been briefly considered for this analysis.

The gender issue that has been a part of the video gaming literature since such games were developed was typically to view the activities of one gender in relation to the other. There are many such comparative studies of differential computer use and video game play (eg the edited volume by Kinder, 1999, provides a discussion on a range of these studies which invariably show that boys use computers and play more and different video games to girls). In commenting on differences in gendered play, Tapscott (1998) notes that video games fail to provide the essential community-building features that are so essential to girls' play patterns and that it appears the Internet, not games, is providing that. In looking at preference of game genres, Lucas & Sherry (2004) found that not only do females play less, they are less likely to play in social situations, and less likely to play games requiring 3D rotation. Vered (1998) suggests that social discourse and the interpersonal interactions during game play not only reinforce social gendered behaviours, but functions to construct and maintain differences between boys and girls observed during children's choice of games during free time (where boys were observed to choose video games and girls chose hopscotch). The edited volume by Cassell & Jenkins (1998) discusses factors in game design (as in games are made for girls and what girls design when they develop their own games), and what makes girls play. As indicated in the rationale (Chapter 1), girls' gaming appears to warrant at least some separate conceptualisation and investigation to boys' video gaming.

Despite statistics showing increases in girls' game play, they still play less than boys (Roberts, et al, 2005) and there continues to be concerns expressed about the potential disadvantage for girls not engaged in video gaming, given the predicted impacts gaming type technologies will have not just for leisure, but for work and education. For example, Herbst (2002) cautions about the illiteracy of females in the language of computer code, that is the code in which any computer application, including games, is written, and with the additional claim from Facer & Furlong (2001) that the 'information poverty' experienced by those unable to use and access new (computerbased) technologies will soon become 'a key indicator of social exclusion' (p451). Cunningham (2000) asks why girls are apparently 'invisible' in many aspects of youth culture, with video gaming being one feature of such a culture. Cunningham (2000) argues that the media concentration on youth violence renders girls invisible and given the nature of video game design, it is no surprise females feature less frequently. The game design world is reportedly dominated and largely controlled by males, so if any 'community of practice' exists, the shared repertoire of resources is based predominantly around familiar male themes and it appears to be a 'community of practice' from which many females (by choice or design) are excluded. Feasibly the video game design industry could be conceptualised as a 'community of practice' much like any purpose-built industry, because to have a successful and sustainable business means having employees mutually engaged in the joint enterprise of that industry using a shared repertoire of specific resources.

Boys and video gaming

Seemingly by default, the research issues related to boys' video gaming focus predominantly around the perceived negative consequences of playing violent video games, discussed later in this chapter. But how to reconcile disparate research findings that on one hand talk about how the most popular video games are distracting boys from real-world pursuits (Sax, 2007), and that their game playing is negatively related to the amount of time spent with family and friends, doing homework and participating in sports and leisure activity (Cummings & Vandewater, 2007), but on the other hand report that even children quite engaged in playing video games do not give up other activities like outdoor and sport activities and that gaming does not lead to social isolation. If anything, for most children it seems to be fully integrated into existing peer relationships and that the qualities of computer technology are quite attractive when children are alone (Fromme, 2003). The deficit focus of much of the boys and video gaming literature seems to be at odds with the observations of the way this phenomenon is played out in *most* boys' lives, suggesting there are other stories to tell about the world of boys' video gaming. However, this research tension will not be resolved while the current and different social, cultural and political agendas about boys' well-being and achievement are in play and are highlighted as an ongoing concern. In other words, the constellations of 'communities of practice' that sit around the practice of video gaming (be they research communities, political communities, education communities and so on) will continue to produce inconsistent accounts of boys' worlds for as long as there is gain and purpose in doing so.

Video gaming as a recruitment and training tool

The next illustration in *Gamer Revolution* about the ways video gaming is changing lives, focuses on the United States army recruitment and training programme. With recruitment at an all time low around the turn of the millennium, the US Army decided they needed a new approach to attract the video gamer generation into the military. To this end, a sophisticated on-line game was developed to both attract potential recruits, as well as for use as a training tool. The Pentagon is currently reported as being the single largest non-commercial partner of the commercial gaming industry. The developers of these games are taken on army 'boot camp' and learn how to use all the latest weapons the military uses to increase authenticity of the game. (As an interesting aside, the current New Zealand Army recruitment advertisement looks like a segment from a video game featuring a computer designed *female* character with physical proportions akin to game character Lara Croft, performing a range of physical feats). Robert Kozinets of York University (in *Gamer Revolution*) comments how video gaming can be an effective way to help desensitise people to the loss of human life which is a cultural manifestation of being in a military society. Critics however state that video gaming does not prepare people for the reality of armed combat. Again, it is questionable that the practice of playing army video games in themselves can be viewed as a 'community of practice' as it is all about shooting the enemy and winning, but more reasonably, 'membership' as a soldier in the American armed forces, who happen to use video games as a resource for their training is where the 'community of practice' concept could be applied.

Educational application of video games

The potential of video games for learning has been explored by various researchers in the field of education (see for example the literature review by Mitchell & Savill-Smith, 2004). One of the favoured areas for research, in relation to the educational gain for children playing video games, is in the development of cognitive skills (for example, Gee, 2003; Pillay, Brownlee & Wilss, 1999; Pillay, 2002). As a tool for good learning, linguist James Paul Gee has to date dedicated two volumes to the subject (see Gee, 2003, 2007) and details the many skills 'good' video games teach ('good' here does not make any moralistic comment about levels of violence, it is more about the sophistication and complexity of the games and the skills acquired and mastered through game play). It needs to be noted however, that keen supporters of video games as learning tools, like Gee (2003, 2007) do not support computer and video game based learning as the only way to learn.

The adeptness with which children seem to learn new video games is of interest to researchers as well (eg Gee, 2003) and how this helps develop their digital literacy in general, a skill deemed essential in a future focused education system (see the New Zealand Curriculum for example, Ministry of Education, 2007) and for a knowledge society where the use of information technologies are an essential tool to both learn and communicate ideas. With educational value in mind, Alloway and Gilbert (1996) found that reflective and critical learning was missing from the skill development that could be associated with game play. They found that boys playing violent, male themed games thought that everyone could play and did not see the strongly gendered features of the game. To illustrate the point that learning through video gaming is not all about adults teaching young people, VanDeventer & White (2002) explored how children developing skills through game play then taught their parents (to turn their parents from video game novices into experts). Adding to this picture of 'giving the learning back', are the likes of Beck (2004) who claim that the post-baby boomer generation, who have been brought up on video games, are now entering the business world and that regular gamers are more creative, optimistic and even more socially active than non-gamers and that this is changing the business world. However, among all of this material related to the skill development of individuals through the medium of game play, any sense of community lies more in the learning environment that is using video games as part of the shared repertoire of the group of learners, with the mutual engagement in an 'enterprise' (be it joint or individual) in the social processes of learning, not the playing of video games per se.

Digital game based learning is gaining in popularity and diversity of application especially in work related training where employees need to be familiar with international industry standards and conventions (for example, see Prensky, 2001). The knowledge components built into these games are often aspects of the job training that might be considered 'dry' or 'boring' but essential to practice such as in engineering or finance management. Games that do this effectively, that are fun and therefore motivating, but also versatile and adaptable to address specific needs are expensive to develop and consequently, remain the tools of industries who can invest the money to

develop them. The 'community of practice' here would reflect Lave and Wenger's (1991) concept with the notion of apprentices learning to be experts in their chosen industry, and the tools of the trade for learning the business happen to be in the form of video games. Yet again, the 'community of practice' is not in the playing of the video game. The 'community of practice' lies in the mutual engagement of members of such industries and organisations, in the shared learning practices (the enterprise), and where the video games they are using as a training tool are part of the shared repertoire of resources of that community.

Perpetuating cultural values

As a militaristic society, the US is not the only country to exploit the medium of video games for political purposes. *Gamer Revolution* reports that as a nation struggling to control the impact of a 'wired world', the Syrian government (on noting how their young people were drawn to western style games where Arab children were being encouraged to kill Arabs in such games), have developed their own games, one title of which re-enacts the massacre at Hebron where Palestinian soldiers kill Israeli soldiers. The Syrian government believes that the impact of such an interactive game is far more effective than any written book at facilitating the acquisition of knowledge and promoting Palestinian cultural values among its young people. Again, any 'community of practice' seems to be more about the politically motivated social practices of promoting and sustaining of cultural values, of which gaming is but one resource to achieve this, the 'community of practice' is not so much in the playing of video games in themselves.

This sort of planned and deliberate political agenda is perhaps not a common feature of games, but some game genres have been criticised for the way they stereotype certain types of characters in ways that negatively perpetuate cultural norms. Leonard, (2003) uses the term 'supremacist projects' to discuss how video games are an instrument of hegemony in the way they perpetuate dominant stereotypes about race with 'characters of colour' being the weaker and less desirable characters in games like *Grand Theft Auto*. Similarly, Jansz & Martis (2007) in their call for further social science type analysis of the portrayal of gender and race in games, challenge that while games like *Lara Croft: Tomb Raider* provide competent female characters in dominant roles, their characterisation is highly sexualised and reflects and perpetuates stereotypical cultural values about female appearance and behaviour.

Challenging the moral panic

Gamer Revolution acknowledges that investigations into some twenty shooting sprees by young people in the USA, have made connections with the playing of violent video games. The fact that almost all boys play video games seems to have been ignored, as does the US Bureau of Justice statistics (reported by the likes of Sternheimer, 2003, TheESA, 2007) that show that the level of violent crime in the US (including those crimes committed by youth) have continued to decrease as video games sales have increased over the decade from the mid 1990s (no causal link claimed), and that poverty is (still) by far the most significant predictor of violent behaviour (because of the association of poverty with domestic violence, unsafe neighbourhoods, poorer standards of education, and so on).

In *Gamer Revolution*, Robert Kozinets posits the notion that because young people are early adopters of new technology, which is often outside the experience of their older parents (even though the average age of a video gamer is now over 30 years old), that this has been the reason for the reactive moral panic about video gaming that has dominated academic literature in recent years. Sherry Turkle (being interviewed in *Gamer Revolution*), echoes Kozinets by commenting on the way the Columbine High School killings have helped perpetuate a generational war between baby boomers and youth.

It is difficult to view this reactive, media-effects literature (which is predominantly from the United States) from an impartial position, given the political agenda of this country with regard to gun laws, and the military inventions that span the lifetime of all American youth. Since Desert Storm in 1990, real and live warfare has been brought in the living rooms of American homes, added to nowadays by the Internet giving viewers access to live action combat scenes in Iraq. In the aftermath of Columbine High School, parents tried unsuccessfully to sue video game design companies, but as Sternheimer (2003) notes in a chapter 'Fear of video games', no such action was taken against gun manufacturers. To ensure such action would be fruitless, a bill was guickly passed through Congress in 2000 making it difficult to sue such companies, indicative of the political might of the US gun lobby. Sternheimer (2003) too supports the previously stated position about the moral panic from adults who do not understand gaming and sees such a reaction as being an integral part of the fear of youth and subsequent youth bashing. Prior to Columbine, Kinder (1999), in an edited collection of essays in 'Kids' media culture' was already supporting 'a research agenda that pays more attention to the broader social context of how these images are actually read' (p4) 'the discursive war around children's media cannot be reduced to a simple binary opposition, for the issues are entangled in many other broader cultural debates' (p5). However, this reactive, media-effects literature still remains some of the most widely cited of all the video gaming literature (and arguably most abused when statistical aspects of such research are reported selectively and out of context).

Reading around this literature it was noted that there are many names in common among the authors of research articles, the list of names on the governing boards of advocacy groups, and the limited selection of research articles cited by these groups in their literature (which appeared to prioritise certain authors over others). It is difficult to critique (but easier to criticise) material where the political agenda, and therefore the impartiality of the researchers is undisclosed, leaving the reviewer questioning whether researchers are in the pocket of the politicians, the lobby groups or the even video gaming industry. It seemed timely then that the most recent metaanalysis by Ferguson (2007) factored in publication bias. Ferguson questioned whether reported effect sizes were indeed large enough to suggest causal claims between video game violence and violent behaviour, especially in light of the small effect sizes being misrepresented in publications. He also queried how frequently studies showing no positive effect size were denied journal publication because they were deemed unworthy of reporting (meaning that studies showing no effect size are therefore not included in meta-analyses), or that an author may not report negative aspects of their research results and rework the data to emphasise the small positive effects that do exist, all for the sake of publishing. Ferguson concludes that the types of research on violent video game effects on behaviour showed publication bias for experimental studies of aggressive behaviour, and for nonexperimental studies on aggressive behaviour and aggressive thoughts. Research into pro-social behaviour and experimental studies on aggressive thoughts were less susceptible to publication bias. Among the recommendations for improvement, Ferguson (2007) suggests that conducting research on people who actually commit violent crimes might be more productive, rather than focusing on populations of convenience such as 'healthy' children and college students, and for some standardisation across the measures and analysis used in such studies.

Ferguson's (2007) timely contribution aside, the repeated challenges about the methodological shortcomings of media-effects studies has resulted in a succession of meta-analyses that can mediate at least some of these problems and to report an effect size on the strength of many related studies. However, to engage in lengthy critique of these media-effects research articles steps outside the purpose of this literature analysis. The methodological shortcomings that would feature in such a discussion are already well documented in the literature (eg see Sterheimer, 2003, for a summary of the methodological and conceptual problems with such research). Consequently, a brief summary of the commonly cited meta-analyses is presented here to illustrate the lack of any sense of community in video gaming, much less any 'community of practice' suggested by such research. This lack of reference to 'community' is a consequence of this media-effects research being focused on the behaviours of individuals who play video games, in isolation of any social (learning) context that this game playing may be occurring.

Dill & Dill (1998), in a review of the empirical literature, claim there are theoretical reasons why video game effects should be stronger than television violence effects. Anderson & Dill (2001) reported that real-life violent video

game play was positively related to aggressive behaviour and the laboratory exposure to graphically violent video games increased aggressive thoughts and behaviour. In a meta-analytic review of 35 research reports, Anderson & Bushman (2001) repeated the claim that violent video game playing increased aggressive behaviour in children and young adults. Concurrent with this publication, Sherry (2001) concluded that there is a smaller effect size of violent video games on aggression than has been found on television violence (using a total of 25 studies that met the criteria for meta-analysis) leading him to conclude that the social purpose of game play and the relationship to the video game experience needs to be addressed before the effects of violent video gaming can be explained. Anderson (2004) reasserts the claim that experimental studies show a causal connection between the effects of violent video game playing and violent behaviour (Anderson remains the most committed supporter of these causal claims, despite the recurrent challenges to the methodology of such research). Also Gentile, Lynch, Linder, & Walsh (2004) report that the greater the level of exposure to violent video games, the greater the levels of hostility and anti-social behaviours (Gentile and Walsh are members of the National Institute on Media and Family who produce the MediaWise advocacy material discussed in the following passage). While not metaanalyses, some of the more recent studies are not giving support to claims that video games cause negative behaviours, stating that (at most) they may have some impact on affect, such as Funk, Baldacci, Pascold & Baumgardner (2004) who report that exposure to video game violence could only be associated with lower empathy, and in consideration of the current interest in Asian youth, Wei (2007) also reported that among Chinese students, empathy was similarly linked with violent video game exposure but the link between exposure to violent games and aggression was non-significant.

Whether or not the research community will move on from this predilection for such research is presently unclear. The December 2007 edition of the *Journal of Adolescent Health* was dedicated to electronic media violence (*Youth Violence and Electronic Media: Similar Behaviors, Different Venues?*) but the theme this time was electronic bullying (as in text or emailing bullying – see David-Ferdon & Hertz, 2007) which presents the question, has video game violence become a passé theme for research, especially as the challenges about publication and research bias enter the debate, on top of the previous methodological and conceptual challenges?

Needless to say, there is no evidence of a video gaming 'community of practice' in this literature given the focus on the psychological impacts and subsequent behaviour of individuals. If anything, it is the variously aligned communities of researchers who are themselves 'communities of research practice' who are mutually engaged in the joint enterprise of researching and developing new knowledge about the behavioural effects of video gaming, using a shared repertoire of resources like psychological theory to conceptualise their work, and meta-analytic techniques to report their findings.

Media advocacy groups

Media advocacy and watchdog agencies such as MediaWise in the USA (National Institute on Media and the Family, 2007) and branches of the health sector, for example The Royal Australasian College of Physicians, Paediatrics and Child Health Division (Australia and New Zealand) (RACP, 2004a) are charged with the responsibility of keeping check on media and to help build public policy. They act as advocates for the well-being of young people by keeping a watchful eye on industry developments, such as the rating systems on games which according to the likes of Funk, Flores, Buchman & Germann, (1999), and Walsh & Gentile (2001) have been very inconsistently applied, and also making accessible, media related research (including video gaming research) being reported in the academic literature. While the intentions of these groups are obviously wellmeaning, recommendations like those from the RACP (2004b) suggesting that parents should 'discourage your child from playing video games when he/she has friends over' (p4), when the video game could be an electronic version of the board game Monopoly (for example) or a game with a genuine educational purpose, seem to be ignorant of the play environment of twenty-first century children and rather overstate or misrepresent the concerns. Similarly, differential interpretation of research like that reported by the National Institute on Media and the Family, (2007) in response to Ferguson's (2007) meta-analyses would suggest that interpretation of effect sizes (or understanding of meta-analyses) does not translate across academic disciplines with The National Institute on Media and the Family (Walsh & Gentile, 2007), claiming the effect sizes reported by Ferguson, in the range of .25 to .3, are significant.

The controversy about the (mis)reporting of effect sizes and the complexity of this debate are noted, as are the recommendations made by researchers in the field of quantitative science to improve the rigour with which effect sizes are reported (see for example, Hill & Thompson, 2004, Thompson, 2002). The *rigid* adherence of researchers to using Cohen's⁸ (1988) effect size benchmarks, which is perhaps the standard by which Walsh & Gentile (2007) have made their judgements, is now challenged especially with the development of meta-analytic techniques, and with the call to *'report and explicitly interpret effect sizes in the context of effect sizes from prior related studies and by not invoking rigid benchmarks'* (Thompson, 2002, p30). It is suggested by Thompson (2002) that where there are small but replicable effects for very important outcomes (eg where people's lives are in question as in medical research), a small effect size has far more significance than for *relatively* less important outcomes, like explaining social phenomena such as education, where larger effect sizes may need to be reported to be able to claim any significantly influential effects. For example, the effect size of .4 that has come to be used in New Zealand education (concerns about benchmarking effect sizes noted) is based on the meta-analytic work of Hattie (1999, and see also Fraser, Walberg, Welch, & Hattie, 1987). To determine the typical effect of schooling (and what makes a difference to student learning outcomes), Hattie (1999) averaged the

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⁸ Cohen (1988) recommended that 'trivial effects sizes are <.1, small effects are in the range of .1-.3, moderate effects sizes .3-.5 and large effect sizes >.5.

effect size of a particular factor reaches .4, it is suggested that this factor is having relatively little influence on educational outcomes. As an aside, this same meta-analysis reported that computer-assisted instruction had an effect size of just .31 and games and simulation (not necessarily video games specifically) had an effect size of .34. Whether or not the effect size 'benchmark' established by Hattie (1999) can be validly applied to the effects of violent video gaming is debatable, given the previously noted concerns about benchmarking, the effect sizes reported from meta-analyses of video gaming studies would seem to warrant a larger effect size (after Thompson, 2002) to claim any substantial influence of violent video gaming on aggressive behaviours.

Like the 'research communities of practice' suggested previously, it would seem that any 'community of practice' in evidence here is not in the practice of video gaming, but could well be demonstrated the ways advocacy groups are organised and function as they mutually engage in the joint enterprise of cautioning the public about their understanding of the effects of video gaming and shortcomings within the gaming industry. Video gaming is only part of the repertoire of resources that this advocacy community utilises as part of its practice.

Seeing the 'good'

The next storyline in *Gamer Revolution* acknowledges that the generation who have grown up with video games (the post-baby boomers) are seeing video games as a tool to help build knowledge and illustrate this claim with an item about a game called *ReMission* which was specifically designed to help children with cancer understand the disease and the course of treatment they were experiencing. It still uses the design of a 'shooter' game but the shooting is to blast away the cancer cells. Subsequent research from Beale, Kato, Marin-Bowling, Guthrie and Cole (2007) has reported that the use of the game increases the level of cancer related knowledge of young patients, over and above the knowledge gained by patients who had not used the video game in conjunction with their cancer treatment. They support the use of video gaming as an effective means of health education for young people with chronic illnesses. In other health-related situations, Griffiths (2005) reports on the use of video games alongside courses of physiotherapy and occupational therapy, especially with patients experiencing pain, as they serve as a distraction, especially during painful treatment sessions. Similarly, when children are receiving chemotherapy (see also Kolko & Rickard-Figueroa, 1985) or have neurodermatitis, video game playing has been used to keeps their hands occupied to allow the treatment regime to proceed. Again, any sense of community here is not in the act of video gaming, but more that the game becomes part of the repertoire of resources for health professionals in their 'communities of medical practice' and the way they help patients manage pain and illness.

The (special) case for MMORPGs- massive multiplayer online role playing games

There is something 'different' about MMORPGs as compared to single-player game genres (where the individual player is playing to win against the computer or other players in the game such as first person shooter and other action games, sports games etc). As another illustration of the ways video gaming is changing people's lives, Gamer Revolution focused half of the screen time of the documentary to online role playing games. Whereas most games are designed to engage the player for 40-50 hours of enjoyment, MMORPGs, like World of Warcraft (WOW), are reported to have kept players interested for over 500 hours and more. These games take players into compelling worlds and rich environments, and game designers (who are also savvy game players themselves and also the post-graduate products of the universities researching video game design and use) are constantly adding new features and new places to visit in these virtual worlds, to ensure ongoing commitment to the game. In the real world, groups of players form guilds who connect up through virtual means and play the game online together. Jenkins (in Gamer Revolution) suggests that the popularity of MMORPGs is because people have a different type of experience of success and accomplishment, and that players enjoy a sense of power in fantasy that is much greater than what they experience in everyday life. Interestingly, the MMORPGs players featured in Gamer Revolution were almost all adult players and it appears that online MMORPG gamers tend to be older as they have more time due to greater autonomy and independence (as compared to children and adolescents), and they also have the financial resources to buy the game updates that take them into new worlds, the broadband internet access essential for being able to play for hours online, and the monthly fee paid to the game developer to keep playing. That there may be differences between adolescent and adult online gamers has been explored by Griffiths, Davies & Chappell (2004) who found that apart from adolescent online players being more likely to be male, they were less likely to gender swap their characteristics, were more likely to sacrifice education and work to play, and favoured the aspect of game violence to other game features.

As *Gamer Revolution* notes, time is currency in online gaming, and in online games it's better to be rich and powerful which comes from achieving higher and higher levels in the game, and this takes time. In reference to older gamers, Jenkins adds that adults need a sense of renewal that the real world does not allow, which is illustrated in the documentary by profiling a group of forty-something male gamers in a WOW guild, gathering for a 'boys' weekend' of game playing. They state that they make multi-million dollar deals during the day and in their own time, take on the role of a fantasy character and play in a virtual fantasy world. In the real world, these men appeared to be little more than a group of friends who share a common interest. If they are members of a 'community of practice' then it would appear to be in their collaborative playing of the game.

This essential high level of time investment for success in playing MMORPGs was illustrated in *Gamer Revolution* through the interview of a married couple. Their (social) adult interest (apart from church on Sunday where video gaming was discussed after the service) was through playing a MMORPG. The female of the couple had less

time to develop her avatar⁹ (because of her duties as wife and mother) and had chosen to 'power-level'¹⁰ or 'super-size' her 'anaemic character'. This is the practice whereby a player can pay another player to get their avatar up to a certain level at which point the 'owner' takes back their character and continues playing. This phenomenon of 'parlaying value' has brought with it the recommendation to conceptualise video gaming in consideration of how material, social and cultural capital are integral to the MMORPG phenomenon (Malaby, 2006). Arguably, the businesses and jobs created for the purpose of power-levelling online gaming avatars could also be conceptualised as 'communities of practice' as the employees of these companies are mutually engaged in the joint enterprise that is the business of the companies that employ them and which they have a vested interest in sustaining.

The one profile of younger MMORPG gamers featured in *Gamer Revolution* was at a convention called "The Gathering" in Norway where some 6000 young people, mostly male in their late teen to early twenties, gather, set up computers, eat junk food and play games for several consecutive days. Once the hardware was set up, the communication was almost all virtual, with minimal face-to-face interpersonal conversation. Again, if any 'community of practice' exists in MMORPGs, it seems more likely that it is in the playing of the game.

As to whether such fantasy role playing is 'healthy' has been an issue for debate since the *Dungeons and Dragons* board game was developed over forty years ago, well before video games were invented. It is another of those arguments whereby the choice of conceptual framework or theoretical alignment can paint either a positive or negative picture to suit the agenda of the researcher. If games are seen as opportunities for learning because they encourage skill development and the use of imagination that could assist the process of critical and creative thinking (related for example to the key competencies of the New Zealand Curriculum, Ministry of Education, 2007), as well as providing a sense of personal fulfilment, then they would seem to have a positive (or 'healthy') purpose.

Filiciak (2003) revisited the debate of the 'healthiness' of role playing games in context of MMORPGs, this time with a postmodern take. In line with such a project Filiciak was noncommittal about any harms of such a practice, instead to be more fascinated by the phenomenon by seeing MMORPGs as the 'longed-for chance of expressing ourselves beyond our physical limitations, they are the postmodern dream being realized.' (p.100). For the moment at least, it would seem that this fascination with the phenomenon has been given priority in the brief literature on MMORPGs to date (for example, see *Games and Culture*, October 2006 for an issue dedicated to

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⁹ An avatar is a movable three-dimensional image used to represent somebody in cyberspace, it is the character or persona of a player with a graphical representation

¹⁰ There are companies of video game players set up in countries with developing economies in Central America, Asia and Eastern Europe that a player can contract to 'power-level' their avatar. This means someone (or several people in shifts) will play their character continuously for several days and 'return' the character to the owner at a much higher level in the game.

WOW). Ever present in the popular literature however, are the negative stories about MMORPGs and the obsessive lengths some players reach, illustrated in *Gamer Revolution* with the report that some seventy five Korean gamers have died from dehydration and heart failure after non-stop gaming. Analysis of these situations, reported in the documentary by Sherry Turkle, suggests that these (young) gamers were not buffered by social and family life implying that the video gaming in isolation is not the issue, but more the wider social and cultural context in which these boys live. The particular impacts that the very rapid rise of online gaming is having on Asian youth and young adults across all east Asian countries appears to be generating social concerns parallel to the violent game content focus of much American research, albeit that the social issues for Asian cultures are different (see the *Games and Culture* journal, January 2008, Sage Publications, which dedicates the whole issue to online gaming research in Asian countries).

Converse to other explorations of gaming behaviour in this review, it is possible that 'communities of practice' exist in online gaming, because of the very nature of the game genre. The complex systems around the playing and management of MMORPGs, reported by Tychsen, Hitchens, Brolund & Kavakli (2006) would suggest that the sort of organisation, collaboration and commitment needed for success in online games like WOW could well mean this game genre can be conceptualised as a 'community of practice', although without empirical evidence, such a claim cannot be substantiated. To determine if MMORPGs can be conceptualised as 'communities of practice', research would need to determine if the way players come together in guilds (when they play online), serves some collective purpose, that there is mutual engagement by the players in a joint enterprise for all players (as members of a community) to gain higher levels in the game. That the players use a shared repertoire of resources is perhaps self-evident – the gaming hardware and software, the language of the game, game strategies and so on. However, whether there is genuine mutual engagement in a joint enterprise (which would include for example the sharing of knowledge and providing support for sustainability of the online gaming community), or whether like all games it's ultimately about the individual gratification of winning and achievement, requires investigation.

Summary

Reading across a diversity of the video gaming literature has not provided convincing evidence that the very act of playing of video games can be conceptualised as a 'community of practice', with nothing *mutually engaged* in, or a clear sense of a *joint enterprise* (for example there is no sense of the sharing of game knowledge for the mutual benefit of all players and helping others to achieve success in game playing for the sustainability of a community). At best it appears that the practice of video gaming is a common interest, it is something done for personal pleasure, even when the game play is social (although the case for MMORPGs, as noted needs separate attention). However, video gaming may well be part of the shared repertoire of resources of other 'communities of practice' such as research communities, media advocacy groups, medical communities, and teaching and learning communities.

In the absence of evidence to support the playing of video games being able to be conceptualised as a 'community of practice', extending this discussion to consider Wenger's (1998) notion of identity seems redundant because if there is no video gaming 'community of practice' to become a member of, then the contribution video gaming may make to identity needs to be conceptualised in other ways.

Alternative conceptualisations

How then, to conceptualise video gaming is a question that has repeatedly surfaced for well over a decade. A recurrent feature of these calls for ways to conceptualise video gaming has been the need to include the wider social and cultural environment that are integral to such a practice, factors which seem to have been lost with the focus on media-effects type research (and the very reason for much of the methodological and conceptual criticism of such). One approach favours the idea for viewing video games as cultural artifacts. For example, in an earlier study (which notably predates most of the very violent game content of current concern) anthropologist Christine Ward Gailey (Gailey, 1993) questions whether society need be concerned about objectionable games given the only consistent response children had to game playing was that 'they attempted to empower themselves, individually and as a group.... [children] redefined gender and other identities, or appropriated the dominant messages in ways that made sense to them, and thereby altered their meaning. In other words, mass culture is promoted in a predictable way in industrial capitalist societies, but it is received in a refracted way' (p.93). Concurrent with this claim, psychologist Patricia Greenfield (Greenfield, 1994) considers video games as cultural artifacts which require a particular set of cognitive skills to be developed and used during interaction with such a cultural artifact, and that the specific nature of these skills cannot be ignored when exploring the effects of video gaming on cognition. Over a decade later, Malaby (2007), advocating for a new approach to games suggests that, rather than seeing games as a subset of play, and therefore an activity that is inherently separable, safe and pleasurable to rethink games as 'social artifacts in their own right' (p.95). Krzywinska (2006) too challenges that video games need to be seen as cultural artifacts and considers the combination of formal

empirical studies alongside the likes of phenomenological approaches to fully explore gaming. Still with a focus on culture, Yates & Littleton (2001) argue that gaming needs to be viewed as an activity that takes place in cultural niches that emerge from the complex interaction between games, gamers and gaming cultures.

Other authors shift the focus for conceptualising the practice of video gaming onto the personal/individual in combination with the interpersonal/social aspects. On the issue of gender and video gaming, Hayes (2007) suggests that 'to better understand women's and men's orientations toward gaming [there is a] need to take into account the complexity of people's identities, not just gender alone but its interplay with and enactment in combination with personal histories and cultural factors that play out differently in individuals live' (p23). In advocating for a new games movement, Pearce, Fullerton, Fron and Morie (2007) speak more to the way the design of games is conceptualised and 'to generate games that use the innate potential of both the technologies we are exploring and the players who put the games in motion. [They note that] one of DeKoven's key points in 'The well played game' is that the game should not measure the players but serve as a focal point for social interaction. Players should adapt the game as they go in order to create opportunities for everyone to play well together' (p.275-276). While the media effects research could be seen to be blaming video gaming for a range of social ills, others like Williams (2006) question what the decay of real world civic and social institutions (as related to political [war], economic and cultural influences) and the impact of transferring social networks into virtual spaces will be, that is, the research questions need to be conceptualised around factors far more reaching than just individual behaviours.

The notion of 'spaces' is another construct appearing in the literature exploring the possibilities for conceptualisation of video gaming, with the likes of Mitchell & Reid-Walsh (2002) talking about the virtual space that is the Internet being cultural spaces where children learn and play. It is a notion comprehensively theorised by Gee (2005a) who discarded the concept of 'community' and the associated 'membership' of such, and hence any claim to video gaming as being a 'community of practice'. In shifting away from 'community' (because of the inherent meanings of community discussed earlier), to that of 'spaces' (be that real or virtual spaces) and how people use that space, Gee utilises various linguistic conventions, conceptualising video gaming in relation to the idea of 'affinity spaces'. He firstly proposes thinking about spaces (in which people function) rather than groups (of people) and to consider how different sorts of people use that space. He calls these spaces, 'semiotic social spaces'. Such spaces can be viewed both 'internally as a set of signs (a type of content) or externally in terms of the individual and social practices in which people engage in respect to the set of signs' (p.218), with the internal aspects being things like game design and the external aspects being about 'the ways people organise their thoughts beliefs, values, actions and social interactions in relation to the signs made available in such games' (p.219). For manageability, Gee refines this broad thinking about semiotic social spaces to a more defined concept of 'affinity spaces' (playing a video game would be an example of such a space). It is a concept which

bears some resemblance or at least parallels to 'communities of practice', but without being committed to any to sense of 'community' and 'membership'. Features of an 'affinity space' include: that people relate to each other in terms of a common interest, novices as well as masters share common space, individual and distributed knowledge is encouraged, as well as encouraging dispersed knowledge from other sites, and that tacit knowledge is used and honoured. The implication here is that the individual and shared knowledge of people in an affinity space does need to conform to any accepted and standardised practice that would be required for community membership, but more important is any and all knowledge people need to use that space. It is not the purpose of this project at this point to unpack Gee's conceptualisation as his intent is to move away from the restrictions of the 'communities of practice' concept when considering application to video gaming. That said, Gee's concept of 'affinity spaces' would seem a worthy and fruitful alternative through which to explore video gaming given the apparent shortcomings of the 'community of practice' concept, but such a project warrants purposeful investigation in its own right.

Speculating on the future of video gaming, Jenkins (in *Gamer Revolution*) states how video games are powerful tools to get people to do things because when they do things that matter they feel a sense of engagement, and games are very powerful mechanisms for creating rules and roles. Gee (2003) posits that games will cease to be called 'games' in future and will become another medium of expression and a new version of human community. It is a world that sounds like something out of a Philip K. Dick¹¹ science fiction novel, and as the quote from Gee (2003) at the beginning of this section of the literature on video gaming suggests *'we ain't seen nothin' yet'*.

However, in the absence of any explicit empirical evidence, the question for the present investigation still remains; is it the very act of (boys') video gaming in itself where the 'community of practice' lies, (or is it that video games are a resource and part of the shared repertoire of some other 'communities of practice')?

¹¹ Philip K. Dick (1928-1982) was a science fiction story writer who speculated on the future of human existence, placing particular focus on the scientific and technological advances that would be an integral part of such lives. Several of his book titles have been made into films (eg *Bladerunner, Minority Report, Paycheck,* and *Total Recall*). The movie version of *Total Recall* for example posits future where travel for fun and pleasure will be virtual, and where interaction with the computer goes well beyond any sense of playing a game. In the case of *Total Recall* the 'traveller', waking from a state of altered consciousness after being connected to a computer, believes they have been on holiday in the physical sense.

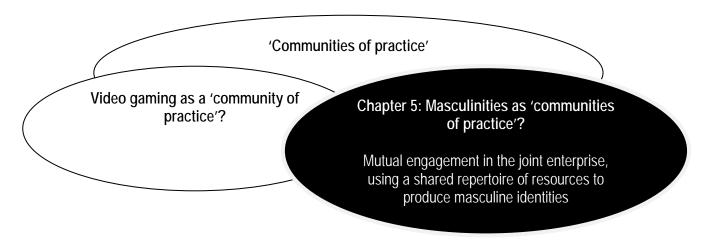
Chapter 5: Masculinities

In nineteenth century boy culture	Through video game culture
Youngsters gained recognition from their peers for their	Children gain recognition for their daring as
daring, often proven through stunts (such as swinging	demonstrated in the virtual worlds of the game,
on vines, climbing trees, or leaping from rocks as they	overcoming obstacles, beating bosses, and mastering
crossed streams) or through pranks (such as stealing	levels.
apples or doing mischief aimed at adults)	
The central virtues were mastery and self-control.	The central virtuesare mastery (over technical skills
The boys set tasks and goals for themselves that	required by the games) and self-control (manual
required discipline in order to complete. Through this	dexterity)
process of setting and meeting challenges, they	
acquired the virtues of manhood.	
Hierarchical, with a member's status dependent on	Can also be hierarchical, with a member gaining status
competitive activity, direct confrontation, and physical	by being able to compete in a game or log a big score.
challenges. The boy fought for a place in the gang's	
inner circle, hoping to win admiration and respect	
Was sometimes brutally violent and physically	Displaces this physical violence into a symbolic realm.
aggressive; children hurt each other or got hurt trying	Rather than beating each other up behind the school,
to prove their mastery and daring.	boys combat imaginary characters, finding a potentially
	safer outlet for their aggressive feelings.
Expressed itself through scatological humor. Such as	Has often been criticised for its dependence on similar
bodily images (of sweat, spit, snot, shit and blood)	kinds of scatological images, with the blood and gore
reflected the boys' growing awareness of their bodies	of games like "Mortal Kombat".
and signified their rejection of maternal constraints.	

Henry Jenkins (1998, p270-274)

Extracts from "Complete freedom of movement": Video games as gendered play spaces
In "From Barbie to Mortal Kombat: Gender and computer games"

Chapter 5 shifts the focus of the literature analysis again, this time to view the research subjects, the boys, and how (aspects of) their boys' world could be conceptualised as 'communities of masculinities practice'. This discussion takes direction from Paechter's (2003a) suggestion to link the concept of masculinities (after Connell, 1995) with 'communities of practice' (after Wenger, 1998). This chapter will firstly outline the popularly used and understood aspects of Connell's concepts, followed by a synopsis of Paechter's proposal to link the concepts of masculinities and 'communities of practice'. A broad selection of articles from the literature is then analysed to illustrate the potential for viewing masculinities as 'communities of practice' in a parallel exercise to Paechter (2003b).



Connell on masculinities

In reviewing and critiquing a selection of books in which the concept of masculinities is applied, Collier, (2002) usefully summarises the commonly stated and understood features of Connell's (1995) conceptualisation of masculinities introduced in the Conceptual Framework (Chapter 2):

[authors] 'stress the plurality of masculinities, moving away from the fixed model of a unitary masculinity and towards an understanding of the complexity, fragmentation and differentiation which exists between the diverse lives of men, as well as the continuities which unite them' (Collier, 2002, p738).

These plural ways of being masculine may reflect the culturally exalted norms about what it means to be male (as in anything deemed heterosexual and not feminine), or the more subordinated ways of being male (as in anything deemed as non-heterosexual or feminine). In responding to ten years worth of critique of the masculinities concept, Connell & Messerschmidt (2005) deem this plurality and hierarchy of masculinities to be one of the essential features of the original concept (Connell, 1995) that should be retained intact. The 'hierarchy' Connell & Messerschmidt speak of here is in relation to the additional conceptualisation of hegemonic masculinity (Connell, 1995) whereby some masculinities have greater access to power and are continuously and constantly reproduced as exemplars of masculinity, even if males do not or cannot live up to them. Conversely, expressions of

masculinity with less access to power (as in they are somehow deemed less masculine) are subordinated, usually in ways that serve to reproduce and sustain the more culturally exalted (or hegemonic) forms of masculinity. As Connell repeatedly points out, gender is always relational; what it means to be masculine is defined in relation to what it means to be feminine. Hegemonic masculinity, as collection of practices, is typically any construction deemed non-feminine (and heterosexual). The conceptualisation of power referred to here, and throughout the remainder of this dissertation, is in reference to a Foucaultian notion of knowledge/power relations, as discussed in Chapter 2 and 3.

Connell (2003) cautions about reifying the term 'hegemonic masculinity' by defining it as a fixed set of masculine characteristics which would limit any suggestion that change can happen (as has tended to happen with more psychologically aligned applications of the concept). The emphasis on hegemony keeps the focus on those social processes, and the knowledge/power relations inherent in these, that construct and produce masculinities in different contexts and at different times. Given the productive way power then exists in gendered relations (between or within genders) it leaves open the possibility for change as historical constructions of masculinity are challenged, contested and resisted, bringing about slow shifts in patterns of masculinity over time.

One of the reformulations of hegemonic masculinity suggested by Connell & Messerschmidt (2005) is in response to the processes of globalisation and the 'significance of transnational arenas for the construction of masculinity' (p.849). They call for empirical analysis of hegemonic masculinity at (and between) each of; local level (masculinities constructed through interpersonal, face-to-face interaction such as in families and peer groups), regional level (for example masculinities constructed through the cultural and political processes of a country), and at the global level (such as masculinities constructed through international media, and through globalisation processes). Studies at a global level to date have focused more on the adult business and corporate world, but feasibly, a global phenomenon like video gaming (and the patterns of hegemony embedded within such games) could be considered as an arena for the construction of masculinity.

Another suggested reformulation which Connell & Messerschmidt (2005) make is the need to more fully conceptualise the pattern of embodiment involved in hegemony. While various sports studies have demonstrated how the skilled body becomes a key indicator of masculinity, especially in youth (see discussion in following section), body practices in general remain under-conceptualised in terms of patterns of hegemony. Noted also is the untapped research field of the ways (expensive) electronic technologies (like computers and telecommunications) 'amplify the power of elite men's bodies' (p.852) resulting in questions like, how are patterns of hegemony changing for those men that have access to and command over such technologies? While Connell & Messerschmidt focus this discussion on adult men, boys too have access to these technologies, albeit for some

different purposes and a question that could be asked is, if and how the global phenomenon of video gaming is changing patterns of hegemony among younger males?

Connell & Messerschmidt (2005) also recommend the need to address the internal complexity of masculinities (responding to poststructuralist critique) stating that 'hegemonic masculinities are likely to involve specific patterns of internal division and emotional conflict, precisely because of their association with gendered power' (p.852). Connell's earlier work (Connell, 2000) was already noting this when it was stated that 'the hegemonic form need not be the most common form of masculinity, let alone the most comfortable. Indeed many men live in a state of some tension with, or distance from, the hegemonic masculinity of their culture or community' (p11). This suggests that when boys are confronted with cultural perceptions of masculinity, they likely face many contradictions resulting in many compromises in their constructions of masculinity (such as boys entering into romantic relationships, or boys who choose sports and hobbies considered less masculine than other such choices) a few examples of which are highlighted among the articles analysed in the following section.

With the basic conceptual framework about masculinities established, it is useful to now add to the discussion Paechter's suggestion to look at masculinities through the lens of the 'communities of practice' concept, and how knowledge/power relations construct hegemonic and non-hegemonic masculinities.

Paechter on masculinities as 'communities of practice'

Starting from the premise that gender is performative (based on the writing of Judith Butler in her seminal work *Gender trouble: Feminism and the subversion of identity*) Paechter (2003a) states that *'the body thus performs gender which is not fixed, but socially constructed and varies between situations. Hence we have a multiplicity of masculinities' (p69).* However, to circumvent the problematic debates about 'gender', particularly in the way feminist work talks of multiple and shifting masculinities and femininities 12, but does not discuss 'gender' in the quite the same way, Paechter suggests 'abandoning' gender to talk about masculinities as 'communities of practice' after Lave & Wenger (1991), and Wenger (1998). The purpose of this is to help understand how different masculinities are performed in different social situations, and also how 'communities of masculinities practice' are established, perpetuated and changed (noting that Butler's work would not necessarily exclude such a project). The balance of Paechter's (2003a) article selects aspects mainly from Wenger's (1998) conceptualisation, reworking his material and offering links with the concept of masculinities, in a parallel way to the discussion in Chapter 4 (albeit that Paechter chose to emphasise Wenger's work on identity and reification more than the present analysis has done). Critical of the lack of a conceptualisation of power in both Lave & Wenger (1991), and Wenger (1998), Paechter in a subsequent article (Paechter, 2003b), explores knowledge/power and legitimate

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¹² Paechter's (2003a, 2003b, 2006) work is inclusive of masculinities and femininities. However, for the purpose of this analysis, and given the focus of the present investigation, reference will only be made to masculinities.

peripheral participation to consider how masculinities and femininities are learned, based predominantly on Lave and Wenger's (1991) writing and with very specific application to gender assignment of babies determined to be intersex. As this earlier work on 'communities of practice' is not the preferred choice of the concept for this investigation, Paechter's later article (Paechter, 2006), which draws more usefully on Wenger (1998) and which includes additional discussion about power/knowledge relations (based on Foucault), is more applicable for this analysis. Few scholars have yet picked up on Paechter's suggestions with only one article reviewed for this discussion referencing her work; Parker (2006) used Paechter's work to look at the way young men in professional football were socialised into their occupational culture and how identities were shaped by the strongly gendered practices of the workplace.

Given the enormity of the task of considering all masculinities at once, Paechter (2006) acknowledges the need to focus on localised practices of masculinities, and how constellations of such practices overlap, hence approaching masculinities as 'communit*ies* of practice' provides opportunity to look at the way knowledge/power relations work within and between communities. Full members (the 'masters', to use Lave and Wenger's, 1991 term) of localised 'communities of practice' have knowledge of the acceptable and the inappropriate masculinities within that community and as masters (of masculinity) they are treated by other members as having the power to enforce it, enforcement typically coming by way of exclusion, ridicule or stigmatising any non-conformists. Membership requires participation within the boundaries of the 'community of practice' and as practice is the source of coherence for a community, members regulate and maintain the boundaries of the community through explicit and implicit performances of masculinity. The parallels with Connell's concept of hegemonic masculinity become apparent here with those constructions or practices of masculinity that are valued by the 'community of practice' having power, because of their acceptance, and those practices of masculinity deemed inappropriate being subordinated. Boys who practice subordinated masculinities are kept on the periphery and are not treated as full members.

'Communities of practice' however, have fluid boundaries suggesting that where communities overlap, constructions of masculinity can leak from one community to another. Boys have multiple membership to 'communities of practice', be they communities based on family groups, peer or friendship groups, sports, hobby, cultural, or other activity groups. Within each 'community of practice', boys (as members of the community) learn what it means to be masculine within the context of that community, and this learning spills over from one community to another, each time being (re)constructed in accordance with the practice of that community. Consequently, the reasons why boys perform the (different) masculinities they do, can be explained though the 'communities of practice' concept, as the same performance of gender might be transgressive in one community but conformist in another.

When knowledge of masculinities (especially hegemonic masculinities and the power associated with these) is learned and carried from one overlapping 'community of practice' to another, it is not difficult to see how culturally exalted expressions of masculinity come to feature in gendered relations. That said, resistance is possible but it comes at a price (as in consequences for social, mental and physical health) particularly for members on the margins (marginal membership of a 'community of masculinities practice' may be by virtue of young age, ethnic minority, transsexual or transgender identity or minority sexual orientation for example). The membership of 'communities of masculinities practice' is continuous, and as community knowledge is relearned and reinforced and particular masculinities reproduced, it means change is slow and difficult. Unlike the formally organised systems within institutions and places of work adopting a 'communities of practice' model, boys feeling aggrieved about the way their various 'communities of masculinities practice' are treating them, don't have any policy quidelines to follow to lay a complaint and affect change.

Placing this discussion back into Wenger's (1998) conceptualisation of 'communities of practice' (being about mutual engagement in a joint enterprise, using a shared repertoire of resources, a 'community of masculinities practice') might be considered thus:

In a community-related social context, boys collectively and mutually engage in the practice of masculinity, regardless of whether that mutual engagement is consensually agreed to, or whether engagement is by passive compliance (in the knowledge that not to do so will have negative implications for community membership and likely, their well-being). To illustrate how hegemonic masculinities are produced through the power of learning and knowing what it means to be masculine in that context, Wenger's (1998) statement on the negotiated meaning of the practice of the community is recalled:

These relations of accountability include what matters and what does not, what is important and why it is important, what to do and not to do, what to pay attention to and what to ignore, what to talk about and what to leave unsaid, what to justify and what to take for granted, what to display and what to withhold, when actions and artifacts are good enough and when they need improvement or refinement. (p81)

The joint enterprise is that all boys in that community share in the enterprise of being masculine, and to do this they use a shared repertoire of resources, such as language (eg sexualised and aggressive language, using taunts, ridicule, and derogatory terms of reference in their interpersonal communalisations), embodiment (eg physicality – the rough and tough stuff, or through sports, some of which are more acceptably masculine than others), doing traditionally 'boys' things (eg sports and hobbies that few if any girls do), acting and responding in certain ways (eg not showing 'feminine' emotions) and so on. Needless to say, when different communities have

some distinctly different practices – contrast for example the formal classroom setting, the family, and boys peer groups, young boys who are still developing understanding and constantly learning new (and often contradictory) knowledge can experience a great deal of conflict as they negotiate the meaning of masculinity in each community, in response to the different ways power is operating in each of these community contexts. From this nexus of multi-membership to a diversity of 'communities of (masculinities) practice' comes identity, not a singular coherent masculine identity, but multiple masculine identities or masculinities.

'Gender' (and) 'identity'

The theoretical foundations underpinning meanings of 'identity' and 'gender' have shifted across time, firstly as psychological and psychoanalytic traditions developed theories of identity, and latterly as the more sociologically aligned traditions gave more diverse shape to theories of gender. According to Connell (2003, see p85-91 for an overview) theoretical approaches to 'gender identity' were introduced into the academic literature by psychiatrist Robert Stoller in 1968. Some of this early gender identity work, embedded in psychological understandings, would seem unethical by today's standards given the less inclusive social, cultural and political mores of the time, with issues like transgender and same-sex attraction being largely pathologised. As challenges from feminist psychologists like Nancy Chodorow (1978) and later Carol Gilligan (1982) were starting to be heard and acted upon, particularly that psychology had been written by males about males, that females had been rendered invisible and their voices silenced or completely ignored in the academic literature, the theorising of gender gradually became the focus for more sociologically oriented scholars who looked towards the social and cultural processes that constructed gender. This is not to say that this more recent body of literature has avoided extensive debate and criticism much like earlier gender identity work, especially as the 'uneasy relationship' between postmodernist and feminist theory have significantly contributed to theoretical tensions in gender identity research (see for example Francis, 2002, for a discussion on this issue).

Complex theoretical debates aside, the strength of the feminist movement and social concerns about the inequality of women meant that women's and girl's issues dominated the gender literature from the 1970s through to the 1990s, and it seems that it was only with the so-called 'masculinity crisis' surfacing during the mid-1990s, that male gendered issues were put back on the research agenda in a significant way. However, this time, notions of masculinity were being explored with some disparate interpretations depending on whether the research paradigm supported the claim of a 'masculinity crisis', like much of the psychological literature that has fed populist agendas, or the more sociologically based literature that looked more to the power relations within and

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¹³ The so-called 'masculinity crisis' arose as data from the likes of education, health, and social/welfare sectors in many Western nations was reported, highlighting the poor (mental) health status and the (relative) scholastic underachievement of boys. While not denying such data exists, some researchers caution that the negative picture this data paints is not uniform across boys of different cultures, ethnicity and socio-economic status, and it is an agenda being pushed by predominantly white middle class men and women in positions of power and privilege, as succinctly summarised in a statement by Kimmel (2000): 'on most measures boys - at least the middle class white boys everyone seems concerned about – are doing just fine, taking their places in an unequal society to which they have always felt entitled' (p.1)

between genders (such as Connell's, 1995, seminal work, *Masculinities*). Given the varying agendas about boys (both academic research related and populist), it seems an important task in any gender and education-related research project to make clear what is, *and what is not*, the position of the researcher in relation to masculinity(ies), as has been documented in this analysis.

Gender

Currently, the diverse theoretical claims to the meaning of 'gender' present the researcher with a continuum of thinking and understanding (with no implication here that a continuum need be a linear construct, nor does it have fixed points of reference), hence it becomes an important task to establish where in the continuum of thinking, or perhaps more usefully, which of the many theory(ies) of gender, any given project is founded upon. As the research aims for this investigation placed most conceptual focus on 'communities of practice', and that inclusion of a theory of gender (related to masculinity) was a focus under this conceptual umbrella, it made sense to select and apply one such concept within gender theory. In other words, it was not a stated aim of this investigation that theories and concepts of gender in themselves would be the focus of the critique, but to apply and extend Paechter's (2003a, 2006) discussion and consider masculinities as 'communities of practice'. Consequently, Connell's (1995) conceptualisation of masculinities (and relevant aspects of Connell and Messerschmidt's (2005) reshaping of the concept) is taken as read, the understanding of which is stated earlier in this discussion.

The issue of females researching males

Thirty or so years on from Chodorow and Gilligan questioning the lack of female voices in the research literature, the criticisms about whose voices dominate the gender-related research landscape have shifted to the other foot, with reactionary claims that education (for example) is becoming overly feminised and the male 'crisis' is in part a consequence of the feminist movement and female domination of boys lives. Integral to this criticism are questions and challenges about the place of women researching males. Skelton (1998) and Raphael Reed (1999) both offer extended discussion about this issue and consider a range of debates related to both men and women researching masculinities, challenging particularly the research agendas and policy decisions *reacting* to the reported underachievement of boys.

To respond to such a challenge in context of the present investigation means going to the very theoretical and methodological foundations of the research project (discussed further in Chapter 6: Methodology). Theoretically, Connell acknowledges that the conceptualisation of masculinities has been developed in part from feminist theory, to look at power in gendered relations, both between genders and within genders. Methodologically this investigation draws considerably on feminist methodologies, as described by Ramazanoglu & Holland (2002), and in particular, the claims of such methodologies to 'reflexivity', which aims to make clear where the power relations and the exercise of power exist in the research process. In practice, this means the researcher has the

responsibility to uncover 'what knowledge is contingent upon, how the researcher is socially situated and how the research agenda/process has been constituted' (p118). While this is unlikely to be a satisfactory answer for researchers from other (disparate) research paradigms, it is unlikely that such a debate can be resolved across epistemological boundaries. At best, a researcher can remain responsive to the theoretical and applied conventions of the knowledge discipline and research paradigms from which they are working.

Identity

The term 'identity' features recurrently throughout the masculinity(ies) literature with the subtle nuances of meaning and application being a reflection of the theoretical orientation of the authors. Again, it is not the stated aim of this project to critique the (gender) identity literature, but to take a position and remain with it. In this case, the lead is taken from Wenger (1998) (as previously noted in Chapter 2), that identity is about 'the person, but from a social perspective', and that the focus on identity, 'call[s] attention to broader processes of identification and social structures' (p.145). Much of the literature selected for this analysis would seem to treat identity in the same way, that to talk of a 'masculine identity' is not so much to suggest a coherent and resolved singular identity (hinting at developmental stage theorists like Erik Erikson), but an identity that is continually shaped and influenced by the social worlds in which boys live and perform. Depending on the theoretical orientation of the author, they may speak of 'masculinities', with the emphasis on the plural to talk of the many ways of being male depending on context (such as poststructuralist feminist authors like Skelton, 1998, 2001), or a 'masculine identity' made up of many and diverse features, often expressed as 'masculine identities' (such as authors spanning the psycho-social disciplines like Edley & Wetherell, 1997). To all intents and purposes, many of these authors are saying *similar* things, with the choice of language and terminology revealing and emphasising more the specific theoretical position each is speaking from, rather than any fundamentally different and opposing interpretations of masculinity(ies), and hence the earlier reference to 'continuums' of thinking. To talk therefore of (masculine) 'identity', seems to be a useful and familiar way to draw attention to those ways of being male that may be expressed by an individual in their social world, whereas 'masculinities' refers to those multiple masculine identities performed individually and collectively.

Illustrating 'communities of masculinities practice'

To illustrate the application of Connell's conceptualisation of masculinities and how a Foucaultian notion of knowledge/power relations produces hegemonic masculinity (and therefore, how knowledge about what it means to be masculine imparts membership to a 'community of masculinities practice'), a broad selection of research articles, grouped around some of the recurrently reported research themes, as well as in relation to boys of specific age groups, is overviewed in the following sections. In general, these 'themes' represent a range of

different, localised social contexts¹⁴ in boys lives, most of them school related, being the context in which most boys can be accessed for purposes of research, and where they spend a good deal of their social lives. As the literature on masculinity(ies) is substantial, it meant that for manageability, decisions needed to be made about which literature would be afforded the most attention and serve the most useful purpose of this part of the analysis.

- The first criterion for selection was that any work cited needed to reference and apply Connell's conceptualisation of masculinit*ies*, and/or, the more specific concept of hegemonic masculinity. This eliminated a variety of more popularly known works on boys from authors like Biddulph (1997), Pollack (1999), Lashlie (2005) and Sax (2007) whose work is based on psychological and psycho-analytic theory and practice (working with youth at risk) which by implication, tends to focus on individual boys behaviours and the assumed 'crisis' of boys, rather than viewing masculinities as a diverse range of practices of being male, and the social processes by which some of these practices are culturally exalted (hegemonic masculinity) or subordinated (less hegemonic masculinity). This same distinction of these particular authors within the literature (and others working in the same field), as differentiated from those studies actually selected for analysis, is also noted by the likes of Frank, Kehler, Lovell & Davison (2003).
- Secondly, the literature had to include specific application to adolescent boys rather than adult men. The reason for this was primarily pragmatic in that the present investigation is about boys not men, and boys' lives and experiences are different to men by virtue of age and development. However, the focus on literature specific to boys is also related to the way power features in gendered relations. Apart from the commonly cited differential ways power operates between genders, when considering power relations within genders, generational (or age) differences can also contribute to the way power features in such relations (Haywood & Mac an Ghaill, 2003), and it cannot be assumed that understandings and practices about what it means to be an adult male can similarly apply to boys. As Consalvo (2003) states, 'past studies of mediated masculinities ... focus on adult men and fail to interrogate constructions on young or adolescent boys' (p. 28). A preference was for literature that included research on boys, as close in age as possible, to those boys in the present study (that is, 13-14 years old), although among the literature reviewed, research on primary school aged-boys and older teenage boys was more common than this early-adolescent group (eg Renold, 2001, 2004, 2007; and Keddie, 2003a, 2003b, 2006, 2007). Brief consideration has been given to research on younger boys due to this greater number of studies related

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¹⁴ It is noted that the 'social contexts' referred to in generic terms here, have been conceptualised by others as 'social spaces'. Fine & Kuriloff (2006) reference the work of radical geographers to acknowledge the specific spaces in which boys and men construct their lives; Carrington, Mills & Roulston (1999) reference Pierre Bordieu in their application of the notion of 'social spaces' to boys in schools. These conceptual frameworks are acknowledged as alternative ways to conceptualise the production of masculinities, but as they sit outside the framework selected for this investigation, they will not be elaborated on here.

to masculinities and boys in primary school, and some differential age-related (that is, developmental) findings from these studies, echoing the previous comment from Consalvo (2003).

• Thirdly, research literature that applied Connell's concept of masculinities in the analysis of boys' real life experiences was preferred (rather work that only theorised such), be that experiences related to school, sport, friendship or other social groups, intimate and sexual relationships, family, hobbies and other activities. This was to enable potential parallels to be made with the practice of video gaming (as another example of an activity or social context in boys lives), and the 'communities of practice' concept for the focus of the present study.

This selection process also meant that literature that sought to theorise masculinity(ies) through other sociological, albeit similar and related, conceptual frameworks (see for example, Haywood and Mac an Ghaill, 2003; Skelton, 2001, Francis & Skelton, 2001b) are largely only acknowledged for their contribution to the literature and their use of Connell's original concept. In addition, articles that aimed only to critique Connell's concept (see Dimetriou, 2001; Wetherell & Edley, 1999; Jefferson, 2002; and Hall, 2002; along with Connell's responses to these challenges, Connell, 2002b, 2005; and Connell & Messerschmidt, 2005) are noted, but of these, only Connell & Messerschmidt's 'reshaping' of the concept, which reinforced Connell's (1995) original conceptualisation and refined some of the thinking, have been added to this discussion.

Teenage boys

Reading around a diversity of literature on young masculinities quickly establishes a picture of boys' worlds dominated by some similar and recurrent practices. To say that boys are mutually engaged in the joint enterprise of producing masculinities, using a shared repertoire of linguistic and bodily resources, is seemingly stating the obvious. The ways power produces knowledge about what being masculine means, and how to be acceptably masculine in the social world, is evident throughout all of these studies without the authors having to make much of an effort to explain such. That said, some studies have been thoroughly documented, with briefly accounted aspects of two such projects, one Australian and another English opening this section of the chapter.

The findings of a substantial Australian research project by Martino and Pallotta-Chairolli (2003) are reported in a volume titled 'So what's a boy?: Addressing issues of masculinity in schooling' (some reference to New Zealand schools is included in this work). This study was particularly influential for the present investigation, as apart from telling a very different story about boys to those populist tiles coming from psychologists concerned with boys in 'crisis' (previously referenced), it had local (as in Australasian) relevance, whereas most other school-based studies focusing on masculinities studies, reported in their entirety, are British in origin (see for example Mac an

Ghaill, 1994; O'Donnell & Sharpe, 2000; Skelton, 2001)¹⁵. The brief summary offered here does not do justice to the detail of Martino and Pallotta-Chairolli's work, the choice instead being made to report equivalent ideas from a diversity of research, rather than a single study, to give support to the 'communities of practice' conceptual framework. Martino & Pallotta-Chiarolli's study highlighted the complexity of the ways teenage boys at secondary school make sense of their social world, and the ways normative constructions of masculinity contribute to their lives at school. Interviewing boys who inhabit borderland spaces (those of minority race, non-heterosexual orientation, or who live with physical disability), as well as white Australian boys who position themselves at the top of the social hierarchy of masculinities, they were able to identify a range of ways boys categorise their social relations and modes of thinking to construct and reproduce masculinities both within and across peer groups. These categories included the importance of the physical (muscular) body for proving one's masculinity, and how bullying and harassment (often using forms of humour) as means by which to police masculinities (and that these behaviours are frequently normalised by both boys and adults in the absence of any intervention to change such). Also identified were ways social hierarchies in schools influence the nature of friendships by including the 'cool' boys and excluding others, drawing distinctions between friends and 'mates' and the impact of homophobia on such a distinction and also the level of friendship intimacy (and how friendships with girls seem to compensate for a lack of intimacy in friendships with other boys).

Coming from more a psychological background, but still working within a masculinities framework (and associated consideration of hegemonic masculinity), Frosh, Phoenix & Pattman (2002) comprehensively document their research findings (the published work titled *Young masculinities*), from studies with teenage boys (and girls) in a diverse range of London schools. Their research aim was *'to be able to accurately represent boys' thinking on their own emergent masculine identities'* (p.6). Again the brief synopsis provided here skips over a wealth of material applicable to the present investigation, however, the authors were able to summarise their findings into three key parts (p.10); that boys needed to maintain their difference from girls and avoid doing things considered as being things girls do; popular (or hegemonic) masculinity recurrently featured notions of 'hardness', sporting prowess, 'coolness', a laid-back approach to schoolwork, and being proficient at 'cussing'; that some boys are more masculine than others, and in context of greater London schools, this included both a class and racial consciousness with contradictions like African-Caribbean boys being seen as more masculine, but they were still denigrated on the basis of race.

A recurrent feature of research projects working within the theoretical framework of masculinities, has been to report the ways boys engage in practices of hegemonic masculinity which in context of 'communities of practice'

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¹⁵ The geographic distinction here is notable in terms of the way 'class' and 'race' are considered in the UK studies. Issues of race or ethnicity Australian and New Zealand tend to give priority to the (minority) indigenous population (which are not a feature of the British social and cultural world), and with immigrant population issues (usually) being managed as a separate consideration; and that notions of 'class' (as in the British 'working class') and the cultural history that goes with such, having been replaced in the Australian and New Zealand social landscape, with ideas about socio-economic status.

could be read as the shared repertoire of resources boys use to produce hegemonic masculinities. For example, Kehily & Nayak (1997) look at the way humour is used by 15-16 year-old boys through game-play, mythic story-telling and ritual insults to produce heterosexual hierarchies; Stoudt (2006) considers the way school violence, in the form of bullying, teasing, and hazing is used to police hegemonic masculinity among boys in grades 10-12; Dalley-Trim (2007) looks at the way masculinities are performed in the classrooms of 14 year-old boys and the 'performance techniques' they use to do this work, such as use of (hetero)sexist, homophobic and misogynistic language, verbal sparring, threats of violence, engagement in acts of aggression and sexualised body stylisations.

The patterns of hegemonic masculinity reported by Frosh et al (2002), add to the list of hegemonic practices identified by Martino & Pallotta-Chairolli (2003), all of which have potential relevance for the video game playing boys in the present investigation. Determining what membership to a 'community of (young) masculinities practice' requires, means looking to the very practices (and hence the social learning of knowledge) that both define and sustain localised 'communities of masculinities practice'. In other words, what patterns of hegemonic masculinity feature in boys' social worlds, and what actions or practices seem to both sustain and police young hegemonic masculinities? The following discussion continues to identify patterns of young hegemonic masculinities in preparation for analysing the data in the present investigation.

Boys on the margins

Rather than assume all boys who play video games will engage in hegemonic practices of masculinity, literature that talked of subordinated hegemonic masculinities was also considered. Subordinated masculinities include those practices that have less access to power. Rather than call these practices 'non-hegemonic masculinities', with the implication that such masculinities have no access to power and are therefore unable to change, the term 'less hegemonic' is preferred (echoing the approach of the likes of Frosh et al, 2002). Subordinated masculinities then are those practices that may be deemed somehow more feminine or non-heterosexual.

Given the oft reported vulnerability of boys in minority groups (be that as a function of (dis)ability, sexual orientation, ethnicity or socio-economic status, articulated more in terms of 'social class' – specifically 'working class' - in UK studies), Martino and Pallotta-Chairolli (2003) dedicate a whole section of their book to 'Diverse masculinities'. A recurrent feature of stories from boys' inhabiting borderland spaces was the dualistic ways they thought about the social practices of masculinity by simultaneously resisting and problematising such practices. In relation to same-sex attracted boys, they comment on the ways gender-normative practices dominate school environments, to the point of completely silencing any discussion on diverse sexualities at some schools. Homophobic harassment was a significant part of these normative processes for maintaining the social hierarchy and to avoid it, some gay students reported the need to 'act in a normal way' (p99). So pervasive are these heteronormative constructions of masculinity that even boys on the borders are implicated in the normalising

hegemonic practices that construct heterosexuality as 'normal', and non-heterosexuality as 'deviant'. Indigenous boys interviewed painted a very complex picture illustrating how an inter-related combination of racialised, sexualised and gendered hierarchies influenced their social practices of masculinity. Their responses to these practices of power ranged from resisting the temptation to fight in reaction to racially based provocation, through to deploying an aggressive, macho-type of masculinity. As Martino and Pallotta-Chairolli note, it is an impossible task to talk about the social practices of indigenous boys' masculinity in isolation of the history of racially-based power relations in Australia. Boys with physical disabilities are presented with a unique set of challenges with regard to masculinity at school, with the chapter title 'You're not a real boy if you're disabled' in Martino and Pallotta-Chairolli's (2003) book capturing the sentiment of many of the boys' stories. The hegemony of physical prowess, strength and independence means that boys without such (physical) resources, on balancing up the costs and benefits of various social practices, either reformulate or outrightly reject these normalising constructions of masculinity. Needless to say, many of these boys are kept on the periphery, if not excluded from many 'communities of masculinities practice'.

Similar findings to these were reported in a New Zealand study. Towns (1999) interviewed gay males, 15-21 years old, about their school experiences, related both to the classroom and wider school practices. Central to his discussion are the heteronormative 16 practices within schools, through the teaching of the formal curriculum and maintaining silence about homosexuality where dominant discourses prioritised heterosexuality, masculinity, acceptability and normality (all in combination), and the pathologising of homosexuality, especially in relation to education about HIV/AIDS and the inadvertent alignment of the disease with gay men. Towns' research highlighted the 'violent practices that policed the boundaries of gender and sexuality' (p.144), with these social practices of masculinity being brought into acute focus when young males identify as gay.

The relevance of this work on subordinated masculinities to the world of boys' video gaming is to consider the possibility that there may be a need to view some aspects of video gaming as less hegemonic practices of masculinity. That integral to 'communities of masculinities practice' (in a video gaming context), there could be features of masculinities practice that do not conform to the hegemonic patterns of masculinity that outwardly dominate video game play.

Masculinities and technology

It was hoped, given the video gaming focus for the present investigation, that literature exploring the production of (young) masculinities in relation to technology may have been available for review. However, among the small

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¹⁶ The term heteronormativity (described by the likes of Warner, 1991) talks of situations whereby heterosexuality is presented explicitly or implicitly as the 'normal' or usual state, and all other (sexual) orientations are marginalised, by being (for example) rendered largely invisible or considered deviant.

number of articles linking masculinities and technologies found during the literature search, none fitted the criteria for selection for discussion, most notably in the absence of any reference to boys. Acknowledging the importance of 'science and technology as powerful motifs of hegemonic masculinity', Lohan & Faulkner (2004, p319) make particular comment about the dearth of research in this area, regardless of whether it is about men or boys. It would seem then, an arena ripe for investigation, especially in light of Connell & Messerschmidt's (2005) statement that patterns of embodiment in hegemony (as related for example to new technologies) remain underconceptualised, in conjunction with their recommendation that the geography of masculinities needs empirical analysis at a global level (given that many new technologies are integral to cultural globalisation processes).

Younger (pre-adolescent) masculinities

Another feature of the masculinities and education research worthy of brief mention, and highlighted by Haywood & Mac an Ghaill (2003) as needing separate attention, is the recognition of developmental differences in boys' constructions of masculinity as related to (young) age, and hence the stated reason for this analysis wanting to maintain as much focus as possible on the age group of boys selected for the present investigation. That said younger boys in primary schools appear to have been the focus for far more young (as in pre-teenaged) masculinities research to date, than have young teenagers, and for this reason, consideration has been given to a collection of such articles.

Patterns of hegemonic masculinity reported by researchers in studies with younger boys have relevance for this study in that they show some developmental (age-related) differences. That is, with increasing age, the patterns of hegemony change and having an understanding about the practices of younger boys provides a point of comparison with the practices of teenage boys like those described in the earlier section featuring the work of Martino & Palotta-Chairolli (2003) and Frosh et al (2002).

Jordan (1995) proposes that little boys (in the early primary school years) adopt a definition of masculinity as being whatever girls are not, and what girls do not do. Owen Blakemore (2003) explored children's beliefs about violating gender norms in 3-11 year olds, finding, not surprisingly, that knowledge of gender norms increased with age, but also that with increasing age came an understanding that norm violations were even possible. McGuffey & Rich (2003) report that hegemonic masculinity in 5-12 year olds regulates social boundaries as well as controlling the rules of gender negotiation and transgression, that boys hierarchy is based on supremacy and 'top boys' rule the hierarchy in a way that allows them to manipulate it, and preserve their power and status. Haywood & Mac an Ghaill (2003, p72) summarise how younger boys were not interested in (hetero)sexual relationships and found such relationships with girls boring, that 'boyness' was demonstrated through 'playing' be that in the classroom, home or playground and that young boys had a fascination with cartoons, computer games and board games that contained a high level of violence and aggression, even though they despised real-life expressions of

aggression. Renold (2001) however reports that for most slightly older boys (10-11 years) the 'experience of boyfriend/girlfriend culture [was] an emotional cocktail of fear and frustration' (p275), in that 'being a boyfriend could be both masculinity conforming and masculinity denying' (p293). However, Renold also found that a few boys of this age invested in a type of hyper-heterosexual masculinity that positioned them as the 'studs' of the school, as their interest in sexual activity (more often associated with that of older teenager's), conferred a social status and power that meant they could avoid some of the practices by which many other boys constructed their hegemonic masculinities.

In an ongoing series of articles, Australian Amanda Keddie reports on young masculinities; Keddie (2003a) considers the importance of the way peer groups shape behaviour and the recurrence of 'exaggerated' violent and aggressive masculine behaviours of young primary school aged boys, and in a related article (Keddie, 2003b), challenges that naturalistic assumptions about boys (because of such behaviours) made by teachers and principals, which assumed a 'gender innocence' (p289), did little to promote gender equity in early childhood education; Keddie (2007) reports on a longitudinal study of a boy from the age of 8 years to 12 years, showing that the increasing mismatches between home and school life (formal and informal), and hegemonic masculinity, served to amplify his disengagement with school and social alienation; Keddie (2006), concludes that teachers require a strong research-based framework of gender knowledge especially in the ways masculinities are constructed, to avoid reinforcing and perpetuating the destructive and exclusionary effects of hegemonic masculinity.

Along similar lines, Swain (2000) considers the way football is a key signifier of hegemonic masculinity, where among many other influential factors, girls are excluded from the game, and that the body plays an important role in the formation of masculine identities through competitive displays of skill and strength. In an extension of this research, Swain (2003, 2004) argues that the construction of masculinity is linked to the acquisition of social status within the peer group at school, and although the resources and strategies used to achieve this vary (intellectual, economic, linguistic, or cultural) boys of this age group (7-11 years) most commonly defined themselves through bodily practices (that is, physicality and athleticism in other words, being tough and sporty). The place of the (physical) body in constructions of masculinity seems a favoured focus for researchers working in sporting contexts, with Light & Kirk (2000) exploring the relationship between boys (in this case older teenager's) experience of school rugby and the embodiment of 'traditional' (social class-based) hegemonic masculinity.

The usefulness of these studies was also in the fact that they focused on specific social contexts such as sport, or classroom settings, and illustrated the potential for exploring the construction of masculinities in different social learning contexts. As noted by Paechter (2003a), to view masculinities as 'communities of practice' means

viewing males in localised contexts where social learning is occurring (of which video gaming could be one such social context) and patterns of hegemonic masculinity are practiced.

Reading across this young masculinities literature, it was apparent that 'communities of masculinities practice' are formed particularly around these types of social groupings and that status within such groups is determined by adherence to a variety of developmentally specific, gender normalising, and hegemonic masculinities. Among young boys, mutual engagement in the production of masculinities utilises a developmentally limited range of resources based around hegemonic masculinities that are fundamentally *not f*eminine, such as displays of real or ritualised aggression, doing things (like playing particular games) that girls do not do, seldom violating gender norms, being part of peer group structures with a clear hierarchy of social status, where the top dog was recognised for his power and his actions taken heed of, and that competent displays of physicality and athleticism are essential.

Research on the gender normalising practices of teachers

One of the popular themes in the educational literature exploring hegemonic masculinity in school settings in recent years is to look to the practice of policy makers and teachers, responding to the populist views and rhetoric about boys' underachievement. Like the video gaming research analysed earlier, the 'community of practice' here, is not so much focused on the boys, but on teachers as a professional group of practitioners, and of politicians needing to be seen responding to the assumed 'masculinity crisis'. The development of this issue is usefully illustrated through a succession of articles authored by Australian Wayne Martino and colleagues that piece together a picture of the way hegemonic masculinity has been 'promoted' through both formal and informal aspects of teaching practice. While the Australian educational issues are not necessarily the same as New Zealand's, the similarity of the education systems in the two countries means inferences could be drawn and parallels made, especially in the absence of any similar New Zealand specific critique. Martino & Berrill (2003) note how the resurgence of the 'right' in global politics and the moral panic about boys was influencing educational agendas; Martino, Lingard & Mills (2004) challenge that the failure to acknowledge the social construction of gender, and to allow the normalising assumptions about gender, made and held by many teachers working in schools, would not contribute to the successful implementation of school programmes that sought to make improvements in boys education; Martino, Mills & Lingard (2005), in looking at the shift to single-sex classes that some Australian schools were adopting as a means to address educational needs, found that teachers assumptions about gender play an important role in the application of pedagogy in the classroom, in that male and female teachers adjust their teaching practice to conform to stereotypical constructions about boys (and girls) supposed different and opposite orientations to learning; Martino & Frank (2006), focusing this time on male teachers, highlight the need to address issues of gender and sexuality as part of teachers' professional learning and for greater recognition of the way normalising constructions of masculinity and hegemonic practices impact

on male teachers own self-perceptions and the ways this then manifests in pedagogy, and challenge that providing more male role models for boys in schools is a very simplistic way of addressing issues with far more complex influences; Mills, Martino & Lingard (2007) challenge the Australian government that a recent parliamentary report on boys education was little more than 'recuperative masculinity politics' (responding to the assumed masculinity crisis), full of rhetorical strategies and anti-feminist politics, and reducing the differences between boys and girls in education to essentialist understandings.

Further afield these same issues are repeated. Skelton (2002), in UK school studies, challenges that the call for more male primary school teachers as positive male role models is rather short sighted in that little is known of the way male teachers, already in primary school education, contribute to dominant constructions of masculinity, although her research at the time was more focused on the impact on girls; Francis & Skelton (2001a) in concurrent work argue that heterosexual norms perpetuated by male teachers in classrooms, stemming from misogynistic and homophobic discourses contribute to the construction of their own masculinity and one of the consequences for this in the classroom is abuse of power and sexual harassment; and with a slight shift in focus, Skelton (2003), reported that male teachers of older primary school aged children were more likely to be concerned about and support traditional expressions of masculinity than male teachers of the younger primary school children; in a similar vein, Smith (2007) goes on to argue that teachers are 'cultural accomplices' in the way they naturalise compulsory heterosexuality and perpetuate homophobia, especially when dealing with disruptive and disengaged students, and he too challenges that more role models for boys ignores the question of how gendered pedagogies affect schooling for boys.

The point of drawing attention to teachers here, is to illustrate that when boys 'communities of masculinities practice' overlap with those of their teachers' professional practice, the social learning of knowledge (about normative and acceptable ways of being male) is reinforced from community to community (as shown by Francis & Skelton, 2001a). When the additional authoritarian power of teachers is factored in, opportunities to resist or contest hegemonic expressions of masculinity, much less negotiate diverse meanings of masculinity, becomes a very difficult, if not an impossible task for students to achieve (like the boys described in Town's 1999, study). Just as teachers' practices of hegemonic masculinity (integral to their professional 'community of practice', as described for example by Smith, 2007) overlap with the various 'communities of practice' to which boys are members, so too do other adult 'communities of practice' overlap with communities of boys, with each 'community of practice' imparting to boys' knowledge about what it means to be male. In a video gaming related world, these overlaps of practice may come from older boys and adult men who boys interact with personally (such as at gaming conventions or the local games shop), or have indirect contact with through the literature posted on internet sites, or through advertising.

Negotiating less hegemonic masculinities

In the midst of a these (often concerning) reports about the production of masculinities among teenage boys, are a few examples of situations where researchers have found ways (a very small minority of) boys are negotiating less hegemonic masculinities, albeit still at some cost. Renold (2001) broaches the issue of studiousness in boys being seen as feminine and identifies a range of strategies that 10-11 year old boys use to avoid being perceived as non-masculine/feminine in their desire for academic success, such as teasing and bullying other achieving boys not investing in hegemonic masculinity, downplaying their own success, bring other external behaviours into the classroom and 'de-valuing girls' school work by positioning their achievements as failures' (p381). Reporting on other findings, Renold (2004) theorises how a minority of 10-11 year old 'hegemonic boys' (see also Renold, 2007) could 'flirt' with other masculinities and seek out spaces where they could resist, subvert and challenge hegemonic (and heterosexual) masculinities within a peer group built on shaming and policing less hegemonic masculinities. Pascoe's (2003) article profiles how teenage boys negotiate less hegemonic masculinity by effectively compensating with other hegemonic masculinities; a footballer with an identified 'feminine side' is able to use his sport as 'Jock insurance' (p1428); having dropped out of the football team in favour of drama, another boy adopted an emphasised heterosexuality and through drama-related social contexts, concentrated attention on the sexual, more so than the romantic aspects his relationships with girls; and another balanced his sporting preference for the 'pansy' track team with the 'Jock' of sport wrestling; while yet another 'rejected the Jock' to exhibit a counterculture identity dressing in black, being tattooed, sporting a James Dean type hairdo and listening to a lot of music, for this boy being different was meaningful and not fitting in was not how he constructed his identity, if anything, he turned Jock culture back on itself by pointing out the contradictions between Jocks' public and private behaviours.

Boys in the study by Frosh, et al (2002) report that things do change, but change takes time and it tends to happen as boys get older. With the suggestion that what constitutes hegemonic masculinity can change, the theme of romance and hegemony was explored by Allen (2007) who, in an aptly titled article "Sensitive and real macho all at the same time", reports that romantic masculinity need not 'pose a significant disruption' (p149) to hegemonic masculinity, albeit that this practice of masculinity still supported a pattern of active male and passive female sexuality. While the negotiated meaning and place of romance in heterosexual relationships may be part of the hegemonic masculinity landscape for some teenage boys, it appears the way power exists in relations between genders has not changed.

Put into context of 'communities of practice', these accounts of negotiating less hegemonic masculinities, or shifts within what constitutes hegemonic masculinities, could be read as illustrations of the very way power produces knowledge in a 'community of practice', as (new) meaning is negotiated to meet changing needs within the community. However, where the 'community of practice' lens is focused (as in where the boundaries of such 'communities of masculinity practice' are established) can only be surmised. If these accounts of negotiated

meaning are specific to adolescent boys it would suggest that this type of gender work needs to be thought of as 'communities of adolescent masculinities practice'. Arguably, there is still a good deal of developmental work going on here (psychological inference acknowledged), as teenage boys by virtue of age and differential access to social contexts, are not only negotiating their way through the hegemony of their own teenage world of masculinities, but also contending with the overlap of their 'communities of masculinities practice' that bring them into contact with those communities in the adult male world.

What remains convincing throughout this discussion is that the construction of masculinity, hegemonic and less hegemonic, requires the mutual engagement of boys, in the joint enterprise of being masculine, using a shared repertoire of resources to continuously reproduce, renegotiate, and at times reconstruct, masculinities.

Summary

The 'communities of practice' concept fits, but

While analysing this literature and considering the potential for viewing masculinities as 'communities of practice', a persistent "yes, but" question lingered to the effect that does the 'community of practice' concept apply when the power that sustains hegemonic masculine practices (arguably) borders on the oppressive and coercive, for some boys at least? Wenger (1998) stated that the way power works in the negotiation of meaning, and therefore the development and acquisition of the knowledge required for membership to a 'community of practice', needs to be a productive form of power (after Foucault). In conjunction with this, Connell (1995) points out that hegemony does not mean 'ascendency based on force' nor does it mean 'total cultural dominance' (p184), but who sets the guidelines for what constitutes a productive form of power versus force and domination through oppression? Analysing boys' interactions in their social groupings to determine the way knowledge/power relations produce hegemonic and subordinated masculinities, is certainly a useful conceptual tool for researchers investigating what creates and sustains such patterns of social practice, but how appropriate is it to call such practices 'communities of practice? If the boys living on the margins, such as those boys interviewed by, Martino & Pallotta-Chairolli, (2003) or Towns, (1999) are left feeling power less, with no opportunity to renegotiate, resist, or contest patterns of hegemonic masculinity, is this (just) hegemony, or is this cultural domination? If these boys can never become full members of some 'communities of masculinities practice' by virtue of race, disability or sexual orientation (and other unchangeable personal factors), who are held on the periphery of some communities, or outrightly rejected and excluded from others, do notions of 'community' apply in such situations?

In a parallel way to Gee's (2005a) challenge to the very meaning of 'community' in relation to video gaming (as in "where is the sense of community?"), the very notion of community needs to be questioned here. Community, even by popular definition is about people living, being and working *together* and if boys are excluded from some activities of the community, because of particular personal attributes, then it would seem they are not members of

the community (in the general sense). Wenger (1998) also stated that participation in a 'community of practice' need not be harmonious, collaborative or cooperative, and that 'communities of practice' are not intentionally emancipatory. However, there is something very uncomfortable about calling the mutual engagement in the joint enterprise of being male a 'community of practice' when such participation is the result of passive compliance (because it is too dangerous for reasons of physical, mental or social harm not to comply), or that participation is in some way forced by means of oppression and coercion or having no choice in the matter. Being male is not like working for an institution or an organisation where people have choices, where the business of the 'community of practice' is formally established and understood, and has a clear sense of purpose, and where the meaning of the practice of the community can readily change to meet changing needs. When 'communities of practice' emerge from cultural traditions steeped in history, where the power that sustains the normalising practices of the culture seem almost non-negotiable for some boys, and where resistance and challenge can result in personal harm, can this really be called a 'community'?

To conclude this chapter and the analysis of the literature; to talk about masculinities as 'communities of practice', in order to avoid the complex theoretical issues around the term 'gender', as proposed by Paechter (2003a) seems a useful and productive exercise. However, when issues of hegemonic masculinity enter the picture, questions need to be asked about how appropriate, indeed how ethical it is, to attach notions of 'community' to some practices where the way power is working could be said to be oppressive and where some boys are less powerful, when culturally exalted ways of being male mean boys on the margins who do not conform to such hegemonic expressions will never attain membership. The message here would seem to be to apply the 'communities of practice' concept to the concept of masculinities – with caution. When commonplace understandings of popular notions like 'community' become mixed with conceptual understandings, intended meanings can be lost in translation.

The first part of the literature analysis established which aspects of Wenger's (1998) 'communities of practice' concept were selected for application to the present investigation. The choice of these aspects in particular was in consideration of the sort of detail that would be useful at an analytical level, to determine if video gaming and masculinities could be conceptualised as 'communities of practice'.

The specific research questions

Reading across a diversity of literature related to the practice of video gaming did not clearly identify how the 'communities of practice' lens could be applied to the phenomenon of video gaming. Hence the first research question for this investigation "(how) can video gaming be explained as a 'community of practice'?".

To make the broad scope of this overarching research question manageable, a series of more specific questions was developed.

To determine how homogeneous or heterogeneous Year 9 boys as video gamers are as a group, these questions were explored:

- How invested in playing video games, are Year 9 boys?
- Is there a particular profile of a boy video gamer how is he similar or different to his peers?

To determine if (and how) a conceptualisation of 'community' (after Wenger, 1998) might be applied to boys video gaming, the question needing to be investigated was:

Is there a sense of 'community' among Year 9 boys who play video games?

To determine if video gaming can be conceptualised as a 'practice' (after Wenger, 1998) (or is playing video games more an activity they have in common and something they 'do') the question needing to be investigated was:

Is there a sense of 'enterprise' in boys' video gaming 'practice'?

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In a parallel exercise, a diversity of studies selected from the young masculinities literature was read to view masculinities as a 'community of practice'. As one means by which the 'communities of practice' conceptual lens might be focused on boys and video gaming, the second research question emerged to ask "(how) can the context of video gaming be explained in relation to 'communities of masculinities practice'?".

Similarly, a series of specific questions was posed to explore the breadth of this question. These questions were:

- How can video gaming be considered 'a boys world'?
- How do boys perform hegemonic masculinity in video gaming?
- (How) do boys accommodate practices or patterns of less hegemonic masculinity in video gaming?

These questions then gave direction to the selected research methods and methodology, detailed in Chapter 6.

PART C: SELECTING THE OBJECTS OF FOCUS Collecting and documenting evidence

'... there is a very practical side to qualitative methods that simply involves asking open ended questions of people and observing matters of interest in real-world settings in order to solve problems' (Patton, 1990 p89)

Introduction

In the spirit of pragmatism advocated by Patton (1990), the methodology for this research project does not *'swear vows of allegiance to any single epistemological perspective'* (p89) in the selection and subsequent use of qualitative methods. Rather, that the repertoire of qualitative (and quantitative) methods available to a researcher can be used as something of a 'pick-and-mix', as it is more important to select methods that help provide answers to the research questions, than to be constrained by the purist approaches documented in the literature detailing the various theoretical frameworks for quantitative and qualitative inquiry. With this understanding, research theories become more the guidelines for conducting research rather than rule books to be faithfully followed.

This chapter details the role of the researcher; the selection of the research sample and the ethical and practical considerations for gaining access to young teenage boys for the purpose of research; the qualitative and quantitative methods employed in this investigation and the reasons for this mixed methods approach; the data analyses carried out to answer the research questions; and a range of considerations that seek to ensure credibility and trustworthiness of the data collection process and analysis.

The researcher

The way the researcher has conducted the data collection process for the qualitative methods warrants particular and detailed explanation as the methods were chosen as a consequence of her professional teacher training and education career experiences. In addition to being a doctoral student, the researcher is also a trained secondary school teacher who works most commonly in the field of Health Education. She has extensive experience teaching Health Education to secondary school students and secondary school teachers in pre- and in-service teacher education programmes. Integral to this curriculum work is the applied use of, and training of other teachers to use, constructivist approaches to teaching and learning. This point becomes important when considering the relationship between the researcher, the research participants, the qualitative methods selected

to gather evidence/data from the boys taking part in the study, and the conceptual framework on which the entire investigation is founded.

Mindful of these considerations, it should also be stated that this research has also been informed by feminist methodology (after Ramazanoglu and Holland, 2002, p12-14) in so far as 'feminists can have different ontological beliefs (and so different theories) about the nature of reality and the objects of their research' such as beliefs about masculinity; 'feminists can draw on differing epistemologies' to determine what constitutes legitimate knowledge; 'feminists can draw on different rules for establishing what counts as true, or can regard valid knowledge as impossible' noting that to do this, claims about social life or gender must use other criteria to justify how this knowledge is produced; 'feminists can draw on different theories of power' which in the case of this investigation, Foucault's notion of knowledge/power relations has been selected; 'feminists can have different experiences and different conceptions of how knowledge is connected to experience and meanings' in that what people do in their everyday lives (such as researching or teaching) cannot be separated from the rest of their lives; 'feminists can adopt different ethical and political positions' because there is no neutral way of producing valid knowledge given the diversity of gendered lives and therefore, 'judgements about power, justice and the transformation of what is unjust have to be balanced against tolerance of contradiction and respect for difference'. Considerations of these aspects have been previously indicated in the analysis of the literature (Chapter 5), with the remainder emerging across this Methodology chapter.

The qualitative research methods for this project have been selected from a range of classroom activities that feature in the constructivist teacher's toolkit as a means to facilitate teaching and learning processes that both identify existing, and construct new knowledge. To a researcher, these activities have many features akin to focus group discussions. As Kincheloe (2005) states about critical constructivism, 'the teaching and learning process is intimately connected with the research act A key dimension of critical constructivism involves the complex interrelationship between teaching and learning and knowledge production and research.' (p3) The appeal of the selected data collection methods for this research project is in the very close alignment between the theoretical foundations of constructivism and concept of 'communities of practice'. This is not to say this research project is founded on purist understandings of constructivism, but simply that the tools a constructivist teacher might use are very useful and practical methods for a researcher to employ when gathering data from young teenagers that could feasibly explain how video gaming can be conceptualised as a 'community of practice'.

Furthermore, constructivist approaches to teaching and learning are integral to working as a 'community of practice' in the New Zealand educational environment and hence these methods for gathering research data/providing evidence of learning are likely to be familiar to students. 'Communities of practice' as a way to conceptualise and think about learning environments in schools, and constructivist approaches to teaching and

learning are recurrent themes in the recent New Zealand education literature. Reference to these concepts can be found both separately (eg Ministry of Education, 2002; Alton-Lee, 2003; Hipkins, Bolstad, Baker, Jones, Barker, Bell, Coll, Cooper, Forret, Harlow, Taylor, France, & Haigh, 2002; Lai, et al, 2006) and in combination (eg Ministry of Education, 2006).

Constructivist approaches in education

To explain further; constructivist approaches to teaching and learning would hold that the world is socially constructed, in very similar ways that social learning theories like 'communities of practice' acknowledge that there is a social component to learning, that 'what we know about the world always involves a knower and that which is to be known. How the knower constructs the known constitutes what we think of as reality' (Kincheloe, 2005, p2). A constructivist understands that people create themselves using the cultural tools they have at hand. Understanding the nature of these social constructions is central to constructivist approaches to education because constructivists are more concerned with the active processes by which particular knowledge is created and validated, rather than the relatively passive and traditional transmission of bodies of previously validated knowledge or 'truths'. In other words, the constructivist teacher engages students in processes of knowledge production that have value, relevance and importance to the learners, which means knowledge is shaped by a diverse range of experiences and influences, rather than the teacher telling or teaching students the preestablished 'facts' of the matter. Put yet another way, Schwandt (1994) summarises, that constructivists take the view that 'knowledge and truth are created, not discovered by the mind' (p125). He explains how constructivists see reality as being 'pluralistic' and 'plastic', pluralistic because reality can be expressed in a variety of different ways using language and symbols, and plastic in that reality can be moulded to suit the deliberate acts that people engage in.

Consequently, constructivist approaches to teaching and learning by their very nature yield a lot of evidence of new learning or new knowledge construction ('new' as in new to the learner). This makes constructivist approaches to teaching and learning (used here as the qualitative data collecting methods) attractive for this investigation because if the world of boys video gaming can be explained as a 'community of practice', where certain knowledge comes to be valued and essential for community membership, then research methods that parallel this knowledge production process allow a researcher to identify aspects of this valued knowledge held by members of video gaming or masculinities 'communities of practice'. Following this line of thinking, it also means that constructivist teachers are concerned with the role of power in the construction of knowledge and can be interested in conceptualisations like Foucault's theory that power is productive (power produces knowledge) to explain how particular knowledge is valued and validated by those who construct it.

These understandings of constructivism align very closely with 'communities of practice' as the social learning theory on which this project is conceptually founded. If the informally constructed social and cultural world of video gaming and masculinities can be conceptualised as 'communities of practice', then gathering data from the research participants using methods that are already established as a way of working in formally organised education settings (where constructivist approaches are used as part of the teaching process), made practical sense.

To apply these understandings to methods used to collect data for this investigation (and the claimed parallels the methods have with focus group discussions); as noted, the activities or research methods selected for the qualitative data collection process came from a toolkit of classroom activities that would typically be used to diagnose (or assess) students' existing knowledge, but stop short of the type of activities a teacher would facilitate to provide opportunity for learners to deliberately transform (as in construct) new knowledge. The reason for selecting only these 'diagnostic' activities is this; if this informally constructed world of boys' video gaming could be conceptualised as a 'community of practice', it meant eliciting information from the participants about their video gaming world as it existed, as they understood it and as they had constructed it. It was important therefore, for the researcher to avoid asking questions that deliberately steered the participants' responses towards a predetermined outcome, such as the sort of data that could be made to fit the 'communities of practice' concept. In other words, it was necessary for the researcher to avoid asking participants the sorts of questions that would transform their knowledge to fit the researcher's agenda. This is in contrast to the sort of questions a researcher might ask in a formally organised environment where the adoption and application of a 'communities of practice' approach was planned and deliberate, and where the language and concepts of 'communities of practice' were already established among the members of the community.

However, it needs to be acknowledged that the very act of asking students *any* questions they have never been asked before transforms knowledge because the student has to make new connections between what they already know and what they are being asked to respond to. But to have a focused discussion, questions have to be asked. Consequently, some new learning is unavoidable. To keep any such new learning within boys' 'communities of practice' (be that video gaming or masculinities practice) gets to the very reason for the selection of activities used as the data collection method and that is, once the researcher had presented the groups with the various open-ended research questions (detailed in the following sections), boys had their own conversations to determine their own meaning of the questions and provide information they thought was valuable and meaningful to share, with no further prompts or manipulation from the researcher.

The age of the research sample

Some large scale international research projects (eg Rideout, et al, 1999) have shown that the proportion of teenage boys who play video games is highest among the younger age range of the teenage population. It is

primarily this piece of evidence that resulted in Year 9 boys being selected for this research. If the concept of 'communities of practice' could be shown to be a valid way to explore the world of boys' video gaming, it made sense to select an age group already identified as being likely to have high percentage of video gamers.

This age group of boys is also developmentally 'interesting' given the many changes they are experiencing in their lives. This year level of schooling typically coincides with the first year of 'being a teenager', and it is also the first year of secondary schooling for most boys in New Zealand, which means they are exposed to a much greater range of overt representations of masculinity than perhaps they have been during their childhood. This is due to a range of factors such as boys being taught by more male teachers at secondary school than at primary school; adolescent male (and female) peers at school are all in transition from childhood to adulthood, with the popularly recognised transition in identity development being an integral aspect of this transition (including an increasing awareness of their sexual selves and perceptions of gender connected with this); and that the increasing autonomy that coincides with adolescent development intersects with an increase in the diversity of opportunities for expressing masculinity such as through sporting, recreational, intellectual, social and creative experiences (eg see Steinberg, 1999).

Ethical considerations

Gaining direct (face-to-face) access to young people (under the age of 16 years) for the purpose of university research is strictly regulated by the University of Auckland Human Participants Ethic Committee (UoAHPEC). One of the most practical and ethically appropriate ways to gain access to a sample of boys in Year 9 (aged 13-14 years) for the purpose of conducting research is directly through schools. Consequently the researcher is dependent firstly on the school principal and (in the case of this research) the liaison teacher to give their signed approval for the research to be completed in the school with a selection of their students, and then for the students and their parents to give their signed consent.

The practical constraints presented by these essential ethical considerations means that any stated desire to sample a cross section of students is seldom achieved by a researcher with no formal working relationship with the school, because of the often unacceptable level of disruption sampling across a whole year group causes. To collect quality data, researchers accessing students through schools can find that it is more practical to negotiate access to an existing class of students who have established ways of working together, especially when the theoretical framework and consequent research methodology for the investigation are not dependent on a random selection of research participants. In the case of this research, the fact boys were in Year 9 and played video games was sufficient to be considered for selection.

The commitment of the researcher to honour the ethical responsibilities agreed in gaining approval from the UoAHPEC, such as minimising disruption to scheduled lessons, also meant that limitations were placed on the amount of time a researcher could gain access to a substantial number of students. This factor also contributed to the selection of the research methods.

UoAHPEC approval to conduct research in schools was granted separately for the Anonymous Survey detailed in the quantitative methods section (ref 2004/Q/026), and the activity group discussions detailed in the quantitative methods section (ref 2006/417). These separate applications for ethical approval were in response to the different UoAHPEC requirements for researchers conducting anonymous questionnaires and conducting interviews or discussions directly with the research participants.

Methods – overview

Given the age of the boys in the sample and the school setting was the point of access, selecting a combination of methods that were known to work, were practical to use, and provided ways to collect data relevant to the research questions, were all primary considerations for this project. In a situation where the boys had no personal investment in the research and that it was something they were simply 'invited' to help out with, it meant that it was unrealistic to ask them to sustain interest in one activity for long periods of time (such as an extended interview with the researcher). Similarly, filling out lengthy questionnaires was also considered unreasonable as such an exercise would be as much a test of boys' literacy skills as it was a survey determining what they knew about video gaming.

To this end, a short, anonymous survey was developed based on a range of ideas already present in the literature that could foreseeably have application to conceptualising video gaming as a 'community of practice' and as a 'community of masculinities practice'. It was intended this survey form a minor focus of the overall research project but still serve the important function of providing direction for the major focus - the qualitative data collection. Consequently, the main purpose of the survey was to identify possible themes that were worth pursuing in more detail through qualitative data collection methods, and to gain some baseline data with respect to boys' video gaming in New Zealand.

Mixed methods approach

The justification for mixed method approaches to research, that is, a combination of quantitative and qualitative methods, is well-established in the general research literature (eg Patton, 1990; Punch, 2005, Tashakkori & Teddlie, 2003, Creswell & Plano Clark, 2007) and particularly in the educational research literature (eg Johnson & Onwuegbuzie, 2004; Gall, Gall and Borg, 2007; Creswell, 2005). The eclectic and multi-disciplinary nature of Education means that researchers working in this field have commonly used a range of quantitative and

qualitative methods often in combination, to investigate a wide range of educationally related questions and problems.

Johnson & Onwuegbuzie (2004), and Johnson, Onwuegbuzie & Turner (2007) go so far as to propose mixed methods approaches as a third research paradigm for educational research and that such an approach sits on a continuum of thinking and theorising somewhere between the purist understandings within quantitative and qualitative research paradigms. These researchers define mixed methods research as 'the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study' (p17). As Johnson et al (2007) summarise, this mixed methods paradigm selects from across the spectrum of epistemological and methodological positions offered by quantitative and qualitative approaches to research, and in the interests of pragmatism, advises the educational researcher to find some workable middle ground and choose research methods that will allow them to best answer the research question.

Creswell & Plano Clark (2007) add to Johnson & Onwuegbuzie's (2004) stated position and make a case for viewing mixed methods research as a 'natural complement' (p14) to established qualitative and quantitative research and tend to view the qualitative versus quantitative debate as somewhat passé. In the selection of mixed methods approaches Creswell & Plano Clark (2007) challenge researchers to be clear about why a mixture of qualitative and quantitative methods match the research problem. Following these authors (p33-34), this investigation employs a mixed-method research approach because:

- A need exists for both quantitative and qualitative approaches. For this research project it was important to firstly establish with quantitative evidence that this age group of boys did indeed have a high proportion of video gamers, and to identify some of the broader trends of video gaming practice among this age group (such as what games they play, how long for and how often they play), as well as collect in depth evidence through quantitative methods of the knowledge of the participants to explore whether or not video gaming can be conceptualised as a 'community of practice'.
- A need exists to enhance the study with a second source of data where one form of data is insufficient in
 itself, (in this case the quantitative data) to identify the more salient themes that need to be examined in
 depth through qualitative methods.
- A need exists to explain the quantitative results. While quantitative data may indicate some possible and
 quite superficial ways the concept of 'communities of practice' may be applied to video gaming and video
 gaming as a 'community of masculinities practice', the lack of boys' own words among the data collected
 by quantitative methods does not provide the researcher with much evidence to explore the application of
 the concept or explain the findings in any detail.

As with any research paradigm, there are a range of strengths and weaknesses to be acknowledged and addressed in some way. The **strengths** of mixed methods research (based on Johnson & Onwuegbuzie, 2004) for this investigation included:

- The boys' words and ideas about their video gaming world collected by qualitative methods added meaning to the numbers that profile the level and nature of participation in video gaming, and numbers can be used to add precision to the boys' words and ideas.
- The strengths of the separate quantitative and qualitative paradigms could be drawn on, for quantitative methods; quantitative data tends to be more generalisable to other members of the population, the data is faster to collect and analyse even from a large group of people, and the research findings are relatively independent of the researcher; whereas qualitative data allows responses to be based on participants' own meaning and interpretation of the situation, such data is useful for describing complex phenomena in detail and in local contexts (that is, in context of the 'communities of practice' in which the boys operate), data are collected in naturalistic surroundings in this case their classroom using classroom type activities used by a community of learners, and the researcher can study the dynamics of the situation including the differences, rather than analysis that only shows quantifiable patterns trends and what things are the same.
- The ability to answer a range of inter-related research questions (about boys, video gaming and 'communities of practice') but not be bound by a single research method.
- The sequential nature of the data collection used in this project, means that the results of one method inform the next which can allow the strengths of one method to address weaknesses of another.
- The collection of combination of qualitative and quantitative data produces stronger evidence because it
 can be analysed in different ways and conclusions drawn though convergence and corroboration of
 findings from the different methods.
- The additional insights and understandings that might be missed when only one method is used.
- And that more complete knowledge may be collected which may improve generalisability.

There are also **weaknesses** of mixed methods approaches, although Johnson & Onwuegbuzie (2004) identify these as being more practical than philosophical in nature, for example they contend that:

The knowledge and skills of a single researcher to use qualitative and quantitiative methods appropriately and in combination may require multi-disciplinary teams, something a doctoral student carrying out their own research cannot readily overcome except to be as well informed and skilled as they can be, and draw on past professional experience and existing expertise. In the case of this investigation, the researcher is a trained teacher and following the claims to pragmatism in the introduction to this chapter, applies her skills as an educational practitioner, working in various educational communities (of practice), to a research environment (which is another 'community of practice' in itself). In other words, the methods

by which the qualitative and quantitative data were collected for research purposes were closely related to the professional practice of a classroom teacher.

- Mixed methods may take more time and therefore be more expensive.
- The relatively recent introduction to, and selective acceptance of mixed methods approaches, means these are still open to challenge by researchers favouring purist qualitative-only or quantitative-only approaches.

Quantitative method

Rationale

Extended access to the sample of Year 9 boys was limited by a range of practical and ethical constraints. In the context of this investigation, the use of quantitative methods provided opportunity to generate quickly a range of baseline data from a larger sample of boys. As indicated in the mixed-methods discussion, the purpose of the quantitative data, collected through an individually completed, pen and paper questionnaire, contributed to the overall project in two main ways. Firstly, it was important to determine that a high proportion of this age group were invested in video gaming. Secondly, the questionnaire sought to identify possible themes from which questions for the in depth discussions could be developed.

Through the researcher's own teaching experience, it was known that it was not practical to ask Year 9 students with a diverse range of literacy skills to fill out long and detailed written questionnaires. In any class, a teacher/researcher can expect boys to have a wide range of literacy skills, hence the level of reading and writing needed to be considered. Questionnaires that are quick to read and easy to respond to (eg requiring only the ticking of boxes or scales and with minimal writing), are more likely to be completed and require minimal input or help from the researcher administering the questionnaire. This type of data collection limits the questioning to asking closed questions that the researcher considers are important. However, as a relatively quick means of data collection, the trends and patterns revealed in the subsequent data analysis can identify themes that may be more fruitful to pursue in follow-up discussions with research participants. (Discussion based methods for data collection are useful where variable literacy skills among the participants are a consideration). Thus, the limitations imposed by asking only closed questions in such a questionnaire can be addressed by the qualitative data collection methods that follow, and which provide opportunity for the boys to express their ideas in their own words.

Development of instrument

Based on the video gaming literature analysed in Chapter 4, ideas were generated that could feasibly be used to explore video gaming as a 'community of practice' and video gaming in relation to 'communities of masculinities practice'. These ideas from existing video gaming literature included themes such as the solitary or social nature of video gaming and where boys played games, the type of games played and other gendered differences in video gaming, the amount of time spent playing, the type of technology used for gaming, and what boys like about video gaming. These ideas were shaped into a four-page questionnaire in consideration of the three main features of the 'community of practice' concept (that there is *mutual engagement* in a *joint enterprise*, where the

members of the community have a *shared repertoire* of knowledge and skills) *but with no overt reference to these* aspects of the concept.

The questionnaire

- To provide some basic demographic data with which to describe the sample, the questionnaire (see Appendix A) firstly asked boys to identify their current age and which ethnic group they mostly identified with.
- To describe themselves as males, the boys were asked to select up to five words from a word bank of 21 descriptors, with the option to use their own words in addition to, or instead of those supplied.

These descriptors were derived in part from a popularly used classroom activity conducted with Year 9 boys prior to the research. The activity was conducted by a health education teacher known to the researcher, and who gave permission to access her class for the later qualitative data collection process. The activity required students to identify various ways they would describe themselves (from the teaching resource *The Curriculum in Action: Friendships*, Ministry of Education, 1999). Reflecting the relative proportions of descriptors generated from the classroom activity, the list contains more descriptors likely to be considered for their positive implications (such as friendly, out-going, athletic, handsome, or intelligent), than descriptors that tend to have more negative connotations (such as loner, reserved, or geek). A mixture of mostly positive and some negative terms was provided to indicate to the boys completing the questionnaire they were not limited to only positive descriptions of themselves. The list of the descriptors generated by the boys in the class was considered and finalised in relation to the practices of masculinity described among the research literature in Chapter 5.

The questionnaire then asked if boys played video games and if they did, to complete the remainder of the questionnaire.

- To identify trends among the types of gaming technology used, the boys were asked which technologies they used for video game playing and how often they used these technologies.
- Boys were asked to identify if they played on-line (internet) games and if so, what game they most commonly play at present.
- To identify the most popular game genres, boys were asked to name up to three games they most liked to currently play.
- To indentify reasons why they liked to play video games, boys were asked to select as many items off a 14-item list as they thought applied to them, and with the option to identify and add other reasons why they liked video games. These items were derived from reading a range of literature about why people play video games (such as Prensky, 2001).

- To identify trends related to where games were played, and who they are played with, boys were asked a
 series of questions about their shared and solitary video gaming practices, in relation to the type of
 gaming technology (personal computer or gaming platform) they most commonly used.
- To identify the amount of time invested in video gaming, boys were asked to identify how many days each week they would usually play video games, and on those days, how long they played.
- To further indicate possible trends in the social or solitary nature of video gaming, boys were asked to identify where their gaming technology was kept at home.

Administering the data collection process

Pilot testing

After receiving approval from the UoAHPEC (ref 2004/Q/026), a sample of 45 Year 9 boys in one school completed the questionnaire to determine the appropriateness of the question wording (that is, could the boys understand instructions and what the questions were asking of them), and therefore, any need to clarify the wording of the questions and instructions, the clarity of the layout, and whether the time taken to complete the questionnaire fell within the intended 15 minutes. As all boys who identified as being video game players were able to complete the questionnaire with no assistance within the intended time frame, and that no additional guidance for improvements was offered by the boys, the questionnaire was used as it was originally developed.

Access

At the invitation of the researcher, principals and liaison teachers from five secondary schools (covering a diverse range of school characteristics) gave their consent for the anonymous questionnaire to be completed by a selection of their Year 9 students. The diversity of participating schools considered city-wide geographic distribution, decile rating (an indicator of the socio-economic status of the wider school community used by the Ministry of Education for the equitable distribution of funding to schools), cultural diversity, co-educational and single-sex boys' schools, independent and state funded schools, from across Auckland, the largest city in New Zealand. No schools were omitted from the research once consent had been granted. In negotiation with the liaison teacher at each school, the boys were accessed through their tutor groups or form classes, or their Health and Physical Education class for the administering of the Anonymous Questionnaire.

The quantitative data collection sample

A total of 284 Year 9 boys from five suburban secondary schools (representing a range of high and low decile, state and independent (private), and culturally diverse communities) completed the anonymous questionnaire in a negotiated 15 minute time slot during a scheduled lesson or form class time.

Administering the questionnaire

The researcher administered all questionnaires. After explaining to the boys the purpose of the research and the ethical requirements around anonymity and confidentiality, and how the research would be used, the boys were invited to complete the questionnaire. It was stated that if they did not choose to take part in the study, they could indicate this by returning the questionnaire unmarked. However, one hundred percent of the boys returned the completed questionnaire.

Analysis of Quantitative data

The data were analysed using SPSS version 15. Analysis of the quantitative data included descriptive statistics to profile the sample and describe general features of the practice of video gaming, and boys playing video games; Pearson's *r* analyses were used to determine if observed relationships among the data were statistical correlated, and additionally, chi-squared tests were used to determine the statistical significance of these observed relationships in order to explain aspects of boys and video gaming as 'communities of practice'.

Qualitative methods

Rationale

The purpose of adding qualitative data collecting methods to the quantitative method previously explained was to create opportunities for boys to tell the researcher about their video gaming world in their own words. Having established some of the features of boys' video gaming that could be explored in more depth, particularly in ways that would permit the researcher to understand this world as a community of practice, the qualitative methods sought to 'understand and capture the points of view of other people without pre-determining those points of view through prior selection of questionnaire categories' (Patton, 1990, p24). The general principles of Patton's work on qualitative evaluation research, especially his claims to the importance of pragmatism when approaching this type of social research, were used as a guideline for this investigation because the research questions are, in effect, evaluating the usefulness of the concept of 'communities of practice' for exploring the world of boys and boys' video gaming (whereas Patton's work is more about a evaluating the likes of programme effectiveness).

The qualitative data collection sample

Access to the sample was gained by re-inviting the five schools who participated in the survey to be involved with the qualitative data collection process. A total of 42 boys aged 13-14 years (M = 13.43) participated in the lessons. It was understood by the researcher, in communication with the schools who had taken part in the original survey, that not all of them would be able to commit time for such research purposes. Consequently, the three school principals and accompanying liaison teachers who gave their consent, formed the sample of schools for this phase of the research. Groups of 9-14 boys from each of these three co-educational (mixed-sex) schools took part in the 'lessons' from which the qualitative data was collected (one a private college, one a high decile state school with a significant Chinese-Asian population, and the third a low decile state school where the majority of the school population were Pacific Nations students). Once signed consent had been given by the school principal, the liaison teacher, the boys' parents and the boys themselves, access to the boys was negotiated with each school. A combination of lesson time, lunch time and/or form time was used to collect the data in a classroom setting.

The qualitative methods - overview

To collect the qualitative data the researcher drew upon her teaching skills to conduct a 'lesson' that blended elements of written questionnaires that ask open-ended questions, with group discussions. In the hands of a teacher, activities that require students to variously read discussion questions, discuss the topic at hand with their peers to formulate an answer to the questions presented, write a combination of individual and group responses to the questions, and then report these responses back to the group, parallels the sort of work a researcher might

do when conducting focus group discussions. UoAHPEC approval (ref 2006/417) was granted for these group discussions.

Although the methods chosen do not fully adhere to a social researcher's use of the focus group discussion method to gather data, for a non-teacher, focus group discussions (after Krueger, 1994) are a useful way to conceptualise the process that was undertaken. The similarity (and differences) of this 'teaching and learning' process with the process of conducting a focus group discussion are discussed in the following section. In a sense, the teaching and learning activities undertaken can be viewed as a research method analogous to that of the focus group.

Discussion and activity groups – the parallels with focus groups

The qualitative data were collected from a series of group discussion activities (in ways that parallel the facilitation of focus group discussions using structured and semi-structured interview schedules). The role of the researcher in a focus group shifts from that of interviewer to that of facilitator (Punch, 2005) in a similar way that the constructivist teacher facilitates student learning rather than a traditional teacher who tends to be the director of student learning.

As noted by Krueger (1994), focus groups were initially developed by market researchers to find out what consumers thought about products and services. As a research method, they have other applications in social research. Focus groups can be particularly useful when adult researchers are working with young people as the group process provides a certain amount of support and safety for the participants, and avoids placing individuals in potentially challenging and threatening one-to-one interview situations.

According to Krueger (1994) focus groups typically have six characteristics: they have people (Year 9 boys), assembled as a series of groups (larger groups of 9-14 boys who then worked as smaller groups of 3-5 boys), they possess particular characteristics (Year 9 boys who play video games), who provide the researcher with data (what they know about the world of video gaming), and the activity of the group is a focused discussion (the focus being video games).

Elaborating on these characteristics, Krueger (1994) identifies a number of features of focus groups that separate them from other interviewing type methods for data collection:

• Focus groups must be small enough for everyone to have their say. The methods discussed in the following sections describe how some additional steps were added to the focus group discussion process to ensure this happened.

- There needs to be a series of focus groups to identify patterns and trends in participant responses and to ensure that anomalous data that has been influenced by factors operating internally or externally to any one group can be identified as such (like dominant group members, or community events concurrent with but beyond the activities of the group). For this research, the three larger groups (one per school) were each reconstituted as several smaller groups for each part of the data collection process.
- Focus groups should be reasonably homogenous but unfamiliar to each other. This is one situation where this investigation departs from Krueger's guidelines. While the groups were very homogenous (all Year 9 boys who play video games), working with young teenagers in their own school environment meant the criterion of unfamiliarity was not practical to achieve.
- Focus groups are the data collection procedure. The very discussion activities the groups were involved in yields the data the researcher will analyse. There is no requirement to reach consensus in a focus group such as would be expected of a group (or a team) working together to produce a pre-determined outcome, and the focus is on the thoughts and feelings of the members of the group, not the researcher's thoughts (as in opinions) and feelings about the matter.
- Focus groups have a focused discussion. The topics for discussion are predetermined by the researcher, but presented in a way that was understandable to the participants. However, whereas a focus group interviewer would typically guide the whole discussion, in the case of this research project, once each group of questions had been presented to the activity groups, the researcher stepped back from the discussion. This was done to allow the boys to make their own meaning of the questions and decide what was important to tell the researcher, rather than the researcher prompting the boys to give answers she already had understanding of and putting things in her words and on her terms in an effort to make herself understood. The discussions that occurred as an integral part of the interactions between the research participants generated that data to be analysed. In other words, the researcher became the facilitator of the data collection process, not the discussions as such. The reasons for this addition to the focus group approach are connected with the conceptual framework for the investigation.

These group discussions or 'lessons' were, in effect, a series of classroom teaching and learning activities typically employed in the constructivist classroom during the introductory stages of a new unit of learning. These discussion-based activities are ones that are typically used when the teacher is 'diagnosing' existing student knowledge, in preparation for planning lessons that would then seek to build on this existing knowledge to achieve a range of stated learning intentions. The reason for conducting the groups this way was firstly practical; the researcher needed to engage and sustain boy's attention for up to two hours and a series of shorter and different activities achieves this more readily than one long one; it minimised disruption to planned classroom lessons to have a larger group of approximately 15 boys working together, where smaller groups of 3-5 boys could be reconstituted for each of the different discussion activities; it kept the researcher's input to a minimum so that

once the initial questions had been asked and the discussion was underway, the very nature of the activity meant the boys facilitated their own discussion, using their words, their meanings and their ideas.

The qualitative methods – the 'lesson'

One of the practical benefits of these data collection methods was that for students, these activities or methods are familiar ways of working in school environments, in contrast to a formal interview with an adult which is far less familiar. These techniques also invite and require contribution from all participants, on all questions discussed by the group, whereas the usual way of conducting focus group interviews can mean that the discussion is dominated by certain members (even with skilled facilitation) and time constraints may mean that not everyone has their say on all issues.

The design of the questions for these three activities (the group discussions) was influenced by the findings from the anonymous questionnaire and sought to explore in more detail aspects of video gaming that could explain it as a 'community of practice', and how video gaming could also be seen as in relation to 'communities of masculinities practice'.

Rather than allocate (for example) all of the gender-related questions to one method and all of the video gaming community related questions to another method, it was decided to spread these questions across each of the methods on the understanding that each method had the potential for drawing on different strengths of the groups and in the ways boys work together and individually.

These questions also needed to resist using language and ideas closely aligned with the concept of 'communities of practice' on the understanding that if the informally constructed world of video gaming can be conceptualised as a 'community of practice' (and how video gaming was related to 'communities of masculinities practice'), then such evidence needed to emerge from a range of data and a diversity of conversations about video gaming as a whole practice, and not from targeted and specifically worded questions that would largely predetermine participants' answers and tie their responses to particular features of the concept.

Each lesson took place in a classroom provided by the school and lasted one and a half to two hours. Each lesson was conducted solely by the researcher with no other adults (teachers) present. At the beginning of each 'lesson' the researcher introduced herself, asked the boys to introduce themselves by their first name; the data collection process was explained and the purpose of the research was reconfirmed using the Participant Information Sheet and what was previously consented to; safety guidelines for the group around sharing, the right to pass and confidentiality were also established. The activities/methods were conducted in the order they are documented following, with the instructions for each given with the start of each activity.

Each activity generated written data from the boys which was copied verbatim into a format more manageable for analysis. The specific ways the data for analysis were collected from each activity is documented in relation to the method that produced the data. The nature of these group activities means that the collected data is not always attributable to any one participant. The purpose of diagnostic activities like these, which determine existing knowledge of the group, means that the data is treated more as collectively held knowledge, not what an individual may know or have contributed. (When viewed as a teaching process, evidence of individual learning tends to be gathered at subsequent points in the process once this existing knowledge has been transformed.) Consequently, when the qualitative data is reported (as documented in Chapter 8), it is not in relation to the individual boy who provided the evidence, but in relation to the process that generated the data.

Method 1: Postbox activity - What is good about video games?

Postbox (after Tasker, 1994) is an activity that firstly requires all group participants to anonymously answer a series of (mostly) open ended questions supplied by the teacher/researcher (see following).

- The answers to the questions were written on different, numbered pieces of paper. Once students had
 answered all of the questions, their answers were 'posted' in a series of boxes numbered to coincide with
 the questions.
- The larger group was then divided into as many groups as there were questions and each group was allocated a set of answers which they were then required to summarise (for research purposes, these were the discussion groups for the activity). An understanding of summarising was developed with the participants, to the effect that they needed to identify main themes among the answers and the frequency of certain responses, and that they would want to see all answers had been considered by the other groups doing the summarising, but it was unrealistic to expect everyone's words to appear as they wrote them. The focused discussion in this case was around the written responses from the larger group with each focus group deciding what and how to summarise everyone's responses.
- Each group was required to present their summary on a large sheet of paper (the way this was done was
 up to the group to decide) and the findings were reported back to the larger group. The
 teacher/researcher at this point asked questions for clarification of meaning.

The original anonymously written answers, as well as the group summaries, were used as data for analysis.

This method had the benefit of firstly establishing video gaming as the context for the focused discussion. Secondly, as the beginning activity, it invited the boys to individually and privately identify some of their own thoughts and ideas about video gaming, before they were asked share their ideas in a verbal discussion. A postbox activity can be a useful way to start discussions with students as it allows for the sharing of ideas from the whole group without the 'owner' of the information being identified. It also 'diagnoses' what students know

individually, before they start discussing ideas and deciding what is important knowledge to share, as these decisions about what is 'important' knowledge may change once they hear what their peers are contributing to the discussion.

The questions (formatted and copied onto pieces of paper and provided for each participant) used for the postbox activity were:

- 1a) Name ONE type of video game you MOSTLY like to play at the moment. (eg action, adventure, roleplaying, sports, puzzle, music, racing, simulation etc)
- 1b) List three reasons why you like to spend time playing this type of video game. (*What do you 'get' from them?* Think about things like competition, challenge, learning new things, winning, pleasure, something to do, excitement, and so on)
- 2a) How do you think some boys get to be really good at playing video games?
- 2b) Do you think there is a difference between the sort of boy who plays video games just for fun and entertainment and the sort of boy who is into more serious video gaming?
- 2c) If YES, how do you think 'serious' video gamers are different to less serious video gamers?
- 3. Where do you get MOST of your games from? eg buy, download, play online, borrow from and share with friends, copy, other
- 3a) Most common place I get my games from:
- 3b) Other places I sometimes get games from:
- 3c) If you buy games (from a shop or online) who USUALLY pays for the games? eq you, parent, someone else
- 4a) When you're with your friends, do you sometimes talk about video games?
- 4b) If yes, what sorts of things do you talk about? give up to three examples.
- 5a) What are two things you like about playing video games by yourself?
 What are two things you like about playing video games you play with other people (in person or online)?
- 6a) Is playing video games the MAIN thing you do for fun and pleasure?

 If YES, why do you prefer video games to anything else that you could do for fun or pleasure?

 If NO, name or describe the other things do you do for fun and pleasure.

Method 2: Pass-the-paper activity - Other perceptions of video gaming

This is a brainstorming activity used to collect ideas based around a question or questions provided by the teacher/researcher. Each group answering a question is a discussion group.

- The larger group was divided into four smaller groups. Each group was provided with one of the discussion questions written on a large sheet of paper. The members of the group were provided with pens. Each group had a few minutes to read the question, discuss possible answers and record ideas they came up with on the paper. There was no need to reach consensus of opinion. Once each group had exhausted their ideas about the first question, the sheets of questions and answers are 'passed' onto the next group.
- The next group read the question and answers previously provided. The group could endorse what had been previously written by ticking any existing comments and they could add new ideas of their own.
- This process continued until all groups had responded to all questions.

In effect, each group 'sees' the discussion of all of the previous groups in relation to each question. This has the benefit of engaging all participants in the discussion and there is opportunity for participants to repeat important ideas by endorsing those previously stated; the researcher can leave the activity groups to identify what they consider to be the meaning of the question and what they decide is important information for answering the question, instead of the teacher/researcher directing the questioning beyond the initial starter question.

The resulting data collected for analysis is a large sheet of paper covered in the boys' brainstormed answers to each of the questions.

The questions for this part of the data collection process were:

Question 1: As you probably know, adults are concerned about the amount of violence in video games, the way male characters fight to win and the way they behave towards female characters. What have you got to say about that?

Question 2: Playing video games are (or have been) considered more for geeks and nerds yet so many boys play computer games. What have you got to say about that? How do you feel and what can you tell me about this stereotype?

Question 3: Studies show girls play video games but they're usually different games to boys and they don't usually play for as often or for such long periods of time. Do you think girls' video gaming is actually different to boys'? Have you got any ideas why you think girls' video gaming is different to boys' video gaming?

Question 4: What [if anything] do you think video games 'teach' you about being male? Do you think you actually use these ideas in your everyday life? Why or why not?

Method 3: Small group discussion activity - Thinking about particular type of games

For this third and final data collection activity, the boys were asked to self-select a partner or a group of three. It specifically needed to be a pairing of two (or grouping of three) boys who liked playing, and had experience of playing the same game (although it did not have to be their favourite game). Each pair or group of boys was given the following questions on a formatted 'questionnaire' sheet with the instruction they needed to discuss and record their answers to the questions.

The data collected by the researcher were the 'questionnaire' sheet that had been discussed and filled in by the boys. This pairing and discussion of questions allowed the boys to negotiate their own meaning of the questions and respond based on what they knew and understood and thought was valuable to share.

- a) Thinking about a game you played recently:
 - What is the name of the game?
 - If someone (*like me the teacher/researcher*) knew nothing about the details of this game, how would you explain to me what it is all about?
 - If I was to play this game, how would you recommend I play it to gain more points or to win?
- b) Thinking about the type of person or the type of character you play in this game:
 - What type of person or character do you take the part of when playing this game?
 - If this is the type of game where you get to choose which character you will be, what sorts of things do you consider when you choose this type of character? Think about why you choose certain characteristics over others type of character, strength, intelligence, skills, powers, sex (as in did you choose a male or female character), appearance, etc
 - Overall, what do you think (ideas, feelings, opinions) about the character you take the part of in this game and the way (s)he was able to respond to situations in the game? Was (s)he a good character to play? Why or why not?
 - Have you or would you ever consider playing a female character in this or another game? Why/why not?
- c) Thinking about what you learn from video games in general
 - What do you think video games teach you? Think about the things you use in real life that you may have
 learned about playing video games either playing with other people, things you learned about yourself –
 what you're good at, or something from the games themselves
 - Are boys your age into the 'business' side of video gaming? eg people who play games to build up

characters to high level, or accumulate gold or other commodities, that are then sold for real money on the internet.

What comments do you have about this aspect of video gaming?

4. Closing activity

For the purpose of describing the sample the boys were supplied with a formatted page which asked their current age and which ethnic group they mostly identified with.

Data recording

The processes used in the data collection methods meant that each of the activity groups documented, in written form, their own discussion. All of this material was copied verbatim by the researcher into a consistent format suitable for analysis.

Analysis of the qualitative data

Analytic induction

Some qualitative researchers use analytic induction to analyse data (Gall, Gall & Borg, 2007). Analytic induction allows the social researcher to 'search for regularities in the social world' (Punch, 2005, p196), or to put it in Patton's terms, analytic induction means that the 'patterns, themes and categories of analysis come from the data; they emerge out of the data rather than being imposed on them prior to data collection and analysis' (Patton, 1990, p390). Patton identifies two ways of representing the patterns that emerge out of the data. One he calls indigenous concepts that come from the very data (the words and language) provided by the research participants, and sensitising concepts that the researcher brings from their understanding of the academic literature and which provide the researcher with a point of reference and give some direction to the analysis, so that the original research questions can be addressed. In other words, the researcher, now working as analyst, has to make meaning of the data the research participants communicated as being their reality, in relation to the stated purposes of the investigation.

A general inductive approach

Procedures for (inductively) analysing qualitative data have been developed and documented in conjunction with a range of specific theoretical approaches and traditions, such as grounded theory (Strauss and Corbin, 1998) and some approaches to discourse analysis (eg Gee, 2005b). However, a lot of social research does not rigidly align with the theoretical foundations of the analytic procedures associated with these traditions, but the practical techniques for data analysis associated with each tradition nonetheless remain useful. Thomas (2006) notes, that in actual fact, many qualitative social science studies adopt a generalised inductive approach which borrow

techniques from a range of traditions, without the researcher/analyst having to accommodate all of the terminology and philosophical underpinnings of the original research tradition.

Thomas (2006) builds on Miles and Huberman (1994) much quoted tasks for qualitative analysis of data reduction, data display, and conclusion drawing, to develop a set of procedures he calls a 'general inductive approach'. These general inductive procedures are useful for this investigation because they allow *for 'themes or categories most relevant to [the] research objectives [to be] identified'* (Thomas 2006, p241). From the outset of this investigation it was signalled that the 'communities of practice' concept was integral to the research objectives, hence the meanings evident in the data would be used to evaluate the usefulness of the concept for its application to the world of boys and video gaming. Although data analysis using a general inductive approach is influenced by the research objectives and reports the most important themes in relation to the objectives, the findings must (still) arise from the interpretations of the raw data, and not be based on the researcher's prior expectations or made to 'fit' a model or concept.

This inductive approach, to interpret meaning from the raw data, is much the same approach used in the generation of grounded theory. However, in contrast to a purist grounded theory approach, general inductive analysis does not develop a theory emerging only from the themes or categories in the data, because a general inductive analysis provides the analyst with opportunity to link this data with the stated evaluation or research objectives, which for this investigation means the 'communities of practice' concept. Using a grounded theory approach, if (for example) no evidence emerged to explain boys' video gaming as a 'community of practice', then the concept would not be considered in the writing up of the final report, whereas general inductive analysis provides opportunity for the analyst to connect the findings from the data analysis with the evaluation or research objectives. Similarly, a purist approach to discourse analysis, one version of which focuses analysis on the very meanings of language in context of the situation in which it is used, does not provide scope for the type of analysis needed to evaluate the 'communities of practice' concept because it does not consider the social processes that determine the production of language meaning and use.

The general inductive analysis coding process (after Thomas, 2006)

- After transcribing and formatting all of the qualitative data into a common format, inductive coding begins
 with repeated close reading of the text to consider the many possible meanings inherent in the text.
- The pieces of text that contain meaningful statements are identified and a relevant label or code is assigned to each grouping or *category* of data where the statements appear to have similar meaning.
 During inductive coding, categories may be created from actual phrases or meanings from specific pieces of text.

- As more and more pieces of text are assigned to each category, a preliminary description of the meaning
 of a category is developed and a memo written to note the analyst's ideas about any associations, links
 and implications they can see emerging from the data as it is categorised.
- Concurrent with previous memoing, the analyst may also be linking categories with each other to show various relationships across categories, such as categories that appear to be linked as a web or a network of ideas, or if a hierarchy of categories, or perhaps a causal sequence appears to be emerging among the categories.

Categorising

Creating categories is a vital part of any inductive analysis. Common to all inductive approaches is the notion that there are different levels of coding, accorded different terminology by different traditions. Continuing to following Thomas (2006), *upper-level coding* represents the more general categories – this coding is more likely to be generated from the evaluation or research objectives. *Lower-level* (or in vivo) coding identifies more specific categories that result from multiple readings of the raw data. It is understood from the guidelines that underpin any tradition of qualitative coding, that one piece of text may be coded into more than one category, and some text may not be assigned to any category because it is not relevant to the evaluation objectives.

Thomas recommends that the outcome of this process is to develop some three to eight major themes that the analyst considers best capture the key themes in the raw data, and are the most important themes in light of the evaluation or research objectives. This process assumes the researcher/analyst comes from a point of knowing, or an informed position about the very nature of the research, but has remained impartial enough so as not to manipulate the data to fit a predetermined outcome.

Coding the data

Central to the investigation was an evaluation of the usefulness of the concept 'communities of practice' in context of boys and video gaming which meant that the analysis could not afford to deviate far from the basic principles that form this concept. As discussed in relation to the conceptual framework in Chapter 2 and elaborated in the literature analysed in Chapters 3-5, taken to its popularly cited foundation principles, communities of practice is about people being *mutually engaged* in a *joint enterprise* using a *shared repertoire* of resources. Therefore, the analysis of the data needed to consider each of these principles to determine if the evidence supported the application of the 'communities of practice' concept to the world of boys and video gaming.

Consequently, the process of coding the data and selection of the final categories for reporting drew heavily on these *sensitising concepts* (from Patton, 1990) or the *upper-level coding* (following Thomas 2006) that the

researcher brings from their understanding of the academic literature, as this provides the researcher with a point of reference and gives some direction to the analysis.

However, to decide which aspects of the data provided evidence for each of these principles required the researcher to make meaning of the comments the research participants communicated as being their reality. These *indigenous concepts* (from Patton, 1990) that come from the very data (the words and language) provided by the research participants, or in other words, the *lower-level* or in vivo coding (from Thomas 2006) identified more specific categories.

As the analysis for the first and second categories (reported in Chapter 8) required unpacking the language used by teenage boys, the following guidelines were used to determine meaning, based on Wenger's (1998) explanation of the 'communities of practice' concept and the principles on which it is founded, in conjunction with commonly understood meanings of the words.

Language meaning used as the basis for coding and categorising

The meaning of the words 'community' and 'practice':

- Community in relation to the principles of the 'communities of practice' concept implies a sense of something *mutual*, *joint* and *shared*.
- **Practice** in relation to the principles of the 'communities of practice' concept implies something done or *engaged* in, an *enterprise* that utilises a common *repertoire* of resources.

The meaning of the words specific to the principles of 'communities of practice': *mutual engagement* in a *joint enterprise*, using a *shared repertoire* of resources were interpreted as follows:

Mutual engagement

- Mutual implies something reciprocated, held communally something in common that is done, felt or expressed by people towards or at least with regard to others
- Engagement implies a commitment to something and perhaps something pre-arranged or purposefully organised (like a 'social engagement', or an engagement to marry)
- So **mutual engagement** according to Wenger (1998) is about *engaged diversity, doing things together,* relationships, social complexity, community, maintenance (p73)

Joint enterprise

Joint implies between two or more, something combined or cooperative

- Enterprise implies endeavour but with some sense of organisation or purpose, taking a risk with a new venture, a planned response or action
- So a **joint enterprise** according to Wenger (1998) is about *negotiated enterprise*, *mutual accountability*, *interpretations*, *rhythms*, *local response* (p73)

Shared repertoire

- Shared implies to take equal responsibility for something along with others
- Repertoire implies skills, techniques, abilities, a knowing about, physical resources like tools and equipment to use in support of these
- So a **shared repertoire** according to Wenger (1998) is about *stories, artefacts, tools, styles, actions, discourses, historical events, concepts* (p73)

Credibility and trustworthiness of the qualitative data

The very nature of qualitative research methods means that the researcher is not independent of, or invisible to the research participants. While the same may be said of quantitative research, the administering of closed-question, anonymous questionnaires generally distance the researcher from the research participants in ways that are not achieved when a researcher is interviewing or conducting discussions with the research participants. That is, the researcher is an integral part of the data collection process. As this 'researcher dependence' is a given feature of qualitative research it is not a case for trying to eliminate the perceived 'problems' of this assumed subjectivity in an attempt to achieve objectivity in the research process, but to adopt a stance of neutrality (Patton, 1990). This means that the researcher does not undertake an investigation where they knowingly have biased agenda or seek to prove a pre-determined point or theory. As neutrality can be hard to achieve and hard to defend when challenged by others external to the research process, the researcher needs to be able to reflect on, and report potential sources of bias.

A number of strategies (after Patton, 1994, p56) exist for the qualitative researcher to draw upon to ensure the credibility of an investigation. Already considered and discussed previously in this methodology chapter are:

- Multiple data sources data collected from each of the quantitative and qualitative research methods was repeated across several groups of boys
- Systematic data collection as described in the quantitative and qualitative methods sections whereby the same process was undertaken by the same researcher across all participant groups
- Training for the role of investigator (as described in the section on the researcher as a teacher)

The two remaining strategies that enhance research credibility and trustworthiness of qualitative data to be discussed in the remaining section of this chapter are:

- The external reviewing of the analysed data or inter-rater reliability.
- Triangulation

Inter-rater reliability

To add credibility or trustworthiness to the analyst's selection of categories that will finally be reported, the analyst must utilise some form of consistency check or inter-rater reliability check. In context of this investigation, the independent study required of a doctoral student meant that a 'check on the clarity of categories' (Thomas, 2006, p244) was the most appropriate way to achieve this. This type of checking requires that another person (who has the skills to act as a coder) is given both the research/evaluation objectives, the categories developed by the analyst and the descriptions of these categories. This second coder is then provided with samples of the raw text and asked to assign the text to a category (or categories). For research credibility, there needs to be a high level of consistency between the first and second coders' assignment of text to categories.

There was a high level of agreement between the analyst and the second coder (an educated adult with a knowledge of video games) who concurred with the analyst on all but seven of the fifty pieces of raw text selected for this checking process. It became apparent that the points of difference were all related to the understanding of the masculinities concept that was integral to the meaning of two of the categories (and the sub-categories with these), in particular, the categories related to hegemonic and less-hegemonic masculinity. The differences were resolved by the researcher (as analyst) explaining more of the conceptual meaning of the masculinities concept to the checker, effectively adding more detail to the descriptions of the categories. With this additional information, the second coder was able to concur with the analyst on the categorising of all items.

Triangulation

Triangulation is a way to coordinate and cross check between different aspects of the research process to be able to analyse trends and patterns and draw confident and well-substantiated conclusions from the data. As Schostak (2002) puts it, triangulation is about 'mapping the objective field of study from a variety of viewpoints and methods in order to gain information that enables judgments about 'truth', 'validity' and the status of the phenomenon in terms of its 'reality. (p78). Patton (1990) identifies triangulation as one important way to strengthen a study design and the more common way to achieve this in social research is by using several types of data and methods, including qualitative and quantitative methods (as discussed in the mixed methods section of this chapter). However, there are some more specific ways to consider how this type of cross checking for credibility can be achieved. Of the different types of triangulation proposed by Denzin (1978) methodological triangulation (using different methods on the same object of the investigation – such as qualitative and quantitative methods) and data triangulation (using different sets of data – such as the data from different methods), and to some degree space

triangulation (cross-cultural techniques such as sampling from across schools), are the most applicable for this investigation.

The logistics and time constraints of doctoral research programmes mean that *time triangulation* (longitudinal designs where the data is collected over several years) is not achievable, and *investigator triangulation* (where more than one researcher is involved in the data collection process) can be in conflict with the demands of university regulations related to the expectations of doctoral students conducting their own study. However, one place the researcher can use another investigator to cross check their work is in the analysis of the data.

Summary

Chapter six has detailed the selection of, and access to, the research sample in consideration of the ethical and practical constraints confronting a researcher seeking to engage young teenage boys in a research project. The role of the researcher as a teacher has been discussed to justify the selection and administering of the qualitative data collection methods. The reasons for a mixed methods approach have been explained, and details of these methods, both the process of conducting them and the reasons for their selection, have been addressed. Lastly, the type of data analyses carried out to answer the research questions have been described. Integral to this discussion are a range of considerations and processes that sought to enhance the credibility of this research.

Introduction

The results from the quantitative data collection process sought to determine recurrent and significant features of the world of boys' video gaming that could be incorporated into an explanation of video gaming as a 'community of practice'. Most of the quantitative results are reported only as descriptive statistics as the survey was not intended to be an end in itself, but to provide direction for the more detailed qualitative research methods, the results of which are detailed in Chapter 8. To this end, numbers and percentages are reported and where further analyses were required, chi squared analyses have been conducted.

The results have been organised into three categories to indicate the combinations of questions that related separately to video gaming and being a boy, and which were subsequently used for developing the qualitative research methods.

- Category (1) contains a description of the sample surveyed to illustrate the ethnic and cultural diversity (inclusive of socio-economic status) of the boys surveyed.
- Category (2) contains data relating to the practice of video gaming which subsequently informed the development of the qualitative research methods and the questions that could potentially explore video gaming as a 'community of practice'.
- Category (3) contains data relating to being male which subsequently informed the development of the qualitative research methods and the questions that could potentially explore video gaming in relation to 'communities of masculinities practice'.

Category (1) Describing the research sample

All 284 boys were in Year 9 which is the first year of secondary school education in New Zealand. Boys were aged 13 or 14 years (M = 13.7, SD = 0.49). The boys identified themselves as belonging to the ethnic groups listed in Table 1.

Table 1. Ethnic group mostly identified with – quantitative sample

Ethnicities	As report	ed by boys	As grouped for analysis		
	Frequencies				
	n	%	n	%	
New Zealand Pakeha or European	98	34.5	98	34.5	
New Zealand Maori	25	8.8	87	30.6	
Pacific Island	62	21.8	0.		
Asian	65	22.9	91	33.1	
Indian	26	9.2	71	33.1	
Middle Eastern	6	2.1	8	2.8	
African	2	0. 7	O	2.0	

This ethnic diversity is a reflection of the multicultural nature of many New Zealand classrooms, especially in schools based in the larger cities.

A total of five schools participated in the survey. The socio-economic status of the school communities in which the boys attended school (as indicated by school decile rating) is summarised in Table 2. The uneven distribution of schools based on decile rating reflects those schools (principals and teachers) who gave the researcher permission to access boys in the school.

Table 2. Number of boys participating in the survey in relation to socio-economic status of school community as indicated by school decile rating

School decile*	Numbers and percer	mbers and percentages	
	n	%	
Low decile	65	22.9	
Mid decile	56	19.7	
High decile	163	57.4	

^{*} Decile rating is the measure by which the Ministry of Education equitably allocates funding to schools. Low decile schools are those schools in communities where households have lower than average access to economic resources, and conversely, high decile schools are those in communities where households have higher than average access to economic resources.

Category (2) Video gaming practice

Boys who play video games

Of the 284 Year 9 boys surveyed, 280 boys (98.6%) reported that they played video games.

Types of gaming technology (resources) used

To determine the most popular type of technology (or resources) used for video gaming, boys were asked which technologies they had ever used for gaming. Most boys reported using computer (87.5%) and console (89.6%) technologies for playing video games (Table 3).

Table 3. Types of gaming technology used

Type of gaming technology*	Numbers and percentages of boys who reported using		
	this technology		
	n	(%)	
Computer	245	87.5	
Console	251	89.6	
Arcade games	162	57.9	
Hand held games	198	70.7	

^{*}To differentiate these technologies, a computer is a personal computer, a gaming console (or gaming platform) is a piece of hardware like an X box or Playstation, arcade games are those found in gaming parlours where the player pays money to use the gaming machine, and hand held games are those devices such as personal (or portable) media players (PMPs).

The frequency of use of different gaming technologies in a typical week

To determine the frequency of the use of gaming technologies, in a typical week, boys mostly reported that they used these technologies 'a few days each week' (computer gaming technologies 41.1%, console gaming technologies 36.8%) as shown in Table 4. The least popular and least used technology was arcade games where the player needs to be away from home to play. This finding is the reason for the focus on only computer and console gaming for the remainder of the investigation.

Table 4. Frequency of using gaming technologies

Type of gaming	Numbers and percentages of boys responding in the affirmative to using each							ach	
technology	technology								
	Less than once a Once a week A few days each week week						E	Everyday	
	n	%	n	%	n	%	n	%	
Computer	25	8.9	43	15.4	115	41.1	63	22.5	
Console	41	14.6	46	16.4	103	36.8	31	11.1	
Arcade games	78	27.9	30	10.7	31	11.1	6	2.1	
Hand held games	51	18.2	36	12.9	55	19.6	30	10.7	

Time spent playing on a typical day (on computer and console technologies)

To determine a sense of how much time boys invested in the practice of video gaming, boys were asked a range of questions to identify how many days per week they would typically play video games *specifically* on computer and console technologies, and on those days, how many hours per day they would typically play for. The boys in the sample most commonly reported playing video games 'some days each week' (49.3%) . A further 28.2% of the sample reported playing games 'just about every day', 13.6% 'only about one day a week' and 6.1% 'less than one day a week'. Most boys (34.6%) reported that the time spent playing on those days was 'about two hours' as shown in Table 5.

Table 5. The time spent playing games on a typical day

Time spent playing	The length of time playing on days boys play video games		
	Numbers and percentages		
	n	%	
Up to one hour	71	26.5	
About 2 hours	97	36.2	
About 3 hours	52	19.4	
About 4 hours	17	6.3	
About 5 hours	31	11.6	

A positive correlation was identified between the usual number of days each week video games were played, and the number of hours spent playing on those days (r= .275, p < 0.01), that is the more days per week boys played video games, the longer they were likely to play for. In addition, the frequency of game playing (days per week) differed as a function of whether boys preferred to play video games by themselves or with others. The 55% boys in the sample who reported that they preferred to play video games by themselves, also reported that they played

more often, with 50% of these boys saying they played some days each week, and a further 32% of these boys saying they played just about every day ($X^2 = 22.22$, df(8), p = .01).

Access to gaming technologies

Most boys surveyed have both a computer and a gaming console at home (75.4 %). Only 13.2% said they did not have a computer for playing games at home, and 15.7% reported not having a gaming console at home. Just 12 boys (4.3% of the sample) said they had neither gaming technology at home.

In recognition of the financial cost of purchasing (and therefore accessing) electronic technologies, and the association between ethnicity and socio-economic status in New Zealand, chi squared tests were carried out to determine if there were any statistically significant differences between boys' access to gaming technologies at home and their ethnicity, and additionally their socio-economic status (as indicated by school decile). Access to *at least one of either* computer or console gaming technology at home did not differ as a function of ethnicity or socio-economic status, (for ethnicity: Pakeha 75%, Maori/Pasifika 74%, and Asian 77%, $X^2 = 5.06$, df(4), p = .28; for school decile: low decile 75%, mid decile 84%, and high decile 73%, $X^2 = 5.41$, df(4), p = .25).

However, chi square analyses showed that *when computer and console gaming technologies were considered separately*, access to these technologies in the home differed as a function of ethnicity and socio-economic status. Specifically, Asian boys (96%) were more likely than Pakeha (85%) and Maori/Pacific Island boys (81%) to have access to computer technology at home ($X^2 = 8.77$, df(2), p = .01), but the reverse situation was shown in that more Maori/Pacific Island boys (92%) than Pakeha boys (85%) and Asian boys (76%) had access to console gaming technology at home ($X^2 = 7.74$, df(2), p = .02); boys in middle (93%) to higher (87%) decile school communities were *more* likely than boys in low (81%) decile schools to have access to computer technology at home ($X^2 = 3.67$, df(2), p = .16), while boys in high decile (80%) schools were *less* likely than boys in low (92%) to mid (89%) decile school communities to have access to console technologies at home ($X^2 = 6.72$, df(2), p = .04).

Place where games are played and who with

To determine the potential for exploring possible 'community' related aspects of video gaming, boys were asked where they played games and who they most commonly played with (by self or with others). Boys reported that when they played video games, this was mostly at home, with 81.8% of the sample saying their computer-based gaming was at home, and 77.9% of console based games were played at home. Boys reported that they liked to play both computer (55.4%) and console games (46.1%) by themselves (noting that 41.4% prefer to play console games alone, and the balance do not use console gaming technology), in preference to playing with other people, as shown in Table 6. The focus here is only on computer and console based gaming due to the greater popularity of these technologies (as documented in Table 3).

Table 6. Who games are played with

Type of gaming	Who games are mostly played with				
technology	Like to play games b	ith others			
	Numbers and percentages*				
	n	%	n	%	
computer	155	55.4	101	36.1	
console	129	46.1	116	41.4	

^{*}The balance do not play video games on a personal computer, but may play console games (or vice versa).

Where computer-based and console-based games are played at home

To indicate the potential for seeing video gaming as a social practice, boys were asked where in their home their video gaming technology was used (as in a more social area like a living area, or a more private area like a bedroom). While the most common area for gaming is a social living area of the home (computer gaming 31.8% and console gaming 40.0%), most computer and console gaming happens in the more private spaces of the home with 55% of boys who play computer games, and 43.2% of boys who play console games reporting that they play in a more private area of their home) (Table 7).

Table 7. Where computer-based and console-based games are played at home

Where the technology is located at home	computer-bas	sed games	console -based games			
	Numbers and percentages*					
	n % n					
In a family or living area	89	31.8	112	40.0		
In an office or study	58	20.7	13	4.6		
In my bedroom	81	28.9	99	35.4		
In another bedroom	15	5.4	9	3.2		

^{*}The balance do not play video games on a personal computer, but may play console games (or vice versa).

Category (3) Being male

A number of the survey questions indicated boys ideas about what it means to be male, and ideas about being a boy who plays video games. To determine how boys of 13-14 years describe themselves, boys' chose up to five items from a word bank which had been predetermined by students participating in a learning activity on personal identity. The list contained mainly positive descriptions but also a few items that may be seen in more negative terms. Opportunity was given in the questionnaire for boys' to add more descriptors of their own choosing, but none opted to do this. Boys most common responses are ranked from the most to least popular descriptors in Table 8a, with 'friendly' (63.4%), 'sporting/athletic' (54.1%), and 'funny' (50.4%) identified as the most popular choices of self description.

Table 8a.Boys' descriptions of their personal qualities

Descriptor	Frequency of descriptor being selected
	n %
Friendly	178 63.4
Sporting (athletic)	152 54.1
Funny	140 50.4
Easy-going ('chilled' / relaxed)	132 46.8
Intelligent	99 35.2
Confident	97 34.2
Out-going Out-going	65 22.9
Shy Good-looking (handsome)	62 22.9
Popular	59 21.8
Serious	59 21.5
Well-built (muscular)	54 19.4
Interesting	51 18.0
Loving*	44 16.2
Masculine (manly)	37 13.7
Studious (conscientious / works hard)	34 12.3
Reserved (keep to yourself)	30 10.9
Wealthy	27 9.9
Techno-geek (or computer geek)	27 9.5
Performer (eg musician /actor)	23 8.1
Loner	20 7.7
	14 4.9

^{*}It was noted that all of the boys who identified 'loving' as a descriptor were Pacific Island boys.

In preparation for further analysis, the frequency of boys selecting the three most popular, and the three least popular descriptors from Table 8a were calculated (Table 8b).

Table 8b. Frequency of boys' choosing the most and least popular personal descriptors

Number of descriptors selected	Boys selecting the three most popular descriptors (funny, sporting, friendly)		Boys selecting the three least popular descriptors (techno-geek, performer, loner)				
		Numbers and percentages					
	n	n % n					
None of these descriptors	23	8.2	233	83.2			
One descriptor	90	32.1	39	13.9			
Two descriptors	119	42.5	6	2.1			
Three descriptors	47	16.8	2	.7			

Boys' descriptions of themselves did not differ as a function of ethnicity, the frequency and duration of game playing, or whether they preferred to play games by themselves or with others (see Appendix B).

Types of games played

To identify whether or not boys' video game choices were based on popular male themes such as action and sport, boys were asked to identify up to three games they currently liked to play, and if they play internet based games, which one game title they most commonly played online at the present time.

Boys identified over 100 game titles among the games they were currently playing. To manage this amount of data the games were grouped into 'genres' (after Wolf, 2000). Wolf notes that many games belong to more than one genre and he describes some forty-three genres. Such a list may be useful when the focus of the research is game design itself, but as the discussion on gaming websites notes, for any other purpose this is still an unmanageable number of categories, and consequently the more popular descriptions of game genres collapse Wolf's list to around ten (eg Stahl, 2005). To decide on one main genre for the purpose of reporting the results of this study, guidance has been taken from this existing research (Stahl, 2005), and also popular literature which appears on many of the websites that support each video game, and the related information in the advertisements that feature the games. A list and brief description of the main game genres used for this study follows:

Game genres

Action games – typically the most violent games where to win means killing (these games usually have a
lot of gratuitous violence) for example, the much publicised R18 first-person-shooter game 'Grand Theft
Auto' was popularly mentioned by the boys. This 'action' genre also includes the more violent and graphic
historic and contemporary war games.

- Adventure games in contrast, adventure games are less violent but may still require killing monsters or 'baddies' to win but they tend to be more problem-solving based games and often based around animated films. They are intentionally designed to avoid a 'R' rating and any violence is less graphic, and often in the pursuit of 'good' triumphing over 'evil'.
- Role playing games these games require the player to take on the role of a character and play in a
 campaign with others. The most sophisticated of these are the MMORPGs (massive multi-player online
 role playing games) played on the internet 'World of Warcraft' being the most popular of these at
 present. These tend to be fantasy type games. They require a significant time commitment (as in
 hundreds of hours) to do well in the game.
- Sports games basketball, golf, rugby, league etc sports re-enactment games requiring knowledge of
 the skills to play the sport, although some have been criticised for the game violence depicted.
- Car racing games like sports games but these are specifically car racing games.
- *Puzzle games* as the name suggests these are problem solving puzzles, *Tetris* being one of the most well-known of these games.
- Simulation games such as flight simulator games (which parallel car racing games) or *The Sims* where the player is put in a 'real-life' position and has to navigate his/her way through various tasks requiring problem solving. The most common title mentioned by boys was *Playboy mansion* (touted as being a 'simulation game' by the advertising and support websites) where the player becomes Hugh Hefner building his Playboy empire.
- *Music games* many of which are karaoke type sing along games with points awarded for singing on time and on key.
- Board and card games such as the card game solitaire.
- Arcade games ones like traditional pinball that have been turned into electronic games.
- Miscellaneous internet games there are many gaming sites online that boys mentioned which contain a combination or a 'smorgasbord' of the above game types.

A quarter of boys sampled (24.3%) reported that they did not play video games on the internet. Of those who do, the most popular types of game played by boys specifically on the internet are action games (23.6%) and role-playing games (22.1%) (Table 9). The level of internet gaming, as separate to all other games was deemed to be useful information to determine the popularity of online role playing games among this age group. The most popular games of any type (computer or console based, or on the internet) are action games (41.8%), sports games (19.9%) and adventure games (11.5%). The least popular games include puzzle, music, card and board games, arcade-type games and simulation games.

Table 9. Types of games played

Game genre	Internet* game mostly played at present		Most popular video games of any type played at present				
	Frequency						
	n	%	n	%			
Action games	66	23.6	117	41.8			
Adventure games	18	6.4	32	11.5			
Role playing games	62	22.1	36	7.5			
Sports games	15	5.4	56	19.9			
Car racing games	12	4.3	10	3.4			
Puzzle games	1	0.4	2	0.7			
Simulation games	3	1.1	5	1.8			
Music games	1	0.4	2	0.7			
Board and card games	6	2.1	2	0.7			
Arcade games	2	0.7	2	0.7			
Miscellaneous internet games	14	5.0	1	0.4			

^{*}Note that only 75.7% of boys indicated they played internet based games.

A trend observed in the data was that Pakeha/European boys played more action games, Pasifika boys played more sports games, and Asian/ Indian boys played more adventure games, a feature which could possibly indicate differences within a community of video gaming practice. These differences were found to be statistically significant for Asian/ Indian boys (19%) whose first choice of game genre showed they played more adventure games than Maori/Pacific Island (4%) and Pakeha boys (6%) ($X^2 = 14.287$, df(2), p = .001); and that Maori/Pacific Island (31%) and Pakeha boys (24%) play more sports games than Asian/Indian boys (15%) ($X^2 = 6.391$, df(2), p = .004). Boys' preferred choice of game genre did not differ as a function of the descriptors of themselves (see Appendix B).

Reasons why boys play video games

To determine if boys' reasons for playing video games reflected potentially hegemonic and/or less hegemonic expressions of masculinity, boys were asked to indicate any and all reasons why they played video games. The most popular reasons boys identified about why they liked playing video games (Table 10) were that; they 'play them for fun and entertainment' (94.3%), that it was 'something to do and it stops me getting bored' (76.4%) and that 'I can play the games with my friends (74.6%). Least popular were reasons such as 'being the characters in the games' (47.9%), having 'to use my imagination playing the games' (45.7%) and 'it is something I can do alone' (44.6%).

Table 10.Boys' reasons for playing video games

	Frequency of an affirmative response	
Reason for playing video games	n	%
I play them for fun and entertainment	264	94.3
It is something to do and it stops me getting bored	214	76.4
I can play the games with my friends	209	74.6
I like winning the games by beating the other characters in the game	185	66.1
I like the visual effects in the games	184	65.7
I like winning the games by beating the other people playing the game	180	64.3
I like winning the games and beating the computer programme	175	62.5
I like the way the games make me think	173	61.8
I like the action sequences in the games	167	59.6
I like the overall competitiveness of the games	167	59.6
I like the challenges in the games	151	53.9
I like being the characters in the games	134	47.9
I like the way I have to use my imagination playing the games	128	45.7
It is something I can do alone	125	44.6

Summary

The survey results show that almost all boys in this sample (98.6%) play video games and they usually play on either a computer or a gaming console. Boys most commonly reported playing video games a few days each week, and on these days, they mostly report playing for about two hours. Most boys (95.7%) in the sample had access to at least one form of gaming technology at home, but whether this technology was computer or console based, differed as a function of both ethnicity and socio-economic status.

Boys' descriptions of themselves as males prioritised characteristics such as being funny, friendly and sporting. They reported playing many different male-themed games, most popularly games of the action genre. A small number of ethnic-based differences in choice of game genre were identified. The reasons boys said they played video games were predominantly related to having fun, filling in time and socialising. However, these boys also reported that they were slightly more likely to prefer playing video games alone, and were more likely to play or have their gaming technology in a more private room of the house like a bedroom or study rather than a social area like the living room.

These data served the purpose of identifying which aspects of boys' video gaming experiences could be useful to explore in more depth through qualitative data collection methods which are described in Chapter 6, and the results of which are documented in Chapter 8.

Introduction

To answer the questions (how) can the world of boys video gaming be conceptualised as a 'community of practice', and (how) video gaming may be explained in relation to 'communities of masculinities practice', data from all of the qualitative methods described in Chapter 6 was analysed using general inductive analysis (based on Thomas, 2006). The nature of qualitative data collected for evaluation purposes (in this case, to evaluate the application of the 'communities of practice' concept to the contexts of video gaming and masculinities), meant that the collected data needed to be interpreted and analysed in relation to the conceptual framework established for the investigation.

Sample

A total of 42 Year 9 boys aged 13-14 years (M = 13.43) from three co-educational schools (these being three of the schools who participated in the original survey), one a private college, one a high decile state school with a significant Asian population and the third a low decile state school with a significant Pacific Nation population took part in the 'lessons' from which the qualitative data were collected. The timing of the different phases of the study meant that while these boys attended the same school as those who completed the original survey, they were not the same cohort of Year 9 boys. The ethnic and socio-economic diversity of the group is detailed in Table 11 to illustrate one aspect of the heterogeneous nature of the sample.

Table 11. Ethnic group mostly identified with and socio-economic status (based on school decile) of the qualitative sample

	Numbers and percentages		
	n	%	
Ethnicities			
New Zealand Pakeha or European	17	40.48	
Pacific Island or Maori	14	33.33	
Asian or Indian or Middle Eastern	11	23.81	
Socio-economic status			
Low decile	17	40	
High Decile	25	60	

Selection of categories for reporting results

The data are being reported under four categories, a quantity consistent with what Thomas (2006) would consider realistic and manageable. The organisation of these categories is closely aligned with the research aims, as the evaluation of the 'communities of practice' concept is integral to the research guestions.

Data that illustrates the lack of a sense of 'community' in boys video gaming, but instead a recurrence of *individualised* factors related to game playing (such as completion and winning) are reported in the first category.

 Category (1) 'Play your friends to see who's better' - where is the sense of 'community' in video gaming?

Data that relates to the possibility of viewing video gaming as a 'practice' are reported in Category 2 to determine if video gaming meets with a conceptual understanding of 'practice' (after Wenger, 1998) or whether it is just something boys do.

• Category (2) 'Play strategically and think like a soldier, take any chance' - video gaming as 'practice'?

Data that highlights aspects of hegemonic masculinities practice in video gaming is reported in Category 3 to determine how video gaming might be explained in relation to the 'communities of practice' concept.

 Category (3) 'It's a boy thing and it's very exciting' - hegemonic masculinities in a video gaming world

Data that did not appear to reflect hegemonic practices of masculinity are reported in Category 4 and add an additional (conceptual) perspective to the hegemonic practices in Category 3.

• Category (4) 'Geeks often play mind games rather than action and fighting' - less-hegemonic masculinities in a video gaming world

To 'check on the clarity of categories' (Thomas, 2006, p244), the skills of an additional coder were employed as a means of inter-rater reliability (described in Chapter 6) to enhance the trustworthiness of the data. For the purpose of coding and then categorising the data, and the reporting of the results, it was useful to identify the question that elicited the responses to give the boys' comments context and meaning. Consequently, the boys' responses, organised under each of the four following categories, are reported along with the question that generated the comment during the data collection process. Many of the boys' responses were repetitive in nature, hence, only a representative sample has been reported under each category.

Note: almost all of the data boys produced during the qualitative methods has been reported, the only material omitted - and there were very few actual examples of this – was where boys' choice of words and phrasing could not be read for meaning or relevance, such as the 'tagging' that decorated the graffiti sheets. (Tagging is a form of graffiti. 'Tags' are specifically a stylised signature unique to the person drawing them. Different ethnic groups and youth sub-cultures tend to have distinctive features to their tags that identify them to other groups.)

The nature of the activities in the 'lessons' from which all of the qualitative data was collected (that is, the anonymous postbox, the collaborative pass-the-paper graffiti sheets and the small group discussions) means that the responses reported cannot be attributed to individual boys. In a sense, these methods gather together the collective knowledge of the group, or in other words, the knowledge of that community (of learners) in relation to a particular topic (video gaming). Consequently, the context provided for the individual comments reported in each of the qualitative data categories is in reference to the activity that generated the comment, not the profile of the boys who said or wrote the response (noting that boys were all in Year 9, 13-14 years of age and represented a diversity of ethnicities).

Recapping from Chapter 6:

- the first activity, the postbox provided opportunity for boys to anonymously note down their own ideas on
 a range of video gaming issues (the anonymity of this task also provides a safe starting point for
 subsequent discussions as the reporting back of the summarised findings allows boys to see the range of
 views and ideas in the group without having to 'own' any of the responses);
- the **graffiti** sheets then provided opportunity for boys to further discuss a range of video gaming related issues in a small group and respond to each other's ideas;
- the paired or small group discussions about a particular video game then provided opportunity for more
 in depth discussion about specific aspects of video gaming of interest to them and one or two of their
 friends. All of the data generated from these activities was produced in written form by the boys.

All of the activity questions were open-ended questions.

Category (1) 'Play your friends to see who's better' - where is the sense of 'community' in video gaming?

'Community' - something mutual, joint, and shared

In preparation for exploring whether or not evidence exists among the data to support how each of the individual principles of the 'communities of practice' concept apply to the context of video gaming, it was useful to overview 'community' and 'practice' as broad categories as defined by Wenger (1998). The reason for this was that the repeated reading of all of the qualitative data revealed a decided *lack* of a sense of community in relation to video gaming, with boys' responses suggesting video gaming was more an individual activity with individual benefits. This category details evidence that illustrates a lack of a sense of community.

In response to the anonymous postbox questions about reasons for playing video games, boys identified predominantly personal and individually focused benefits. The common themes identified were personal gratification - winning and competition, personal thrill – excitement, challenge, pleasure, satisfying personal needs, meeting individual social needs, learning personal skills and knowledge, and personal escapism - doing things you don't get to do in real life.

Personal gratification (winning and competition) was evident from comments like 'it challenges you (38.10%, n=16 boys specifically mentioned the challenge of video gaming), 'having fun beating other people', 'I like clocking the game' ('clocking' means to complete the game), and 'winning - everyone thinks you're good'. In addition, the personal thrill of playing video games was apparent in the choice of words boys used such as '[it] gives you the pure pleasure', 'because it's a boy thing and it's very exciting', 'hyped up' and 'fit] challenges you to see how far you can go. That video gaming satisfies some personal needs, boys also reported that they play because 'sometimes because I'm bored' and 'it's addictive', and it also helps boys meet individual social needs in that they have 'friends come over' or it is an opportunity to 'meet new friends' (while these responses have a social component to them, the apparent social purpose was more to satisfy the personal need for social company rather than any sense of being sociable for the good of everyone involved in the friendship). Video gaming also has the benefit of helping boys to learn personal skills and knowledge such as sports related skills - 'I try to do the tricks after I've played them', life skills - '[it] teaches you what to do in the real world', and plan for the future -'helps me plan the car I want when I'm older'. The personal escapism that many types of games (not just video gaming) offer, and being able to do things boys don't get to do in real life was a recurrent feature of their responses, for example: 'because it's a gangsta [video game] – you can do anything like kill people', 'because [you] get an opportunity to shoot a gun which you're not allowed to do in reality', 'experiencing how to hold

weapons', 'lots of blood splat', 'you get a lot of money', 'exploring the environments' and 'you get to do [soccer] kicks that you wouldn't do'.

Also as part of the anonymous postbox activity, few boys (only 19.05%, n=8) identified video gaming as being the main thing they did for fun or pleasure. The boys who said it was their main activity they did for pleasure similarly indicated no sense of community among their responses giving reasons like 'sometimes I like to be left alone when I play the game', 'because I get addicted and I love playing them', 'because it's cool and I don't have much friends', 'because video games are easy to play, more fun to anything', and 'I'm lazy'. However, when video gaming was not boys' main identified activity for fun or pleasure, there was some potential sense of community among the other main activities that the majority of boys (80.95%, n=34) do. Almost all of these boys identified a form of sport – mostly social or team sports - 'sometimes because when I get bored I have nothing to do I usually play [video] games but if there is sports I hang out with my friends and don't play [video games]', 'play back yard cricket and touch [rugby] with my friends' or 'go to the field and play kicks'; or being with friends and other people - 'go hang with my mates', and that they had better things to do - 'I used to be addicted to games but I'm not anymore because the games were wrecking my friendships with people', 'I very rarely talk about video games because there is better things to talk about' and 'checking them girls out'.

It was predicted that the responses about what is good about playing video games alone (another of the anonymous postbox questions) would focus on personal and individual features of video gaming and the comments from boys reflect this, with common themes focusing on: it's OK to lose and try again, self satisfaction of achievement, choosing what to play and how long for, no disturbances and irritations, being selfish (not sharing), and self indulgence. These responses gave no sense that video gaming had some collective purpose for a community, it was an activity where personal needs and wants were attended to, and not the needs of others. That boys thought that video gaming was a context in which it was okay to lose and try again was evidenced in comments like 'if I lose I get to play again' and '[you] get more chances', 'you don't have to be good' and 'no one else gets to see what I'm doing in the game', 'not getting mocked when [you] die', 'do whatever you want' and 'it gives privacy'. The self satisfaction of achievement boys gained from video gaming was apparent in comments like 'you can try and clock [finish] it', 'you can choose how hard you want it to be', 'you get practice and better', 'I get credit for it' and 'winning all the time'. Added benefits of playing alone included being able to choose what to play, such as 'you can play gangster games'; and how long you get to play for - 'feel alright' could play all day long' and 'more hours used playing'. Boys also reported how no disturbances and irritations were an advantage of playing alone with comments like 'you don't get distracted' and '[you] concentrate better', '[you] don't get annoyed', 'quiet - all you can hear is sound from the game', 'feel peaceful nobody is disturbing me', 'gets me away from the world' and '[it] gives time to rest and relax'.

Playing video games alone was also an opportunity for boys to be selfish in their pursuits by not having to consider the needs of others, as shown repeatedly in comments like 'you don't need to take turns' and 'you don't have to give it to anybody', 'sometimes my friends annoy me when I'm playing games', 'competing against real teams but you are controlling them', 'being able to play it the way I want', 'it's always your turn', 'nobody else telling you what to do' and '[it] doesn't lag. Video gaming alone is also a context for self indulgence to 'just get some free time' and 'let me have time to myself', '[it] gives you the pleasure' and 'enjoy it by yourself', 'play on it longer' and 'get to do things you won't be able to do'; and to enjoy the visual aspects of the game 'I really like good looking game play' and 'I enjoy the graphics and how real they look'.

A recurrent theme among boys' responses about the benefits of shared game playing was about: beating them – who is personally better?, personal benefits of social interaction, playing with others video gaming is more (things that are better when playing with others), avoid feeling lonely, (but also) some sense of community – learning from or helping out others. Beating others to find out who is personally better was shown repeatedly in comments like 'play your friends to see who's better', and 'show how good you are', 'killing them' and 'beating them in racing', and also noting the extra challenge shared playing offered - 'it puts more pressure on you', 'more challenging', 'more competition' and 'it's more fun like in FIFA soccer you play against your mates and if they're good it's harder'. Boys also indicated the personal benefits of the social interaction that occurred during shared game playing with comments like 'we can talk at the same time', 'we get close', 'you don't get bored fast', 'there's someone else playing, not just yourself', 'we always have a laugh', 'they are real people and not a cpo [reference to the robot C3PO in Star Wars]', 'having someone of equal skill', 'don't know what moves they will do' and 'you get to chat to people on the other side of the world in games like Runescape'. These comments about the social benefits were added to with an acknowledgement about the way shared video gaming helped boys to avoid feeling lonely with a number of specifically stated responses like 'you won't be lonely and you can talk to them'. Boys repeatedly noted that playing video games with others was 'more....' as in 'more excitement', 'far more intense', 'far more interactive', it's more fun playing games with others' 'you do more stuff when you play against other people', 'it's more fun where there are more people playing' and 'more competition'. The social component indicated by each of these items did not convincingly support a notion of 'community' in that while the activity of video gaming might be shared, the benefits were largely personal. That is, playing video games with others reduces personal loneliness or there is more personal satisfaction and gain from playing with others, video gaming is not so much something *mutually* engaged in as a *joint* enterprise that has some collective or community sense of purpose

That said, it was anticipated that **questions about social gaming** would indicate something of a sense of community in video gaming which boys articulated in terms of **learning from**, **or helping out others** with a few responses like 'some[one] to help me in mission games', 'somebody to help out' as in 'rescue them', 'they can

help me', 'tell me about other games', 'teaching my friends or relatives how to play', 'you can use each other's skills', 'it develops your skills more' and a repeated mention of team work - 'you can team up with other people'.

When boys were asked targeted questions during the small group discussion activity, about what they thought they learned from video gaming, the lack of a sense of 'community' continued among all but two of their responses with themes related to learning new sports skills, new skills for life and career, and new skills for learning (education). Learning sports skills was noted from comments like 'I learn soccer skills from games sometimes', 'new tricks I can use in my football games', 'karate moves how to fight', 'I think games teach me to get hand/eye coordination', 'how to use a gun, how to save someone'. Additionally skills for life and career were mentioned; 'they teach you that life is short and methods your life could end up like', 'strategies in life', 'how to become a good soldier' and 'playing video games have helped me think strategically and how to manage my resources', 'teach you how to drive or fight. Also noted were new skills for learning 'names of stuff and learn about history', 'how to be type quick' and 'grammar' with comments like 'I don't learn much from games but occasionally I learn spelling of a word I don't know'. Just two boys from the sample indicated the potential for social learning stating that they learned 'social interaction', and gained 'friends from overseas'.

Boys' responses to the postbox question about where they obtained most of their video gaming software, indicated that games were most commonly purchased, or hired, from a (named) video games retail or rental outlet. Boys also reported that these games were equally as likely to be paid for by themselves as their parents. Borrowing from, or sharing games with friends, and downloading games from the internet were typically identified as 'other' sources of video gaming software. A sense of 'community' here might be inferred from the social interactions around the sharing of games and ensuring others had access to the repertoire of gaming resources, but whether there was anything mutually engaged in as a joint enterprise is not evident.

Summary

The types of questions from the 'lesson' that resulted in responses highlighting predominantly individual and personal features of video gaming, and the absence of a sense of community included; the reasons why boys like to play video games; when boys talk about video gaming with friends, what do they talk about; what is good about playing video games alone and what is good about playing video games with other people; and what boys prefer to do for fun and pleasure. This category detailed the evidence from boys' responses to these questions to show the lack of a sense of community, and instead illustrated the abundance of evidence that indicates the personal and individual aspects of video gaming practice. Also, the responses to questions about what is good about playing video games with other people, continued to reflect the personal and individualised benefits of socialising when video gaming, and only a small indication of any mutual, joint or shared sense of community.

Category (2) 'Play strategically and think like a soldier, take any chance' - video gaming as 'practice'?

Practice – something engaged in, an enterprise using a repertoire of common resources

To establish whether or not video gaming could be conceptualised as 'practice' (after Wenger, 1998), data that focused more on the 'doing' of video game playing was collected together with the view to determine if a sense of enterprise existed when boys engaged in video gaming (that is, that video gaming was about more than just 'doing'), and what might constitute a shared repertoire of resources in video gaming.

The evidence from the postbox question that asked how boys get to be really good at the practice of video gaming identified individual commitment and skills as being what is required to be good at the practice of video gaming, with common themes among the responses including: frequency of play and practice by individual boys, assumed personal talents, development of personal skills, and being somehow different from others. 'By playing them very often' was a comment repeated in similar language by almost all boys in response to being asked how boys get to be good at playing video games because 'that makes them get more experience'. Boys also assumed some sort of personal talent was needed for being good at gaming; 'they probably just have a natural talent like me', and 'at times naturally or just as they practice', although the development of personal skills was also useful 'playing them a lot and having good hand-eye coordination skills', 'sometimes boys may have nothing to do and spend hours on games and can get really skilled', 'learning the techniques' and 'cos boys waste their time away in front of the screens'. However, being really good at video gaming also meant being somehow different from others as shown in responses like 'by being anti-social and playing them all day', 'they are very attracted to it' and 'because girls have better things to do or boys are just better than girls [at playing video games]'.

In response to the postbox questions about what do boys talk about when they discuss video gaming with their friends, all responses were about the practice of gaming with multiple responses similar to these based around themes including; obtaining the game – what's new, the features of the game, the pleasure of video gaming, playing the game, achievements, and getting technical help to play better. Boys' social talk about video games recurrently features information about obtaining new games such as 'maybe new games that are coming out', 'if it's worth buying', 'and if they got it so I can borrow it; and details about the features of games – 'the graphics (image)', 'layout and set out of the game', 'action (movement style)', 'killing', 'money' and 'new features in the game. Conversations also include mention of the pleasure of video gaming with comments like 'are they fun to play?', 'is it cool?', 'what is your favourite game?', 'what kinda character you like', 'who your favourite fighter is', 'how good or bad the game is, our dislikes and likes about the game', and 'the excitement of the game'.

Details on playing the game are also discussed such as 'what to do in certain types of video games', 'describe it if he hasn't played it', 'hard missions', 'have you done this [in the game]', 'how good it is', 'how long it can take' and 'is it easy?'. Boys' achievements in video games are included in conversations in particular 'how far I got on it', 'how to get things or how to complete different levels', 'stages or levels [they] are at', 'if they unlock new stages', 'if they clocked it', 'how to finish it', 'what you are good at and not', 'if you got an award' and 'beating high scores'. To help with these achievements boys also discussed how to get technical help to play better such as 'cheats' [extra programming usually downloaded from the internet to help a player win or reach higher levels in the game]; 'how to win the game if you are stuck' and 'things that make it easier'.

When boys were asked during the small group discussions to explain what a particular game was about and what recommendations they would give a new player to help them win, the focus of their responses stayed with the individual mastery and technical practice of playing of the game, rather than any sense of developing a shared knowledge of the game for some collective or mutual benefit. Responses have been grouped in relation to game genre. (Note: Boys chose the title of game they focused their responses on).

What games are about and how to win them (responses documented as part of the small group discussions):

Sports games – football

- Rugby League 2: It's about strategy and looking for the gaps and plays. [How to win] Get to the try line. The one with the most points wins.
- FIFA 06 and 07 [soccer]: Choosing a team from any league in the world whether it be the English premier league for example and play teams in that league to win at the end of the season. [How to win] Choose your favourite team see how your players are ranked then play the best ones and verse the competition

Fighting and wrestling games

- Marvel vs Capcom 1. Choose your own Marvel or Capcom character, 2. one on one, 3. you can play one
 player (against Com), 4. 2D graphics, 5. you see both your and opponent (or Com) HP, Bar, Power bar,
 time and moves 6. You flip, jump, fire fireballs, punch, kick and do special combo 7. You play with 6
 buttons and one rotating stick. [How to win] Practice hard, gotta be addicted.
- Marvel vs Capcom: Super heroes form Marvel and Capcom and the main players are from Street fighter
 and other cartoons [How to win] Play on easy mode and pick a player from the little boxes and just press
 any of the six buttons the top three are the punch buttons and the lower three buttons are the kicking
 buttons
- Smackdown vs Raw 2007: It is all about the TV show WWE which is a wrestling programme (acted), but it is not real. [How to win] Put it on easy, put interference on, play with ric flair put him on dirts player. Do low blows and poke him in the eye and cheap moves.

Action games – car chase/criminal action

- Grand Theft Auto San Andreas: It's a gangsta [video game], a lot of shooting, heaps of killing, running from cops, drug dealers, mean as cars, prostitutes, can do a lot of realistic things like (basketball, doing weights, can buy you a feed, can fuck girls in cars). [How to win] Do cheat codes, kill a lot of cops and play your best.
- GTA [Grand theft auto]: You go around and kill lots of people [How to win] Kill and don't stop killing

Action games - war

- Metal Slug: It is an army game where you go through a mission to save some hostages and get to the end where there will be a helicopter to take you to the next level. There will be enemies to try and stop you. You shoot to kill them. [How to win] You shoot to kill as much enemies as you can.
- Counter Strike: Connect to a server and join counter terrorists or terrorists and shoot each other 'til one team loses all their players. There are other conditions of winning such as bombing a certain place or rescuing hostages play on line with other people around the world. [How to win] Aim for the head. One hit kills. Buy awp if sniping. Best sniper. At the start of the round always buy a deagle. Best pistol. Preferred weapon with counter terrorists = M4A1. Preferred weapon with terrorist = AK47
- Counter Strike: It is about terrorist and CT [counter terrorist] forces who are trying to prevent the other team to blow up the bomb site in a 4 min round to get excellent head-shots. [How to win] By clicking the mouse and shooting people.
- Counter Strike ground zero: A military game where we are counter terrorist or terrorist and prevent terrorist from detonating a bomb or killing hostages.[How to win] By killing your opponent.
- Killzone: It's a 1st person game about war between two sides. Captain Templar is the main character and you can choose out of four characters [How to win] Play strategically and think like a soldier take any chance
- S.T.A.L.K.E.R Shadow of Chernobyl: You are in Chernobyl 2010, 4 years after the second nuclear explosion and you are trying to survive in the radioactive environment with other stalkers and mutants and anomalies. You are saved by a person and you wake up and have amnesia. You have one main objective on you pda: to kill a man called Strelck although you don't know why. [How to win] To find a good gun and armour early on and find a lot of medkits.

Fantasy and role playing games

• Final fantasy: It's an adventure, action and fantasy type game. It has a story line, lots of different characters (3-9 characters). It's RPG and it takes a lot of thinking to win and it's about strategy. It's violent but not very violent. It's usually the bad guys who are trying to be powerful and you have to kill them to

- return peace to the world. [How to win] To get a strategy guide book so you can get 100% completion. Always train all the characters up. Focus on what strategy you use (magic, attack, heat etc).
- Star Wars Battlefront II: Well you have two teams and must kill all the enemy to win. If you die you can respawn but it will count as a death for your team [How to win] To gain a win you must keep low and sneak up on people then use a powerful weapon on them
- Runescape the massive online game by Jagex Ltd: It is based in the middle ages and you are basically
 a knight. You need to finish quests and to do that you need good skills. [How to win] Put heaps of time
 into it like 5 hours on a week day and 10-12 hours a day on the weekend.
- Age of mythology: You start with a small civilization and worship a god, you go through the ages building armies of human and myth unites so you defeat your enemies. [How to win] I would play on lighting or conquest, in lighting you go faster, in conquest you start with high resources

Over half (64.29%, n=27) of the boys considered there was a difference in the practice of video gaming between serious and less serious video gamers as indicated among the responses to the postbox questions. Boys understood these points of difference to include; a different level of investment (of time or resources), a different motivation or reason for video gaming, a different emotional reaction of serious video gamers, and less serious gamers play video games for fun. These differences may contribute to an understanding that some boys (the less serious gamers) just 'do' video games for fun, whereas others (the more serious gamers) may be invested in something that could be talked about more as an 'enterprise'. That serious video gamers had a different level of investment of time or resources was repeatedly indicated with comments like 'serious people spend hours and hours playing and are addicted while not serious people spend a few hours playing', 'they play a lot more and don't do much else but do activities that involve video games', 'they play all day and are determined to be the best and less serious gamers just play on occasions and not hard out', 'serious video gamers pay heaps of money just to play', and 'I think they're different because serious people always go in big competitions'. Boys also thought that serious video gamers had a different motivation or reason for video gaming as shown in comments like 'serious players get hooked into the games and it's really hard not to play a game that you are hooked on', 'because serious play to win, uninterested don't play to win or lose, it's a matter of fact of playing the game', 'serious is more into the game, non serious isn't eg doesn't matter if you fail', 'because they want to clock the game that means complete it', 'because the ones who are serious are game freaks not like those less serious video games', and 'cos people that ain't serious just turn it off when they screw up whereas hardouts persevere and look up cheats and stuff until the conquer the part'.

Boys also considered that serious video gamers had a **different emotional reaction** to gaming with responses from their small group discussions including *'the game controls their emotion for example: if his character dies or does something wrong he'll get pissed off', 'if they lose they get angry'* or *'when they lose it's like the world's going*

to end' and 'they are more anti-social'. A clear distinction made by boys about the differences between serious and less serious gamers was around the focus on having fun: 'they always want to win while less serious gamers just do it for fun', 'serious video gamers could maybe turn just playing into serious practice whether less serious could just muck around but they both have fun', 'serious gamers play at any time they can and people who just play for fun might just play on a rainy day etc', 'they play games to beat people and not for fun'.

Summary

This category documented the evidence illustrating the potential for viewing boys' video gaming as a 'practice'. In contrast to the dearth of evidence (discussed in Chapter 3) which would support the notion that there is a sense of community in boys video gaming world, that video gaming might be a 'practice' is potentially supported by the data. The evidence that highlighted the 'practice' or at least the 'doing' of video games, which revealed something about the nature of the *engagement* in video gaming, the *enterprise* of video gaming, or the *repertoire* of resources used for video gaming came from boys' responses to questions that included; how boys get to be good at the practice of video gaming; what boys talk about when discussing the practice of video gaming with their friends; explaining to a non-gamer what a game was about and how to win it; and whether or not there is a distinction between the practice of serious video gamers and less serious video gamers.

Category (3) 'It's a boy thing and it's very exciting' - hegemonic masculinities in a video gaming world

Mutual engagement in the joint enterprise of being male, using a shared repertoire of resources to produce hegemonic masculine identities.

In preparation for exploring whether or not evidence exists among the data to support if, or how, video gaming can be related to 'communities of masculinities practice', it was useful to collect together data where masculine themes repeatedly featured. The data in which these masculine themes dominated were considered in terms of whether there was some sense of 'community' - something mutual, joint and shared amongst the boys about being male in the context of video gaming, or, if there was some sense of 'practice' of being male (that is, an engagement in the enterprise of being male, using a repertoire of resources) in the context of video gaming. The questions that provided this data included: boys' current choice of game they played, what video games teach boys about being male, describing a video game they currently played to someone unfamiliar with the game and how they would recommend a new player play to win, the type of character they played and what was good about this character, boys' attitudes toward violence in games, and if girls' video gaming was somehow different to boys' video gaming. Boys' responses to these questions are summarised in this category.

The sample of boys participating in the qualitative data collection processes mostly identified male-themed game titles as their **current choice of game** (Table 12).

Table 12. Current choice of game

Game genre		Frequency	
	n	%	
Action including war and fighting games	24	57.14	
Sport	7	16.67	
Adventure/fantasy including roleplaying	6	14.29	
Simulation or puzzle	5	11.90	

When asked verbally (by the researcher) why most boys played single player action or sport type games and why so few boys this age appeared to play MMORPGs (massive multi-player online role playing games), boys suggested that the significant time commitment required to do well in these online games, combined with the financial cost of the monthly registration fee, broadband internet costs and the cost of regular game additions and upgrades, made the choice of such games impractical for many boys.

Boys did not respond unanimously to the idea that video games teach them something about being male in

the graffiti sheet activity. This was a specifically worded question that was asked at the very end of the data collection process. Those responses that indicated in the affirmative that some learning did take place, focused on reinforcing stereotypically dominant male attitudes and behaviours about what it means to be male with responses like 'that you're not a girl', 'it teaches you how males can be', 'they teach us we are cool', 'they teach we are good at doing things like racing', 'they teach us that we like violence and sport', 'they teach us that we are good at shooting fighting and sport', 'it teaches you to take risks', and 'never give up morals'. More specifically, a few responses noted that video games taught boys how to fight and defend yourself and behave aggressively 'they teach you skills- just teaching yrself how to defend yrself', 'yes I do think it teaches us about gangs', 'it teaches me what males can do in real life such as violence', 'teaches you to be abusive' and 'yes karate can help protect you from someone'.

A range of recurrent hegemonic masculine themes emerged when boys were asked to describe a video game they currently played to someone who was unfamiliar with the game, and how they would recommend a new player play to win. These data were collected from the small group discussions based around a series of openended questions and focusing on specific games the boys liked to play. The hegemonic masculine themes included having knowledge and control of the game, fighting and violence, winning and being the best, and mastery of the gaming technology:

Knowledge and control of the game (knowing what to do):

- Marvel vs Capcom: 1.Choose your own Marvel or Capcom character, 2. one on one, 3. you can play one
 player (against Com), 4. 2D graphics, 5. you see both your and opponent (or Com) HP, Bar, Power bar,
 time and moves 6. You flip, jump, fire fireballs, punch, kick and do special combo 7. You play with 6
 buttons and one rotating stick.
- Smackdown vs Raw 2007: [How to win] Put it on easy, put interference on, play with ric flair put him on dirts player. Do low blows and poke him in the eye and cheap moves.
- Counter Strike: Connect to a server and join counter terrorists or terrorists and shoot each other til one team loses all their players. There are other conditions of winning such as bombing a certain place or rescuing hostages play on line with other people around the world. [How to win] Aim for the head. One hit kills. Buy awp if sniping. Best sniper. At the start of the round always buy a deagle. Best pistol. Preferred weapon with counter terrorists = M4A1. Preferred weapon with terrorist = AK47
- S.T.A.L.K.E.R Shadow of Chernobyl: You are Chernobyl 2010, 4 years after the second nuclear explosion and you are trying to survive in the radioactive environment with other stalkers and mutants and anomalies. You are saved by a person and you wake up and have amnesia. You have one main objective on you pda: to kill a man called Strelck although you don't know why. [How to win] To find a good gun and armour early on and find a lot of medkits.

• Final fantasy: It's an adventure, action and fantasy type game. It has a story line, lots of different characters (3-9 characters). It's RPG and it takes a lot of thinking to win and it's about strategy. It's violent but not very violent. It's usually the bad guys who are trying to be powerful and you have to kill them to return peace to the world. [How to win] To get a strategy guide book so you can get 100% completion. Always train all the characters up. Focus on what strategy you use (magic, attack, heat etc).

Fighting and violence

- Grand Theft Auto San Andreas: [How to win] Do cheat codes, kill a lot of cops and play your best.
- Grand Theft Auto: You go around and kill lots of people [How to win] Kill and don't stop killing
- Metal Slug: It is an army game where you go through a mission to save some hostages and get to the
 end where there will be a helicopter to take you to the next level. There will be enemies to try and stop
 you. You shoot to kill them. [How to win] You shoot to kill as much enemies as you can.
- Counter Strike: [How to win] By clicking the mouse and shooting people.
- Counter Strike ground zero: A military game where we are counter terrorist or terrorist and prevent terrorist from detonating a bomb or killing hostages.[How to win] By killing your opponent.
- Star Wars Battlefront II: Well you have two teams and must kill all the enemy to win. If you die you can respawn but it will count as a death for your team. [How to win] To gain a win you must keep low and sneak up on people then use a powerful weapon on them

Winning is about being the best

• FIFA 06 and 07 [soccer]: Choosing a team from any league in the world whether it be the English premier league for example and play teams in that league to win at the end of the season. [How to win] Choose your favourite team see how your players are ranked then play the best ones and verse the competition.

Mastery of the gaming technology

Marvel vs Capcom: Super heroes form Marvel and Capcom and the main players are from Street fighter
and other cartoons. [How to win] Play on easy mode and pick a player from the little boxes and just press
any of the six buttons the top three are the punch buttons and the lower three buttons are the kicking
buttons.

Boys' responses to questions about the **type of character they played and what was good about this character** in this selected game, boys repeatedly identified dominant male characteristics such as; being male, strength, mastery of particular skills, abilities and resources, and heroes – being the best.

The specific statement of 'being male' featured in many of the boys responses, for example:

- A knight. U wanna be a man but you don't get to choose specific skills at the start only looks from a prearranged list you get to make them how they are [Runescape]
- Very staunch or opinionated. He is strong has a heavy machine gun and is male [Killzone]
- The best would be to choose a male because they are stronger [Smackdown vs Raw]
- He's black, he lives a gangsta life you can make him bully, you can do realistic things with him [Grand Theft Auto San Andreas]
- A black guy. Strength and sex [Grand Theft Auto]
- The best would be to choose a male because they are stronger. [Smackdown vs Raw]

Similarly, the specific skill of 'strength' was identified by many boys, with the implication being that the type of strength being referred to is physical (and not emotional) because to win these games requires acts of physical aggression. Responses highlighting physical strength included:

- The best would be to choose a male because they are stronger. I'd choose Batista. Why I'd choose Batista because he is strong [Smackdown vs Raw]
- A black guy. Strength and sex [Grand Theft Auto]
- Counter terrorist. An excellent shield and a male has excellent strength. [Counter Strike]
- You are a person. I look at strength agility skill over any other thing ... he was good and reacted well was a good character [Battlefield]
- Very staunch or opinionated. He is strong has a heavy machine gun and is male [Killzone]
- The good people my favourite is the person you start off with at the start of the game because he is usually the strongest (male). It's a good choice because it's usually the best. [Final fantasy]
- Fighter prostitute. Strength, skill, male powers ... helps mates in danger [Grand Theft Auto implication that the chosen character is female]
- A tough, dangerous, violence, notorious character. Aggressive, strong, quick ... you win and carry on. [Marvel vs Capcom]

Mastery of particular skills, abilities and resources was also desirable in a character, for example:

- He has excellent skills [Counter Strike]
- Counter terrorist or terrorist. He is cool fast and good at cunning. [Counter Strike]
- Appearance, what they're good at like shooting or blocking ... 'cause he's good at everything [NBA Street Home Court]
- You play a soldier or you can be a hero. I would choose someone depending on what gun they had and for the right job. I think a normal rifle trooper is good because they are the normal (default) person. [Star Wars Battlefront II]

On this game you can pick two characters I would pick any person or thing like Ryu or Hulk. A player that
has heaps of special moves and abilities. Ryu is a good character because he moves easy. [Marvel vs
Capcom]

Alternatively, real life sporting heroes and being the best were favoured features of game characters:

- In my team Alan Shearer is a character he plays for Newcastle United. My team. Their skills and ability and what he does his skills are awesome. He is a great character to play all I can say is that he is a legend. [FIFA 06 and 07]
- A rugby team. You choose the best team eg all blacks or favourite game. [Rugby 08]
- All Blacks rugby team. How good they are ... because he play the game professionally [Rugby 08]
- The Warriors. Popularity strength speed and defence. The Warriors because I know most of the players. [Rugby League]

Boys acknowledged the male-dominated violence in games (in light of reported concerns about this) in the graffiti sheet activity and endorsed a number of recurrent themes when asked about their attitudes toward such game violence, with responses such as: a denial that video games negatively affect behaviour, but also support for the idea that video games do influence behaviour, their perceptions of the rights and responsibilities of parents, a justification of the violence in video games, and separating the fantasy world of video gaming from the real world. A denial that video games negatively affect behaviour (as shown with words like 'no' or 'not' and 'don't') was apparent in comments like 'video games have no effect on our behaviour', 'it's not like we will go out and kill or rape someone after playing a violent game [endorsed with] true, what he said ', 'violent games don't influence children because if they were to be influenced they are dumb because they were to play too much', '[video games are] not abusive to women' and 'it's just a video game'. Conversely, there was also support for the idea that video games do influence behaviour, with the controversial R18 game Grand Theft Auto being the focus of boys' responses: 'GTA influences the actions of teenagers', 'GTA they turn it into reality', 'not always - people have gone on hit and runs that's why they have age restrictions especially for Grand theft auto', 'it does go a bit too overboard ... with the abusement and all and I think that it's made boys behave that way'.

Boys' perceptions of violence in video games in the graffiti sheet activity also drew attention to the **rights and responsibilities** of parents with comments like 'they should not worry because they will only talk about and they could pick up some skills', 'parents should trust their kids', 'should they accept the way their children are', 'they should get a video game that's suitable for their age', 'the parents should give their children some supervision just in case they get carried away', 'why don't they buy a low violence game', 'the parents should go with them and buy their video games' 'all games are rated and it's advised to read the rating', and 'your parents will approve on non-violent games'. That is, as young boys, they still saw their parents as having some responsibility for

managing their (masculine) behaviour and what level of violence in games (and illustrations of masculinity) parents allowed their sons access to.

Boys also sought to justify the violence in video games with comments such as 'some games are violent but not all', 'no the same thing is in movies', 'violence is what make men play games - female characters on games are bonuses', 'violent games are stupid like shooting games', 'there isn't much violence in games and if there is it's not bad', 'get u off the streets', 'that's alright ... yeah ... that's straight ... cool, and and 'I think it's OK because it's self control what they do'. These two responses indicated that violence in games was a way to manage pain and anger: 'they help you release pain', and 'some people can take out anger in video games'. Further to this, some boys stressed the separation of the fantasy world of video gaming from the real world: 'they are not real so I think they should not be concerned,' 'as long as they don't do them in real life', 'I wouldn't advise a 10 year old to play a R16 game, but if the player is old enough to understand it's not real it's OK' and 'kids know it is fake'.

In the graffiti sheet activity, boys generally endorsed the idea that girl's video gaming was somehow different to boys' video gaming be it related to: perceptions that females have different interests and play 'girlier' games, there's something inferior about girls and girls games, boys assumptions about girls' sensitivity to violence, and the availability of game genres and game titles with suitable female themes.

Perceptions that females have different interests and play 'girlier' games was repeatedly articulated by many boys with comments such as 'yes because girls play girlier games', 'yes because girls may like more gentle kind of things' and 'it's different because they have different interests'. These different interests and game choices were frequently mentioned such as 'girls play less action games', 'there's no action', 'girls play more chat games', 'they play pony games, Barbie games and games where talk to each other', 'they play games like Singstar', 'dolls and makeup', 'their games are all dress up games', 'brats games' and 'girls games are centred towards fairies and dreams'. There was also a suggestion that there is something inferior about the way girls play games and girls' games in responses like 'yes we boys would like to play for a very long time while girls play for a shorter time', 'because we were made different (testosterone)', 'because they are dumb', 'yes because boys are evil', 'boys R beta than girlz' and 'it's boring playing girlz games. There was however one contradiction with '[girls games] use more brain power'.

Boys comments assumed the difference in girls' games was due to their **sensitivity to gory details**: 'they don't like gory details', 'girls don't like blood and monsters' and the differences in boys and girls games repeated comments about the **level of violence** for example 'because theirs are not that violent' and 'they have no fighting involved'. Availability of game genres and game titles with suitable female themes and depiction of female

characters in games was noted in comments like 'why girls might not play video games as long because girls games are often not very good and there aren't many around' and 'because girls are playboy mansion, tomb raider [Lara Croft is the main character in Tomb Raider].

Summary

The ways the boys answered many of the questions during the 'lessons' and what they chose to highlight in their responses repeatedly endorsed a range of masculine practices: knowledge and control of the game (knowing what to do), specific identification of male dominated themes in the games such as fighting and violence, that there is distinction between boys and girls games and gaming, that winning is about being the best, and mastery of the gaming technology is important for winning.

Category (4) 'Geeks often play mind games rather than action and fighting' – less hegemonic masculinities in a video gaming world

Knowledge/power relations that produce masculinities – hegemonic *and* less hegemonic in the world of boys' video gaming

In addition to the repeated endorsement of ideas about being male in the world of video gaming documented in the previous category, the idea that video gaming could be related to 'communities of masculinities practice' also needs to consider the way the knowledge/power relations produce masculinities, both hegemonic *and* less hegemonic.

The questions that provided data indicating the possibility for the expression of less hegemonic masculinities in the context of video gaming included those which asked about the type of character boys chose to play in a game, what is good about playing video games alone and playing with friends, the distinction between serious and non-serious gamers, and whether video games were more for geeks and nerds and ideas about this stereotype. This section documents the evidence related to less hegemonic masculinities.

In response to a general question in the small group discussion activity, asking whether or not playing a female character is something boys would do, the responses varied. Boys who said they would play a female character gave the following reasons related to; validating their choice to play a female because of the power, skills, abilities or talents of the character, validating their choice to play a female because of sexual attractiveness, validating their choice to play a female because of more matter-of-fact reasoning. Some boys stated they would not play female characters and gave range of reasons why they said this. (Note: some game titles have been named where the comment was in specific reference to a game). Validating their choice to play a female because of the power, skills, abilities or talents of the character boys commented yes they would play a female because, 'females can be good too', 'to make it more difficult', 'because they normally use magic', 'yes, have because she is an assassin and very quick [Killzone]', 'yes but I pick characters on skill basically, not looks or gender', 'because there is usually 3-9 characters and about 4 are girls and each characters have specific skills [Final Fantasy]'. Validating their choice to play a female because of sexual attractiveness resulted in comments like 'hell yea! Sexy babes! Bikini suits! [Marvel vs Capcom – wrestling game]', and 'yes because they're HOT!!'. A few boys validated their choice to play a female character because of more matter-of-fact reasoning such as 'I always do it's good to have a change' and 'yes because it's just a game'.

A number of boys however, said they would not play female characters giving reasons like 'because they don't play very well', 'because I'm sexist', 'cos a girl is not what I think of being a shooter person with a gun [Star Wars

Battlefront II]', 'because girls don't suit being a gangsta', 'cause they're not as good', (also phrased as 'because females suck'), 'cause men are more ruthless and tough', 'you can't and NO I wouldn't because no offence men are football players', 'because there aren't many [rugby] cups for them', and 'because there is hardly any female characters in games'

When asked which character they chose to play in a (selected) video game, three boys specifically chose female characters, with each boy identifying the skills of this character that made her a desirable character to play.

- Age of mythology: Note: you are not a person, you worship a god as a civilization. I choose the Titans, mainly Gaia. I choose Gaia because I like the myth units she allows you to get and the powers you get to use. I think she is good because her power ranges so it gives you a variety
- Sims 2: I use an EMO looking character. Sometimes I make my character a girl. My character always has a high cleaning level and a nice level. She is a good character and doesn't start fires by mistake or die easily from starvation. [Emo (a shortening of the word 'emotional') is term used to refer to a fashion, style, or attitude linked to post-punk era, hardcore rock music. The emo stereotype is used to identify someone who displays a particular appearance or attitude associated with emo style.]
- Grand Theft Auto: Fighter prostitute. Strength, skill, male powers ... helps mates in danger [chosen character is female by implication]

The postbox question that asked boys what was good about playing video games alone identified a number of responses that would indicate that for some boys, video gaming accommodated less hegemonic practices of masculinity in that it's okay to *not* be a winner, or *not* be a knowledgeable master of the game – but only if no one is watching. The premise here is that masculine practices that acknowledge failure in some way are less hegemonic than those practices which acknowledge success. Boys suggested that when playing video games by yourself 'you don't have to be good', 'it gives privacy', 'no one else gets to see what I'm doing in the game', 'people don't mock you for example when you play Runescape alone people don't know and don't mock you' and 'not getting mocked when [you] die'.

In response to being asked a postbox question about the **benefits of playing video games with friends**, by far the majority of boys identified hegemonic practices of masculinity among the perceived benefits of social game play (such as winning and competition, as documented in Category 1). However, a small number of responses identified some potentially less hegemonic expressions of masculinity, related to equality in and quality of friendships, the acknowledgement of feelings of loneliness and how social video gaming relieved such feelings, and being helped by or helping others. Again the suggestion is that expressions of equality, personal feelings and emotions, and accepting or needing help is a less hegemonic practice, in comparison to practices of masculinity

based on hierarchy, keeping hidden emotions like loneliness and the feelings associated with this, and being in control and being able to help yourself. Equality in and quality of friendships was indicated in comments such as 'we can talk at the same time', 'we get close', 'they are real people and not a cpo [a robot]', and 'having someone of equal skill. The value of video games for avoiding feelings of loneliness were specifically mentioned in a range of similarly worded comments like 'you won't be lonely and you can talk to them', 'sometimes good don't have to feel lonely all the time', 'you don't feel lonely' and 'more company'. In addition, the shared actions of learning from, or helping out others was noted in comments like 'some[one] to help me in mission games', 'they can help me', 'somebody to help out', 'tell me about other games', you can use each other's skills', and 'you can team up with other people'.

The boys' responses to the postbox questions about their perceptions of serious and less serious video gamers suggests something of a tension between what is acceptable (as in hegemonic) male behaviour and less acceptable (or less hegemonic) performances of masculinity. The tensions identified are based on the idea that a serious video gamer who masters a video game is a good thing, but that serious gamers are still negatively labelled for their differences and these differences are somehow less hegemonic and to be policed, for example; serious gamers play to win at all costs, serious gamers get hooked, serious gamers get emotional (and express feelings negatively), and serious gamers competitiveness is somehow different. Evidence that serious gamers are still negatively labelled for their behavioural differences came from comments like 'because the ones who are serious are game freaks not like those less serious video games', 'the ones that are serious are try hards', 'serious video gamers play to clock every game', 'serious gamers are better and usually play all day', and because they want to clock the game that means complete it. Boys also indicated that serious gamers play to win at all costs – 'they play all day and are determined to be the best and less serious gamers just play on occasions and not hard out', 'because serious play to win, uninterested don't play to win or lose, it's a matter of fact of playing the game', 'serious is more into the game, non serious isn't eg doesn't matter if you fail', 'cos people that ain't serious just turn it off when they screw up whereas hardouts persevere and look up cheats and stuff until the conquer the part', 'they always want to win while less serious gamers just do it for fun', and 'serious video gamers pay heaps of money just to play'.

In combination with winning at all costs were ideas that serious gamers get hooked and there was something undesirable about this – 'serious people spend hours and hours playing and are addicted while not serious people spend a few hours playing', and 'serious players get hooked into the games and it's really hard not to play a game that you are hooked on'. Similarly, the idea that serious gamers get emotional and express their feelings negatively was seen as a point of difference and somehow undesirable – 'the game controls their emotion for example: if his character dies or does something wrong he'll get pissed off', 'if they lose they get angry', and 'when they lose it's like the world's going to end'. Some boys also thought that the competitiveness of serious

gamers was somehow different with several similar comments like 'I think they're different because serious people always go in big competitions'.

When boys were asked a targeted question in the graffiti sheet activity about the 'qeek' and 'nerd' video gamer **stereotype** and what they thought of these (less hegemonic) labels, the varied responses ranged from: disagreement with the stereotype – it doesn't fit because everyone plays video games, the stereotype doesn't always fit (but sometimes it does), nerds and geeks exist but have certain 'other' characteristics, and the question 'invited' the opportunity to label video gamers for other perceived reasons of difference. Disagreement with the stereotype was shown in many repeated comments like 'it doesn't fit because everyone plays video games', backed up by comments like 'if you play a lot of video games doesn't mean you are a geek because it is only for fun and entertainment', 'players not geeks', 'I think some people would rather stay inside and play video games', 'they shouldn't say that because even if you don't play as much still doesn't mean you can judge them, 'it used to be only geeks that played but now everyone does it because it's fun and it's become more popular because they are more common and cheap', and 'video games are for everyone because everyone needs recreation time'. The boys that suggested that the stereotype doesn't always fit (but sometimes it does) made comments like 'you're not a nerd if you just play for fun or not very long or all the time', 'this is just people who think they are the best and aren't nerdy but sometimes are', 'I don't think you're a nerd when you play games it all depends how long you play the game. If you clock in a game a day then you'd be a nerd!!', 'there ain't a rule saying it's only for geeks', 'it depends on what type of game you play', and several comments expressed the sentiment that 'everyone plays video games and we are not all nerds'.

The continuum of boys' thinking (written as a series of connected ideas on a graffiti sheet) about video gaming geeks and nerds, indicated that geeks and nerds exist but they have specific characteristics to separate them from other boys who play video games, such as 'I think you are a bit of a nerd if you play competitive', 'nerds don't play games they do maths', 'I think when u get older then you're called a nerd', 'nerds are the ones who make video games', 'geeks play a bit more longer than normal boys and tend to share information with each other on how to pass stages and levels', 'geeks often play mind games rather than action and fighting', 'playing vg mo' makes some boys obese most geeks are puny' and 'there are game geeks and there are clever geeks like Bill gates a geek of computer mic [Microsoft]'. To point out differences between geeks and nerds and 'normal' boys, some boys took the opportunity to label video gamers for other perceived reasons of difference, mostly with reference to their sexuality 'they're gay if they play Runescape or Maple story [both MMORPGs]', 'no – Asian [additional verbal comment stated that the majority of people in local internet cafes were Asian]', I'm a geek and what! ... You're a fag if you're a geek ... Not true!, 'game freaks' and '[named] people play video games can't get qirlfriends'.

Summary

Across the data are repeated examples of not only hegemonic masculinities (as detailed in Category 3), but also the practice and policing of less hegemonic masculinities whether that be in relation to the choice of game character (such as plying a female character), the benefits of playing games alone (being able to make mistakes when no one is watching) and the reasons why boys play games in the company of friends, or the distinction between boys who play games for just for fun and more serious gamers.

PART D: REFINING THE FOCUS Discussion and conclusion

'Having fun beating other people'

'Winning - everyone thinks you're good'

'[It] gives you the pure pleasure'

'Because [you] get an opportunity to shoot a gun which you're not allowed to do in reality'

'You get to do [soccer] kicks that you wouldn't do'.

Examples of Year 9 boy's responses to anonymous postbox questions about reasons why they play video games

Introduction

The general aims of the present investigation sought to 'model' how the 'communities of practice' concept, popular in New Zealand Education, could be applied to aspects of the wider educational environment, and in effect, evaluate the usefulness of the concept for explaining a range of social learning phenomena. Of interest were informal social learning contexts that were not exclusive to the formal school environment but had implications for boys' social lives both in and beyond school, those contexts being video gaming and being boys.

If video gaming can be seen as a 'community of practice' and/or if video gaming can be explained in relation to 'communities of masculinities practice', as stated in the research questions, then the evidence for such a conceptualisation needed to be in abundance. Occasional 'hints' at something mutual, joint or shared among boys' responses would be unconvincing evidence to support these research aims in context of this project. As detailed in the Methodology (Chapter 6), the types of questions boys were asked to discuss and respond to, did not purposefully seek answers to questions related specifically to the features of the 'communities of practice' concept (that is, the research methods were not designed to fulfil the researcher's agenda). If a 'community of practice' exists in video gaming, such evidence needed to be present and highly visible across a diversity of responses and a variety of conversations related to video gaming. Consequently, the way the results have been reported in Chapters 7&8 is to variously illustrate the lack of, or conversely, the wealth of evidence, used as the basis for this discussion and to formulate the final conclusions.

This discussion of the quantitative and qualitative results (detailed in Chapters 7&8), is organised into four sections:

- The first part of the discussion provides an overview of the sample of boys involved in this research
 project (particularly the more general aspects of the findings from the quantitative data collection
 methods), in preparation for a more focused dialogue that responds specifically to the research questions
 documented in the following two parts.
- The second part of the discussion considers the research question (how) can video gaming be explained as a 'community of practice'?
- The third part considers (how) can the context of video gaming be explained in relation to 'communities of masculinities practice'?
- The final section of the discussion considers the strengths and limitations of the present investigation.

The **implications** of these findings, in relation to conceptualising video gaming, conceptualising boys in their boys' world, and the education sector's use of the 'communities of practice' concept are discussed in the conclusion (Chapter 10).

Part One: General overview - diversity of the research sample

The finding that almost all 13-14 year-old boys (98.6% of the surveyed sample) use computer and/or console gaming technologies to play video games validates the focus for this research being about boys of this age group and their video game playing. The high frequency of boys playing video games is a reflection of the similarly large numbers reported by Roberts et al (2005), but direct comparison cannot be made with this survey, given the different questions asked during the data collection process. Starting from the most simple and self-evident observation of the data collected for this investigation, it can be stated that video gaming is something almost all boys do, and they play video games for a wide range of reasons, but especially for fun and pleasure, and for the challenge, as reported by the likes of Prensky (2001), and Gee (2003, 2007), and because it is something to do in the absence of anything else (Griffiths, 1997), in other words, it relieves boredom. Video gaming is an integral part of the play world of almost all boys although the level of investment (in terms of frequency and duration of game play) varies.

Wenger (1998) notes that members of a 'community of practice' need not be a homogenous entity and indeed, the heterogeneous and diverse nature of community membership can assist with engagement in the practice of the community. With this understanding, it is worth considering both homogeneity and the heterogeneity of this group of boys who all share video gaming as a common activity, but who each brings with him knowledge and understandings from other 'communities of practice' of which he is a member.

Ethnic diversity

The boys who participated in each phase of the research were similar in ethnic profile with approximately one third of both samples being Pakeha/European, another third Maori/Pacific Nation and a third Asian/Indian. This ethnic profile is reflective of the diversity of Auckland city and the many schools across the region. Ethnic based differences between boys and their video gaming practices described in the quantitative data were few, with game choices being one of a very few observed ethnic differences. Two of these observations were shown to be statistically significant and that was that Asian/Indian boys were more likely to choose adventure games over all other games as compared to boys of other ethnicities, and Pakeha/European boys and Maori/Pacific Island boys were more likely than Asian/Indian boys to play sports games. While speculative to say so without additional supporting evidence, these differences *may* be explained by different cultural values and interests. For example, if it could shown that Asian and Indian traditions place higher value on education outcomes, it may explain the greater preference by boys of these ethnicities for adventure games which use strategy and problem solving to win. Alternatively, if additional evidence could show that the relatively conservative values of these ethnic communities influence boys' game choices, it may mean that video games with high levels of gratuitous violence

and sex are just not seen as acceptable and boys' gaming choices are bound by cultural standards. Many of the sports video game titles would *suggest* that there are more games designed for boys of Pakeha and Maori/Pacific Island backgrounds – world class rugby and rugby league (especially), soccer, motor racing and wrestling (many featuring named players of these same ethnic backgrounds), are not sports typically associated with Asian and/or Indian communities, so the greater popularity of these games may lie with the boys who share the greater cultural connections with the teams and players portrayed in the games. It needs to be stated however, that all ethnicities play all genres of games and it was just the proportions of boys in each ethnic group that showed variation in game choices. Consequently, it could be said that the boys still share a common repertoire of resources, especially when the very games they play (despite the genre) still show a high level of male themed content.

Diversity of socio-economic status

The public attention afforded differences in socio-economic status, particularly on matters of equitable distribution of resources and who has access to what, could not be ignored in the current social and political climate (and the very reason for the Ministry of Education to attribute a decile rating to schools which then determines the level of government funding for the school). Asking boys to identify which electronic technologies they had access to at home was by way of identifying whether boys shared a common repertoire of resources for the practice of video gaming. The financial cost of owning gaming technologies like computers or game consoles (like Play Station or X Box) could be potentially inhibitive for boys and families in lower socio-economic communities. As noted in Chapter 7, just 12 boys (4.3%) in the sample had neither gaming technology at home (and they were not all in the lowest decile school), but in completing the questionnaire these boys indicated that they still had access to such technology at the houses of friends or other family members, at school, or at internet cafes. Like the young people in the KFF survey (Roberts, et al, 2005), these boys live with the technologies that are a feature of a 'media saturated' home environment.

No statistically significant difference was shown to exist between the school decile rating (as a measure of socio-economic status¹⁷) and whether or not boys had access to *either* computer or console gaming technologies at home. However, one finding outside the scope of the intended research question but worthy of mention is the differential level of access boys had to specifically computer-based technology at home. The combination of being Maori/Pacific Island *and* in a lower decile school community meant that access to gaming technology was more likely to be in the form of a gaming console (much like young people of black or Hispanic ethnicities in the KFF study).

¹⁷ It needs to be stressed that the basis for attributing socio-economic status to boys was related to the decile rating of the school they attended, which gives a measurement indicative of the economic resources of the whole community, not individual families or individual boys within those communities.

From an educational point of view, this could be seen to disadvantage boys in such communities, as the less expensive gaming consoles (which cost a few hundred dollars) can only be used for gaming, whereas computers (costing in the low thousands of dollars) have applications beyond just gaming, such as internet access for research and communication, using programmes for word processing, data management and so on. This difference in access to computer technology, given the importance of such for educational purposes, has resourcing implications for schools attended by boys who may not have a computer at home. That is, in order to achieve some sort of educational equity for their students, schools in lower socio-economic communities with significant Maori and Pacific Island populations have the added responsibility (and cost) of ensuring that their students have ready access to computers – this in contrast to the private school in the sample whose students each compulsorily had their own laptop which is used as an integral part of their daily tuition.

Diversity of boys as boys

It was difficult to *avoid* seeing boys self descriptions of themselves as a function of their age and stage of adolescent development. The adolescent need to be accepted by peers, to fit in and to feel a sense of (cultural) belonging (see for example Steinberg, 1999, on adolescent development) could explain why the most popular self descriptors included; being friendly (and not reserved or a loner), being sporting and athletic, like the boys in Swain's 2003, 2004) studies (as opposed to performer of the arts), and being funny and easy going (as in 'chilled' and relaxed – in other words appearing to be in control of the situation). The low popularity of the 'wealthy' descriptor, something that adult men are likely to see as a measure of male success (discussed by the likes of Connell, 1995, albeit more in relation to access to employment, the working class and women in the workforce), may be explained developmentally as well. The age of these boys would suggest that the need for independent income to support the purchasing and running of cars and buying other material goods that infer status, being able to afford social activities associated with partying and perhaps socially-related expenses associated with (sexually) intimate relationships (as in having a girlfriend or boyfriend), have not yet become a reality.

Similarly, being well-built or muscular, and masculine (or manly) were surprisingly well down the popularity list for self description, although good looking or handsome featured further up the list. On one hand it could be said that when given only five choices, these alternative descriptors were not so much not important, they just didn't make it into the top five of most boys' preferences, or again, the stage of adolescent physical development of the boys may mean that being seen as muscular and masculine (and the meaning young teenage boys attributed to these terms,) had not (yet) become a priority for most boys at 13-14 years. However, developmental psychology is not the planned theoretical framework for this investigation, so while it is acknowledged that boys' descriptions of themselves could be explained through this discipline of understanding, this discussion needs to focus on the sociological understandings offered by the masculinities literature which is expanded on later in this discussion.

Summary

The heterogeneity of this group is such that a boy who plays video games cannot be labelled with a distinct set of characteristics, except that he is most likely to play male themed games from either the action, adventure, sport or role playing game genre, all of which require acts of violence and aggression to win or advance in the game. Among this sample of boys, the differences are largely distributed across the group, with the exception of some expected ethnic and socio-economic differences already noted. Whether the differences between boys as video game players are based on game choice, frequency and duration of game play, the reasons boys play games, the ways boys describe themselves and their opinions about aspects of video gaming, the combinations of boys' similarities and differences are spread. That said, some responses by boys indicated that there are (perceived) differences between boys who play video games for fun and entertainment in contrast to boys who play more seriously (as in they invest more time and resources). Whether or not these are the 20% of boys who reported that video gaming was their most preferred activity is uncertain without additional data. However, because the focus for this investigation was the video gaming of any and all boys, and as no specific questions were asked of boys to identify themselves as serious or less serious video gamers (as in boys who make a commitment to video gaming in much the same way that some boys commit to competitive sport, or the performance arts), who these boys might be and how they would be described in context of this sample, remains unclear.

Part Two: Video gaming – a 'community of practice'?

To initiate this part of the discussion it is difficult to avoid stating upfront the answer of 'no' to the question, "can video gaming be conceptualised as a 'community of practice'?" The overwhelming *lack* of evidence to support any sense of 'community' in video game playing makes this an obvious starting point from which to discuss the findings. While there is feasibly some sense of 'practice' in boys video gaming, whether or not this aligns with 'practice' as Wenger (1998) conceptualised it requires consideration. Consequently, this part of the discussion will address why the present data *does not* support the conceptualisation of video gaming as a 'community of practice'.

Taking into account both the literature reviewed, and the data collected from boys, this discussion additionally became an exercise to determine where the 'communities of practice' lens *might* be usefully applied in relation to video gaming. The review of the literature identified the potential for shifting the focus of the 'community of practice' conceptual lens, away from the act of playing video games, to other social arenas that in some way utilise or consider video games. These alternative points of focus will be discussed to suggest where the 'communities of practice' concept still appears to have relevance and application to the world of video gaming.

Focusing the 'communities of practice' lens on video gaming

As stated in the rationale, video gaming for the purpose of this investigation refers to the very act of playing video games, not the whole economic and cultural world of activities and events that are based around the playing of games. Therefore, this part of the discussion is centred on video gaming, with the 'community of practice' lens being applied specifically to boys playing video games.

Young teenage boys, like children of all ages, play games, and among their other leisure and recreational activities, twenty-first century boys play video games. Boys say they play video games for fun and pleasure, for a challenge and for something *to do*. That is, their reasons for playing are about personal fulfilment and self-satisfaction. Video gaming is a fantasy play world boys can escape into just as children have always done, the fact that the objects or 'toys' they use to play these twenty-first century games of fantasy are sophisticated electronic technologies, makes little difference (much as Jenkins, 1998, illustrates in the opening to the masculinities section of the literature review). But to call boys who participate in the common activity of video gaming a 'community', much less a 'community of practice' as conceptualised by Wenger (1998), steps outside the intentions of the concept.

Before dispensing with the concept and its application to video gaming, it is worth considering at least some aspects of Wenger's conceptualisation, to expand on these ideas. Feasibly, some features of the 'communities practice' concept could in a general and superficial sense be made to 'fit' the world of boys' video gaming, but the essential point is, the concept as a whole and in detail, does not apply as shown by the data collected from the present investigation.

'Community'?

Wenger (1998) stated that 'community' 'is way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognizable as competence' (p5). The picture painted by boys about their playing of video games does not give any indication of the existence of any 'social configurations' in this sense. Boys may discuss games with their friends or mates, but the friendship between just a few boys, or between an informal and changing peer group, does not speak to a sustained social structure whereby boys are mutually engaged in a joint enterprise of video gaming. If a joint enterprise requires 'a collective process of negotiation that reflects the full complexity of mutual engagement' and it is 'defined by the participants in the very process of pursuing', where is the evidence of these collective processes, and where is evidence of negotiation giving 'rise to relations of mutual accountability among those involved' it' (Wenger, 1998, p77)?

Boys' participation in video gaming seems to be a matter of choice - it is something they personally choose *to do*. The playing of video games is not an activity boys 'negotiate' the meaning of, at best it is a common interest most of them share. It begs the question, if video gaming is a largely individual activity (albeit that games can be played socially) how can it be a joint enterprise, and therefore, what meaning is there to negotiate in the playing of video games? The nature and 'meaning' of the game has been predetermined by the game developer and as long as boys have the personal knowledge and skills to use the technology to play the game (a type of competence perhaps), what is the joint enterprise they need to mutually negotiate meaning of? A joint enterprise would also suggest there is some collective and common purpose for the practice of the community, and one that needs to be sustained, but not all video gaming is social practice, as shown by boys' preference to play alone, and also, there is little sense of video gaming having a collective purpose when boys report (almost exclusively) personally motivated reasons like fun and pleasure for playing video games. When some research reports specifically state that video gaming is something that is attractive to children as something they can do when other people are not around (eg Fromme, 2003), it emphasises that video gaming is an activity that is not dependent on social practice or any sense of mutual engagement in a joint enterprise. If boys have the gaming hardware and software, the knowledge and skills to use it, and the motivation to participate, then video gaming happens, which can be in social isolation and independent of any negotiated meaning of the activity. The present data supports Gee's (2005a) challenge that the 'communities of practice' concept is an inadequate concept for video gaming, because of the absence of 'community' (and all of its connotations) in video gaming.

'Practice'?

Video gaming can be talked of as a 'practice' in general terms, but when taking on board additional meaning for conceptual purposes, that 'practice' is 'a way of talking about the shared historical and social resources, frameworks and perspectives that can sustain mutual engagement in action' (Wenger, 1998, p5), and that practice is what gives a community coherence (it is the very reason for the existence of the community), then evidence from the present investigation does not convincingly support such a notion of practice. 'Practice' is not only about 'what' people do, it is also about why people do what they do to sustain the joint enterprise of the community. Therefore practice is always social practice because people need to negotiate meaning of the joint enterprise, and as already stated, boys' video gaming need not have a social structure to sustain it. The skills and knowledge boys need to participate in video gaming can come from the fixed instructions that come (literally in the box) with the gaming technology itself, boys do not need to negotiate meaning to determine what video gaming is about, or be invested in some sort of collective enterprise along with many other video game players to be able to play video games.

A shared repertoire of resources

Having argued that *mutual engagement* and *joint enterprise*, as specific understandings within the 'communities of practice' concept cannot be convincingly supported by the (lack of) evidence from this investigation, the third essential component of the concept could reasonably be applied to video gaming. That is the notion of a 'community of practice' having a *shared repertoire* of resources, experiences, stories and strategies as a way of addressing relevant issues, so that the members of the 'community of practice' become actual practitioners of what they do. It is apparent that boys have *common* resources such as the very gaming hardware and software that they use to play video games, although to say these are 'shared' resources seems to overstate the situation. If boys want to play video games they simply need to have access to the technology, it is not a resource in the video gaming repertoire that is negotiated in terms of its meaning and purpose. They need common knowledge and skills to know how to play video games, but are these negotiated or are they simply learned because without such learning the game cannot be successfully played (it is a game after all, and there are rules to be followed)?

Boys who become very adept at playing video games could well be considered practitioners (noted for such skills if they end up in a video gaming competition), but does anyone else benefit or learn from the skills these boys have mastered? Maybe some others do benefit by learning new game strategies and other knowledge gleaned from conversations boys have about video games, but is there any mutual engagement in a joint enterprise to ensure such knowledge and skills are passed on? Boys may use a common language to talk *about* video games, but then this is taking the focus away from gaming itself and into a different arena, that being their social world which is not exclusively about video gaming and could arguably be quite a different, albeit overlapping 'community of practice' like the 'communities of masculinities practice' featured later in this discussion. To say boys have a

shared repertoire of resources for playing video games, is a part of the 'communities of practice' concept that could be applied loosely at best, but the point remains, without substantial evidence to support a sense of mutual engagement in a joint enterprise, these incidental connections between the notion of a shared repertoire and video gaming are relatively meaningless.

What could a video gaming 'community of practice' look like if such existed?

As noted in the literature review, the one area of video gaming that would seem to be able to be conceptualised as a 'community of practice' are the MMORPGs (massive multiplayer online roleplaying games). This gaming phenomenon is by its very nature, a collective and social activity, albeit that the social interaction is all in the virtual world which is a situation Wenger (1998) accommodates in his conceptualisation. As noted by Tychsen et al (2006), the complex systems around the playing and management of MMORPGs could mean that the 'communities of practice' concept can be usefully applied to this game genre. To successfully play a MMORPG like *World of Warcraft* requires mutual engagement by a guild of players, in a joint enterprise (the missions, and quests in the game), who need to negotiate meaning of game events to determine a way forward so that all characters survive and eventually increase their level in the game. All of which utilises a shared repertoire of resources (from the very gaming hardware and software, through to the knowledge of how to play the game, knowledge of game features and so on). However, empirical evidence, responsive to criteria which stress the importance about where the 'community of practice' lens needs to be focused (eg Lai, et al, 2006, explain this in relation to the identification of 'online communities of practice') would be necessary to determine if such a conceptualisation is borne out in application.

Boys in the present study reported relatively low levels of preference for roleplaying games, apparently not out of interest but more because of the required investment in time and resources to make such gaming worthwhile. Hence, in context of the present investigation there was little opportunity to explore the possibility of conceptualising MMORPGs as 'communities of practice'.

Alternative points of focus for the 'communities of practice' conceptual lens in relation to video gaming

While aspects of video gaming could be conceptualised in context of wider social and cultural practices (as a number of researchers have suggested, and as discussed in the literature review), the research question being explored for this part of the investigation placed the conceptual lens specifically on the playing of video games. The second research question shifts the conceptual lens onto the boys (who play video games) to consider how social practices related to gender, could be viewed through the 'communities of practice' concept. However, before engaging with that part of the discussion, it is worth considering ways that the 'communities of practice' lens may still be useful in relation to other aspects of video gaming.

It is apparent from the literature that if the 'communities of practice' conceptual lens is going to be focused on the world of video gaming, then it is not on the gaming in itself (with perhaps the exception of MMORPGs as noted), but more the constellations of 'communities of practice' that include video games among their shared repertoire of resources. This discussion is deliberately avoiding calling these constellations of other communities, *co-located* 'communities of practice' (after Lai, 2006) as it would suggest that video gaming is a 'community of practice' that other such communities can be co-located with.

Consequently, it is suggested that the constellations of 'communities of practice', some of which will overlap, may include: professional communities of educationalists and teachers who, in the sharing and development of new educational knowledge, integrate the use of video-gamed based learning into their teaching programmes; professional communities of medical practitioners who use video games to educate or distract patients as part of the treatment regime for chronic illness; communities of researchers who are investigating the use of video games from their various disciplinary perspectives (with the suggestion that there will be several such communities if noting comments by Hammersley, 2005); communities of advocacy groups with various social and political agendas based around monitoring the violent content of the video games that young people are being exposed to, and passing onto the public research that maybe identifying effects of such video gaming; communities of trained game developers employed by the media corporations who design and produce video games; and other groups invested somehow in the world of video gaming. It would be feasible to call some of these communities 'co-located' as the work of a researcher overlaps with and informs the work of an advocacy group, or that a community of educationalists work additionally as researchers. However, the central point remains, it is not the playing of video games that is the 'community of practice', it is the social learning environments that utilise video games as a resource within their practice where the conceptual lens needs to be focused.

Revisiting Lave and Wenger (1991)

The earlier chapters of this dissertation established that Lave & Wenger's (1991) earlier work lacked the type of detail that would be useful for analytic purposes for the present investigation. As a point of discussion it is worth considering briefly *if* their ideas about legitimate peripheral participation, through which novices or apprentices learn how to be masters or experts in a 'community of practice' could be applied to video gaming. If learning is to be viewed as a social activity whereby novices, working on the periphery of the community, learn proficiency from the masters (the accomplished practitioners) in order to become a full member of that 'community of practice', then a 'video gaming community of practice' would need to have social interaction where the learning can happen (in the real or virtual world), and there would also need to be a sense of purpose as to what learning needs to happen to develop from a novice into a master. The question in relation to video gaming has to be, where is this social learning happening to become a master video gamer?

According to the boys in the present investigation, to become a proficient player of video games is something a boy undertakes to learn for himself by sourcing other documentation from websites and other media sources, (perhaps) using cheat codes (as mentioned repeatedly by boys in this investigation), and then 'playing lots' so that he can personally do better in the game. It is not the type of learning boys appear to be offered or encouraged to learn by other (expert) practitioners for the benefit of a community. While it would seem reasonable to assume that boys are learning something about game strategy (for example) from each other during their interpersonal conversations, it is not as though a player is learning these skills and this new knowledge for the good of the 'community of practice', it is all for his own benefit and personal enjoyment of the game. The sustainability of such a 'community of video gaming practice' would also need to be questioned as every time a player purchases or otherwise obtains a new game, and regardless of which existing gaming titles he has previously mastered, he returns to the position of novice, albeit that his general gaming skills and command of the gaming hardware previously learned, remain part of his personal repertoire of resources. To talk of novices and experts in video gaming, would seem therefore to be an ongoing cycle depending on the level of experience of any one game player with any game title. While this situation need not be at odds with Lave & Wenger's (1991) conceptualisation, without a *collective* sense of purpose to the activity of video gaming, the question "where is the 'community'?" resurfaces.

Summary

The framing of the research questions was in anticipation of the need to consider different focal points for the 'communities of practice' lens. Focusing the 'communities of practice' conceptual lens on the playing of video games has proved to be a less productive exercise. Such a finding is still useful however, as determining which (social learning) concepts are less applicable, can help steer researchers towards concepts and theories that are more workable in their application to the world of video gaming. As an illustration of an alternative focus for the 'communities of practice' lens, the next part of discussion shifts its focus to the social practices of the boys themselves, but still in relation to their video gaming world.

Part Three: Video gaming in relation to 'communities of masculinities practice'

In contrast to the previously discussed task that sought to conceptualise video gaming as a 'community of practice', the prospect of viewing masculinities as 'communities of masculinities practice' (after Paechter, 2003a) seemed much more fruitful, given that the review of the masculinities literature was far more supportive of such a project. To provide manageability of such an exercise (given the enormity of an undertaking that sought to look at any and all 'communities of masculinities practice'), Paechter suggests focusing on localised contexts of masculinities practice, the chosen context for this investigation being video gaming. This part of the discussion then, is to consider how data collected during the present investigation, in conjunction with the literature reviewed in Chapters 3 and 5, can be used to explain video gaming in relation to 'communities of masculinities practice'. In other words, the 'communities of practice' conceptual lens is now being applied to boys and the practice of masculinities, in context of their video gaming world.

Addressing the research question

Entering this part of the discussion has a different 'sense' to it; whereas video gaming is an activity boys can *choose* to do (or not to do), being male is a feature of boys lives that has already been ascribed by virtue of biology and (variously) by social construction. Working from the assumption that masculinities *can* be conceptualised additionally as 'communities of masculinities practice', based on Paechter's (2003a) recommendation, and on the strength of support for this from the masculinities literature reviewed in Chapter 5, it could be said that boys are members of 'communities of masculinities practice' by default, simply because they are boys. However, being born (biologically) male does not confer membership to any and all 'communities of masculinities practice'. There are some communities that boys are able to choose to develop membership of, such as sports-related 'communities of practice'; there are some communities that boys are automatically included in, such as school communities where they are compulsorily required to attend for the purpose of their education; and there are other communities from which they are actively excluded (or remain on the periphery of, and never achieving 'full' membership) because of their young age, their (perceived) differences such as ethnicity, (dis)ability, sexual orientation and gender identity, and their resources like their level of education or economic situation.

Boys do not get to choose to be boys¹⁸ in the same sense they can choose to play video games, what they may have (some) choice in, is how they *be* a boy. These choices however, drawing on Connell's (1995) concept of hegemonic masculinity, are largely bound by what is deemed appropriate and acceptable to the context in which

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 $^{^{18}}$ The specific and complex situations around transgender and transsexual people are noted and consequently, people with such identities are not necessarily included in the *general* point of this discussion.

boys are being boys. In other words, boys' choices about how to practice masculinities are considerably influenced by the social status afforded them by conformity to hegemonic patterns of masculinity, and their policing of less hegemonic practices.

The point to be made here, drawing now on Wenger's (1998) conceptualisation of 'communities of practice' (and the components of the concept), is that to say boys are mutually engaged in the joint enterprise of being boys, is something of a 'given', especially when being a boy is conceptualised in terms of Connell's concept of masculinities, and in particular, hegemonic masculinity. For boys to be invested in hegemonic practices (which include the policing of less hegemonic patterns of masculinity) and to practice culturally exalted patterns of hegemonic masculinity, means there must be a collective commitment on the part of boys to do this. *That is, hegemonic masculinity requires mutual engagement in the joint enterprise of being masculine, using a shared repertoire of resources to produce or practice patterns of hegemonic masculinity.*

The review of the literature, in addition to Paechter's (2003a, 2003b, 2006) writing, provided a convincing argument that masculinities *can* be conceptualised as 'communities of practice', and consequently *this position* has been adopted as a central premise for this part of the discussion. The question for discussion then is **how** can the context of video gaming be explained in relation to 'community of masculinities practice'?

It has already been established that video gaming in itself is not where the 'communities of practice' conceptual lens can be focused, and if video gaming is going to be conceptualised in relation to 'communities of practice', the concept needs to focus on the social activities of people who use video games as part of the shared resources of their practice. Consequently, a question that asks "how can video gaming be seen as a 'community of masculinities practice?", becomes redundant as it has already been shown that the playing of video games cannot be adequately conceptualised as a 'community of practice' (because among other reasons, there is no sense of what the collective enterprise might be as boys play video games almost exclusively for personal reasons such as fun and pleasure). For this investigation, the focus is on boys, which means that video games need to be seen as part of their boys' social world which is where 'communities of masculinities practice' exist (conceptually at least). That is, the 'practice' of the community is not about the activity of video gaming, the 'practice' is about being a boy.

The localised contexts that are 'communities of masculinities practice' are the boys wider social and peer groups at school (in the classroom or playground), or other social settings beyond school. Within these social contexts boys learn, practice and produce masculinities, and given that boys in the present investigation reported that they talk about aspects of video gaming in their conversations with their friends family members, and peers, it could be assumed that aspects of video gaming are integral to practices of masculinity in the communities to which these

groups of people are members. If anything, video gaming becomes a sub-context, or a situation, within the wider social context where the 'communities of masculinities practice' exist. What boys learn about being masculine from other members of their various 'communities of masculinities practice' then carries over into their video game play, meaning that video gaming becomes the context in which masculinities are *practiced*, video gaming itself is *not* the context where the 'communities of masculinities practice' conceptual lens can be applied. When boys are playing video games as a solitary and individual exercise, and even if they are playing socially with friends (MMORPGs excluded as previously discussed) they practice patterns of masculinities they have learned from their various 'communities of masculinities practice'.

Again this discussion has become an exercise to determine where the conceptual lens offered by Wenger's (1998) 'communities of practice', can be applied. In the case of this investigation, it is claimed that masculinities can be conceptualised as 'communities of practice', but that the localised contexts where these 'communities of masculinities practice' exist, needs to clearly focus on social groupings of boys, not necessarily the shared activities of the boys, unless such an activity is inherently social. 'Community' after all is about people being and working together, and 'practice' is related to the collective enterprise they are engaged in that gives the community coherence and defines the community's purpose.

To answer the second research question then; the context of video gaming can be explained in relation to 'communities of masculinities practice' only when video gaming is considered as a popular and common activity in which boys *practice* masculinities. These masculinities have been learned from, and are produced through boys' continuous membership to their various 'communities of masculinities practice'.

The remainder of this part of the discussion therefore focuses on how video gaming is a context for the practice of masculinities, learned from, sustained and produced by boys' membership to their various 'communities of masculinities practice'.

The practice of hegemonic masculinities and video gaming

The premise that masculinities *can* be conceptualised as 'communities of practice', assumes that boys are mutually engaged in the joint enterprise of being masculine, using a shared repertoire of resources. Data collected from boys in this study provided such evidence through the repeatedly supported, and highly repetitive endorsement of hegemonic practices of masculinity. To illustrate ways in which video gaming is a context for practicing and producing hegemonic *and* less hegemonic masculinities, the following passages discuss a number of themes common to both the reviewed literature, and the results of the present investigation.

Rather than clutter this part of the discussion with additional reference to Foucault's conceptualisation of knowledge/power relations, it is understood that the social learning in a 'community of masculinities practice' and

the production of hegemonic masculinity can be explained through such a concept of power, as discussed in the conceptual frame work (Chapter 2) and the literature review (Chapter 3). That is, any discussion of hegemonic masculinity is inclusive the discussion of a Foucaultian notion of knowledge/power relations.

When considering the practice of masculinities in relation to the activity of video gaming, the boys in this investigation exhibited many patterns of hegemonic masculinity commonly reported in studies of younger (pre-teenaged) boys, such as being a boy was anything that girls were not, physicality was important for the practice of masculinities, being a boy is about fun and playing, and being a boy is about maintaining and policing a hierarchy of hegemonic masculinities.

Being a boy is about not being a girl

That being a boy is about not being a girl (reported by Jordan, 1995, in research on very young children) emerged, for example, when boys were asked what types of characters they liked to play in video games, with the majority of boys explicitly stating *he* had to be *male* (most boys specifically said they would not play female characters). Like the young boys in the study reported by Griffiths (2004), these boys were less likely to swap gender characteristics when playing video games. Boys exclusively chose male-themed action, adventure, sports and roleplaying game titles, if boys ever play girl-themed games, they were not owning up to it. In gender related questions, boys identified girls games in terms of the non-violent/less action nature of them, or by titles related to girls toys like 'Barbie' or 'Brats', and assumed that girls had interests like dressing up, make up, singing, ponies and so on. Hinting at some more developed thinking however, were a small number of comments from boys indicating that they thought girls were put off video gaming because of the (sexualised) characterisation of women in video games such as 'Playboy mansion', or Lara Croft in 'Tomb Raider'.

Being a boy is about being physical – rough and tough

Boys made repeated reference to exaggerated displays of violence and aggression throughout their accounts of how to play games and win them, what games teach them, why they like to play them, and in their reasoning as to why they like to play certain characters in video games. These exaggerated performances of aggression are much like those observed during the play and social interactions of much younger boys reported by Keddie (2003a). When viewed as examples of hegemonic practice typical of almost all young boys, this plethora of overstated, violent and aggressive acts in video gaming takes on a different meaning to the messages of alarm and panic in the media-effects literature. As Jenkins (1998) reports, boys across the centuries have thought, talked and played aggressively and violently, it is something boys learn from a very young age in most societies, and these patterns of hegemony are reproduced generation after generation. While such behaviour cannot be condoned when it causes harm to others, to blame video games for violent behaviour seems very short-sighted, and it would seem that providing boys with the opportunities that video games offer, to do things they know they

cannot do in real life, is one way to channel these hegemonic practices. When the wider political and cultural world the boys live in is not addressing the most significant predictor of violent behaviour, that is, poverty, or providing any alternative examples of more socially 'acceptable' practice, boys will continue to learn that aggressive performances (real or ritualised) are integral to masculine identity.

It would seem then that the low popularity of the 'muscularity' descriptor (from the item bank in the quantitative survey boys used to describe themselves) was anomalous given the association of the need for muscularity and success in carrying out violent or aggressive acts, but as previously suggested, this may be a function of being young teenagers whose stage of adolescent physical development meant that most of these boys still had the bodies of young boys, and not the muscular development of young men. That muscularity had not yet become a personal priority for masculinity would seem unlikely given the importance of the physical body for proving one's masculinity (as reported by Martino & Pallotta-Chiarolli, 2003), especially as boys repeatedly chose game characters on the basis of their male (physical) strength which would assume a certain level of muscularity. However, the high level of popularity for the 'sporting/athletic' descriptor may explain this as it seems that physical competence, sporting prowess and ability (as in not disabled), which was the second most popular descriptor selected by boys, rather than muscularity in isolation, are afforded a higher importance for boys describing themselves as boys (reflecting other findings reported by Martino & Pallotta-Chiarolli, 2003; and also Frosh et al, 2002; Swain 2004; and some of the boys described by Pascoe, 2003). It appears that for 13-14 year old boys, having a physically able and competent body (as highlighted through sport) is a more important descriptor for being a young teenage boy, than having a well developed musculature which for most of them does not yet exist given their early stages of adolescent maturation. That over 80% of boys said video gaming was not their most favourite activity, and that almost all of these boys nominated physical activities like sports as the preferred way to spend their leisure time, could additionally indicate the importance of physical (sporting) prowess for the production of young masculinities, with the value of a muscular body being reserved more for the largely private fantasy play world of video gaming.

When asked about their attitudes to violence in games, these boys tended to rationalise acts of game aggression and violence by saying they knew the difference between real life and fantasy game-based violence, and that they also considered parents had a responsibility to monitor game violence, to regulate children's access to such games, and also to trust and accept their kids. This does not quite parallel Haywood & Mac an Ghaill's (2003) claim that young (pre-teen) boys simply despised real life violence, suggesting there are some developmental shifts in boys' understanding, so while they may still engage in exaggerated game violence, what they understand about such game play is more complex. This has implications for education programmes seeking to engage boys in critical and reflective thinking about their gendered attitudes, beliefs and behaviours (similar to the call from Alloway & Gilbert, 1996), by illustrating the need to have developmentally appropriate teaching resources and

learning activities. Also, that teacher knowledge (or any other adult knowledge for that matter) about gender issues for boys needs to include some understanding about social construction of gender (echoing Martino, et al, 2004; Martino & Frank, 2006), and the impact of gender normalising practices that have been shown to prevail in many classrooms (similar to those situations reported by, Francis & Skelton, 2001a, Smith, 2007).

Being a boy is about having fun and not being a 'try hard'

One of the findings from Haywood & Mac an Ghaill (2003) suggested that 'boyness' (to be a masculine boy) was expressed through 'playing' with an emphasis on having fun and not taking things seriously. Boys repeatedly reported they played video games for fun and pleasure; it was not an activity that many of them seemed to, or admitted to, taking seriously. Also noted was that being 'funny' was the third most popular self-descriptor for the boys in the present investigation, followed by 'easy going'. A similar idea of not taking things seriously being a practice of hegemonic masculinity was reported by Frosh, et al (2002) in relation to achievement at school. However, when asked about how boys get to be proficient at playing video games, and in addition, what their perceptions of computer geeks, nerds and serious gamers were, such gamers were seen by most boys as somehow different and that to be a serious gamer (one who entered competitions, played obsessively for hours on end, or got emotional when he lost), was somehow a less hegemonic practice. This could be explained in terms of emotional responses being seen as feminine, obsessive behaviours were not 'playing', not fun or funny and obsessive behaviours indicate a level of seriousness not featured among practices of hegemonic masculinity.

This attitude of not taking things seriously and downplaying, or otherwise taking attention away from personal achievement (Renold, 2001) in any context (with perhaps the exception of the sports field), seems to be prevalent among many young and teenage boys and could reasonably be seen as a contributing feature of the reported underachievement of some boys. However, the hegemonic practices that produce such attitudes and patterns of hegemony are so pervasive that affecting change seems an enormous task. To put this statement in the conceptual language of this dissertation; such a task (to change attitudes and ultimately behaviours) would need to be approached as an joint enterprise in which all members, teachers and students (when considering the context of schools) need to be mutually engaged, using a shared repertoire of resources which would include a common conceptual knowledge about gender which supported such a project, and the use of inclusive language in all communication to sustain the enterprise of such a community.

Being a boy is about maintaining social status - preferably from the top of the hierarchy

When video gaming is used as the topic of conversation between boys, or when they play games socially with their friends, the situation offers a means to practice masculinities and maintain social status as a boy. Conversations that focus on how well they did, whether they clocked (finished) the game or what level they achieved, and new things they found out about the game, all point to having a greater knowledge or command of

the game. While it is too simplistic to say 'the power of knowledge' imparts hegemony, the power of boys knowing about gaming and making sure other boys know they do, produces masculinities in a way that seem to help boys maintain their social status, much like the findings of McGuffy & Rich's (2003) study with young boys. As well as talking about their gaming successes, boys can show their superiority by playing games with friends to see if they can beat them and see who is better, and to show their gaming prowess by taking on the additional challenge and competition that are factored into the game when additional players are added (and it is not just an individual boy playing the computer). Even when boys say they help others to play, such as to 'rescue' them in the game, there is still a sense of superiority in that the boy being the helper has the skills and knowledge to know how to do this, over and above his competitor, and hence maintains his superiority in the social hierarchy. It seems it is much easier to play the game of being a boy (that is, to practice hegemony), when boys hold a level of status well up the social hierarchy.

Teaming up' (in a video game) also appears to be another feature of this pattern of hegemonic practices. While being in a 'team' would suggest collaboration and each member contributing their skills and resources in an equitable way - 'for the good of the team' - it could also be read in relation to wanting to be friendly and easy to get along with, and to be seen to be doing the right thing (being friendly was by far the most popular descriptor boys used to describe themselves in the survey). It could also be a reflection of the cultural importance of team sports like rugby in New Zealand, because of the history of hegemony associated with (inter)nationally played (male dominated) team sports (as noted by Pascoe, 2003; Light & Kirk, 2000).

Being a boy is about policing less hegemonic masculinities

The social environments in which the topic of video gaming may feature, or in which video games might be played socially, are also opportunity for policing masculinities. When boys police masculinities, they contribute to the production of hegemonic practices and the pattern of hegemony. In video gaming-related situations, boys regulate hegemonic practices through a range of performances such as name calling (reported by every researcher investigating masculinities in schools, eg Martino & Chiarolli, 2003, Towns, 1999), especially to draw attention to the (perceived) differences of less hegemonic others, such as those with a seriousness approach to video gaming who may have superior skills but are also obsessive in their gaming habits – the 'game freaks'; or put downs related to any hint that a game might have feminine associations. There were also, the ubiquitous homophobic references used to additionally label boys heavily invested in video gaming.

The defiance with which many boys said they would not play a female character in a game *and making sure other* boys knew this, would suggest that the choice of game character was a factor in maintaining patterns of hegemony, as was the choice of game, much like the situation in the *South Park* cartoon used to illustrate the conceptual framework in Chapter 2. Furthermore, the choice of strong and physically competent male characters

in games, enhanced with good weapons, skills or powers, was integral to character choice, and which boys talked about.

Other than homophobic language, there was very little reference to sex across boys' responses, with most girl-related comment being more about gender differences than anything to do with sex and sexuality. One notable exception was from a boy describing the game *Grand Theft Auto; 'It's a gangsta* [video game], *a lot of shooting, heaps of killing, running from cops, drug dealers, mean as cars, prostitutes, can do a lot of realistic things like (basketball, doing weights, can buy you a feed, can fuck girls in cars)'.* However, this was an atypical response reflecting Renold's (2004), findings which reported that hyper-heterosexual masculinity among pre-teen boys was a form of hegemony practiced by very few boys of that age group. While speculative to suggest so, it appears that the masculinities of boys in this study were far more influenced by the hegemonic patterns of masculinity they have grown up with, which place most attention on aggression, violence and the bodily performances to achieve this, far more than any sexualised behaviour that as young teenagers, most boys are only beginning to comprehend.

Less hegemonic masculinities in video gaming

Video gaming, for some boys at least, is also an opportunity for the practice of less hegemonic masculinities. The privacy of single player games when played alone (and specifically *not* with friends), and the anonymity of online role playing games, means boys are invisible to their friends and other boys. This provides opportunity to take risks with their masculinity, but not be personally 'shamed' by the consequences of being seen to lose or mess things up. If a boy's character gets killed in the game, they can simply restart the game and try again, having learned from their previous experience. The idea that it is okay to lose as long as no one is watching (for fear of harassment and ridicule, or being 'mocked'), featured in a number of responses from boys suggesting that boys private practices of masculinity are at odds with more public performances in relation to video game play. What they are prepared to try out and therefore learn from in the privacy of game play, is in contrast to the sorts of risks they take when in view of their friends and peers.

However, in social game play, where two or more boys play competitive video games together (a number of console game titles in particular are purposefully designed for this), some boys noted the value of this for sharing time with friends and 'getting closer' to friends. It is possible that the shared interest of video gaming (with all its male themes of violence and action), and much like participation and competition in sport, seems also to mediate more intimate social interaction between friends. It is as though the inclusion of a very 'boyish' activity like action or sports genre video games provides a sense of (heterosexual) safety or security in friendships, to reinforce understanding that these boys are friends, and *not* boyfriends (echoing Martino & Pallotta-Chairolli, 2003). In conjunction with this was specific acknowledgement of feelings of loneliness and how shared game play helped

relieve such feelings. Again it was if boys were suggesting that the acceptability and commonplace activity of male-themed video gaming could be used as an excuse to spend time with others, simply to have their company.

Boys of this age know they can violate gender norms, but that it comes at a cost. Consequently, boys who negotiate less hegemonic masculinities in video game play, tend to compensate with hegemonic practices of masculinity, in a parallel sense to the boys reported in the study by Pascoe (2003). This was particularly noticeable among the few boys who chose to play female characters when gaming, in a sense 'flirting' (to borrow Renold's, 2004, expression) with less hegemonic masculinities, but simultaneously justifying their choice with more hegemonic reasoning. Typically these reasons for female character choice made reference to a type of hyper-heterosexuality (as reported by Renold, 2001, 2004), in that is fine to play a female if she is 'hot' and sexy. Alternatively, justification of playing female characters was based around some superior attributes such as the fact she has really good powers, or that she is somehow more challenging to play (the implication being that because many female characters have to use intellectual skills to compensate for lesser physical strength in games, then boy gamers have the additional challenge of using their brain to play the female character).

These less hegemonic patterns of masculinity emerged incidentally from the data, in that the boys' responses revealing practices of non-hegemonic masculinity were not elicited by specifically worded questions seeking to uncover such understandings. It would seem then an area worthy of more focused research given the prevalence of video gaming in most boys lives, and the high levels of homophobic bullying and normalising heterosexual (and generally hegemonic) practices boys experience in their social lives (as reported by authors such as Martino & Palotta-Chiarolli, 2003). If video gaming is a context in which masculinities (less hegemonic as well as hegemonic) can be practiced and produced (but perhaps not so much 'negotiated'), such investigation would likely produce evidence to offer some alternative discourses to those that presently dominate the literature in relation to boys' video gaming.

Summary

The interpretation of the present data was that video gaming was a context or a situation in which boys *practiced* masculinities, predominantly hegemonic, but also less hegemonic. These practices of masculinity by 13-14 year old boys bore much in common with patterns of hegemony reported in boys of a younger (pre-teen) age. The 'communities of practice' lens could not be shown to have application to the playing of video games in themselves (with the possible exception of MMORPGs) as the shared activity of video gaming could not be shown to have any sense of collective purpose or enterprise (as reported in Part Two of this discussion). Video gaming is just something boys *do*. Therefore, in relation to video gaming, the 'communities of practice' conceptual lens needs to be focused on boys social practices, which integrate video gaming into the shared repertoire of resources of a community, as they mutually engage in the joint enterprise of being male in that community.

The literature could be confidently read to view masculinities as 'communities of masculinities practice', (after Paechter, 2003a), especially when an additional concept like Foucault's conceptualisation of knowledge/power relations is added to connect the masculinities and 'communities of practice' concepts (Paechter, 2003b, 2006). However, any application of the 'community of practice' conceptual lens to a localised example of boys social practice still needs to keep the focus on the social aspects of the community, and the joint enterprise of the community, which for the present investigation was being masculine. To focus the conceptual lens on an activity common to the boys, in this case video gaming, took the focus away from the social practices where the work of a 'community of practice' is in evidence. For most boys, video game playing was a solitary activity, but even when played socially with a friend or friends, it was more convincing to view video gaming as a situation, or an activity in which masculinities were practiced, rather than to consider the context of video gaming as a 'community of masculinities practice' in itself. 'Communities of masculinities practice' are more appropriately considered in the wider social practices of boys' lives in contexts like schools, where the enterprise of being male is mutually engaged in, and boys 'learn' over and over again (through the policing and practice of hegemonic masculinities) what it means to be masculine.

Part Four: Strengths and Limitations

Researching social situations inevitably means that a number of limitations present themselves during the process of the investigation, be it in the planning and conceptualising of the project, or in the subsequent conducting of the research and application of the data collection methods. However, the nature of such problem solving can in turn become a strength of the research as such considerations are addressed. While these methodological and conceptual limitations need to be identified and managed within the boundaries of the time and resources available to an independent researcher meeting the statutory requirements for doctoral level qualifications, there are situations in the research process where practical, or conceptually based decisions need to be made (at the expense of alternatives) and these must at least be acknowledged. A brief discussion follows of the limitations and strengths identified as being relevant to the present investigation.

Limitations

Method - the sample

Although the sample size for the quantitative methods in this investigation was modest, the fact that saturation of data was quickly achieved meant that more data was unlikely to offer any amount of significantly new and different information. Perhaps more pertinent to the sample selection is the choice of age of the boys investigated. This age of boys was selected because of the high level of video gaming reported among this age group in large scale, international studies, and this was also shown to be the same for the sample of boys who completed the survey. However, analysis of the data, in consideration of the literature, would indicate developmental considerations need to be taken into account and that it cannot be assumed that these findings can be applied to video gaming by young boys (children) or older adolescent boys (young men), in relation to either their frequency and duration of game play, or in the practice of hegemonic and less hegemonic masculinities across childhood and adolescence.

The survey questions

A few specific shortcomings about the questionnaire used for the quantitative data collection that did not emerge from trialling, but became more apparent on analysis, included the following points:

- The survey item that asked boys what they liked about video gaming would have been more useful if a
 limit had been placed on the number of responses, to encourage a more considered response, rather
 than the 'any and all' approach that was used. Similar data collected from the qualitative methods proved
 more useful than responses to this questionnaire item.
- The lack of a self-described distinction between boys who play video games for just for fun and something to do, in contrast to boys who are more committed video gamers (in the same sense of boys

who are committed to playing a particular sporting code, or who make a commitment to play in the school orchestra for example) could be seen as a limitation of the data. The evidence from boys about the ways they distinguish between serious and less serious video gamers collected during the qualitative methods indicates that the heterogeneity of boys who play video games, warrants more in depth and specific investigation.

• While it would make practical sense to align survey questions with those from international studies, the fact they change the wording and emphasis (eg the KFF 1999 and 2004 surveys) in response to shifting trends and issues, and the fact that these findings are often published after the point at which they would have been useful for the investigation at hand, means that the unique aims and priorities of the present research become more important, particularly when the new research is not contingent on past results.

Conceptual framework

The choice of possible theoretical frameworks through which the world of boys and video gaming could be explored is substantial, and the reasons for the choices made have been documented throughout this dissertation. It is noted that the use of a different theoretical or conceptual framework (and the analytical tools associated with such) could paint a very different picture of boys' video gaming from the same data. For example, a psychologically focused theoretical framework, which has been repeatedly acknowledged given some of the tensions presented by such thinking, and the popular reporting of psychologically based research, is one such alternative theoretical framework.

For reasons of manageability, and due to most of the 'communities of practice' research to date placing conceptual emphasis on *mutual engagement* in a *joint enterprise* using a *shared repertoire of resources*, noted by Wenger (1998) as being an entry point to a much broader framework of ideas, the aspect of Wenger's conceptualisation around the notion of identity has been largely omitted from this dissertation. Therefore, this study adds little to the meaning and application of this part of the concept. While the discussion about masculinities (as in masculine identities) in some way works in place of Wenger's ideas on identity, it cannot be seen as a direct interpretation of his work. An additional project therefore could be to focus attention on identity as conceptualised by Wenger (1998) and the relationship of this to the concept of masculinities (effectively expanding Paechter's 2003a discussion which initiated such a task).

Strengths

Methodology

In observance of the aims of reflexivity, every effort was made to identify and make clear where the power relations, and the exercise of power exist in the research process (after Ramazanoglu & Holland, 2002), particularly in consideration of the fact that the researcher is a trained and experienced teacher working with high

school aged students, and a female researching boys. This included using data collection methods akin to classroom teaching and learning processes which sought to ask boys about their impressions of their video gaming world in a way that did not ask deliberately leading questions that could be interpreted in context of the 'communities of practice' concept. If video gaming and masculinities could be conceptualised as 'communities of practice' such evidence needed to come from any and all conversations with boys, not concluded from a series of questions that fulfilled the researcher's own agenda.

Conceptual framework

The choice of social learning theory, and in particular the 'communities of practice' concept, over many other possible conceptual frameworks, is a strength of the present investigation due in part to the currency of the concept in the New Zealand Education system. The claim here to the choice of concept being a 'strength', is in the parallel application of the concept between the present investigation and various education initiatives. While the chosen context for the investigation (that is, video gaming) may not have specific and current application to formal education situations, as a model for researching 'communities of practice' it offers some insights and ways to approach such an investigation. Additionally, if the 'communities of practice' concept is to be established as a foundation for a number of New Zealand education initiatives, it would make sense to consider a multiplicity of applications of this one adaptable and flexible concept so that adult learners (the teachers and school managers) can transfer understanding of the concept from context to context rather than (attempting to) adopt a new conceptual framework for each new educational development.

Through the application of the concept to the world of boys and video gaming, the level of analysis needed to apply the conceptual lens offered by 'communities of practice' was highlighted. This reflects the call from Lai, et al, (2006) that when claiming that the work of a socially-connected group of people (in the education sector for example) is a 'community of practice', such a claim cannot be made without a clear understanding about what the joint enterprise of the 'community of practice' is about (and therefore what gives the community coherence). In conjunction with this, the members of the 'community of practice' need to be identified (as well as those who are not members) in order to delineate the boundaries between one 'community of practice' and other co-located communities. The present study similarly highlights concerns about the misappropriation of community-related concepts, as expressed by Roth & Lee (2006), in that that the downplaying (or total stripping way) of the defining principles of such concepts means they lose their intended purpose and become little more than popular rhetoric; and Linehan & McCarthy's (2001) caution about the use of the 'community' metaphor in educational application, which if used loosely and without detailed conceptual meaning, is rendered largely useless for any analytical purposes.

However, the nature of education-related research means that concepts and theories are borrowed from across a range of knowledge disciplines and adapted to suit the context in which they are applied. This means that some of the purist understandings and meanings of such theory may be lost in application. While this approach to research may be viewed as a limitation by researchers working within some disciplines of knowledge, others would see it as a strength and central to the way new knowledge is constructed, befitting a future focused education system founded on (among other principles) critical and creative thinking to equip learners for an everchanging world (Ministry of Education, 2007). Where the literature was able to offer many possible theoretical and conceptual frameworks that could have been used to inform the project, every effort was made to identify and explain which theory or concept has been chosen and why. Additional reasoning was included for those choices where seemingly competing or disparate, or where more popular alternative theoretical frameworks exist.

Contribution to the empirical literature

In a bid to add to the empirical literature, this investigation provided evidence to support (or not support) what had been previously theorised by other researchers, that is, viewing video gaming as a 'community of practice' (after Gee, 2003) and masculinities as 'communities of practice' (after Paechter, 2003a). When a concept such as 'communities of practice' (and its associated claims to 'community' and 'practice' and that it is about mutual engagement in a joint enterprise using a shared repertoire of resources) has been, or is being taken on as a model for knowledge management in institutions and organisations, the application of the concept needs to go beyond theorising and rhetoric. So too in less formally organised situations; as well as a concept for theorising aspects of people's social worlds, it needs also to become a tool for analysis as without evidence that there is indeed a 'community of practice' (as conceptualised by Wenger, 1998), the claims to 'community' may be overstated and unsubstantiated.

'It teaches you how males can be'

'That you're not a girl'

'They teach us we are cool'

'They teach we are good at doing things like racing'

'They teach us that we like violence and sport'

'They teach us that we are good at shooting fighting and sport'

Examples of Year 9 boy's responses to questions collected on graffiti sheets, about what they think video games teach them about being male

Introduction

Having integrated the conceptual framework for the present study into the research questions, this investigation became not only an evaluation of the usefulness of Wenger's (1998) conceptualisation of 'communities of practice' for its application to video gaming and masculinities, but an additional exercise emphasising the need to focus the conceptual lens offered by 'communities of practice' in a very careful and considered manner. That is, the features that define the 'communities of practice' concept, *mutual engagement* in a *joint enterprise* using a *shared repertoire of resources* for the purpose of *learning* to impart *membership* of any such community, each need separate consideration both conceptually *and* empirically. The work by Lai, et al (2006) for the New Zealand Ministry of Education, noted the requirement for such attention to conceptual detail, particularly in relation to more formally organised communities, in that specific case, 'online communities of practice'. Given the less well defined communities that exist in informally organised social contexts, where the 'practice' and nature of the 'community' is not clearly defined by organisational structures and institutional policy, this consideration and attention to conceptual detail is equally essential to establish before claims can be made to any such community being a 'community of practice'. Consequently, the discussion throughout this dissertation has afforded substantial space to explaining where the conceptual lens, offered by Wenger's (1998) conceptualisation of 'communities of practice', can be validly applied.

In addition to evaluating the application of the 'communities of practice' concept, the present investigation also aimed to tell a story about boys' video gaming that was different to the reactive media-effects research, with its

controversial attempts to make causal links between video game violence and real life violence, and which dominates academic and political discourses around video gaming. This 'different story' was in response to the call from researchers seeking to develop a video gaming literature that considered 'socio-cultural, political and economic dimensions of gaming from a wide variety of perspectives, including textual analysis, political economy, cultural studies, ethnography, critical race studies, gender studies, media studies, public policy, international relations, and communication studies' (Sage Publications, 2006). Linguist, Gee (2003a) made the connection between video gaming and social learning theory ('communities of practice' being one such concept within this theoretical framework) and feminist educationalist Paechter (2003a) theorised masculinities (after Connell, 1995) as 'communities of practice'. These concepts, in combination, draw on an array of knowledge disciplines related to the broad scope of this evolving literature. Piecing the present project together then became something of a jigsaw to meaningfully link the various concepts together to reveal a coherent picture.

The conclusions to the research questions were:

- That the empirical evidence from the present investigation would suggest that video gaming in itself cannot be conceptualised as a 'community of practice' because there is no sense of mutual engagement in a joint enterprise in the playing of video games, which supports Gee's (2005a) later dismissal of the notion (that is, there is no 'community' or 'practice'). However, the enterprises of groups of people engaged in social practices that use video games as part of the shared repertoire of resources, may more fruitfully be conceptualised as 'communities of practice';
- In addition, while masculinities can be convincingly conceptualised as 'communities of practice', the evidence from this investigation would support the notion that it is only when the activity of video gaming is seen as a resource within the *shared repertoire* of the 'communities of masculinities practice', in which masculinities, both hegemonic *and* less hegemonic are performed and produced, that video gaming can be linked with the 'communities of practice concept'.

The purpose of this final part of the dissertation is to consider the significance of the present study, the implications of these findings, and make recommendations for further investigation.

Significance of the present study and implications of the findings Claiming to be a 'community of practice'

Wenger (1998) stated that 'communities of practice' are 'everywhere'. However the present study highlighted the importance of empirical evidence to support such claims. When people are engaged in social practice based around a particular activity, being able to call what they do, a 'community of practice' firstly requires careful conceptualisation, and secondly, evidence to verify that what is claimed is borne out in practice. The review of the 'online communities of practice' literature by Lai, et al (2006) is a useful document emphasising this point and contains much that could be used in ways to parallel other education work adopting the 'community of practice'

concept as an organisational model. Wenger, et al (2002), also stress the importance of defining what are, and what are not 'communities of practice', particularly when the concept is being applied to the operations of organisations and institutions.

If validly establishing the 'communities of practice' model in organised working contexts is challenging, it would tend to make application of the concept to less formally organised social practices even more fraught as the very 'practice' of the community, and what communities people are members of (given that people belong to constellations of overlapping communities), can mean that the conceptual lens needs to be focused in ways not immediately apparent. In the case of the present study, the 'community of practice lens' could not be focused on the playing of video games, but *may* be more reasonably applied to the social practices of people who use video games as part of the shared repertoire of the joint enterprise they are mutually engaged in, such as communities of researchers investigating video gaming, or teachers learning how to incorporate video game based learning into their programmes.

When applying the 'community of practice' concept to less formally organised (and assumed) 'communities of (social) practice', it is important to keep the conceptual lens focused on the social practices where the learning to be members of the community happens, and to clearly establish what the enterprise of the community is (and is not). If the assumed 'practice' is an activity like video gaming that is largely solitary, or little more than a common interest between friends, it would suggest that the shared activity is not where the 'community of practice' lies, and perhaps, the activity is (at best) part of the shared repertoire of quite a different 'community of practice'.

The key point to reiterate here is that if the claims to 'community' are founded on theory such as 'communities of learners' (after Rogoff, et al, 2001) or 'communities of practice' (after Wenger, 1998, or Lave & Wenger, 1991), it is important not to romanticise the notion of community, given the popular and politic reasons for doing so, not only, but especially in education. Whether or not the assumed or intended 'community of practice' exists in formally organised, or informally occurring social contexts, without evidence to back up such claims there is a danger that the complex relationships that make up a 'community', and the learning of knowledge that sustains the community and imparts membership, are not understood, nor are the opportunities offered by being a community maximised. For example, if teachers engaged in professional learning have no means to share knowledge and negotiate meaning, there is no 'community of practice' (reflecting comments by Haberman, 2006).

Other education-related considerations

The finding that boys in lower decile schools (that is schools in communities with fewer economic resources) were less likely to have access to (specifically) computing technology at home, they instead were more likely to have console gaming technology, may have implications for educational achievement. With the use of information

technologies being integral to curriculum learning, lack of access to a computer at home could be seen to disadvantage some students. It means that schools in lower socio-economic communities have the additional financial responsibility to ensure that students at school have ready access to such technologies to maximise opportunities for learning and achieving the objectives of the curriculum.

Video-game based learning appears to be growing in popularity, especially in some branches of industry and career training where funds are available for the development of such resources. 'Good' video game based learning packages are currently very expensive to develop meaning that the uptake of such resources into cash-poor school environments has to date been limited. 'Good' here refers to games that are highly sophisticated, where interaction with the game motivates students to learn and significantly and deliberately enhances knowledge and skill development, rather than be little more than a resource containing passive knowledge (a text book replacement). Teaching in the *New Zealand Curriculum* (Ministry of Education, 2007) favours the use of local knowledge and examples, which if to be incorporated into a software package for the small market that New Zealand is, make the costs of producing such resources inhibitive. The option then is to use internationally available packages which then run the risk of standardising knowledge (which may actually be important for some subjects), or normalising and privileging certain knowledge in other learning areas (bearing in mind that the video game design industry is dominated by males, from western and Asian nations). With these concerns, the degree to which video game based learning can be inclusive of diversity, and meet unique local needs, remains unclear.

Another concern surfacing from the literature reviewed is that study after study has shown that girls play video games less frequently and for shorter periods than boys (eg Roberts et al, 2005, TheESA, 2007). If video game based learning is to become more prevalent in curriculum learning and industry and career training (highlighted for example by Mitchell & Savill-Smith, 2004; and Prensky, 2001) the question needs to be asked, will some girls in future be at an educational disadvantage compared to boys, if girls do not grow up developing the technical skills needed for playing video games (whereas almost all boys seem to develop such skills while playing games for fun and entertainment)?

The literature around computer based learning (of which video game based learning is one aspect), was not reviewed for this dissertation as it sat outside the aims of the investigation. However, within this body of literature it has been reported that computer based learning can engage learners (summarised by Mitchell & Savill-Smith, 2004). It would seem then that game based learning could hold potential for (not only, but particularly) underachieving boys (that is any boy not reaching a level of scholastic achievement expected by national standards), especially if the 'privacy' and isolation of a video game offers a buffer from the hegemonic practices of boys in the more social environment of the classroom. Making significant shifts in the patterns of hegemony takes time, generations of time and a collective commitment by entire societies. The power that sustains entrenched

hegemonic practices such as the downplaying of achievement, or policing hegemony by ridiculing those who are variously seen as knowing too much, or knowing too little and not having relevant skills and knowledge (like boys described by Renold, 2001), means that substantial barriers are placed in the way of change. If game based learning is *one* way boys can make mistakes as part of their learning, but not be 'mocked' for their errors (or achievements) because it is out of view of their peers, it would seem a useful tool even if it seems more of a 'quick fix' solution than anything sustainable in the longer term (which would still require that the destructive hegemonic practices like those just listed be challenged and changed).

Conceptualising the social world of boys

In a parallel way to Gee (2005a) challenging the notion of 'community' in relation to video gaming, when he stated that '[t]he idea of "community" can carry connotations of "belonging-ness" and close-knit ties among people which do not necessarily fit classrooms' workplaces or other sites where the notion of a community of practice has been used (p214), a similar challenge has arisen from the present study in consideration of the conceptualisation of masculinities as 'communities of practice'. It can be shown that the 'communities of practice' concept 'fits', in so far as the knowledge/power relations that exist within the ways males mutually engage in the joint enterprises, that are 'communities of masculinities practice', that use a shared repertoire of resources to reproduce hegemonic and police less hegemonic masculinities. However, the question that arises, is how ethical is it to call these social practices, 'communities' (of practice)? When the way boys practice masculinities is stringently policed, that to conform to hegemonic practices means acceptance, inclusion and safety, but to resist, or not conform usually means exclusion, bullying and harassment, can such social practices fairly and justly be called 'communities'?

The Youth Development Strategy Aotearoa, (Ministry of Youth Development, 2004) speaks a great deal about 'community' but in terms of how community is important for healthy youth development. It would seem that the mismatch between the positive populist understanding of 'community', and the conceptual meaning of the term in context of 'communities of practice', could undermine the work of schools trying to establish healthy relationships within the school community. In the view of this researcher, the usefulness of the 'communities of masculinities practice' concept as an analytical research tool to help understand the social practices of boys is acknowledged, but the discomfort in calling all social practices involving groups of boys 'communities of practice' makes the application of the concept to school settings suspect, if not supported by extensive conceptual meaning and understanding.

However, if teachers' conceptual knowledge of 'communities of practice' is developed as a part of professional teaching practice, it is a concept which could be applied to a range of practices within school settings. The one concept could have parallel applications to a range of educational developments and ways of working and understanding. This means teachers would need only to develop knowledge of one (new) concept which is

transferred from context to context. For example, the current INSTEP initiative (Ministry of Education, 2006) is founded on a 'communities of practice' framework to quide the process of researching and establishing effective professional development practices of teachers. At these early stages of development, it is not clear whether teachers involved in the research are to learn and develop understanding of the 'communities of practice' concept and its application, or whether this is a conceptual focus only for the researchers and facilitators of the project. If such conceptual learning was to be added to the resources of teachers as part of their professional learning practice, and as a way to understand their own shared and social learning practices, it could be used as a foundation to which other new initiatives could be attached. One such development reflecting the context of the present research being to develop understanding about the ways patterns of hegemony are reproduced in schools (by boys and teachers) within 'communities of masculinities practice' (pushing aside for a moment the previous concerns about the ethics of calling such practices 'communities'). Rather than continue with the unproductive and deficit-focused 'recuperative masculinity politics' (after Mills, et al, 2007) that too often positions teachers as 'cultural accomplices' (after Smith, 2007) and which only exacerbates the 'problem' because of the normalising practices inherent within such politics (as highlighted by Martino & Frank, 2006), conceptualising boys differently may open some eyes as to the reasons behind the underachievement of some boys. However, unless understanding of concepts like 'communities of practice' are developed in depth as part of professional education practice, the resultant superficial meaning around the comfortable and familiar connotations of 'community' may mean it becomes little more than populist knowledge (echoing Roth& Lee, 2006). The proverbial 'little bit of knowledge can be a dangerous thing' may mean that the misappropriation of the concept continues to disadvantage students in their learning environments.

Recommendations for further research

A number of alternative or additional areas for research have been identified throughout this dissertation. These are summarised as follows:

Shifting the conceptual lens away from 'communities of practice' to a conceptualisation of 'space', such as Gee's (2005a) notion of 'affinity spaces', may offer researchers a more useful way to conceptualise the actual playing of video games. However, acknowledging that the increasing sophistication of gaming technology is making video games a feature of many people's lives, the repeated calls to conceptualise video gaming within the context of people's social world, moving away from the narrow research focus on the behaviours of individuals, would seem to be essential for keeping new research about video gaming contemporary with the rapid development of gaming technology. That said, the abundance of normalising practices within, and related to, video games may also mean that theories associated with 'culture' (discussed in Chapter 2 as a potentially competing theoretical framework to that selected for the present study), or video games as cultural artifacts, may still offer a useful conceptual lens through which to explore video gaming.

In relation to the boys, additional research about the differences between boys who consider themselves less serious gamers who play video games for fun, pleasure, entertainment and something to do, and boys who are committed video gamers who invest far more time and resources in video gaming (albeit that some of their reasons for paying are the same as the 'less serious' gamers), would seem a useful exercise in order to more fully understand the ways hegemonic and less hegemonic masculinities are practiced in context of video gaming. It is anticipated that a project like this would involve watching boys play video games rather than ask boys about their video gaming world which was necessary for the present investigation because of the selected conceptual framework of 'communities of practice'.

Connell & Messerschmidt's (2005) refinement of the masculinities concept also called for more theorising to explore, and empirical evidence to explain the social embodiment of masculinities. While sport has been a popular context for these investigations to date, the way electronic technologies add to the physical power of male bodies (or perhaps how such technologies are changing patterns of hegemony) are yet to be considered. Similarly, the call from these authors to analyse patterns of masculinities emerging from globally structured arenas of masculinities practice (in this case a virtual world arena) offers some potential for further video gaming research.

Wenger's (1998) conceptualising of 'identity' was largely omitted from the present study firstly, for reasons of pragmatism (and the need to contain the scope of the investigation), secondly that the aim of the project was to determine if video gaming could indeed be conceptualised as a 'community of practice'. Having demonstrated that it could not, it made the application of Wenger's notion of identity redundant in the context of the stated research question, because with no 'community' to be a member of, it did not (conceptually) follow that identities could develop. Thirdly that 'identity' is the feature of 'communities of practice' least applied, with most investigations (like this one) favouring the greater analytical potential of the aspects of Wenger's (1998) conceptualisation which focus on the additional concepts of mutual engagement, joint enterprise and the shared repertoire of resources. It would be possible to reread and reinterpret data collected during this investigation through Wenger's notion of identity, in place of, or in conjunction with the masculinities literature (a task which was initiated by Paechter, 2003a).

Closing statement - 'It's a boy thing and it's very exciting'

Boys aged 13-14 years have a lot to say about video gaming and what they think *as boys* they get from the practice (like the statements that opened this conclusion). The conceptualisation and development of the present study identified many different theoretical and conceptual frameworks that a researcher could employ to make sense of what these boys were saying. Consequently, this dissertation is only one of several stories that could be told about boys' video gaming. It is hoped that social researchers will keep pace with the rapid changes in gaming technology, especially given the predictions of the ways video gaming is likely to be integrated into people's social

lives, both working or education related, and in their recreation and leisure time (as illustrated in the documentary *Gamer Revolution*, De Guerre, 2007). Keeping up with technological developments may mean social research contributes productively to understanding the place of such advancements in people's lives, and not (only) be in the business of reacting to new phenomena and perceived social problems that arise from these, after the fact.

While the concerns about video game violence are noted, when framed in context of boys lives and patterns of hegemony that have been reproduced *for generations*, video games become yet another context in which masculinities are practiced as part of boys 'communities of masculinities practice'. The main generational difference being that instead of a boy picking up a piece of wood and fashioning it into a gun, racing around simulating shooting noises and performing ritualised (and sometimes real) acts of aggression, twenty-first century boys click the button on a mouse to activate a piece of sophisticated electronic technology that very few people understand the workings of (but many people know how to use).

However researchers choose to conceptualise video gaming, for the moment it remains predominantly (albeit not exclusively) a boys' world. It is a fantasy play world that almost all boys appear to find very attractive. It is a world in which they get to perform or play 'boy' in ways exaggerated far beyond what they know they can do in the real world, but still ways that are founded on culturally exalted practices of masculinity, endorsed for generations by the society in which they have lived their lives.

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APPENDICES

Appendix A

A survey for Year 9 boys about playing computer games

There are many more boys than girls play computer games, and we would like to find out what you think might be some of the reasons for this. This survey is to ask you whether or not you play computer games, and if you do, what you play, where you play and how long you play for, and what you like about computer games.

Please answer all the questions as honestly as you can.

- The survey is anonymous which means you do not write your name on the paper.
- For most of the answers you only have to tick a box that best describes what you do or what you think.

Thank you for agreeing to complete this questionnaire.

Section A - Personal details

1. In which year were					
you born?					
Year	Tick one				
1989					
1990					
1991					
1992					
1993					

2. Which ethnic group do you mostly identify with?							
	Tick one						
NZ Maori		Asian		Other (please state your ethnic group)			
Pakeha or European		Indian					
Pacific Island		Middle Eastern					

3. What kind of guy (male) are you? **Circle up to 5 words** that you would use to describe yourself. *You can use the words below and some of your own words if you wish.*

Word list:		
Popular	Serious	Good-looking (handsome)
Intelligent	Confident	Sporting (athletic)
Funny	Friendly	Reserved (keep to yourself)
Well-built (muscular)	Shy	Techno-geek (or computer geek)
Out-going	Masculine (manly)	Studious (conscientious / works hard)
Wealthy	Interesting	Easy-going ('chilled' / relaxed)
Loner	Loving	Performer (eg musician /actor)

If these words don't describe you, then add your own words here.

Section B - Video and Computer games

Tick one

4. Have you played <u>any</u> sort of computer game, video	YES	Go to Question 5 below
game or electronic game in the past year?	NO	End of survey. Please hand your paper to the researcher – thank you.

5. Which of the following forms of games have you played in the past	Tick all the types of games you	6. Of the game types you ticked, how often do you play these games?						
year?	have played		Everyday	A few days each week	Once a week	Less than once a week		
Personal computer (PC) games eg. like								
those that are bought on CD's or accessed via the internet and played on a computer								
Console video games eg. like those played on X-Box, Playstation, Nintendo etc.								
Video arcade games eg. those games where you put money into the machine to play								
Hand held games Eg. like those on a cell phone or game pad, personal media player (PMP)								

In this survey we are mostly interested in the games played on a personal computer or a video console. *For example*, a game you would buy on CD and load onto your computer, or a game you would play on the internet.

If you never play any games on a personal computer or video console, please ignore the rest of the questions and hand your paper into the researcher – thank you.

Tick one

7. Have you played any on-line	YES			If you answered yes, please name the game
computer games on the internet		_	→	you play most often on the internet at the
this year?				moment (or recently).
	NO			

8. Thinking of all the personal computer or video console games you play, name <i>up to</i> 3 games that you most like to play at the moment.	Write the names of the games below. 1. 2.
	3.

9. What do you like about playing	a computer or v	ideo games?				
Land the gradient and the property		easons that apply to	you.			
a. I play them for fun and entertain			e characters in the games			
b. It is something to do and it stops me getting bored		i. I like the actio	i. I like the action sequences in the games			
c. It is something I can do alone		j. I like the visua	I effects in the games			
d. I can play the games with my frie	ends		all competitiveness of the xample, the way my character is			
e. I like the challenges in the game example, the way I have to solve		in competitio	n with the other characters			
problems to get out of trouble	an think for	I. I like winning characters in	the games by beating the other			
f. I like the way the games make n example, working out a way for to survive or win			the games by beating the other			
g. I like the way I have to use my ir playing the games	magination		the games and beating			
If there are other reasons why you them here:	like playing comp	outer or video games	that we have not listed, please wr	ite		
	10. If you play personal comp you <i>mostly</i> pla Tick one	outer, where do	11. If you play games on a v console like X-Box or Play s where do you <i>mostly</i> play? one	station,		
I mostly play at home	personal comp you <i>mostly</i> pla	outer, where do	console like X-Box or Play s where do you <i>mostly</i> play?	station,		
I mostly play at home I mostly play at a friend's or relative's house	personal comp you <i>mostly</i> pla	outer, where do	console like X-Box or Play s where do you <i>mostly</i> play?	station,		
I mostly play at a friend's or	personal comp you <i>mostly</i> pla	outer, where do	console like X-Box or Play s where do you <i>mostly</i> play?	station,		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or	personal comp you <i>mostly</i> pla	outer, where do	console like X-Box or Play s where do you <i>mostly</i> play?	station,		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or internet café	personal comp you <i>mostly</i> pla	outer, where do	console like X-Box or Play s where do you <i>mostly</i> play?	station,		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or internet café I mostly play at school	personal comp you mostly pla Tick one	outer, where do	console like X-Box or Play s where do you mostly play? one	station, Tick		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or internet café I mostly play at school	personal compyou mostly platick one 12. If you play personal comp	games on a puter, do yourself or with	console like X-Box or Play s where do you <i>mostly</i> play?	ideo station,		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or internet café I mostly play at school I don't play this type of game	personal compyou mostly platick one 12. If you play personal compmostly play by	games on a puter, do yourself or with	console like X-Box or Play s where do you mostly play? one 13. If you play games on a v console like X-Box or Play s do you mostly play by yours	ideo station,		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or internet café I mostly play at school	personal compyou mostly platick one 12. If you play personal compmostly play by	games on a puter, do yourself or with	console like X-Box or Play s where do you mostly play? one 13. If you play games on a v console like X-Box or Play s do you mostly play by yours	ideo station,		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or internet café I mostly play at school I don't play this type of game I mostly play games by myself I mostly play games with other people (either in person or online on	personal compyou mostly platick one 12. If you play personal compmostly play by	games on a puter, do yourself or with	console like X-Box or Play s where do you mostly play? one 13. If you play games on a v console like X-Box or Play s do you mostly play by yours	ideo station,		
I mostly play at a friend's or relative's house I mostly play at a cybercafe or internet café I mostly play at school I don't play this type of game I mostly play games by myself I mostly play games with other	personal compyou mostly platick one 12. If you play personal compmostly play by	games on a puter, do yourself or with	console like X-Box or Play s where do you mostly play? one 13. If you play games on a v console like X-Box or Play s do you mostly play by yours	ideo station,		

14. On how many days would you play games on a personal computer and/or a video console in an average week?	Tick one		console	ne days you games, ho spend play	w much tir		
		Ī	Up to 1 hour	About 2 hours	About 3 hours	About 4 hours	5 hours or more
I play games just about every day			Tioui	Hours	Hours	Tiours	more
I play games on some days each week							
I play games only about one day a week							
I play games less than once a week							

16. Which situation best describes where you live? Tick one						
I live in one house with my family, guardians or other relatives		I live in a school hostel during term time and my own home at other times				
I live in different houses for example sometimes with Mum, sometimes with Dad		I board privately with people other than my family				
None of these situations describes my living situation						

For the purpose of this survey, if you live in more than one house, board, or live in a hostel, think of the place you spend most of your time living in as "home".	17. If you have a <u>personal</u> computer at home, where in your house is it used?	18. If you have a <u>video gaming</u> console at home, where in your house is it used?
In the family or living area		
In an office or study		
In my bedroom		
In another person's bedroom		
I don't have this sort of computer gaming equipment at home		

If there anything else you would like to tell us about video gaming, please write it in this space.

Thank you for completing this survey

Appendix B

Quantitative analysis - Chi Squared data

Data Category (2) Video gaming practice

Table 1. Relationship between each of ethnicity and socio-economic status, and access to <u>either computer OR console</u> gaming technology at home

Ethnicity and access to either computer or console technology at home	n	%	X ²	df	р
Pakeha/European	75	75			
Asian	66	77	5.06	4	.28
Maori/Pacific Nation	64	74			
Socio-economic status access to either computer or console technology at home					
Low decile	47	75			
Mid decile	47	84	5.41	4	.25
High decile	117	73			

Table 2. Relationship between each of ethnicity and socio-economic status, and access to <u>computer</u> gaming technology (specifically) at home

Ethnicity and access to computer technology at home	n	%	X ²	df	р
Pakeha/European	83	85			
Asian	85	96	8.77	2	.01
Maori/Pacific Nation	69	81			
Socio-economic status and access to computer technology at home					
Low decile					
Mid decile	51	81		2	
High decile	52	93	3.67		.16
	140	87			

Table 3. Relationship between each of ethnicity and socio-economic status, and access to <u>console</u> gaming technology (specially) at home

Ethnicity and access to console gaming technology at home	n	%	X ²	df	p
Pakeha/European	83	85			
Asian	68	76	7.74	2	.02
Maori/Pacific Nation	78	92			
Socio-economic status and access to console gaming technology at home					
Low decile	58	92			
Mid decile	50	89	6.72	2	.04
High decile	128	80			

Data Category (3) Being male

Table 4. Relationship between boys' personal descriptors of themselves and typical of days per week spent playing

Most popular descriptors and usual number of days played per week	Less than once a week		About 1 day per week		Some days each week				X ²	df	р
	n	%	n	%	n	%	n	%			
No choice of most popular descriptors	2	12	5	13	9	6	6	8			
One choice of most popular descriptors	5	29	6	16	46	33	30	38			
2 choices of most popular descriptors	9	53	16	42	61	44	33	42	16.469	12	.171
3 choices of most popular descriptors	1	6	11	29	23	17	10	13			

Table 4b. Relationship between boys' personal descriptors of themselves and typical number of hours per day spent playing

Most popular	Up to	1 hour	About 2	2 hours	About	3 hours	About 4	4 hours	5-	+ hours	X ²	df	р
descriptors usual number of hours spent	n	%	n	%	n	%	n	%	n	%			
playing on those days													
No choice of most popular descriptors	5	7	6	6	7	13	3	18	1	3			
One choice of most popular descriptors	16	23	34	35	21	40	4	24	10	32			
2 choices of most popular descriptors	37	52	43	45	15	29	7	41	15	48	17.984	15	.264
3 choices of most popular descriptors	13	18	13	15	9	17	3	18	5	16			

Table 5. Relationship between boys' personal descriptors of themselves and ethnicity

Most popular descriptors and ethnicity	Pakeha			Maori/PI	Asian		X ²	df	р
	n	%	n	%	n	%			
No choice of most popular descriptors	12	12	12	1	10	11			
One choice of most popular descriptors	27	28	27	32	33	38			
2 choices of most popular descriptors	44	45	42	49	31	35	11.558	6	.073
3 choices of most popular descriptors	15	15	15	18	44	16			

Table 6. Relationship between boys' personal descriptors of themselves and playing by self or with others

Most popular descriptors and playing by self or others	Play by self		Play w	vith others	X ²	df	р
	n	%	n	%			
No choice of most popular descriptors	13	8	9	9			
One choice of most popular descriptors	48	31	36	36			
2 choices of most popular descriptors	70	45	40	40	6.25	6	.396
3 choices of most popular descriptors	24	15	15	15			

Table 7. Relationship between boys' first preference of game genre and ethnicity

Preference of game genre and ethnicity	n	%	χ^2	df	р
Action games					
Maori/Pacific Nation	42	49			
Pakeha/European	47	48	5.46	2	.065
Asian	30	34			
Sports games					
Maori/Pacific Nation	26	31			
Pakeha/European	24	24	6.39	2	.041
Asian	13	15			
Adventure games					
Maori/Pacific Nation	3	4			
Pakeha/European	6	6	14.287	2	.001
Asian	17	19			