An Investigation into the Conceptualisation of Electronic Communications by Youth Across Different Socio-Economic Groupings in the Launceston Region

by

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Abstract

The ubiquitous nature of electronic communication technology has enabled Australian youth to readily adopt such communication devices as mobile phones and the Internet. Relatively little research has been conducted into the ways in which these youth use this technology, and more specifically how this technology has framed their social perceptions. This research seeks to explore the impact of this technological usage has upon the social structures and interaction style of regional Australian youth. A series of four focus groups, selected from a range of socio economic backgrounds from a regional city in Tasmania, have been analysed qualitatively in order to gain insight into the participants' perceptions regarding electronic communications.

The results surprisingly indicate a disparity across the socio economic groupings, and a sense that the socially constructive worlds in which these youth exist, varies noticeably from that which is characterised in the mass media, and is commonly understood by later generations. The implications of this research will impact upon the decision and policy makers, for controllers of mass communication and for provides of communication services.
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Chapter One – Introduction

1.1 Introduction

Mobile communications are ubiquitous in Australia, especially amongst late teenage youth who have readily adopted mobile telephones and the Internet. Relatively little research has been conducted into the ways in which these youth use this technology, and more specifically how this technology has framed their social perceptions. This research project seeks to understand the nature of the use of electronic communication technology and the impact that such usage is having upon the social structures and style of interaction amongst youth. A series of four focus groups have been chosen with different socio economic backgrounds from a provincial city in Tasmania. The discussions of these focus groups have been analysed qualitatively in order to gain insight into the participants’ perceptions regarding electronic communications. The results indicate a surprising variation across the socio economic groupings and also a sense that the socially constructive world in which these youth live varies markedly from that which is portrayed in the mass media and is commonly understood by later generations. This research has implications for decision makers who are managing youth, for controllers of mass communication and for providers of communication services.

1.2 Background Information

Electronic communication is defined as any form of interpersonal communication that is mediated or facilitated by any mode of electronic message transmission (Palen, 2001). For example, this definition covers telephone usage, both landline and mobile, and all modes of communication via the Internet.

Numerous authors have published reports on the uptake of electronic communication technology, especially that of the Internet since its worldwide

1.2.1 Youth

Relatively little research has been published on the use of electronic communication technology by people in the age range of 15 – 25 (Thurlow, 2003), despite the obvious importance of this age group as future consumers and decision makers. In contrast there exists several studies dealing with the use of Internet applications by children, especially in the US (Venkatesh et al., 2002, Tapscott, 1996, Pew, 2001, Pastore, 2002, Palfini, 2001, Lenhart et al., 2001, Grinter and Palen, 2002) and Canada (Maczewski, 2002). However, these studies often focus upon particular environments, such as the use of communication technologies in schools, and do not generalise to the wider social patterns of usage.

1.2.2 Online Relationships

The youth chosen to be studied in this research program were aged 17 – 19 and lived in the Launceston region. The social networks and the nature of the communications between these youth focused very much upon the formation, the maintenance and the breaking down of relationships. Youth in their late adolescent stage are experimenting with interpersonal communication (Wolak
et al., 2003), the nature and development of interpersonal relationships and tend to be focused upon small or micro society networks. These networks are often based upon common interest, regional locality or attendance at educational institutions (Grinter and Palen, 2002, Taylor, 2001a). It became apparent very early in this study that the stages of formation and the breaking up of relationships are closely associated with the use of particular modes of electronic communication technology. Very few authors have dealt with this phenomenon in any detail, with the exception of Ling (Ling, 2000) who has categorised interpersonal communication into several distinct stages, mainly based upon physical characteristics, such as geographical proximity, and the use of particular modes of electronic communication.

The widespread usership of mobile phones and the availability of mobile phone networks have resulted in a very significant jump in ubiquitous electronic communication over the past decade (Yoon, 2003a, von Niman, 2003, Taylor, 2001a, Rautianinen and Kasesniemi, 2000). Some surveys indicate that the highest percentage of mobile phone usership is in the age range 15 – 25 (Thurlow, 2003, Schiano et al., 2002, Taylor, 2001a). Ling has characterised this ubiquitous communication as hyper coordination, in the sense that the participants are almost obsessive in the extent to which they communicate and coordinate their intentions and activities (Ling, 2000, Thurlow, 2003).

1.3 Assumptions

No specific assumptions were associated with the development of this research program, since it is an exploratory, interpretative study into a relatively new phenomenon. Through background reading the researcher was aware of the general literature in this area but none of this literature dealt specifically with the research question being addressed in this study. Hence
no specific constructs were placed upon this research program, derived from the existing literature.

1.4 Research Objectives

The main aim of this research study was to seek to understand the nature of the usage, and the cultural implications of the use, of electronic communications. This study was confined to participants in four focus group based case studies, that satisfied the following theoretical parameters:

- Were aged between 17 – 19 years of age;
- Lived in the vicinity of the city of Launceston; and
- Satisfied one of the following focus group membership criteria:
  - Attended a private senior secondary college; or
  - Attended a state senior secondary college; or
  - Were employed; or
  - Were not currently employed.

The specific research objectives of the study are:

- To undertake exploratory research in order to understand the factors that influence the use of electronic communications by youth from a variety of socio-economic backgrounds, as determined by the theoretical parameters of the study;
- To seek to gain insight into relationships between uses of electronic communication across different socio economic groups, as determined by theoretical parameters of the study;
- To seek to gain insight into the nature of communication protocols between youth selected within the theoretical parameters of the study; and
• To seek to understand individual and small group perceptions of the form and function of electronic communication, amongst youth selected according to the theoretical parameters of the study.

1.5 Justification to Undertake Research

An extensive review of the available literature has indicated that while there is an interest in the modes of usage of electronic communication, especially use of the Internet in the US, relatively little material has been published that deals specifically with the nature of the relationships that are developed using electronic communication and the roles that such communication plays both for individuals and within their social groupings. Maczewski (Maczewski, 2002) has surveyed how children use various applications on the Internet, but has not extended her study either to youth or to the use of mobile communication equipment. Due to different regulatory and commercial forces the nature of the uptake of the Internet and of mobile communication is significantly different in Australia than in the US. In particular, the uptake and use of mobile phone technology is much greater in Australia than in the US (Pew, 2001, ABS, 2003).

Knowledge of the 15 - 25 year old demographic is of key significance in determining the market demand and likely adoption of new technologies over the next five to ten years, since this age group represents those people who will be acquiring significantly more disposable income and already demonstrate that they are highly adaptable to the use of new technology (Venkatesh et al., 2002). In addition numerous writers and speakers who have investigated the nature of communication amongst people in this age group comment that their modes of usage and ways of conceptualising electronic communication technology are vastly different from the older, more conservative groups in the 35 plus age range (Thurlow, 2003, Thurlow and McKay, 2003a). Hence for reasons of marketing and of
developing appropriate communication technologies it is critical to understand the ways in which people in the 15 – 25 age range are employing current technologies (Schiano et al., 2002, Tapscott, 1996, Taylor, 2001a, Thurlow and McKay, 2003a).

Internet applications, such as email, chat and bulletin boards, and mobile phones are relatively basic technologies that essentially provide for asynchronous or synchronous communication of textual/audio/pictorial messages (Elkin, 2002, Karjcsi and Kovacs, 2001, Rossler and Hofich, 2002). There is very significant diversity in the manner in which these technologies are actually used, and the roles that they play in linking members of social groupings together. Very few studies have been published, with the exception of Ling (Ling, 2000) on the actual roles that such technology plays in the everyday life of the participants and in the nature of the relationships that are formed, sustained and broken through the use of such technologies.

Finally, regional Australia provides a very interesting experimental field in which to gather data on the use of electronic communications by youth. While regional Australia represents a relatively small proportion of the total Australian population, it is of particular interest because of the unique demands that distance and low density populations place upon the rollout and maintenance of communication technologies, especially broadband (NOIE, 2000). While no attempt is made in this thesis to generalise the findings beyond the context of the study, namely that of four focus groups of youth aged 17 – 19 from the Launceston region, naturalistic generalisation would imply that these findings would be of interest in regional US and European countries where the proportion of the population living in regional areas is far higher. Launceston is a particularly interesting choice of locality because it has a five year history of being chosen as the e-city by Telstra
Research Labs (TRL, 2001) as a trial community for the introduction and testing of new broadband services.

1.6 Originality of Research

This thesis reports on the design and outcomes of a research project and is considered to be significantly original in the following aspects. This research program is:

- An interpretative study of youth aged 17 – 19 in the Launceston region who utilise electronic communication.
- Detailed research that seeks to understand the modes of electronic communication employed by the participants, the ways in which they conceptualise the use of this technology, and the roles that they played both for them as individuals and in their social groupings.
- Seeking to understand the associations that the participants explicitly and implicitly formed between the stages of interpersonal relationships and modes of usage for particular electronic communication technologies.

It became apparent during the early phases of the project that the participating youth viewed the use of electronic communication not only as a means of communicating with other people, but also as a form of entertainment in which the anonymity of the participants was a key factor. This study sought to explore how the participating youth conceptualise the use of electronic communication technology, both from a functional perspective and also from the superficial viewpoint of stimulating entertainment.

1.7 Research Question

The research question addressed by this thesis is:
What is the nature of the usage, and the cultural implications of the use, of electronic communications amongst youth aged 17 -19, living the Launceston region, and drawn from a range of socio economic backgrounds?

Consideration of this research question provokes identification of the following relevant issues and hence the development of a number of sub research questions (Meloy, 1994).

a) The association between the use of distinct modes of electronic communication and the functional requirements placed upon that communication;

b) Differential usage of electronic communication technology by youth from distinct socio economic groupings;

c) The cultural implications of the use of electronic communication technology at a micro societal level; and

d) The associations that exist between the use of distinct modes of electronic communication and interpersonal relationship development.

Associated with each of these sub topics one can develop sub research questions that are specific to particular components of the research program:

a) What is the nature of the relationship between the use of distinct modes of electronic communication and the functional requirements of such modes of electronic communication?

b) How do youth from distinct socio economic backgrounds employ distinct modes of electronic communication?

c) What impact do the distinct cultural implications associated with the use of electronic communication have for different socio economic groupings?
d) What is the nature of the association between the use of distinct modes of electronic communication and interpersonal relationship development?

1.8 Thesis Structure

Chapter one introduced the nature of this research by clearly stating the research objectives and the research question. Originality has been illustrated and justification provided for the research. The following five chapters will explore the research conducted. A brief structural break down of the remaining chapters follows:

1.8.1 Chapter Two – Literature Review

Chapter two is a literature review designed to demonstrate a level of familiarity with, and critically evaluate, the current body of knowledge. It begins by identifying the lack of literature available in this research area, then discusses the current global state of the digital divide issue. Research conducted into the various modes of electronic communication are addressed, including references to online relationships formed by youth. Finally, technological determinism is mentioned in the context of the influence technology has on in shaping human existence.

1.8.2 Chapter Three – Research Methodology

Chapter three is the research methodology chapter. The selected interpretivist research philosophy is declared and a qualitative research methodology is given. The methods for data collected are outlined: multiple focus group sessions across four socio economic groupings. All focus group sessions are coded and chapter three includes outlining the various coding methods available to analyse the data. Finally, limitations of the research are addressed and reflection on the research methodology, including the selection of participants and data collection style, is discussed.
1.8.3 Chapter Four – Analysis

Chapter four provides cameos developed for each focus group, followed by the phases of analysis for each of the sessions. Illustrative examples demonstrate how the researcher analysed and interpreted each component of the data through open, axial, selective coding and categorical aggregation. Finally, the limitations of the data analysis phases are discussed, following with reflection on the analysis experience.

1.8.4 Chapter Five – Findings and Interpretation

Chapter five deals with the findings based on the derived core categories and the interpretations of these categories. Each focus group was treated as a separate case study for which core categories were derived using categorical aggregation. Within this chapter, selective coding was employed to illustrate how the derived codes, categories and core categories are reflected in the data. Finally, propositions are identified and discussed, which were found to be universal across all four case studies. Finally, the reflections section of this chapter discusses the participants in reference to the derived core categories and propositions.

1.8.5 Chapter Six – Discussion

Chapter six reflects on the aims of this research, followed by how the research has addressed the objectives. The research questions and subquestions are discussed with reference to the outcome of the analysis process, including particular examples of the data. Comparison of the objectives against the original outcomes of this research are outlined, followed by the implications of the research program. Finally, the chapter concludes with reflection on the experience and insight gained by the researcher through undertaking this study.
Chapter Two – Literature Review

2.1 Introduction

When conducting research, the researcher reviews the accumulated knowledge to learn and build on what others have previously done. As Neuman explains, the purpose of a literature review is to read studies to compare, replicate or criticise them for their weaknesses (Neuman, 2003).

The goal of this chapter, the literature review, is to:

- Demonstrate a familiarity with a body of knowledge and to establish credibility;
- To show the path of prior research and how this current study is linked to it;
- To integrate and summarise what is known in this area; and
- To learn from others and stimulate new ideas, with the objective to establish the significance and relevance of the research question.

When conducting a context review for a project, it should be slightly broader than the specific research question being tested. Often, the researcher will not finalise a specific research question for a study until they have reviewed the literature. The review assists in bringing greater focus to the research question (Neuman, 2003).

One of the most notable advances of the 21st century’s communication is the increased capacity of mobility (Baker, 2003). The Internet and mobile phones, and other modes of electronic communication, have become symbols of the new information economy, with trademarks of mobility, modularity and multiple functionality. Information Communication Technologies provide an immediate, asynchronous medium of communication which not only allows for instant information flow, but also provides an increasing connectedness
and interactivity among individuals, communities, organizations, and countries (Maczewski, 2002). It is a popular belief, particularly amongst youth, that we need to be connected through a variety of Information Communication Technologies, as connection equals communication/relationship (Baker, 2003).

Relatively little data has been published on the conceptualisation of electronic communication by Australian youth, particularly within regional and rural areas. Carroll and Howard (Carroll et al., 2002, Carroll et al., 2001) have investigated the appropriation and perceptions by urban youth of mobile telephone usage, and have developed models of the uptake of such technology.

The Launceston region has been exposed to broadband concepts and the availability of ADSL for domestic use through the e-Launceston project for approximately three years (TRL, 2001). This study seeks to determine the extent to which knowledge and use of this and other electronic communication technology has influenced youth who participated in this study from this region.

A better understanding of how such youth conceptualise electronic communication will assist in researchers who investigate the nature of communication, the pathways and socio-technological models employed by youth.

### 2.2 Digital Divide

With the recent growth of online activity, concerns have arisen regarding the existence of a ‘digital divide’, a term now commonly used to describe the inequalities that exist with respect to the use of Internet and other telecommunication services (Warschauer, 2003, Warschauer, 2002, Norris, 2001, Horin, 2002, Curtin, 2001). Since the middle of the 1990s, when the
Internet emerged as a major communication medium, the digital divide has been a concern to policy makers (Warschauer, 2002). Anxiety regarding the divide centres on the argument that those who do not have access to the Internet are disadvantaged compared to Internet users for a number of reasons. The concern is that, for example, Internet non-users will have less power as consumers and fewer economic opportunities, no chance to learn about their world from the millions of organisations that have posted their material on the Web, and less opportunity to interact with others through email and instant messaging (Pew, 2001).

Current research (Warschauer, 2003, Curtin, 2001) indicates that the 'digital divide' is best understood as part of a socio-economic context. Thus solutions need to go beyond purely technological 'fixes', needing to rely on "...a deeper appreciation of the interconnections between information and development and...a broader interpretation of the digital divide is necessary." (Warschauer, 2003)

Ensuring greater digital inclusion requires more than providing access to physical sources of computers and connectivity (Curtin, 2001). A range of elements must also be addressed, including access, Information Communication Technology literacy, awareness of the benefits and uses of Information Communication Technologies, integration of Information Communication Technologies into the social fabric of everyday life, support the development of relevant online content and applications to motivate use (Pew, 2001, Maczewski, 2002, Horrigan et al., 2003). Going beyond the digital divide and understanding the social factors surrounding technology use and inequality in promoting the use of technology for social inclusion will ensure that people maximise their use and enjoy from the benefits of ICT development (NOIE, 2000).
2.2.1 International studies

International studies (Warschauer, 2003, Venkatesh et al., 2002, Norris, 2001) indicate that a range of social factors influence the existence of a digital divides. For example, an American report suggests sharp inequalities exist in Internet access according to income, education, age and race and ethnicity (Curtin, 2001).

Expanding on the surveys conducted in 2000, the Pew Internet Project released findings in April 2003 (Horrigan et al., 2003), demonstrating that America’s Internet population has increased since April 2000. In 2000, it was found that 49% of American adults had Internet access, whereas in April 2003 it had grown to 59% (Lenhart et al., 2001). Other relevant findings, particularly within the context of this research, were that:

- Younger Americans are much more wired than older Americans. Younger Americans show relatively low levels of growth, reflecting the saturation from previously high levels of Internet access in that group.
- Financially privileged Americans are more wired than less well-off Americans;
- Employed are far more wired than the unemployed;
- Well educated Americans are more wired than those who only completed high school; and
- Suburban and urban residents are more wired than rural residents. Disparities between rural inhabitants and others remain. In rural areas, less than half of Americans go online.

The 42% of Americans that do not use the Internet indicate the clear differences along five demographic dimensions: race, income, educational attainment, community type (rural, suburban, or urban) and age (Lenhart et al., 2001).
The Pew study attempts to explore other aspects in people's lives that might relate to whether they go online or not (Horrigan et al., 2003). Such findings include:

- A person's sense of efficacy can make a difference in their decision to go online or not;

- A person's media use is related to Internet use. People who read the newspaper, watch television shows or news are more likely to be Internet users, highlighting that people who seek information, content and entertainment in other media are also attracted to the Internet;

- Technology adoption also affects Internet use. Americans that own a mobile phone, and/or a personal digital assistant (PDA) are, independent of all other factors, more likely to be Internet users and raise the issue of causality. Having a mobile phone may not cause one to obtain Internet access, but rather having several personal technologies is part of the same related process of being wired.

- A person's level of social contentment correlates with the likelihood that they use the Internet. Social contentment is measured in several ways, such as whether they trust other people and whether they have others they can turn to for support. If a person has high levels of social contentment, they are more likely to go online.

- A person's social 'nearness' to the Internet matters. Non-users are less likely than users to know many Internet users.

- Physical access is still a problem. Much of previous research on the digital divide has focused on questions of access. Non-users are less likely than Internet users to know of a public place to access in their communities.

Those with an active and immediate social network, that is, those who frequently visit, talk or dine with friends and family are less likely to go
online. The study also attempted to discover whether a person's community involvement was connected in some way with Internet use, with the results being inconclusive. For example, some types of community involvement indicate a negative effect on Internet use (Horrigan et al., 2003), whereas other kinds of community activity show the opposite effect, predicting that those who do these activities are more likely to be online. The study concluded that this area is a likely location for future research by the Project and other researchers (Horrigan et al., 2003).

In Facer & Furlong's report (Facer and Furlong, 2001), they note that many children and young people in supposedly technologically privileged countries like the United Kingdom still face a form of information inequality. This is not only a result of poor access at home or school, but also because of individual resistance to, and the perceived irrelevance of, some new technologies.

2.2.2 Australian Context

While the authors of this report view the significance of constantly challenging the homogenised assumptions regarding the role of technology in young people and young adults' lives, particularly in the context of the United Kingdom (Livingstone and Bober, 2003), no such studies have been conducted within the context of Australian youth, and more specifically regional Australian youth.

Lloyd and Hellwig's study (Lloyd and Hellwig, 2000) focused on the different levels of access and use of communication services by Australians and indicated that socio demographic factors determine their uptake of new technology, particularly education, income and age. Whether or not rural and regional Australians are on the disadvantaged side of digital divide remains a contested issue. In Curtin's report (Curtin, 2001), data sourced from the ABS indicated that while there was an increase in the percentage of people in rural and regional Australia who have access to computers at home, there remains
a gap between them and those who dwell in capital cities. Similarly, the percentage of rural people with access to Internet has more than doubled since 1998, but has yet to reach the level of use in capital cities (Curtin, 2001). In the *Reconceptualising the Digital Divide* report (Warschauer, 2002), Warschauer highlights the problematic examples of community technology projects and models of technology access, suggesting that people need to go beyond the digital divide framework in addressing the problem. The author suggests an alternative concept of technology for social inclusion is required, with attention focusing on human and social systems for technology, in order to make a difference (Warschauer, 2002), rather than the possibility of exclusion due to the perceived irrelevance, as is currently experienced in the United Kingdom (Facer and Furlong, 2001).

### 2.3 Modes of Electronic Communication

Apart from Ling (Ling et al., 2000, Ling, 2003, Ling, 2000), no other authors known to the researcher have examined the association between the distinct electronic communication modes and interpersonal relationship development. While Ling’s (Ling, 2000) research deals with the nature of relationships, encompassing eligibility, availability and, relationship establishment and development, he categorises interpersonal communication into multiple distinct phases within a macro societal context, based upon physical characteristics, such as geographical proximity. In addition, the author focuses upon the influence and impact that mediation technology has on relationship formation and maintenance, with each form of media playing different roles, depending upon the relationship’s stage of development. Ling reports that the form of mediated interaction that was appropriate at the beginning of the relationship loses its significance as the relationship develops and is replaced by other modes of mediation, suggesting that as the
relationship progresses, the appropriate form of mediation also changes (Ling, 2000).

In June 2002, a report was published (Venkatesh et al., 2002) which researched children aged 14 to 18 and from a middle to upper income family, experience in electronic environment. More specifically, the study investigated the use and integration of computers and other electronic devices, the impact these technologies have on their lives and the construction of their worldview. The primary focus was the computer/Internet and its multi-purpose function to fulfil several roles. Findings from the study ranged from the selection of communication medium were dependent upon the friendship status. For example, the telephone was chosen for chatting with close friends, whereas email and instant messenger are for relaying information, or for communicating with people that they did not know well. In contrast, a study undertaken by Stanford University found that instant messaging was employed to maintain direct, immediate, casual online contact (Schiano et al., 2002). Forty three percent of surveyed 7th graders (“young teens”) versus 28% of 12th graders (“older teens”) reported instant messaging “all the time”, a statistically significant difference that is contrary to recent national findings (Schiano et al., 2002).

The study found that time spent on instant messaging was dependent upon the number of people online and the level of active participation. Contrast between the computer and phone illustrated that the participants considered it the phone was better because it is a lot quicker, whilst Grinter and Palen’s study (Grinter and Palen, 2002) identified instant messaging as an emerging feature of teenage life, supporting interpersonal communication and playing crucial role in everyday life. Ultimately, the Internet was viewed as a complimentary, convenient alternative for social interaction, rather than a substitute for the phone, and that the online experience cannot replicate the
physical social experience. In contrast, McCollum’s (McCollum, 2003) investigation of American youth saw the Internet, and more specifically instant message, as an optimising choice between multiple communications media, with practice also tied to concerns around peer pressure, peer group membership and creating additional opportunities to socialise. The study of online interaction covered such topics as community formation, identity construction/maintenance, and anonymity. 

Comparison between Internet and television indicated that the traditional role of television, to offset the boredom, was now fulfilled through the Internet (Venkatesh et al., 2002).

The above studies neglect to examine the types of relationships maintained through the varying and distinct modes of electronic communication. In particular, the research previously discussed, separate and categorise the different modes, identifying that each form is specific to a type of relationship, rather than multiple modes facilitating the development of each individual and unique interpersonal relationship, particularly in the context of the progression of each stage through various levels.

The simplistic and mechanical tactic employed to categorise interpersonal communication into several distinct phases illustrates the generalised method by which authors, such as Ling (Ling, 2000, Ling et al., 2000), have approached this research area. These models do not reflect the richness of the data when discussing the facilitation of interpersonal relationship development through electronic communications. This style of research excludes the complexity of the relationships formed, maintained and broken by the participants, particularly when identifying and acknowledging the multiple and distinct relationships that are individually unique, particularly in the context of youth from different socio economic backgrounds.
2.3.1 Internet

As a communication tool, the Internet enables individuals to remain socially connected by communicating via email and instant messenger (Thurlow and McKay, 2003a). It is now more convenient to contact a large group of people, or people that live far away much more affordably. The Internet is viewed as being more protective than the traditional phone and has a communicating advantage in being able to say things that would not be said in a telephone based conversation (Venkatesh et al., 2002).

Maczewski’s thesis (Maczewski, 2002), Internet Research on Youth’s Experiences Online focuses upon the interactive use of the Internet through self-expression and engagement with others, stating that youth in this digital age “are learning, playing, communicating, working, and creating communities very differently than their parents. They are a force for social transformation.” (Maczewski, 2002) and studies the influence these communication technologies have on the existing personal and societal dynamics for children and youth. The author proposes that the Internet with existing parameters allow youth to participate in virtual communities in a way that is not possible in their physical environment, due to discriminatory parameters such as age, race, gender, wealth, religion and culture (Tapscott, 1996, Maczewski, 2002).

A report published by Pew Internet and American Life Project (Lenhart et al., 2001) found that close to 13 million teenagers use instant messaging, with this techno-communication playing a significant role in their social lives. Nineteen percent of the 754 youth surveyed stated that they employed instant messaging most often to contact friends, 8% use email however 71% still used the telephone most frequently.

In contrast, a study conducted by Pastore (Pastore, 2002) for AOL, demonstrated that American youth employ the Internet as their primary communication tool, surpassing the telephone amongst some groups. The
study found that 81% of youth between 12 and 17 used the Internet to email friends or relatives, whilst 70% use it for instant messaging. For youths aged 18 to 19, these statistics increased to 91% for email and 83% for instant messaging. Fifty-six percent of these youth preferred the Internet to the telephone. Other findings from the Pastore report are that 58% of these youth aged 12 to 17 used the Internet as an educational resource, which increased to 61% for youth aged between 18 and 19 years of age. For entertainment purposes, such as downloading music, 55% of youth aged 12 to 17 used the Internet, whilst this statistic increases to 65% for youth aged between 18 and 19 years. Twenty five percent of these respondents also indicated that they used mobile phones with instant messaging or email capabilities (Pastore, 2002).

2.3.1.1 **Online Relationships**

Online relationships are a relatively new phenomenon, but have already become part of adolescent culture. Psychologists have theorised on the meaning of online relationships during adolescence (Venkatesh et al., 2002, Tapscott, 1996, Ribak, 2003, McCollum, 2003, Tapscott, 1998), yet little is known about the nature or quality of online relationships. Livingstone and Bober (Livingstone and Bober, 2003) suggest that adolescents may be drawn to online relationships due to their intense interest in forming relationships, and because the expansiveness of cyberspace frees them from some of the constraints of adolescence by giving them easy access to a world beyond that of their family, schools and communities.

Much of the commentary regarding youth online, suggest that the Internet is universally appealing to them (Tapscott, 1998). If this were accurate, it would appear that forming online relationships might be one of the generally appealing aspects amongst youth, given that relationship formation is a developmental imperative of adolescence. Green’s study (Green, 2003)
focuses upon whether online relationships such as close friendships and romances are evenly spread throughout the population of youth online, or whether they are common amongst certain segments of youth Internet users. The authors of that study focussed on discovering which youth area is more likely to be involved in online relationships, in the hope of determining the impact online relationships have on these youth, through the collection of empirical data on the characteristics of adolescents who form online relationships. The study does not discuss the varying and complex relationships that are formed and maintained through not only the Internet, but also through other modes of electronic communication and physical contact. Rather, they find that it is inconclusive from their cross-sectional data that youth with problems are drawn to the Internet, speculating that cyberspace is serving as an alternative venue for forming relationships disproportionately amongst adolescents who are alienated from their peers or parents.

The author of this report does acknowledge that this subject area is ripe for research, stating that online relationships are accessible to an increasing number of youth, identifying that the lack of face-to-face contact is a unique element in these relationships.

Critics of online communities generally, cite the lack of physical presence as a factor which negates the ability of individuals to form "real" communities in virtual space (Chayko, 2002). And while some Internet researchers celebrate what they perceive to be the freedoms afforded by the disembodied nature of the Internet (Jones, 1997), this same idea of disembodiment leaves others to see rampant distrust and a lack of real-world consequences caused by interaction in an environment where communication takes place by isolated, lonely and depressed individuals (Markman, 2003).
The rapid growth of Internet use is likely to lead to close online relationships becoming an enduring component of a youth's social landscape. Research that investigates the nature and quality of youth online relationships combined with physical contact is greatly needed (Wolak et al., 2003) due to the cultural implications at a micro and macro societal level.

2.3.2 Mobile Phones
Recent research conducted on mobile telephones indicates the popularity, ubiquity and necessity of these electronic communication technologies in general, and in text messages (SMS) in particular (Teather, 2001). Worldwide usership of mobile phones is approaching a billion. This compares with an estimated 600 million people online. Although not true for the USA, where the Internet has tended to be the communication technology of preference, penetration rates in countries in Western Europe (eg. Scandinavia, UK, Germany and France) and East Asia (eg, Hong Kong, Singapore, Korea and Taiwan) are believed to be as high as 70 – 80% (Thurlow, 2003).

It seems that these communication technologies have become an essential feature on both new media cultures and especially of 'global communications' and has heralded important new cultures of communication (Rheingold, 2002) and social connection (Thurlow, 2003). However, this does not mean that this technology is properly global. Worldwide patterns of mobile phone usership are consistent with socio-economic contours which distinguish the 'media rich' and 'media poor' more generally (Carvin, 2000). Katz and Aakhus (Katz and Rice, 2002) cite global usage figures estimated at approaching one billion, compared to 600 million Internet users. In contrast, American figures suggest that the Internet has tended to be the electronic communication technology of preference (Schiano et al., 2002). Australian statistics obtained through the Australian Bureau Statistics (ABS) indicate that in March 2003 5 million people used the Internet. The 2001 Australian Consensus reported that for the
age range 0 – 24 38.8% used the Internet. Within this age range for Northern Tasmanian, the figure was 38.5% (ABS, 2003). A report published by NOIE (NOIE, 2000) in August 2003 indicates that 65% of Australians over the age of 16 had access to a mobile phone. Studies undertaken by Redcliff (Redcliffe, 2003) released findings in September 2003 that half of Australia’s youth aged 10 – 14 years old sent or received SMS text messages every day. This research also revealed rapid growth in mobile phone usage among children and youth aged 6 – 17 and a distinct preference for using SMS text messages to communicate with friends and family. A growing 80% of 15 – 17 year olds use SMS text messages once a day.

2.3.2.1 Text Messaging

Academic interest in text messaging is only recent and fairly scattered. Whilst Finland’s Information Society Research Centre (Rautianinen and Kasesniemi, 2000) has been researching mobile communication culture of children and young people since 1997, this is seldom the case elsewhere, in particular within the context of rural and regional Australia. While Baron (Baron, 1998) has investigated the linguistic/discursive practices of email messages, and Werry (Werry, 1996) has studied online chat, until recently, very little published research has investigated SMS text messages (Thurlow, 2003). Nor is there an extensive mobile phone survey to compare with the Pew Internet & American Life Project’s (Horrigan et al., 2003) report on the use of Internet and instant messaging among American youth.

The history of the development of communication technologies has been marked by periods of excessive hype and hysteria regarding the kinds of cultural, social and psychological impact each technology is likely to have (Heller, 2003). However, few would have been able to predict the extraordinary rise in popularity of the mobile phone in many countries, and the SMS capability.
Initially intended for purely commercial purposes, text messaging is an example of how the human need for social intercourse, a kind of communication imperative, bends and ultimately co-opts technology to suit its own ends, regardless of any commercial or military ambition for technology. Figures published by the Mobile Data Association (MDA, 2002) indicate that 1.7 billion text messages were exchanged in the United Kingdom in May 2003, culminating to an annual 8 billion messages.

In many countries the mobile phone is an altogether far more popular, pervasive electronic communication technology than in others (Katz and Rice, 2002). Whilst this technology is in no way solely used by youth (Cyberatlas, 2001a), in the United Kingdom, it is understood that half of all 7 – 16 year olds own a mobile phone (NOP, 2001b). More recently, Ling (Ling, 2003a) reported that young adults/older teenagers in Norway are the heaviest users. Indisputably, a fundamental capability of almost all youths' phones is the use of SMS text messages, with the majority sending in excess of three messages per day.

As other authors have stated, Crystal (Crystal, 2001) dismissed SMS text messages as simply providing youth with a time wasting exercise. The author suggested that this activity is an intricate and integral role in their social lives. Thurlow's findings (Thurlow and McKay, 2003a) indicated that mobile phones provide youth with a means of demonstrating their social network, both in participation and in defining the boundaries, and consolidating their community of peers, and demonstrating their social status. This study focused upon what aspects of mobile devices provide the potential to support everyday life. Elkin (Elkin, 2002) noted that language will be necessarily affected by technological variables such as synchronicity, granularity and multi-modality, additionally, other non-linguistic variables such as participants' relationships, expectations and levels of motivation. SMS may be
broadly defined as asynchronous, text-based, technologically mediated discourse (Thurlow, 2003).

Recent discussion regarding the development of new colloquial language, and the literary skills of youth has indicated that electronic communication plays a significant role in the development of communication between youth.

Doering’s (Doering, 2002) has investigated the communicative functions of young people’s text messaging, and more specifically what youth use text messaging for and to what extent is there experimentation with conventional language. This study focused upon the types of messages sent and received by the participants. Categories identified ranged from friendship work, which identified the number of instances where SMS text messages were being used by friends to stay in touch while apart. This indicated that these participants rely on text messages to facilitate relational maintenance and social intercourse, through to hyper coordination, which exemplified precisely the kind of interpersonal coordination discussed by Ling and Yttri (Ling and Yttri, 2002) and Thurlow (Thurlow, 2003). The type of messages included redirecting already commenced trips, letting people know that the participant was running late, and confirmation of exact timing and location. The study identified that these youth placed a high priority on such a continual accessibility and connectivity, or what Katz & Aakhus (Katz and Rice, 2002) characterised as ‘perpetual contact’, which is done primarily in the provision of social intercourse.

As Thurlow & Mackay (Thurlow and McKay, 2003b) discovered, new electronic communication technologies can empower young people and many do explore and develop new imaginative ways of making the technology work best for them, the study’s primary focus was examining the reality behind popular notions of youth’s reinvention of language. Whilst the authors compared SMS text messages against online chat, they do so with a language
and communication focus, such as turn taking and message length. They acknowledged that relationships are maintained, however, they primarily focussed on mobile phones, and in particular SMS text messages as ways to sustain relationships or how young people learn the rules of social circle, such as what kind of conduct is and is not acceptable. The authors do not reflect on the relationships themselves or the roles and the influence these relationships have on these youth, or how these technologies collectively, facilitated each relevant and individual relationship.

As text messaging allows extra time to formulate one’s thoughts and express them more concisely, or diplomatically, and is an invaluable tool in this process (Quinn, 2003), youth indicate that text messaging permits them to overcome their social awkwardness and develop their social and communication skills. Subsequently, they communicate with more people, and communicate more frequently than they did prior to obtaining access to mobile text messages (Poster, 2003, Rautianinen and Kasesniemi, 2000, Lorente, 2003).

2.4 Technological Determinism

McLuhan (McLuhan, 1964) predicted in the 1960s that through the electronic age, the Internet and World Wide Web would create the 'global village'. He believed that the new electronic media have radically altered the way people think, feel and act. The success of the Internet as a collaborative medium was not managed, but rather developed spontaneously. Marshall McLuhan’s insights into demonstrating how medium has a certain effect on its users independent of its content, was expressed with his famous aphorism, "The medium is the message" (McLuhan and Fiore, 1967).

Technological determinism is the belief that new technologies will ultimately deliver its intended outcomes for individuals, organisations and society, with inventions in technology invariably causing cultural change (Willson, 2003).
Put another way, the modes of communication shape human existence. Joinson (Johnson, 2002) suggested that sudden extensions of communication are reflected in cultural disturbances. McLuhan (McLuhan, 1964) believed that channels of communication are the primary cause of cultural change. Family life, the workplace, schools, health care, friendship, religion, recreation, politics are all touched by communication technology. Elkin (Elkin, 2002) established that the Internet, which as a hybrid technology of telephony and computing, has a unique set of properties or characteristics, that taken together, make it the ideal medium for collaboration. Kim (Kim) suggested that the significance of technology for the realisation of particular forms of social relations cannot be denied. For while it is not true that modern sociality cannot be attained without the use of electronic communications technology, it is true that such technological contribution is becoming increasingly central to the ways in which we live together. In particular, the mobile telephone and computer are both constructed in youth's discourse as technologies of freedom, allowing them to escape their real, unmediated environment (Han Nool, 2003). Mobile phone technology has enabled users to return to the more natural and humane communication patterns of pre-industrial society, when we lived in small, stable communities, and enjoyed frequent 'grooming talk' with a tightly integrated social network. In the fast-paced contemporary environment, we had become severely restricted in both the quantity and quality of communication with our social network. Mobile phones are a 'social lifeline' in a fragmented and isolated world (Eldridge and Ginter, 2001).

Karjcsi's (Karjcsi and Kovacs, 2001) paper argues that the technological mediation and extension of social relations via the Internet have important ramifications for contemporary communication theory that need to be taken into account. Whilst communication theory is relevant to this area of research,
it is beyond the scope of this thesis. Using communications technologies, such as the Internet, extends the capacity to connect with people through space and time therefore enabling the continuation and extension of relations of community. Interpersonal interconnectivity is consequently heightened for both the individual and the community.

2.5 Summary

Very few authors have been published studies on the conceptualisation of electronic communication by youth, particularly within a regional Australian context. Studies conducted into electronic communication focus upon the role that different modes individually play in forming and maintaining interpersonal relationships. Statistics of youth Internet and mobile telephone usage between various countries, such as America, Western Europe and Asia illustrate the contrast in preference in technologies. However, this research does not include the distinct phases and levels that these youth progress through, particularly during the developmental and decline stages in interpersonal relationships. In addition, with the exception of Ling (Ling, 2000, Ling and Yttri, 2002), little research has investigated the facilitation of interpersonal relationship development through the simultaneous employment of various modes of electronic communication. However, Ling categorises interpersonal communication into multiple distinct phases within a macro societal context, rather than identifying the complexity and uniqueness of each individual relationship. Furthermore, the author mechanically categorises interpersonal communication into several distinct phases, generalising the relationships formed, maintained and broken by youth, rather than investigating varying socio economic groupings, with the objective of identifying the distinctiveness and complexity of youth relationships.
The aim of this research, which seeks to address the lack of literature or research undertaken in this area, is to investigate and identify how youth conceptualise electronic communication, the differential use of electronic communication, including the vast and complex interpersonal relationship development from different socio economic groupings, and the cultural implications of such usage at a micro societal level.
3.1 Introduction

The goal for research is to provide the reader with a rich narrative experience, plus insightful interpretations and the construction of a formal theoretical model (Myers, 1997, Eisenhardt, 1989). This is intended to provide the reader with an experience that they would not normally have, in two senses both in exposure to the participants and also being made aware of the researcher's interpretations of the observed phenomena.

At the same time, the researcher also needs to establish and maintain external validity. This is done by demonstrating rigorous application of the research methodology. Typically this involves rich illustration of the coding methods used, of the aggregation of codes into categories and the derivation of the core categories (Stake, 1995). This information not only demonstrates to the reader that a rigorous research method was employed, such as an adaption of Grounded Theory, but also allows the reader to understand how the researcher has derived their interpretations and the theoretical model (Eisenhardt, 1989). This does not imply that the reader should necessarily follow the same research methods to arrive at their own interpretations, but reliability in an interpretive context would imply that the reader could reasonably expect to arrive at similar interpretations, regardless of which qualitative research method they applied to the data.

Chapter three is the research design and methodology chapter, comprising of three main components: the research philosophy, the research methodology and the research methods employed for data collection and analysis. In addition, the distinction between quantitative and qualitative methods will be addressed, providing the opportunity to justify the ontological, epistemological and methodological stance adopted by the researcher.
Within a multiple case study strategy, multiple physical focus groups' sessions, not online focus groups, were conducted to gain insight into the relationship between uses of electronic communication across different socio economic groups, understanding of individual and small group perceptions of the form and function of electronic communication, insight into the nature of communication protocols between youth in regional Australia, which will provide the basis for the establishment of emergent themes and categories. These themes and categories will be used to form a preliminary conceptual model of the form and function of electronic communication within the participating youth from this region.

The research methodology will be outlined, and then the researcher will proceed to discuss the analysis of data employed in the research. This component will also address the techniques employed in ensuring the reliability and validity of data.

The subsequent section addresses and justifies how the research methodology employed ensured and resulted in addressing the research question.

### 3.2 Research Philosophy

All research is founded on some principal belief regarding what constitutes as 'valid' research, and which research methods are appropriate. Therefore, in order to conduct and/or evaluate qualitative research, it is important that prior to commencement, the researcher affirms their philosophical position according to their ontological and epistemological stances (Remenyi and Williams, 1996).

For our purposes, the most pertinent philosophical assumptions are those which relate to the underlying epistemology, which guides the research. Epistemology refers to the assumptions about knowledge and how it can be obtained (Myers, 1997).
This section discusses and justifies the philosophical stance adopted by the researcher.

There are multiple approaches to the conduct of research, including interpretivism, positivism, critical research and post-modern (Hirschheim and Klein, 1989). While some researchers suggest that a mixed methodology research is possible, as a new researcher, the researcher is of the belief that it is better to undertake research that is restricted to a single philosophical stance.

3.2.1 Ontology
The researcher studying a social phenomena is faced with the basic ontological question, that is how the 'reality' exists in relation to the individual, according to that is whether the reality is of an 'objective' or 'subjective' nature (Burrell and Morgan, 1977). The broad alternatives for determining an ontological approach are objectivism versus subjectivism (Burrell and Morgan, 1977).

Objectivism seeks to objectify the participants and to provide an impartial verifiable model of the data (Neuman, 2003), whereas subjectivism accepts the role of the researcher as the gatherer and interpreter of the data and strives to maintain empathy with the participants in relating their individual stories and seeking to interpret the deeper issues behind these stories (Myers, 1997).

Further, the researcher has also sought to understand and adopt the ontological view of the world as perceived by the 17 – 19 year old participants in this study. Their Weltanshauung, or worldview for the purpose of this study is an ontology based upon relationships, physical appearance, emotions, technological devices, communication, protocols and entertainment. Their language reflects their own worldview. For example,

*Fine tune:* meaning – to refine a relationship

*E-relationship:* meaning – a relationship that is sustained solely by electronic means.
Gay: meaning – a negative opinion of something, someone or an action.

The use of jargonistic terms such as to SMS, plus the use of abbreviations in SMS or text messaging such as "c u l8r".

The researcher also performed the role of facilitator in focus group sessions and considered it important to show empathy and to be accepted by the participants through adoption of terms and concepts from their worldview. Hence the researcher earnestly sought to be accepted within the youth culture of the participants in order to increase the richness of the data being obtained from the focus group. Any perception by the youth participants of a cultural divide between themselves and the facilitator would potentially have reduced the flow of rich and inhibited comments.

One of the participants very strikingly expressed the distinction between his world view and that of a normal person by stating that when he got older and became normal he would exhibit normal behaviour, such as going for walks in the evening.

3.2.1.1 Ontological Stance
This research project seeks to discover elements of the conceptual framework that youth aged 17–19 living in the Launceston region have about a range of forms of electronic communication. It seeks to understand the concepts held by individual participants, and from that detailed individual perceptions to develop a group based perception. Hence it is important for the researcher to become very familiar with the thoughts and perceptions of the participating youth. Such an approach necessitates an interpretive epistemology, based upon a subjective ontology (Burrell and Morgan, 1977), since it seeks to gain a rich, deep understanding of a few individuals’ concepts with respect to electronic communications.
3.2.2 Epistemology

Epistemology is the discipline of knowledge acquisition, or the philosophical way that data are collected and given meaning (Hirschheim and Klein, 1989). Therefore, it can be considered as the philosophy and assumptions which influence the style of knowledge formation and attainment (Hirschheim, 1992, Neuman, 2003, Orlikowski, 1991, Burrell and Morgan, 1977, Hirschheim and Klein, 1989).

Prior to commencing any research, the researcher must evaluate their basic beliefs about the nature of reality and knowledge. These beliefs affect the selection of the method suitable for research (Guba and Lincoln, 1994). Guba and Lincoln suggest four underlying "paradigms" for qualitative research: positivism, interpretivism (post-positivism), critical theory, and constructivism (Guba and Lincoln, 1994).

An intrinsic component of this research project is the endeavour of the researcher to get inside of the headspace of the participating youth, that is, to seek to perceive the world of electronic communication through their eyes. The researcher is not only seeking to understand the individuals participants' views of electronic communication, but also the collective views of the focus groups as examples of small communities or societies of users of electronic communications. Participants were encouraged to not only express their own views but to bounce ideas about with other members of the focus group so that data was gathered on the different views held by focus group members. This implies the researcher needs to adopt an interpretive approach, that is, be within the interpretivism paradigm (Guba and Lincoln, 1994).

3.2.2.1 Epistemological Stance

The research aims to gain insight into the relationship between uses of electronic communication across different socio economic groups, whilst attempting to understand the individual and small group perceptions of the
form, function and protocols employed by these youth. The interpretivist paradigm best matches this understanding and accepts that the social world is created intentionally by the people that associate within it and the social reality of it can only be explained form the individual’s standpoint, hence the interpretivist research seeks an intimate relationship with the subject (Denzin & Lincoln, 1994).

3.3 Research Methodology

Consistent with the interpretivist and subjectivist stance within this research, the researcher has adopted a qualitative approach to analysis of the data. The nature of the data gathered will be spoken language that is recorded and transcribed and the proposed method of analysis is based on categorical aggregation.

3.3.1 Qualitative versus Quantitative

Neuman notes that while qualitative and quantitative research differ in various ways, they also complement each other (Neuman, 2003). All social researchers systematically gather and analyse data, meticulously exploring the configurations in them to recognize and explain social life.

Historically, quantitative research methods were developed in natural sciences to investigate natural phenomena (Myers, 1997). Researchers are concerned with issues of design, measurement, and sampling, with emphasis on detailed planning prior to data collection and analysis.

Qualitative research was undertaken within social sciences to study social and cultural phenomena, taking into consideration the researcher’s impressions and reactions. The motivation for doing qualitative research, as opposed to quantitative research, comes from the observation that a distinguishable feature of humans from the natural world is our ability to speak (Myers, 1997).
Researchers focus on issues of richness, texture, and feeling of raw data, concentrating on relationships between the data and developing insights and theoretical frameworks. Kaplan and Maxwell (Kaplan and Maxwell, 1994) consider that when researchers attempt to understand a phenomenon from the participant's perspective within a particular social and institutional context, it is basically lost when textual data is quantified.

Table 3.1 provides comparison between qualitative and quantitative research (Source: (Neuman, 2003))

<table>
<thead>
<tr>
<th>Quantitative Research</th>
<th>Qualitative Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test hypothesis that the researcher begins with.</td>
<td>Capture and discover meaning once the researcher becomes immersed in the data</td>
</tr>
<tr>
<td>Concepts are in the form of distinct variables</td>
<td>Concepts are in the form of themes, motifs, generalisations and taxonomies</td>
</tr>
<tr>
<td>Measures are systematically created before data collection are standardised</td>
<td>Measures are created in an ad hoc manner and are often specific to the individual setting or researcher</td>
</tr>
<tr>
<td>Data are in the form of numbers from precise measurement</td>
<td>Data are in the form of words and images from documents, observations, and transcripts</td>
</tr>
<tr>
<td>Theory is largely causal and is deductive</td>
<td>Theory can be causal or noncausal and is often inductive</td>
</tr>
<tr>
<td>Procedures are standard, and replication is assumed</td>
<td>Research procedures are particular, and replication is rare</td>
</tr>
<tr>
<td>Analysis proceeds by using statistics, tables, or charts and discussing how what they show relates to hypotheses</td>
<td>Analysis proceeds by extracting themes or generalisations from evidence and organising data to present a coherent, consistent picture</td>
</tr>
</tbody>
</table>

### 3.3.1.1 Justification of the choice of qualitative analysis

Myers suggests that motivation to undertake qualitative analysis stems from the distinction of humans from the natural world, whereby we are able to talk. Myers (Myers, 1997), Guba and Lincoln (Guba and Lincoln, 1994) and
Eisner and Peshkin (Eisner and Peshkin, 1990) indicate that qualitative analysts place a high priority on interpretation on events and phenomena and lesser priority on the interpretation of measurements. Research questions in studies based on qualitative analysis are typically orientated towards the investigation of cases or phenomena and seek to discover patterns of relationships between the key issues. Further, qualitative research involves reflection upon the data in which the researcher seeks to understand the deep meaning of the data and focuses upon interpretative understandings of this data.

In this study, the researcher is striving to discover the individual and group based conceptualisation of electronic communication amongst youth, and more specifically, how this technology has framed their social perceptions and the impact that such usage is having upon the social configuration and style of interaction amongst youth.

### 3.4 Research Methods for Data Collection

This research project seeks to uncover the conceptualisation of electronic communication, and as indicated above, the research approach is interpretative. The approach to data gathering is to utilise focus groups.

#### 3.4.1 Case Study

Case study method assists the researcher in understanding the workings within a single environment and of the particularity and complexity of a single case, beginning to comprehend its behaviour within significant context-based circumstances (Eisenhardt, 1989, Yin, 1994, Stake, 1995).

Table 3.2 Main Characteristics of Case Study Techniques
(Source: (Benbasat et al., 1987)

<table>
<thead>
<tr>
<th>11 main characteristics of Case Studies</th>
<th>Research Case Studies' Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The phenomenon under investigation is</td>
<td>Each focus group, apart from the employed,</td>
</tr>
</tbody>
</table>
being studied in its natural environment | was conducted in their everyday surroundings.
---|---
Data are collected via several means | Not addressed.
One or a few of people, group or organisations are investigated | Up to six participants were included in each focus group.
This method suits exploratory research | The use electronic communication, in particular by youth, is a relatively new phenomenon, with little research conducted into the ways youth use the technology, and more specifically how it frames their social perceptions.
There are no experimental controls involved in the research | This research does not involve any experimental controls.
The researcher does not state any independent and dependent variables before the research is conducted | There are no independent or dependent variables stated in this research.
The outcomes produced from the research depend upon the ability of the researcher to synthesise observations | The outcomes of this research depend upon the researcher's ability to synthesise observations.
The site and data collection methods chosen may alter as the researcher forms new hypothesis and theories | Because theoretical sampling was used for each of the case studies and hypothesis formulation was not a component in the selection of the participants, such as may have been the case if purposive sampling had been employed, this characteristic of case study analysis was not relevant to this research program. However, the use of distinct case studies permitted gathering of information in situ, for example in the classroom of a private senior secondary college, and at the local skate park where unemployed tended to congregate.
Case study method is helpful when the research is interested in asking 'why' and 'how' questions, as these types of questions are adept in assisting the researcher in | The research asks some 'why' and 'how' questions. However, Neumann (2003) suggests that this field research technique is best when 'how' and 'what' questions are
understanding or describing a community of interacting individuals as opposed to frequency or rate of recurrence

| The focus of the research is centred upon current events. | The use of electronic communications, particularly by youth, is a current event. For example, the widespread use of SMS text messaging and the introduction and uptake of recent versions of mobile phones with unique capabilities. |

3.4.1.1 Multiple Case Study

To ensure richness of data a multiple case study approach was adopted that utilised four focus groups, drawn from the following areas:

- Students who are aged between 17-19, from the Launceston region who are attending a private school and who utilise electronic communication in some form.

- Students who are aged between 17-19, from the Launceston region who are attending a senior secondary government school and who utilise electronic communication in some form.

- Youth who are aged between 17-19, from the Launceston region, who are currently unemployed and who utilise electronic communication in some form.

- Youth who are aged between 17-19, from the Launceston region, who are currently employed and who utilise electronic communication in some form.

A researcher uses cultural-context research to study cases that are surrogates for types of societies or units. For example, Burawoy and Lukac's (Burawoy and Lukac, 1985) comparative study of machine shops in the United States and Hungary looked at shops in the two nations, not to compare United States and Hungary, but to compare similar work settings in advanced
capitalist and state socialist contexts. The United States and Hungary represented types of societies. Likewise, Skocpol's (Skocpol, 1979) comparison of revolution in France, Russia, and China treated each nation as a backdrop for examining a common social process. “(Neuman, 2003) This research seeks to discover the conceptual framework for youth, to recognize the concepts and perceptions held by individual participants, in order to develop a group based perception.

The multiple case approach was chosen, not only to enrich the data gathered but also to provide more compelling evidence and a study as that is regarded as being more robust (Herriott and Firestone, 1983). Each case study is analysed independently and no critical or comparative analysis is undertaken of the different findings from each case study. Hence the multiple case study approach broadens the research outcomes to deal with four different groups with different socio-economic backgrounds.

The concept behind the focus group technique is that group processes assist participants to explore and clarify their views in ways that would be less easily accessible in one-to-one interviews (Pope and Mays, 1999). Focus group based discussions are particularly suitable when the researcher has a series of open ended questions, hoping to encourage group participants to investigate the topics of significance to them, using their own terminology, prompting their own questions and pursuing their own priorities (Neuman, 2003). When focus group dynamics work well, the participants act as co-researchers, taking the research to new and often unexpected outcomes.

The focus group is a special qualitative research technique in which the participants are informally interviewed in a group discussion setting. It has the advantages of allowing each person to freely express their ideas and opinions, to encourage expression by socially marginalised groups, to reduce intimidation upon individual participants and to encourage social interaction.
via group dynamics that enriches the discourse and hence the data gathered (Neuman, 2003, Pope and Mays, 1999).

The facilitator plays a special role in the focus group by guiding the group through a discussion based on a semi structured 'interview'. The facilitator is free to explore issues in greater depth as they arise, and to use techniques derived from the study of group dynamics to encourage all members of the group to feel empowered and to contribute to the discussion. However the facilitator does not lead the discussion. Each participant can freely contribute whatever opinions or information they like and are also free to query one another and explain their answers or contributions to each other (Pope and Mays, 1999).

Focus groups also exhibit several disadvantages as a data gathering technique. Subgroups can become polarised in their opinions and may seek to dominate or to withdraw from the discussion. Because of the need for each person to have their say the number of topics that can be discussed in a focus group session is relatively limited. The facilitator can unwittingly limit discussion, through such inappropriate techniques as overly assertive questioning, asking leading questions or ignoring part of the focus group. Focus groups can also suffer from 'group think' phenomena in which they unwittingly move to a common position and suppress other ideas from individuals (Neuman, 2003).

Within this research, the size of each focus group will be limited to six participants to ensure that adequate discussion takes place, but that the amount of data generated is manageable within the scope of the project. The age range of the participants will be 17 – 19 years of age and there will be an attempt to balance the number of each gender in each focus group. “In focus groups, a researcher gathers together 6 to 12 people in a room with a moderator to discuss one or more issues...The moderator introduces issues
and ensures that no one person dominates. The moderator is flexible, keeps people on the topic, and encourages discussion. Responses are tape recorded or recorded by a secretary who assists the moderator. The group members should be homogeneous enough to reduce conflict but should not include friends or relatives. Focus groups are useful for exploratory research or to generate new ideas...and the interpretation of results." (Neuman, 2003)

The participants within this research, within each focus group are involved in three separate sessions. The first session seeks to gain information on what forms of electronic communication the participants are using and how important is this technology in their daily life. The second focus group session deals with the manner in which interpersonal relationships are established, developed, maintained and broken through the use of electronic communication. The third focus group session deals with the roles that electronic communication play in their society and communities.

3.5 Selection of Participants

3.5.1 Nonprobability Sampling

Qualitative researchers rarely draw a representative sample from a huge number of cases to intensely study the sampled cases. For qualitative researchers, “it is their relevance to the research topic rather than their representativeness which determines the way in which the people to be studied are selected.” (Flick, 1998, Neuman, 2003)

3.5.1.1 Theoretical Sampling

Within focus group studies, it is possible to work with a representative sample of a small population. A field researcher samples by taking a smaller, selective set of observations from all possible observations. It is called theoretical sampling because it is guided by the researcher's developing theory. In theoretical sampling, what the researcher is sampling (e.g., people,
situations, events, time periods, etc.) is carefully selected, as the researcher develops grounded theory. A growing theoretical interest guides the selection of sample cases. The researcher selects based on new insights they may provide (Pope and Mays, 1999).

Theoretical sampling was adopted for the selection of participants who satisfied the requirements of being a 17–19 years old, living in the Launceston region, using electronic communication and satisfying the inclusion requirement of one of the above four focus groups. In practice, these participants were chosen as follows:

- Education Department approval;
- Approaching principles, in order to gain permission and access to potential participants;
- Employment agencies, to gain access to potential participants; and
- Unemployed youth who were friends.

By using pre-existing and naturally occurring groups such as people who work together, go to school together or were friends, the researcher is able to observe fragments of interactions that approximate to naturally occurring data. An additional benefit is that friends, school friends or work colleagues can relate to each other's comments to actual incidents in their shared daily lives (Pope and Mays, 1999).

3.5.2 Participant Selection Process

Four focus groups were chosen from a variety of socio-economic backgrounds in order to enrich the findings across the four distinct theoretical samples, for the analysis of conceptual models of electronic communication.

These focus groups were drawn from the following:
• Youth with a relatively wealthy background from a private school;
• Youth with a range of backgrounds from a senior secondary state school;
• Unemployed youth; and
• Youth who are currently in employment.

In the first two cases, the relevant school undertook the selection of participants.

In all cases, participants will need to self-select to be involved in the focus groups, and it will be made clear to the participants at all times that their involvement is on a voluntary basis.

In the cases of employed and unemployed youth, approaches were made to potential participants in the Launceston region to seek their voluntary acceptance to participate in the focus groups. Each such person approached that agreed to participate, were informed by the researcher that it was voluntary and that they could withdraw from the study at any time without any ill effects or ill feelings.

In the cases of students at a private college and a government senior secondary college, approaches were made through the college Principal to seek his/her assistance in identifying potential participants in these focus groups. Each such student identified received the Information Sheet, Consent Form, the researcher’s contact details, had the project explained to them, and asked if they wished to participate in the study. Those students that wished to participate in the focus group sessions, each person that attended then had the option to contact the researcher. They were informed that such participation is voluntary and that they may withdraw from the study at any time without any ill effects or ill feelings.
If a potential participant was under 18 years of age they were informed that they required their parent/guardian’s permission to participate in the study.

The first contact with each of the third parties was in the form of the attached correspondence, followed by a face-to-face meeting with a school staff member to explain the nature and purpose of the study. These contacts were provided with the attached information sheet and details on the process by which participants would be selected and the nature of their involvement in the focus group discussions. It was expected that these third parties would approach the potential participants and arrange the information session. Once contact had been made by the students to the researcher and 6 students from each socio-economic group accepted the invitation to be involved in the focus group discussions, meeting times and locations were arranged. Feedback was provided to the participants based on the preliminary findings from the focus group sessions and subsequent responses sought as part of the participant validation of the findings. All participants were provided with a report on the outcome of the study.

An attempt was made to balance the number of each gender in each focus group, plus to limit the size of each focus group to six participants, to ensure that adequate discussion took place, but that the amount of data generated is manageable within the scope of the project.

The inclusion of four focus groups with different socio-economic backgrounds was considered to be an important part of the research design. As this project is qualitatively based, there was no attempt to stratify the population, nor to attempt to generalise beyond the specifics gathered during the study. However, it was considered important to gather a rich data set that reflected the opinions and conceptions of a youth from a range of socio-economic backgrounds. As this is exploratory research, no causal
explanations will be proposed that might imply linkage of the occurrence of particular themes to membership of one of the four identified groupings of participants. Rather, face-value comparative analysis will be undertaken to identify whether distinct themes do emerge from distinct focus groups, without proposing any causal relationships.

Each focus group will be analysed qualitatively as a distinct grouping and the resulting themes compared across the different socio-economic groups. Given the relatively small size of each focus group, it is considered necessary to conduct a number of distinct focus group sessions in order to ensure adequate richness in the data gathered, and hence the findings. Given this requirement, it seemed obvious that greater richness could be incorporated into the findings if these focus groups spanned different socio-economic groupings. This approach is essentially the same as a multiple case study, in which each case study is chosen from a distinctly different grouping (de Vreede, 1995).

"Kohn (Kohn, 1987) has discussed four types of comparative research...The primary focus of case-study comparative research is to compare particular societies or cultural units, not to make broad generalisations....A researcher intensively examines a limited number of cases, or just one, there is relatively little need to be concerned about the equivalence of units. This method is helpful for identifying factors that are constant or that vary among a few cases." (Ragin, 1987, Neuman, 2003)

At least three sessions were conducted with each focus group, with the discussions taped and analysed qualitatively for emergent themes and categories. These themes and categories were used to form a preliminary conceptual model of the form and function of electronic communication within youth in this region.
3.5.3 Outcome of Selection of Participants
From the selection process described in the previous section, four focus groups were formed, comprising of six participants in each session. There were three sessions conducted for each group dealing with the topics below.

3.5.3.1 Focus Group Framework – Topics of Interest
This section describes the main topics of interest for this research. For the complete list of focus group questions for each section, please see Appendix D.

Personal Use of Electronic Communication
The first focus group discussion considered personal use of electronic communication technologies, with emphasis on the person. The discussion sought to discover what exactly does electronic communication mean to the individual, asking what technologies were utilised, exploring what needs were met, what motivates the person to use it and what do they personally get out it.

Relationships Established and Maintained through Electronic Communication
The second focus group discussion considered the types of relationships that are established and maintained through the use of electronic communication. This section intended to discover why these youth used electronic communications, whether they actively sought relationships, and what relationships did the individuals find, and how did they sustain these relationships. The outcome from emphasising the building, maintaining and altering of relationships provided discussion and subsequent discovery of the many stages and levels that these youth experience.

Roles of Electronic Communication in Youth Communities/Societies
The third focus group discussion considered the roles that electronic communication plays in the communities/societies of the youth involved. This section sought to discover how these youth conceptualised how it supports
their social lives, requesting them to visualise their social network. Emphasis was placed on concepts rather than events; the discussion explored the real and virtual relationships they experience, and to what extent does the technology support their real social network and virtual social network.

**3.5.4 Pilot Study**

A final preparation for data collection is the conduct of a pilot study. Reliability can be improved by utilising a pre-test or pilot version of a measure first. The pilot case may be chosen for several reasons unrelated to the criteria, such as for selecting final cases in the case study design (Stake, 1995).

The pilot case study helps investigators to refine the data collection plans with respect to both the content of the data and the procedures to be followed (Yin, 1994).

The pilot case is used more formatively, assisting an investigator to develop relevant lines of questions – possibly even providing some conceptual clarification for the research design as well (Stake, 1995).

In the event of multiple-case design, the selection of cases may have to be modified because of new information about cases. In other words, after some early data collection and analysis, the researcher is authorised to conclude that the initial design was faulty and to modify the design.

The pilot study assisted in refining the focus group framework in the following ways:

- Recognition of individual’s use of technology, regarding the jargonistic terms these youth employ when discussing how they utilise electronic communication;

- Appreciation of the overwhelming amount of information that was derived from one focus group session;
• Realisation of the limited number of topics that the researcher was able to discuss in the time period available and hence the need to structure the focus group sessions to deal with specific topics; and

• Development of an understanding of the dynamics of focus Group formation.

3.5.5 Data Gathering
Data gathering was achieved using audio recording direct into a laptop PC. This meant that the data was captured in digital format immediately and did not have to be rerecorded from an audio cassette or disk into digital format. The digital recordings were then transcribed by the researcher into textual format. Every endeavour was employed to accurately transcribe the focus group discussions, including ascribing utterances and conversation to the appropriate person and inclusion of non-language utterances such as um and ah. Confidentiality of the tapes was preserved through their encryption immediately after transcription and through anonymous labelling of the participants in the transcripts. No key was kept of the mapping of participants' identifiers in the transcript to their true identity.

Each participant was provided with an information sheet as shown in Appendix B at the information session, prior to the commencement of the focus group sessions. Consent forms were provided to each of the participants in the focus group. Participants over 18 years of age were asked to sign the consent form, while underage participants required the consent form to be signed by their parent or guardian – check to make sure that it's included in the previous section on selection of participants.

3.6 Data Analysis

In qualitative research, the context-based and unstructured data is in the form of text, written words, phrases or symbols describing or representing people,
culture, behaviour and events in social life (Neuman, 2003), distinguishing humans from the natural world, in order to examine relationships. Qualitative analysis allows the researcher to formulate a new explanation/theory by examining the phenomena’s interrelationships. As suggested by Yin (Yin, 1994), the coding process subsequently offers a chain of evidence that links the research findings to the underlying data. Miles and Huberman define codes as “tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study.” (Miles and Huberman, 1994)

The analysis of data employed was the categorical aggregation methodology (Stake, 1995). Through this approach the researcher codified the original data using an open coding approach. The researcher then refined the coding scheme using an axial coding approach. The codes were then classified into categories from which were derived a small number of core categories (Stake, 1995). This approach adopted the bottom up coding technique loosely based on the Grounded Theory approach (Strauss and Corbin, 1990). An essential feature of this approach is that all coding is grounded in the data. That is, the actual words and phrases spoken by the participants form the basis for the identification for all codes and all patterns of coding. Through the categorisation process, the researcher is seeking to interpret the meaning of the data by three main processes:

1. Classification of categories and codes into a taxon that ultimately leads to a small number of core categories;

2. Through the examination of repeated patterns of behaviour and relationships that lead through inductive analysis to the establishment of propositions that are not refuted by the data; and

3. Through constantly reviewing, and emersion in, the data and seeking to understand its deep structure (Chomsky, 1975).
Finally, categories of codes are interpreted in order to derive the main findings of the research project.

3.6.1 Open Coding
Open coding is performed during the initial coding phase, identifying themes and assigning initial codes or labels and developing low level abstractions grounded in close inspection of the data (Strauss, 1987). Open coding assumes that the researcher commences the analysis task with a completely open mind. That is, there is no predetermined or pre-coordinate coding scheme (Strauss and Corbin, 1990). The coder needs to read and understand the transcript completely and then seeks to represent the key components of the transcript as a series of embedded codes. Each code is essentially a label attached to a fragment of text within the transcript and acts to. This label should in some way edify the text by providing an abstract reference that is dimensionalised (Neuman, 2003). The assignment of these codes is the first step in the interpretation process that is transforming the raw text into high-level categories.

Open coding was performed on each of the transcripts of the focus group sessions at the level of the interaction, where an interaction is defined to be all of the comments spoken by a single speaker consecutively over a period of time. In many cases, the transcript revealed that there were grammatically incorrect sentences being spoken by the participants and so coding needed to be performed at a level higher than each sentence. A single interaction could be coded in many different ways, particularly if that interaction extended for a period of time. Because the researcher was using a bottom up technique to analyse the data, the codes were chosen carefully to ensure that they were grounded in the data transcripts of the participants.

The researcher and project supervisor engaged in open coding of some of the sessions, not for the purpose of inter-coded reliability as such reliability is not
required for qualitative research (Myers, 2002), but rather with the intention to mentor the researcher in acceptable coding methods.

**3.6.2 Axial Coding**

Axial coding involves inductively analysing the codes that were developed during the open code phase (Neuman, 2003, Strauss, 1987). Although this phase of coding primarily centres upon sharpening and categorising the themes into higher-level common categories identified in the open coding phase, additional categories may also be identified. Axial coding involves repeated analysis of the coding scheme as new codes are introduced and deeper insight leads to significant revision of the existing coding scheme. In addition, the axial coding stage stimulates thoughts of linkages between concepts or themes thereby requiring several iterations (Neuman, 2003). During axial coding, the researcher investigates causes and consequences, conditions and interactions, strategies and processes, and seeks to identify categories or concepts that cluster together (Neuman, 2003, Strauss, 1987).

The coding paradigm proposed by Corbin and Strauss (Strauss and Corbin, 1990), was not employed in this project because it was felt to too tightly constrain the coding process. However, attempts to dimensionalise the coding scheme were consciously adopted. This approach was intended to produce a series of codes that more clearly delineated the different theoretical aspects of the data as lying upon distinct conceptual axes.

**3.6.3 Selective Coding**

The third coding pass of the data is selective coding, which involves the selection of phrases that clearly illustrate the major concepts associated with each code or category (Neuman, 2003). This phase involves scanning data and previous codes, seeking evidence of the specific core categories.
Selective coding emphasises the groundedness of the analysis (Strauss, 1987). That each component and phase of the data analysis must relate back to the actual data as gathered in the focus groups and cannot be interpreted independently of that data. In this research, some evidence existed in several forms such as in vivo comments made by the participants, and identifying recurrent patterns of association codes with data and codes with other codes.

3.6.4 Thematic Coding
Thematic coding differs from content coding in that it seeks to "complexify" our understanding of the data (Boyatzis, 1998). It raises new questions about information which might seem straightforward and factual.

Boyatzis (Boyatzis, 1998) states that a good thematic coding occurs when the researcher captures the qualitative richness of the phenomenon, which is usable in the analysis, interpretation and presentation phases of the research (Boyatzis, 1998, Neuman, 2003). However, for the purposes of this research thematic coding was not employed.

3.6.5 Categorical Aggregation or Direct Interpretation
Two strategic methods that researchers employ to attain new meanings about cases are through direct interpretation of the individual stance and through aggregation of instances (Stake, 1995).

Direct interpretation is a hermeneutic approach to analysis of data in which the major themes or core categories are derived from the data by the researcher directly interpreting the data, without the use a coding hierarchy (Stake, 1995).

The alternative coding approach is the categorical aggregation process. This involves categorising codes into a hierarchical taxonomy whereby codes with similar meanings are categorised into higher-level categories, and then grouped as subcategories of higher-level categories (Stake, 1995). Through
this hierarchical aggregation procedure the researcher then derived the core categories.

The codes developed through the processes of open, axial and selective coding are still too low level to permit the generation of findings by any process other than direct interpretation (Stake, 1995). Therefore the stage in the analysis process was that of categorical aggregation (Stake, 1995). This stage in fact can be broken down into many substages depending on the number of levels of hierarchical aggregation needed to develop the core categories. At each stage, the available codes are analysed and grouped by common characteristics into a number of higher level and more abstract categories. This categorisation does not occur once but many times to enable the researcher to identify a number of alternative taxonomic interpretations of the data. Categories are then grouped according to higher level categories and this process is repeated until a small number of core categories have been identified (Stake, 1995).

Having derived a set of core categories, the researcher then evaluates the entire categorisation hierarchy and compares and contrasts distinct hierarchies in order to select that hierarchy which produces the core categories that have the greatest semantic appeal. Through this process a small number of core categories are chosen that represent the most insightful interpretation of the data.

3.6.6 Model and Theory Building

The core categories form the basic concepts or issues in the model to be developed of the phenomena being observed. However, a rich model consists not only of a number of core categories but also the meaningful relationships of the core categories. Therefore in order to build such a rich model consideration is given to the range of relationships that may exist between pairs and triplets of the core categories. Spradley (Spradley, 1979a) defines a
range of possible relationships that may exist between concepts in an ethnographic study. These relationships were investigated as a way of exploring the possible types of relationships present between the core categories. The result was developed as a concept map of core concepts and the relationships between these concepts. Whilst relationships between the core categories were developed in this research, such as the multi-purpose functions between each form of electronic communication for both relationship formation and maintenance and additionally the entertainment purpose they satisfy, the youth did not appear to reflect on their experiences in an abstract manner, and hence do not develop abstract conceptual models of electronic communication.

Just as the coding and categorisation were iterative processes, so the formation of theoretical model was also iterative, with the goal of deriving a rich theoretical model that had the greatest semantic appeal, in terms of its ability to represent the researcher’s interpretations of the data.

3.7 Limitations

It was very difficult to find suitable participants for some of the focus groups. For example, the employed group had such busy lifestyles, which made it extremely difficult to bring them all together over three sessions. The unemployed were difficult to find, which made it challenging to conduct the focus group sessions for this socio economic group.

The time available to undertake the analysis was severely limited as the process of applying for ethic approval took two and half months longer than expected, of a project with a six month timeline. The recording equipment frequently did not work and so focus group session had to be partially or fully repeated, and this reduced the spontaneity of the discussion and responses. On some occasions the level of recording was so low that the accurate transcription of every spoken word was impossible. In one case, one
participant in a focus group over three sessions did not speak because he was obviously daunted by the energy and the social confidence of the other members. It is interesting to note that in the same session, one male participant did open up and revealed very personal details about his use of electronic communication. With the employed people, the time available to conduct the sessions was limited because of their busy lifestyle.

3.8 Reflections

Stake (Stake, 1995) suggests that reflection is the most important process by which an interpretivist researcher gains knowledge. This is also consistent with (Schon, 1983) and exemplifies an existentional (Satre, 1957) approach towards the acquisition of knowledge. This thesis is structured so that the reflections accumulate at the end of each major section and underpins the findings in the last chapter.

A potential consequence of these reflections is the reader may recognise how my own personality shapes the analysis of data and interpretations.

At the time of conducting the focus groups I was concerned with how I was going to get through the questions, if the discussions were going to provide relevant and valuable information, that I would be able to facilitate discussion amongst participants and that the participants would feel comfortable in front of me.

I was concerned what value these participants were going to get out of attending and contributing to the discussion. For example, the Launceston College students attended the sessions during their lunch breaks so what proposition could I provide to them to ensure that not only did they attend, but that they would actively and honestly contribute to the discussions.

The age group of the participants was also a concern due to the fact that it was hoped that they would reveal personal and sensitive information in the presence of people that were not close friends, or could possibly be ridiculed for what they said.

Considering the age of the focus group participants. I was concerned with how they were going to understand some of the topics that I had hoped to cover (eg conceptual and abstract references/questions).
It was also possible that the participants had not reflected on what their objectives were when instigating and maintaining relationships through electronic communications. With respect to relationships with the opposite sex, participants may have been cautious to disclose how they initiated relationships (e.g., the sequence of events in relationship lifecycles, their chat up lines, the separate identities that they’d formed).

On reflection, I believe I gained more out of this than what the participants did. Not only due to finding it extremely interesting, revealing and insightful, but also that I discovered what these youth were thinking, doing, what their hopes were in terms of possibly finding partners and soul mates. I feel extremely privileged that they allowed me to come into their life and experience personal and extremely private aspects of their lives that possibly had not been disclosed to anyone prior to the discussion. I truly believe that to read the transcript of the sessions does not accurately and realistically convey the experience of observing, listening, participating, interacting, analysing, responding, facilitating and being included in the focus group discussions.
Chapter Four – Analysis

4.1 Introduction

This section illustrates the phases through which the data is analysed. Illustrative examples are included to demonstrate how the researcher analysed and interpreted each component of the data through open, axial, selective coding and categorical aggregation. While it is an ideal to achieve theoretical saturation (Strauss and Corbin, 1990), this is impractical within such a time-limited project. However, every attempt was made to analyse the data as completely as possible. The examples included in this thesis do not convey the completeness with which the data was analysed, but merely serve to demonstrate the validity of the techniques used.

4.2 Cameos

Below is a thick description for each of the focus groups.

4.2.1 Private College Cameo

I contacted a teacher who had previously taught me, and explained what I was currently doing and asked for his assistance in organising an information session. Once the information session had been conducted, and students had volunteered and gained approval to be involved in the focus groups, a time and place for the session was decided. Turning up for the focus group were six slightly confused and cautious students, not really understanding the purpose and format for the session. I attempted to ‘break the ice’ by bringing along some refreshments, which I asked the students to pour themselves a drink and have something to drink. While I set up my computer and recording device, I chatted with the students, introducing myself and explaining what I had hoped to discuss with them over the time period that we had been allocated. The boys involved in the group were quite relaxed and content, possibly due to the fact that they were missing a couple of
periods of maths. The female students sat at one end of the table, and the males sat at the other. The more outspoken male student sat in between the other two male participants, with the conversation mainly centring on/around him. The females huddled on the other side, mainly speaking in whispers and were not directly involved in any group conversation at that point. The students' understanding was that to be involved required them to possess or use a mobile phone. I took the opportunity to clarify exactly what I had hoped to cover during the session, emphasising the casual and informal nature that the session was to be conducted, bringing to their attention the information sheet that they brought along with them, which included focus group questions.

I commenced the focus group by asking each student to tell which forms of electronic communication did they use. The students saw that the main purpose for their use of electronic communication was to fill in time of an evening, or to make contact or arrangements with their established social and family network, but in the same sense they were addicted to it and could only go without any form for approximately two weeks. The boys were more open with how they initiated and maintained both same sex and opposite sex relationships. The boys would often reveal personal aspects as to how they used electronic forms, particularly relationships that had been formed through electronic forms, and their tactics to initiate conversations through chat. For example, one student role-played, impersonating a famous AFL player (although this tactic was only employed on overseas participants), even going as far as inserting a photo of the player in the 'pie box'. Surprisingly, this student was not concerned with the potential ridicule associated with this revelation, which may possibly be due to his confidence and level of comfort with himself.
Chapter Four – Analysis

One male participant would often not engage in the conversation with the other students. I attempted to ask him specifically his thoughts or answer to a question, with which he reflected on what his response was before proceeding to advise me. His answers mainly centred on the aim of personal exchange in communication, and so his use of electronic communication was not as diverse as the other participants, with him preferring to talk on the telephone than SMS text message someone.

There were incidents where the students would reveal aspects of the relationships that have eventuated from their use, only realising after it is revealed that even their friends are surprised by their actions. They are then forced to immediately decide whether to be embarrassed or play down what they have just revealed, or to stand by what they revealed when questioned about it.

There was a continual reference of communication protocol and the reduction and control of the 'awkward silences' through the use of electronic communication. Surprisingly, they seldom visualised whom the other person/s they were communicating with if they had no prior face-to-face contact.

The lunchtime siren came through the PA speakers, so I took the opportunity to wrap up the discussion. As I thanked all the students for taking time out of their maths class to participate, one student asked if I would be returning the following day to conduct another session. I explained that we had covered all the questions, which meant that I would not have to schedule another session. As they were walking out the door, I asked if they would like to take the remaining refreshments with them. Choosing a couple of bottles of coke, they began to discuss something between themselves while heading outside for their lunchbreak.
4.2.2 Senior Secondary State College Cameo

When I arrived at Launceston College, I was advised that the group that had volunteered to participate in the session had pulled out, except one. My reaction was to enter the computer lab next door, where I sought permission from the teacher to request volunteers to participate in the focus group session. I proceeded to explain what the focus group would cover and attempted to encourage volunteers with the promise of refreshments, emphasising the informal and relaxed nature of the discussion. This situation forced me to only seek volunteers that were 18 and above, due to the consent form requiring permission from parents/guardians of participants under legal age. The class that I interrupted were students enrolled in a computing subject, and those who volunteered their time seemed intrigued about what was going to be discussed.

Initially, the students were sarcastic and joking around, and insincere with their responses. Once we had proceeded to discuss the relationships that they had formed through such modes as MSN chat and SMS, they became more comfortable and began to answer my questions and became actively involved in the discussion, often communicating amongst each other, allowing me to observe and listen to them and reflect on what they were saying.

During the session, the participants were continually receiving and sending SMSs to their friends outside of the focus group, even displaying SMS messages they had sent and were receiving. For example, one student received a message from his father asking how the son went at the doctors, while another student received a message from a friend querying what subject they were doing and how it was going.

When discussing what they used the Internet for, it mostly centred around nightly exchange of messages on MSN chat, searching for music and movies and checking out web sites for information to assist in the completion of their
assignments. They revealed that they did not see the point in role-playing on the chat, due to the inevitability of a person's true identity being discovered. This reinforced the purpose of technologies such as MSN chat and SMS, in that they rarely extend their social network to people that they have not met personally, or have an idea of whom this person is. This confirmed the notion that to have a fulfilling and purposeful relationship, it is crucial for them to have physical contact; else the relationship was not considered 'real' nor has longevity.

Two participants of the group were best friends, resulting in many discussions being centred on them. This provided an opportunity to discuss the issues surrounding one of the student's current opposite sex relationship situation. This participant was surprisingly open and honest with the situation and the issues surrounding the relationship. He was also rather vocal and repetitive about who is best friend was, referring to the male participant sitting next to him.

The females present in the session were quite reserved, which affected the types of engagement between the participants as they were mainly exchanged between the males. Another female entered the room around the middle of the sessions, but she too was softly spoken, which did not encourage the remaining females to interact between themselves.

We eventually covered the main questions that I had hoped to discuss, so I took the opportunity to wrap up the discussion by asking what they were planning on doing next year. As they were responding, my mobile phone rang. At that stage, I realised how long I had been with the students, so after finishing my phone call, I sincerely thanked the students for all their time and the valuable information they had provided. They responded by saying that they had enjoyed themselves and wished me luck with my study. I too
wished them luck with whatever they decided to do next year and jokingly stated that they could be famous from the study that I was doing.

One of the girls stayed behind, assisting me with gathering and dispersing with the rubbish. We walked out of the building together, with me again thanking her for her participation and contribution to the focus group, and then bid each other farewell.

4.2.3 Employed Cameo
Alex was already waiting for me at the dining table when I arrived. She looked bored and called out to Tim and Kate to come and join her. She told me that ADSL had just been installed in the house, and that they were still coming to grips with having the Internet and phone available 24 hours.

It was a comfortable house, with a good view over the Tamar River, 1980s décor and a little messy. A basket of clean clothes sat on the hearth, waiting to be sorted. A few other odd bits of clothes, newspapers, used coffee cups and shoes were lying about the floor and on the furniture.

Tim and Kate came into the room. It was immediately obvious that they were boy and girl friend. I sat down at the table, Tim sat next to me and Kate sat opposite. I introduced myself and asked if there was anyone else coming. Tim gave some excuse, but all I could catch was that it concerned some drama that featured a Nissan Skyline. Before I could explain what we were going to do, Tim informed me that he and Kate had to go out soon and that they did not have much time to spare. I took the hint and got my laptop ready to record. Alex was looking more interested and started telling me about her studies towards journalism in a BA. Alex currently worked as a clerk in a financial company, Kate went to TAFE and worked part-time at McDonalds, and Tim was a Front-Of-Shop-Manager in a supermarket.
Although the four of us were in the same room, the conversation was split into two, one involving me, Tim and Kate, and the other between Alex and myself. There was almost no overlap, and little common interests. Kate appeared very quiet. I tried to get her to speak by addressing many of my questions directly to her, but almost inevitably Tim answered. He was out to impress me with his mastery of the subject, and often only let Kate nod or echo his statements in the background. Tim felt sure that he knew the right answer to each question. When Kate did speak she was not confident, and often trailed off the end of her sentences. There were certain topics, such as using the Internet as a pick-up medium, that they found embarrassing and behaved more like a married couple in carefully choosing their replies.

Alex was much more thoughtful. She wanted to show how literate she was by constructing overly complex sentences. I thought that she could have been much more honest and explicit if she dropped the linguistic gymnastics. Alex followed my questions carefully and gave carefully considered replies. Tim obviously respected her, and did not interrupt once when I directed my questions to her. At times I felt that Alex's answers were so long, and my questions so short that she was the journalist interviewing me.

After getting through the main topics that I wished to discuss, Tim suddenly announced that he had to take Kate to her shift work at McDonalds. I thought that fast food and fast life-style obviously go together. They left and Alex went on telling me about her experiences for another fifteen minutes. I began to feel sorry for her as she clearly used the Internet as a way to meet guys, and things were not going well at present. She also had high standards on the physical appearance of the right guy.

I packed up my laptop, said goodbye to Alex and started to leave. Alex went into the office to see if the selection of guys on ICQ over ADSL was any better than it had been a few days earlier over a dial-up line.
4.2.4 Unemployed Cameo

I was quite apprehensive and anxious about the unemployed focus group. After attempting many avenues to source some unemployed youth, I was given the advice of visiting the local skate park. Walking down the path towards the skate park, the sun was shining in between the trees and the afternoon breeze was causing the leaves to rustle. Royal Park, the location of the skate park, is on the outskirts of Launceston's CBD and meets the Tamar River. Approaching the skate rink, I noticed that no one was using the facilities, but there were two boys sitting with their bikes on the grass under the shade. I approached them and asked if they would possibly volunteer to participate in a focus group that I was hoping to conduct that afternoon. I took the opportunity to attempt to entice them with the promise of alcohol and munchy food. They were surprised with the proposition, and were curious and cynical about my promise. I explained the background of my project and told them that I required about 6 participants. I asked whether more people would arrive soon, with their response being that it usually became popular after 3.00pm. In the meantime, I sat down and chatted with them, finding out what their names were, where they were from and just general chitchat. At this stage more youth arrived at the Park, so I took the opportunity to approach them and ask if they too would volunteer to participate. This action became overwhelming for one of the original youths, with him rolling around the grass laughing and shrieking with delight and surprise with the prospect of receiving free refreshments in exchange of talking about how he used his mobile phone and the Internet. After rounding up enough volunteers, I went to the local service station to pick up some food and drink, including the promised six pack.

I arrived back at the park and asked for some help carrying the goodies to the kids, then set everything up and began the session.
As the kids were munching, I proceeded to go through the first set of questions, querying what forms of electronic communication they used, and for what purposes? Their responses were one and two word answers, often repeating the same sentence as the previous participant. As the session progressed, the youths came and went from the session over the skate area to either ride their skateboards or bikes. They seemed to be more interested in eating and drinking the munchies provided to them, possibly due to the time of day. As new people approached the group, mini conversations were taking place between different parties, usually covering topics such as querying what this session was all about, what they’d been doing lately or discussing the state of their bike or board. Often they would contribute to the session without my request, which provided me with additional and uncovered material. One male approached the group and began a conversation with a participant about the changes he had made to his bike. When the discussion moved around to this participant, the new member proceeded to explain that he had recently broke up with his girlfriend because she couldn’t handle the amount of time he spent with his bike, and could not understand why she was not his priority. These two participants were quite cynical about relationships and girls and were confused as to how girls think, with the declaration from one member that all relationships were destined to fail. I found this surprising that at such a young age these two boys were pessimistic about the likelihood that the lifetime/timeframe of their relationships. A couple of times I had to ask that some of the people settle down, as it was not only distracting the other members, but it was often difficult for me to hear what the participants were saying or to maintain a conversation between them.

It did not take very long to go through the three sets of questions that I had prepared, mainly due to their one or two word responses, but also the level of
distraction and disinterest in expanding their responses, was too difficult to contend with. I eventually decided to give in and thanked members for their contribution. The youth took the opportunity to pack their belongings and move to the skate area. A couple of youths stayed, which led to the offer of some marijuana. I gratefully declined the offer, explaining that I had to go and pick my son up from day care and that I would become paranoid if I were to consume drugs. His response was that I was wearing sunglasses so no one would know. Laughing at his statement, I again thanked him for his contribution to the focus group and he responded by saying that he’d hoped that I had obtained some valuable information. I smiled and asked if he would mind taking the chip and chocolate packets to the rubbish bin for me, in which he replied no problem. I then bid the remainder youth goodbye and stated that I hoped they would have a good night. As I walked away from the skate park, one youth shouted and waved goodbye, saying that he’d enjoyed our session.

4.3 Data Analysis

4.3.1 Open Coding

A bottom up approach was used to open code the data. This involved immersion in the transcripts of each session through repeated reading of these transcripts. As it was the first time the researcher was engaged in qualitative research, the project supervisor also undertook open coding of some of the sessions. The purpose of this was not to ensure inter-coded reliability but rather was intended to mentor the researcher in appropriate techniques of coding. However, this provided the researcher with the opportunity of discussing the data contents, the style and unit of analysis appropriate for coding and the actual codes produced. After this exercise had been completed on five of the sessions, the researcher proceeded to open code the remaining sections by herself.
The unit of analysis chosen for open coding is the individual participant's response. A response is defined as being a period of continuous contribution to the focus group from the moment a participant begins to speak until the time at which that same participant ceases that spoken contribution. A response may consist of a combination of questions, statements, interjections and utterances. In some cases responses overlap in time because another speaker interrupts or speaks over the first speaker. These few occurrences have been separated out into individual responses within the transcript without any significant loss of context.

When developing open codes it was considered important to dimensionalise the codes. That is, to develop the codes that clearly indicated distinct aspects or dimensions of the data being analysed.

Neuman (Neuman, 2003) and Boyatzis (Boyatzis, 1998) suggest that a code should have five characteristics:

1. A label. The label is the code itself, which uniquely identifies each code applied to the data.

2. A definition. The definition of each code uniquely describes that code.

3. A flag. The flag together with the definition enables the reader to be able to recognise occurrences of the code in the data. The flag may refer to the type of data or comments in which one would expect this code to appear. For example, a flag may refer to an in vivo situation in which one may expect to find a code that relates to the expression of inner feelings of a participant.

4. A qualification. A qualification describes inclusion and exclusion conditions for scoping the application of the code. We can adopt the term referent from semiotics to refer to that fragment of text in the data to which a particular code refers. For example, a code “relationship-
platonic" could have an exclusive qualification placed upon it in which it does not refer to any situation in which the referent contains either an explicit or implied sexual relationship.

5. A list of referents. Each code will be associated with a number of fragments of the original data or a list of referents that occur in the original data.

For example, Table 4.1 illustrates a fragment of the transcript from the session, together with the codes assigned to that fragment. These codes clearly illustrate that the data dealt with very distinct aspects including electronic based communication relationship development, wariness of respondents, trust established towards respondents, parallels between real life communication and online life communication and realism of anonymity associated with online communication.

Table 4.1 Codes Assigned to Fragment of Transcript

<table>
<thead>
<tr>
<th>A Response Taken From the Employed Participants Focus Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Employed 1: Well, I'd probably, I think, you know, just say if we, if we talked regularly for about three weeks or something, I'd still be very wary of what their real personality was like, because I s'pose that form of communication is like, it has, I mean, parallels with real life interaction but it's quite condensed. So, I s'pose talking to someone for three weeks is like knowing someone for three months, I mean, you don't, you know, I mean you know quite a bit about them by then but you're certainly not going to, you know, put a huge amount of trust in them. So I s'pose after, after a few months then, you know, you're, you're starting to develop a belief that, you know, they're not going to say anything weird or, you know, start freaking out or something like that, although that thought never really leaves your mind, and I 'spose, I s'pose it's just the nature of the communication which means that you have to be on your guard usually.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wariness of real person</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cautiousness expressed by a participant about the personality traits of a</td>
</tr>
</tbody>
</table>
respondent who is engaging in electronic communication and is geographically distant from the participant.

Flag

One may reasonably expect an occurrence of a referent relating to this code to occur when the participant is engaged in a reflective discourse about their own feelings and emotions relating to the use of chat with respondents with whom they’re not familiar.

Qualification

This code refers to only respondents in chat sessions.

List of Referents

- “I’d still be very wary of what their real personality was like”
- “not going to, you know, put a huge amount of trust in them.”
- “they’re not going to say anything weird, or you know, start freaking out or something like that, although that thought never really leaves your mind”
- “I s’pose it’s just the nature of the communication that means you have to be on your guard usually”

A Response Taken From the Employed Participants Focus Group

Same response as above

Label

Long lead time of relationship development

Definition

The period of time over which the respondent believes that a meaningful relationship is developed and in which different stages of the development of
trust may be evident.

Flag

One may expect this code to occur when the participant is discussing stages and pre-requisites for the establishment of relationships over a series of chat sessions.

Qualification

This code refers to only respondents in chat sessions.

List of Referents

- "if we talked regularly for about three weeks or something, I'd still be very wary"
- "I s'pose talking to someone for three weeks is like knowing someone for three months...I mean you know quite a bit about them by them but you're certainly not going to, you know, put a huge amount of trust in them."
- "after a few months then...you're starting to develop a belief that...they're not going to say anything weird"

Table 4.2 illustrates an example of coding in which one fragment has vastly different multiple codes associated with it. This table is a structural example which illustrates the complexity of the coding.

Table 4.2 Multiple Codes Assigned to Fragment of Text

A Response Taken From the Employed Participants Focus Group

"Employed 3: You don't really want to be giving that away at such an early stage. But if you can discuss a topic that is kind of external to both of your real life existences, like, you know, a current event, or, you know, just your thoughts on something in every day life"
Consistent with the multiple case study design, each focus group was analysed independently. That is, the three sessions associated with one focus group were transcribed together and then open coded together before consideration of the other focus groups. Obviously the researcher gained more experience in coding as the open coding process proceeded and this led to some increased sophistication of the codes being used, but every attempt was made to ensure that the coding scheme developed for one case study did not unduly influence the coding of another focus group. After completing the open coding of all four case studies, the researcher revised the coding schemes of the first two case studies analysed in order to improve their richness before proceeding to axial coding.

Table 4.3 illustrates further examples of open coding showing the range of codes used across a variety of focus groups. Coding was performed at the level of contribution by each member of the focus group, rather than at the syntactic level, such as the sentence, in order to capture the meaning of each person’s contribution while not being too pedantic. Table 3.3 demonstrates the same code being used across multiple focus groups, demonstrating an example of two open codes being unified as a single axial code.
4.3.2 Axial Coding

Table 4.4 illustrates examples of two open codes being unified as an axial code. For example, the refinement of the open codes social rules of communication and protocol of communication developed to form the new code communication – protocol. The other example is taking two codes, electronic relationships and face-to-face relationships, and dimensionalising them into the new codes, relationships – virtual, text based and relationships – physical. Strauss and Corbin (Strauss and Corbin, 1990) recommended as good practice the dimensionalisation of codes as a way of achieving abstraction and richness in the coding scheme.
Table 4.3 Examples of Open Coding Showing Range of Codes Used Across Focus Groups

**An Example of the Same Code Being Used to Refer to Two Fragments in Two Focus Groups**

*The following is taken from the Employed Case Study*

**Response 1**

"obviously SMS usually follows after you have built a relationship with somebody...It's not like a chat program. You don't just, you know, start SMSing people randomly...it is a good way to keep in touch with other people" (Case Study Three: Line 85)

*The following is taken from the State Senior Secondary College Case Study*

**Response 2**

"I met, I'd been talking to a guy for probably six months and then I went up to Sydney and met him there." (Case Study Two: Line 90)

"go to a party, to meet them go to a party or something or someway of meeting them, get a bit drunk, um you start talking to someone and think 'oh, this person's okay' so you get their number, email address and...][...get their number and get their email later...][...next day, send them an SMS or something" (Case Study Two: Line 232)

"yeah, I'd SMS before I'd call just to, in the development stages, just to make sure that I wouldn't make a fool of myself to start off with." (Case Study Two: Line 305)

**Label**

Relationship Development – Roles of Electronic Communication

Relationship Development – Stages

**Definition**

The role a form of electronic communication plays in the development of a relationship between two or more respondents.

The phases that relationships between two or more respondents pass through during the lifecycle, especially growth and decline.

**List of Referents**

- "SMS usually follows after you have built a relationship with somebody"
- "don't just, you know, start SMSing people randomly"
- "good way to keep in touch with other people"
- "talking to a guy for probably six months and then I went up to Sydney and met him there."
- "meet them go to a party or something or someway of meeting them"
- "get their number, email address and...][get their number and get their email later...][next day, send them an SMS or something"
- "I'd SMS before I'd call just to, in the development stages"
## Table 4.4 Two Open Codes Unified as an Axial Code

<table>
<thead>
<tr>
<th>A Response Replacing Two Different Codes by a Single Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Original Labels</strong></td>
</tr>
<tr>
<td>Social Rules of Communication</td>
</tr>
<tr>
<td>Protocol of Communication</td>
</tr>
<tr>
<td><strong>New Label</strong></td>
</tr>
<tr>
<td>Communication – Protocol</td>
</tr>
<tr>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td>The socially accepted and expected rules associated with interpersonal communication, especially the establishment and termination of periods of communication, as treated in detail in discourse analysis. (Wood and Kroger, 2000)</td>
</tr>
</tbody>
</table>

## Taking Two Codes and Dimensioning Them

<table>
<thead>
<tr>
<th><strong>Original Codes</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Relationships</td>
</tr>
<tr>
<td>Face-to-face Relationships</td>
</tr>
<tr>
<td><strong>New Codes</strong></td>
</tr>
<tr>
<td>Relationships – Virtual, Text Based</td>
</tr>
<tr>
<td>Relationships – Physical</td>
</tr>
<tr>
<td><strong>Definitions</strong></td>
</tr>
<tr>
<td>A relationship that is initiated and maintained through forms of text-based</td>
</tr>
</tbody>
</table>
electronic communication, which are not perceived to be a real relationship because they do not have physical contact with and cannot visualise the respondent.

A relationship that is perceived to be a real relationship because the respondents are acquainted with each other and are able to visualise each other.

Once open coding was completed for each focus group the researcher passed through the coding scheme two or three times more in order to perform axial coding. These axial coding passes resulted in:

- The cancellation of some codes;

- The introduction of several new codes; and

- The renaming of some existing codes in order to merge multiple codes with subtly different meanings.

This axial coding phase took longer than the original open coding because the researcher was required to reread much of the transcript data and to consider the appropriateness of each code. No hierarchical categorisation took place in this phase. Rather the approach was to produce codes that were consistent in their naming conventions and best described the phenomena in the data. The exercise of providing working definitions for each code significantly aided in refining the precision, with Table 4.3 illustrating several examples of original open codes and their corresponding codes after the axial coding phase.

Examples of the coalescing of codes and of the replacement of codes in the axial coding phase are illustrated in that table.

4.3.3. Categorical Aggregation

After each session had been axially coded, the codes were categorised into a hierarchical taxonomy in which codes with similar meanings were grouped
under higher level categories and these categories were then grouped as subcategories under higher level categories. This process typically proceeded for three to five levels of categorisation until the core categories became apparent.

The researcher quickly learnt that hierarchical categorisation was not a deterministic exercise and that many hierarchies could be developed for the same set of axial codes. The task of the researcher then became to explore multiple alternative categorisation hierarchies, to consider the meanings of the codes and how best they suited each version of these hierarchical categorisations, and finally to choose that hierarchical categorisation which the researcher felt best captured and categorised the semantic meaning of all of the codes.

Table 4.5 illustrates two hierarchies for the same set of axial codes. The researcher has chosen hierarchy number one because it is considered that this better represents the semantic meaning ascribed to the codes in that hierarchy. All three sessions for each of the focus groups were treated together so that one categorisation hierarchy was developed for each focus group.
Table 4.5 Two Examples of Categorisation Hierarchies for the Same Core Concept — Relationships

The following two hierarchies illustrate two distinct categorisation hierarchies derived by bottom up categorisation from axial codes to core categories or concepts.

<table>
<thead>
<tr>
<th>1. Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Virtual versus Physical Relationships</td>
</tr>
<tr>
<td>1.1.1. Relationships — Virtual</td>
</tr>
<tr>
<td>1.1.2. Relationships — Physical</td>
</tr>
<tr>
<td>1.1.3. Connection</td>
</tr>
<tr>
<td>1.1.3.1. Connection — Person-to-person</td>
</tr>
<tr>
<td>1.1.3.2. Connection — Cost Per Contact</td>
</tr>
<tr>
<td>1.1.3.3. Communication — Mode</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.2. Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1. Trust — Establishment</td>
</tr>
<tr>
<td>1.2.1.1. Intimacy</td>
</tr>
<tr>
<td>1.2.1.2. True Identity Revealed</td>
</tr>
<tr>
<td>1.2.2. Trust — Lack of</td>
</tr>
<tr>
<td>1.2.2.1. Vulnerability</td>
</tr>
<tr>
<td>1.2.3. Formal Communication</td>
</tr>
<tr>
<td>1.2.3.1. Communication mode — email</td>
</tr>
<tr>
<td>1.2.3.2. Communication mode — telephone</td>
</tr>
<tr>
<td>1.2.3.3. Communication mode — chat</td>
</tr>
<tr>
<td>1.2.4. Information Communication</td>
</tr>
<tr>
<td>1.2.4.1. Communication mode — SMS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1.3. Lifecycle — timeframes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.1. Long term relationship building — chat</td>
</tr>
<tr>
<td>1.3.2. Soul-mates vs Shorter term relationship building</td>
</tr>
<tr>
<td>1.3.3. Relationship Development — Stages</td>
</tr>
<tr>
<td>1.3.4. Relationship Development — Roles of Electronic Communication</td>
</tr>
</tbody>
</table>
Please note that bottom level codes are shown in italics and higher-level categories are shown in regular font. All higher-level entries have been developed using bottom-up categorical aggregation.

1. Relationships
   1.1. Real versus E-Relationships
      1.1.1. Relationships – Virtual
      1.1.2. Relationships – Physical
   1.2. Relationships – Non visual, depersonalised
      1.2.1. Anonymity
   1.3. Visual versus Physical Appearance
      1.3.1. Dependency on appearance before relationship begins
      1.3.2. Face-to-face insufficient
      1.3.3. Need to verify physical traits
         1.3.3.1. Connection
         1.3.3.2. Trust
         1.3.3.3. Letting guard down
         1.3.3.4. Belief that not going to be deceived
   1.4. Social Network
      1.4.1. Chance encounter outside friendship group
   1.5. Levels
      1.5.1. Degree of familiarity
      1.5.2. Physical contact essential
      1.5.3. Chat
      1.5.4. Social Network, buddy list, best mates
      1.5.5. Face-to-face versus Emotional Relationship
      1.5.6. Purpose of Relationships
   1.6. Lifecycle
   1.7. Communication Forms
   1.8. Stages
      1.8.1. Developmental Stages
         1.8.1.1. Relationship development through SMS
      1.8.2. Reverse layers out of relationship
4.4 Core Categories

The above process of categorical aggregation was used to develop the core categories for each focus group. In each case the researcher spent considerable time analysing distinct possible categorisation hierarchies before choosing that which was semantically most appealing.

However, this process overlapped with selective coding where the researcher took the core categories back to the data and sought direct or implied evidence for the existence of such core categories, for example through examination of *in vivo* comments.

Table 4.6 illustrates several examples of *in vivo* comments, where the participants dropped all forms of pretence and spoke honestly about how they felt. *In vivo* refers to a situation in which the fragment of text or referent is used as a code label. That is, when the participant uses material that is so self-disclosing that it can immediately be incorporated into the lists of codes. This table illustrates how such *in vivo* comments can be linked through to corresponding categories for the same focus group.

**Table 4.6 In Vivo Comments**

<table>
<thead>
<tr>
<th>Private College</th>
<th>In vivo comments linked to corresponding categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 2: Nah. No, well you don’t know who you’re talking to. Especially people you don’t meet, like you’ve never met before and you say they would have added you and <em>you don’t know who they are. So you just sort of say you’re. They’re probably lying to you as well. You don’t know.</em></td>
<td>Anonymity through chat allows this respondent to take on another persona, that is, role-play and deceive the other respondent. This respondent drops their guard to concede that the other respondents could also be deceiving them as well, possibly displaying their</td>
</tr>
</tbody>
</table>
vulnerability to other participants of chat.

The anonymity of MSN chat provides the opportunity for respondents to initiate and maintain relationships that may be based upon deception, enabling respondents to role play illustrating the ease in which participants can be deceived, highlighting the vulnerability and the level of initial trust established and sustained by and to each respondent.

The relationships developed via chat progressed to a relationship involving physical and electronic communication. This statement also illustrates the vulnerability and trust granted to the other respondent and the progression to physical relationship provided verification that this trust was justified.

Through MSN chat, respondents are able to sustain relationships by resolving conflicts or issues between other respondents. However, while

| "Student 1: Oh, I've got um, I think, like some, I got added by some...some girl from Canberra...I think it's a girl (laughter), I'm hoping so, yeah but like a friend." | The anonymity of MSN chat provides the opportunity for respondents to initiate and maintain relationships that may be based upon deception, enabling respondents to role play illustrating the ease in which participants can be deceived, highlighting the vulnerability and the level of initial trust established and sustained by and to each respondent. |
| "Student 6: I met, I'd been talking to a guy for probably six months and then I went to Sydney and met him there...][...and he was like a really cool guy, and like everything he'd ever said was true, so that was sort of a way of verifying...][...it's only by chance that I met him. I didn't fly up to meet him or anything" | The relationships developed via chat progressed to a relationship involving physical and electronic communication. This statement also illustrates the vulnerability and trust granted to the other respondent and the progression to physical relationship provided verification that this trust was justified. |
| Student 7: This chick went nuts at me the other day in biology class. It was kinda amusing (laughter). Had no idea really why...][...I talked to her on the Internet...][...I wouldn't have bothered speaking to her again if she hadn't been on the Net, like...][...It still doesn't make much sense really. Because I had Internet, I could ask. I | Through MSN chat, respondents are able to sustain relationships by resolving conflicts or issues between other respondents. However, while |
wouldn't have asked in person.”

this form of electronic communication provides the mechanism for sustaining relationships, this focus group member concedes that although this relationship had not ceased, there was confusion over the other respondent’s concern and hence the issue had not been resolved.

| Employed |
| "Employed 1: Well, I s’pose to, I s’pose it's *quite neat and convenient to just sort of cut them off* the way you, you initiated knowing them. So if you're going, if you're sure that you don't want to talk to them again, then, I mean, like really, really sure, and you don't want to be friends with them at all, then you can, you can ignore and that way you won't like you'll never know if they are online and they won't know if you are, and it will just be completely severed off. Um, or a *more dramatic and satisfying way of doing it is to just remain online and just don't respond to anything that they say*, and your symbol that comes up in your contact list will, er, remain on so that it will show to the person who is trying to contact you that you're there, but you're *simply unavailable to speak to them ever again.*

| Unemployed |
| "Unemployed 5: All relationships are going to end eventually. They can't last forever." |

The ease in which MSN chat can provide simple and effective mechanisms to cease relationships may not be employed, rather a more direct and obvious method is to not respond to this respondent. This possibly conveys the power that this respondent experiences or indulges when ceasing a relationship.

These youth saw that relationships in general, whether they are solely sustained through electronic means or a combination of physical and electronic communication, were all
inevitably destined to cease and the lifecycle completed.

Table 4.7 presents the core categories derived for each focus group. As advocated by Corbin and Strauss (Strauss and Corbin, 1990) a small number (3 - 4) were considered appropriate to adequately categorise the deep meaning associated with a particular focus group discussion.

Table 4.7 Core Categories for Each Case Study

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Core Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private College</td>
<td>Stages and Levels of Relationship Development</td>
</tr>
<tr>
<td></td>
<td>The Desire for Electronic Connectivity</td>
</tr>
<tr>
<td>State College</td>
<td>The Nature and Complexity of Relationships</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
</tr>
<tr>
<td></td>
<td>Electronic Communication as Entertainment</td>
</tr>
<tr>
<td>Employed</td>
<td>Modes of Communication</td>
</tr>
<tr>
<td></td>
<td>Distinct Patterns of Relationship Formation and</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
</tr>
<tr>
<td>Unemployed</td>
<td>Limited Functional Communication</td>
</tr>
<tr>
<td></td>
<td>Activity-based Engagement</td>
</tr>
</tbody>
</table>

Table 4.8 illustrates examples of interpretations of quotations for each case study, which derived the core categories.

Direct interpretation (Stake, 1995) is a hermeneutic approach to analysis of data in which the major themes or core categories are derived from the data
by the researcher directly interpreting the data, without the use of a coding hierarchy. The alternative approach used in this thesis is that of categorical aggregation, in which the core categories are derived through hierarchical aggregation of the codes into taxonomies. Woolcott (Wolcott, 1990) provides examples of the use of direct interpretation. In Table 4.7 the technique of direct interpretation is used to illustrate further evidence for the support of core categories derived by categorical aggregation. This is not intended to represent triangulation, since the same source of data is used for both categorical aggregation and direct interpretation to derive these core categories.

Table 4.8 Comments that Support Direct Interpretation of Core Categories

<table>
<thead>
<tr>
<th>Private College</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Category – Stages and Levels of Relationship Development</strong></td>
</tr>
<tr>
<td>“Student 1: If you’re meeting them and you don’t want to, like you just get their number or something. You just SMS rather than phoning them so it’s not awkward or something. You can just ask them general questions. And you just keep replying back and then say a week down the track you actually get up the courage to call them probably, Saturday night or something, or just whenever.”</td>
</tr>
<tr>
<td>Speaker: To speak to them? So it’s the stage between meeting them and speaking to them?</td>
</tr>
<tr>
<td>Student 2: Oh, there’s also a stage where people dump people over SMS.</td>
</tr>
<tr>
<td>Speaker: Well no, apparently you don’t because that is quite cowardly.</td>
</tr>
<tr>
<td>Student 2: It is cowardly, but it does happen.</td>
</tr>
<tr>
<td>Speaker: So tell me about the dumping stage.</td>
</tr>
<tr>
<td>Student 2: Oh, just a couple of my friends have dumped boyfriends over the SMS because they didn’t want to see their faces or something.”</td>
</tr>
</tbody>
</table>

Interpretation of the above quotation, taken from case study one illustrates the stages that through the use of electronic communication these participants follow when establishing, maintaining and then finishing a relationship, which lead to the identification of the core category stages and levels of
relationship development.

4.4.1 Selective Coding

Once the core categories had been identified for a particular focus group, the final stage in the coding process was selective coding. In this phase evidence was sought from the data and in the coding scheme to support the choice of the particular core categories. This evidence existed in several different forms:

- *In vivo* comments by participants that directly support the existence of core categories. Examples of these have been shown in Table 4.6;

- Extended comments by one or more participants that support direct interpretation of one or more of the core categories. Table 4.8 illustrates an example this support through direct interpretation;

- Recurrent patterns of association of codes with data and codes with other codes. Through inductive analysis the researcher was able to discern patterns of occurrences of the same, similar or associated codes, and the interpretations of these patterns support one or more of the core categories. For example, Table 4.9 illustrates an example of a recurrent pattern of association of the codes such as stages and levels of relationships.

Table 4.9 Recurrent Patterns of Association of Codes for Each Case Study

<table>
<thead>
<tr>
<th>Private College</th>
<th>Codes</th>
</tr>
</thead>
</table>
| *Speaker: How do you think of the other people that are on the other side of the chat session? Do you think of them as real people, or do you think them as tags or something?*  
Student 1: You think of them as *gullible 'cause you can tell them anything.*  
Speaker: So do you make up a *fictitious person?*  
Student 2: *Sometimes you do.*  
Student 3: Yeah. Oh, you do sometimes. You sometimes sort of *say* | Vulnerability/Trust; Deception; and Role-play. |
you're someone else.

Student 2: Especially people you don’t meet, like you’ve never met before and you say they would have added you and you don’t know who they are. So you just sort of say you’re. They’re probably lying to you as well. You don’t know."

“Student 5: You can like, you know, go onto a guy’s chat session and say you’re a guy.

Student 6: That’s fun.

Student 4: Once a friend and I went onto chat pretending we escaped from a mental asylum.

Student 2: You change your name, where you come from, you’re appearance. Especially with MSN6, you’ve got that window box where you can have a picture or you’re profile so I usually put someone else. Like you say this is a picture of me and you have a picture of someone else.

Student 3: Do you do that?

Student 2: Yeah, I do that.

Speaker: But do you think that they’re not telling you the truth as well.

Student 2: Yeah, well probably. You don’t know. They probably wouldn’t be."

“Speaker: And what about putting up a photo? What would be the stage at which you would actually show them your photo?

Student 2: When they do it. When they show you theirs.

Student 1: They ask you if you’ve got a pic, and you ask them if they’ve got a pic.

Student 2: And you put them up at the same time.

Student 1: Yeah.

Speaker: This makes it very personal though because suddenly it becomes a real person. You’re sort of exposing yourself.

All: Mmmm.

Speaker: Do you feel that way? Do you feel embarrassed, or do you get a picture of Brad Pitt and put that up instead?

Student 1: If it was Brad Pitt, I think that they’d know.

Student 2: I put Wayne Carey up as me, like I go, this is a picture of
me and I put up a picture of Wayne Carey because I'm an Adelaide supporter or someone up and they go 'oh yeah' 'cause they don't know who he is because they live over in wherever.

Student 1: So you look 40 years old.

All: Laughter.

Student 2: And they go 'what job do you have?' And I say I play professional football over here and all this sort of stuff and so you sort of make stuff up. They live over in America and Hawaii and those sorts of places.”

<table>
<thead>
<tr>
<th>State College</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Speaker: What do you use, and how do you use it to seek and maintain a relationship?</td>
<td></td>
</tr>
<tr>
<td>Student 8: It's easy to get to know someone with no strings attached.</td>
<td></td>
</tr>
<tr>
<td>All: Agree.</td>
<td></td>
</tr>
<tr>
<td>Student 1: Exactly.</td>
<td></td>
</tr>
<tr>
<td>Student 8: It's no big deal, and like nothing, it's not even, it's so much lower than personal contact that sometimes it doesn't mean a thing, like a thing at all, but you still have a base that you're building just by talking to someone on the internet. And as we have already said once before, I met someone who I just got added onto my list. I think it was because someone else was signed onto my computer and the list got cut over and we started talking and I said 'oh yeah, Brad's this' and she said 'I know Brad, blah, blah, blah, blah, blah, blah, blah. He used to go out with one of her friends, or something, um and then so I started talking to her and we talked for a long time and just you know, and I was mates with her mate and blah, blah, blah, blah, blah, blah. Then we met and then we built a personal relationship from that, um but like as much as this chat stuff goes on, it's nothing like, its nothing compared to an actual personal relationship.</td>
<td></td>
</tr>
<tr>
<td>Student 1: nothing. E-relationships hahahaha.</td>
<td></td>
</tr>
<tr>
<td>Student 8: electronic relationships.</td>
<td></td>
</tr>
</tbody>
</table>

Student 4: 99% on your messenger list you vaguely know already.

Student 1: or you know them through somewhere else, or they're a friend of a friend.
Speaker: and it's because they're in the same location as well?
Student 1: yeah, or they're close by or they're known to you.
Speaker: yes, but you've physically seen them so you can identify who they are?
Student 1: yeah.
Speaker: okay, so no-one has found and maintained a relationship through internet with someone that's not in the same location as them?
Student 6: I have.
Student 7: yeah, his computer mates.
Student 6: I met, I'd been talking to a guy for probably six months and then I went up to Sydney and met him there.
Speaker: so that was through a chat session thing? Discussion board thing?
Student 6: yeah, I can't remember how.
Student 7: he plays online games.
Student 1: ah, hahaha.
Student 6: yeah, I met him up in Sydney and he was like a really cool guy, and like everything he'd ever said was true, so that was sort of a way of verifying
Speaker: so this is the only person that's done this?
Student 6: it's only by chance that I met him. I didn't fly up to meet him or anything (laugh)
Speaker: oh, right.
Student 6: um, I won a competition and got to go up there.
Speaker: oh okay, and you organised with him through chat to meet up.
Student 6: yeah, we organised for him to pick me up at the airport, but that fell through.
Speaker: oh, right. Did you know what he looked like?
Student 6: yeah.
Speaker: so you had sent, exchanged photos of each other?
Student 6: um, I don't know whether he knew what I looked like.
Student 7: he did, with that photo of you inside his house.
Student 6: oh yeah. Both laugh.

Student 6: so yeah, he did. We both knew what each other looked like. So I met him and heaps of other people up there.

Speaker: oh okay, and have you maintained these relationships since then.

Student 6: yeah.

Speaker: with just that person or with the other ones that you met?

Student 6: um, I talk to a few other people that I met up there.

Speaker: do you think you need to maintain, do you think that you need physical, um physical meetings to reinforce that? Like, what would happen if you only had this relationship through sms and chat? Like there was no face to face

Student 6: pretty meaningless

Student 7: yeah.

Student 6: in the long run.

Speaker: even though you’re delving into such deep issues, do you think that the physical meet-ups are reinforcing that?

Student 1: yeah, that they’re helping

Student 7: you can only go so far

Student 1: yeah, you can only go so far on the Internet, you need to have physical...typical society thing is most people try to avoid confrontation whenever they can in person.

Speaker: yep.

---

<table>
<thead>
<tr>
<th>Employed</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS usually follows after you have built a relationship with somebody in some other way. It's not like a chat program. You don't just, you know, start SMSing people randomly. Um, but it is cheaper than talking on the phone, so, and the message will be there whenever they can look at it, so it is a good way to keep in touch with other people who have mobile phones.</td>
<td>Relationships – SMS within social circle</td>
</tr>
<tr>
<td>Speaker: Um, what about chat, what sort of relationships do you</td>
<td>Relationships – Chat to establish, maintain and end relationships;</td>
</tr>
<tr>
<td></td>
<td>Relationships – Virtual and</td>
</tr>
</tbody>
</table>
Employed 3: Well, I suppose, I s'pose to an extent they're quite removed from reality so that you can be quite good friends with somebody without actually knowing them in real life. So, and you can kind-of build up an impression of what the ' like and, find out all about what they do, what they've been doing in the past, and so on. So, I guess without the sort of, I guess without the breaking in of, you know, friendships that happen in real life, it's probably easier if you actually click with someone to, to become good friends on that form of communication.

Speaker: So take me through the stages of relationship building. How might you meet somebody on chat?

Employed 2: Well, I find the people that, um, well there's a white pages so that you can, you know, look up all the people who live in Hobart, that, you know, are 23 to 27, and, you know, choose all the variables you like. Whether people fit those or not is another story. But when people ICQ me and just say "Hi", I just find that the most unoriginal and tedious initiation of conversation. I mean, if you genuinely want to talk to someone then you usually have to sell yourself a bit, so I usually come up with something a bit different so that the people that respond to that are usually going to be a bit more innovative and creative as well, so that probably means we are going to have a better chance of having a friendship.

Speaker: OK. So what things do you find attractive in an ICQ conversation?

Employed 2: Well, I find the initial point as pretty boring, like "How are you?" "What do you do?" and "What are you hobbies?" and that sort of thing. I mean, they build up a pretty bland profile of somebody, and it's, in some ways it's quite intrusive for someone to ask "Where do you live?" and, you know, "What's you job?" and those sort of things. You don't really want to be giving that away at such an early stage. But if you can discuss a topic that is kind of external to both of your real life existences, like, you know, a current event, or, you know, just your thoughts on something in every day life, then it's probably going to be more interesting, because, you know, comedians use a lot of comments on every day life, and they use that as a technique to make people laugh, so you're usually going to have a more fun time.
Speaker: So, if a conversation is going no where on chat, what do you do?

Employed 1: I just click out of the conversation and forget it, and if they've made such little effort then they usually don't care either.

Speaker: Do you use chat for a pick-up circuit?

Employed 3: Ummm. No, no not strictly. I s'pose if you sort of connect with someone and then you meet in real life and the sight of them does not make you physically sick then can contemplate that, but it's really just kind of, just kind of a chilling out really.

Employed 2: Um, I s'pose, I mean, I s'pose with such a variety of people at your disposal you can, you can sort of approach it from both ways, depending on your frame of mind. So if you just sort of bored and you just think "Oh well, I'll just, I'll just, you know, try and initiate half a dozen conversations and see what turns up, then it is probably going to be, you know, a bit of light entertainment, but I s'pose it can become more serious if people are, you know, are sharing real aspects of their life with you, and they're, they're obviously quite serious to them, like something bad has happened to them and you have to be, you obviously have to be a bit respectful about that.

Speaker: OK. So if you see that a relationship is going somewhere, you know, you're feeling comfortable with this person and so on..

Employed 1: Um.

Speaker: What would be your next stage?

Employed 1: Well, I'd probably, I think, you know, just say if we, if we talked regularly for about three weeks or something, I'd still be very wary of what their real personality was like, because I s'pose that form of communication is like, it has, I mean, parallels with real life interaction but it's quite condensed. So, I s'pose talking to someone for three weeks is like knowing someone for three months"

"Employed 1: Well, I s'pose to, I s'pose it's quite neat and convenient to just sort of cut them off the way you, you initiated knowing them. So if you're going, if you're sure that you don't want to talk to them again, then, I mean, like really, really sure, and you don't want to be friends
with them at all, then you can, you can ignore and that way you won't like you'll never know if they are online and they won't know if you are, and it will just be completely severed off. Um, or a more dramatic and satisfying way of doing it is to just remain online and just don't respond to anything that they say, and your symbol that comes up in your contact list will, er, remain on so that it will show to the person who is trying to contact you that you're there, but you're simply unavailable to speak to them ever again."

"Speaker: So how do you feel about people dumping either via SMS or chat?

Employed 1: Um. Well, it depends, it depends if you have developed a real life relationship with them. If you actually know them in real life and then they dump you in that form, and you have never known them, you know, in that form strictly, then that is a bit of a kick in the teeth, and, you know, you feel quite appalled that they have chosen to insult you in that way. But, er, if you know, if you did know them that way to being with, you know, it's not so bad."

### Unemployed

<table>
<thead>
<tr>
<th>Unemployed 1:</th>
<th>Codes</th>
</tr>
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<tbody>
<tr>
<td>I go onto chat during the day and start up conversations with people from all over the world.</td>
<td>Modes of Communication; Language; Activity-based Engagement; Relationships.</td>
</tr>
</tbody>
</table>

Speaker: So is it used to initiate relationships?

Unemployed 5: Oh yeah, and to see what's going on in the world.

Speaker: Do you organise with them to be online at a certain time or is it luck when they're on?

Unemployed 5: Usually it's luck. They're pretty much always online. These people are the same age as me.

Speaker: So how are these people online all the time?

Unemployed 5: Some of them have got Internet at work, some...

Unemployed 6: Chat, fill in time.

Speaker: So do you initiate relationships through chat.

Unemployed 5: No not really.

Speaker: so you stick to people that you already know?

Unemployed 5: Yep.
Speaker: So do you get on there to organise where to meet up.

Unemployed 5: Sometimes.

Speaker: On chat as well.

Unemployed 5: Yep, halfway through the week, to organise the weekend.

Speaker: So what types of relationships do you initiate through chat? Like, do you initiate relationships with the opposite sex?

Unemployed 5: Sometimes.

Ring them and go and do something with them. I don’t know, go and have a drink with them or go skating or go and get something to eat or, phone, internet, talking... I don’t know.

Speaker: how did you start the relationships?

Unemployed 5: I don’t know. Knew them from school I suppose or like other places.

Speaker: Like parties and that?

Unemployed 5: Yeah. Started sms’ing them, give them a call.

Speaker: So did you actually call them first?

Unemployed 5: Yeah. Did get on MSN a little bit, not really that much.

Speaker: So who initiates relationships through sms?

Unemployed 2: I end relationships through sms.

Unemployed 3: You might get someone’s number when you’re pissed.

Speaker: So it’s usually at a party or something like that?

Unemployed 3: You go do a hell mission with someone and get their number after that.

Speaker: What’s a hell mission?

Unemployed 3: Going searching for drugs, steal something. Kids these days are up to all sorts of shit.

Speaker: So what sorts of relationships have you initiated through electronic communications?

Unemployed 5: Girlfriends through chat.

Speaker: Were they locally based?

Unemployed 5: Yeah.
Chapter five (Findings and Interpretation) contains many more illustrations of the use of selective coding to support the core categories.

While the researcher has presented the phases of the coding and analysis as essentially serial, in reality the phases from axial coding and selective coding have been applied in an iterative fashion. Each phase of this analysis informs the later phases, but also analysis of the data in the later phases caused revision of the codes and categories in the earlier phases. For example, application of categorical aggregation in several cases caused revision of the
codes produced by the axial coding phase. In a second example, identification of the core categories and consideration of alternative core categories resulted in revision of the categorical hierarchy leading to such core categories. Finally, selective coding and the interpretation of the findings resulted in the re-examination of the categorical hierarchies and the manner in which the core categories were specified.

4.5 Limitations

The amount of effort put into data analysis was limited by the time-scale of the research project, in particular the extent to which theoretical saturation could practically be achieved.

The lack of experience of the researcher must have played some role in the effective interpretation of the data. This was overcome partly by mentoring of the researcher by the researcher supervisor so that the proficiency of the researcher increased rapidly after the analysis of the first two focus groups.

In a very few cases, the actual utterances of the participants were obscured through the recording process and were unable to be transcribed. In most of these cases the language that was lost did not appear to have any significant effect upon the interpretation of the speaker's contribution.

The lack of use of appropriate analysis and conceptualisation tools, such as Nudist or Atlas/ti inhibited the researcher from being able to visualise the categorisation hierarchies and to manage the large number of codes that were generated. In practice the use of traditional techniques, such as sorting of codes and use of paper-based organisation of codes, categories and core categories, was sufficient to analyse the data and derive the findings.

4.6 Reflections

On reflection, I am grateful and appreciative for conducting a coding session with my supervisor as this gave me the opportunity to have reassurance of the coding
process employed by myself, but also confirmation of the codes that I was assigning to the transcript. I found it so much easier coding the remainder of transcripts for each focus group.

I was amazed at how the experience of coding the transcripts compared to observing and participating the focus group sessions. At the time of the sessions, I believed that each was so revealing and I was gaining so much information and insight into their lives. Yet after coding the transcript, I began to appreciate how much I actually missed, or wasn’t attune to at the time of the discussion. For example, when searching for in vivo comments, I began to appreciate who these participants were individually, including their characteristics and personalities. Initially, I did not feel comfortable about what I had interpreted as discovering possible aspects of them that I had not explicitly requested, nor had they permitted. With this revelation, I am additionally grateful for their permission and agreement to participate in the sessions. Their honesty and openness enabled such richness to be discovered in the transcripts. I hope that this richness is evident in the selected codes provided in this chapter.

I recognised during the coding that the youth do not appear to be reflective on their experiences in an abstract manner and hence do not have abstract models of electronic communication.

As I continued to code each transcript, I was surprised at how distinctively unique each of these focus groups were. Although each group had similar usage purposes for the modes of electronic communication, for example to maintain relationships or for entertainment purposes, each group did possess unique and distinctively different objectives and purposes for employing the modes, with respect to their individual relationships. This is what I find most exceptional and inimitable of this research. To generalise the codes assigned to each focus group, or to bundle them all together removes the complexity and individuality of each group, and each member.

After I had coded and formed hierarchies for each of the focus groups, I began to reflect on the possible meanings or interpretations of these hierarchies, which will be elaborated in the following chapter. After discussing my thoughts and possible theories with my supervisor, I was advised that this was common among novice researchers to create theories or scenarios. I was sceptical with this revelation, as I am convinced that no other researcher has had such interesting participants to converse with, or topics to analyse and develop. I thoroughly enjoyed both participating and coding each of the sessions, and anticipate that the reader
appreciates or concurs with the codes assigned to each transcript, and the core categories that emerged for each grouping.
Chapter Five – Findings and Interpretation

5.1 Introduction

Chapter four indicated the analytic pathway by which the researcher derived the core categories for each case study using categorical aggregation. These core categories were introduced at the end of that chapter. Chapter five deals with the findings based on these core categories and the interpretations that the researcher places upon these core categories. As with all good qualitative research, the emphasis has been upon achieving depth of insight, rather than breadth of coverage or generalisability.

Each of the focus groups has been treated as a separate case study for which core categories have been derived using categorical aggregation. The design of this project explicitly stated that the purpose of the four core categories and their theoretical definitions was intended to add richness to the findings, rather than provide a basis for comparative evaluation. Hence the goal of the analysis is not to identify what is distinct between the case studies and hence to seek to explain causality for such distinctness. Instead the case studies were chosen to represent four distinct cohorts of youth in the age 17 – 19 living in the Launceston region with the expectation that naturally differences will occur and be observed between the expressions of these cohorts. This indeed has occurred and will be discussed later in the chapter.

Within this chapter selective coding is used to illustrate how the derived codes, categories and core categories are reflected in the base data. In each case where a fragment of the data has been included, an associated short section that provides the researcher’s interpretative understanding of that data is also included. Both of these sections are formatted using block borders to differentiate from the main text of the thesis. In each case, the interpretation is specific to the relevant points being made in the text of thesis. Hence this is
only one possible interpretation of this text and does not represent a full or complete interpretation of the text, as has been gained through open coding, axial coding and categorical aggregation.

5.2 Core Categories from Case Study One

The first case study dealt with a cohort of seven senior secondary school students from St Patrick’s College in Launceston. Each of these students was in the age range of 17 – 19 years old and were studying years 11 – 12 at the College. An information session was conducted with the assistance of a teacher from the College. The students were provided with an information sheet, consent form and list of focus group questions. The students under the age of 18 were required to receive parental or guardian consent, prior to attending the first session. The core categories derived from the categorical aggregation analysis of this case study are:

5.2.1 Stages and Levels of Relationship Development

Definition: the development of a relationship is perceived to be via a set of distinct and identifiable stages. Each stage is defined by a mode of communication and a style of interaction. A conscious effort is required by a participant to recognise the potential and make the effort to progress from one stage to another both towards a deeper relationship and also a more shallow relationship. In addition to stages each responding pair can engage in a particular level of discourse, involving role assignment in which a respondent can adopt a role or assign a role to their co-respondent. At any one time a respondent can be engaged in many conversations at many different stages and levels through the use of a buddy list. One respondent can be having many conversations concurrently with many co-respondents, or may be engaged in one conversation that spans many co-respondents.
Chapter Five – Findings and Interpretation

An unexpected outcome of the first case study was the description of the stages of development that each of the participants saw relationships passing through, especially using electronic communication, in both the growth and decline stages of each relationship. The first stage in the development of a relationship, other than with known classmates, was through MSN chat. The second stage in the relationship development occurred when the two parties exchanged mobile phone numbers, but limited their communication to text messaging (SMS). The third stage is the establishment of phone-based communication. However, this stage was only reached when both parties were confident enough to avoid socially embarrassing silences. The fourth stage is face-to-face or “physical” communication. These stages typically occur in the reverse order as a relationship declines. Despite their blasé exterior and the macho image portrayed by some of the male participants, it was clear that they were motivated towards reaching a certain stage in relationships that then provided them with the possibility of reaching a deeper level in a relationship. These participants were discrete in their actions and motives when pursuing relationships via MSN chat. One participant revealed that a relationship that had been formed with a female respondent from another state, which had progressed to a friendship that included telephone communication. This relationship enabled him to confide personal aspects of his life that he knew would be kept confidential and separate from his other personae. For example, another role that he adopts is face-to-face communication with his sister in which he stated that he did not discuss aspects of his relationship with the girl from Canberra.
The transcript below illustrates the procedures in which a relationship progresses from one stage to the next.

1  Speaker: How do you find people?...
2  [...Student 3: I don't know. They just appear up there one day. And I've just gone, I have just
3  gone and added them.
4  Speaker: How do you decide who, when you go onto chat, how do you decide who're you're
5  going to chat with?
6  Student 2: oh well, they've got this big public forum at the start and you can just write anything
7  on this big list and all these people are talking on it and someone will bring up a topic and you
8  could like that topic and so you could start talking to them and then you're just talking to
9  anyone and it doesn't really...matter (laugh).
10 Speaker: Do you...what about picking up people?
11 Student 2 (Boy): It doesn't really work, oh it
12  Student 1 (Boy): SMS.
13 Student 2 (Boy): Oh, SMS yes.
14  Student 1 (Boy): SMS, text messages.
15 Speaker: You pick up people through SMS?
16  Student 1 (Boy): No, you get to know them a bit more instead so, if you don't want to call. If
17  you're not at that stage.
18  Student 2 (Boy): you fine tune, you fine tune.
19  Student1 (Boy): yeah, you just...
20 Speaker: So tell me about this stage. What's the stage in which you SMS?
21  Student 1 (Boy): if you're just meeting them and you don't want to, like you just their number
22  or something. You just SMS rather than phoning them so it's not awkward or something. You
23  can just ask them general questions. And you just keep replying back and then say a week
Chapter Five – Findings and Interpretation

24 down the track you actually get up the courage to call them probably. Saturday night or
25 something, or just whenever

26 Speaker: To speak them, so it's the stage between meeting them and speaking to them.

27 Student 2: Oh, there's also a stage where people dump people over SMS...[...just a couple
28 of my friends have dumped boyfriends over the SMS because they didn't want to see their
29 faces or something.

30 Speaker: so give me an example, what sort of message might you send through SMS, which
31 is a dump message.

32 Student 2: Oh, I'm really not sure; I haven't seen any of them

33 Speaker: this was the pick up stages, what would you see as the getting to know you stages.

34 Where would SMS fit into...

35 Student 2: I'm not on the...

36 Student 1: Well, SMS you can text them rather than have long pauses and stuff like that,

37 which is really awkward.

38 Student 2 (Boy): Kills the awkward silences.

39 All: Agree

Transcript Interpretation

The above transcript provides an example of how these youth initiate relationships and how they
progress from one stage to the next, and what forms of electronic communication are employed at each
stage. Lines 6 – 9 illustrate the ease in which these youth initiate communication with other online
respondents through MSN chat, but in line 11 a student concedes that this procedure is not suited for
'picking up people'. At the early stage of relationship development, SMS provides participants the
opportunity to become acquainted with the other respondent, as illustrated in line 18 where student 2
confirms to fine tune the relationship. This procedure ensures that if either respondent is not confident or
ready to make physical or verbal contact with the respondent and as indicated in lines 37 - 38, they are
able to avoid the awkward silences or uncomfortable moments.
Over a period of approximately a week, the two respondents are in constant communication where either party are developing confidence and courage to proceed to the next stage, which is a telephone, based verbal conversation.

As a relationship progresses through the lifecycle, SMS communication also provides the means in which relationships are terminated, as evident in lines 27 – 30.

5.2.2 The Desire for Electronic Connectivity

Definition: the interpretation of connectivity includes the desire to be connected electronically, the act of connecting, plus the effects this has on the participants, both socially and personally.

5.2.2.1 Social

Aspects of the social domain in which the participants use electronic communication include the issues of:

5.2.2.1.1 Trust

Trust effectively acts an enabling factor. When two partners have established a sufficient level of trust at a stage in their relationship development, then they are enabled to move to a deeper level of relationship.

For example:

1  "Student 1: Oh, I've got um I think, like some, I got added by some...some girl
2  from Canberra...I think it's a girl (laughter), I'm hoping so, yeah but like a
3  Friend. She's really easy to talk to so, I went from that and now we actually
4  talk on the phone and SMS, so it's gone from chat room.
5  Speaker: What would be the stage at which you would actually show them
6  your photo?
7  Student 2: When they do it. When they show you theirs.
8  Student 1: They ask you if you've got a pic, and you ask them if they've
9  got a pic...
Chapter Five -- Findings and Interpretation

| 10 | Student 2: And you put them up at the same time |
| 11 | Student 1: Yeah.* |

Interpretation

Student 1 reveals in lines 3 – 4 that a relationship formed via MSN chat had progressed to a friendship, which implies that trust had been established. This friendship was now maintained via SMS and telephone based communication, in which the youth conceded in line 3 that the other respondent was really easy to talk to.

Once trust was established between respondents of MSN chat, for the relationship to proceed to the next stage in the development of the relationship, each party would provide the other respondent with a photo of themselves. Both parties would have to trust the other respondent before providing this visual representation of their real identity. As indicated in line 8, once the participant had requested a photo, the response would be to request one from them, which would be displayed simultaneously. Without this reciprocated trust, the relationship would not be able to proceed to the next stage in the relationship development.

5.2.2.1.2 Anonymity

Anonymity is seen as a key aspect of MSN chat in that participants wish to be free to role-play and adopt personae distinct from their real selves.

For example:

| 1 | "Student 2: I put Wayne Carey up as me, like I go, this is a picture of me and I put up a |
| 2 | Picture of Wayne Carey because I'm an Adelaide supporter or someone up and they go |
| 3 | 'oh, yeah' 'cause they don't know who he is because they live over in wherever...][... and |
| 4 | they go, what job do you have? And I say I play professional football over here and all |
| 5 | this sort of stuff and so you sort of make stuff up." |

Interpretation

The anonymity provided by MSN chat enabled these participants to take on various identities that were separate from their real life. Such role playing as evident in lines 1 – 2 enabled this participant to target respondents who reside outside of Australia, enabling them to continue role playing through the course
of the communication with other respondents, as evident in lines 3 – 5 where this youth confides to not only utilise the footballer's image but also his profession.

5.2.2.1.3 Responsibility

In the context of this sub-theme, responsibility is viewed as a state of mind which influenced their behaviour. Responsibility was expressed by some of the participants as the need to inform their parents of their whereabouts late at night. They saw the use of mobile phones as essential for this maintenance of contact, and disapproved of others who had not shown the same level of responsibility.

For example:

1 "Student 1: We had a friend who we were trying to get hold of, this was Sunday, on
2 Thursday morning and 'cause he didn't go home and like his mum called like us
3 because his mobile phone was switched off. So we had to go around to his house.
4 So if he just had it on, it would've been a lot easier to contact him."

Interpretation

These youth were affected by their friend's level of irresponsibility, not only from the parent's phone call but also in lines 3 – 4, required them to visit their friend's house. They confirmed in line 4 that if this youth had switched his mobile on, both they and his parents could have contacted him to confirm his whereabouts.

5.2.2.1.4 Reassurance

Reassurance also relates to responsibility in that it is a state of mind for these youth, and also as indicated by the parents through the participants.

For example:

1 "Student 2: Yeah, Mum would prefer for me to call and wake her up at 2.00am in the
2 morning and say that I'm not going to be home for a while, than not to call her at all."
3 "Student 5: My brother, he doesn't do that and so sometimes, like one night, one
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Interpretation

These youth saw that by contacting their parents, regardless of the time they were not only being responsible youths, but also reassured their parents of their whereabouts so they did not have to worry.

5.2.2.1.5 Behaviour

In this context, behaviour is defined by what these youth are actually doing, that is a series of actions. The participants reflected acceptable behaviour in several different ways. They saw phone based communication as requiring particular protocols especially during the connection and termination phases. In contrast, MSN chat and SMS text messaging did not require such protocols to be followed. While the participants would have claimed that their behaviour was essentially moral, in reality they enjoyed the anonymity of role play in MSN chat and they could not see the problems associated with breach of copyright in copying MP3s and DVDs. In fact, one student skited about her father copying rental DVDs for personal use.

A further aspect of their behaviour was the extent to which they exhibited aspects of their parents behaviour, such as listening to John Laws on commercial radio and predicting that one day they would exhibit normal behaviour by going for evening walks.

For example:

1 "Student 2: I tend to listen to Kevin Bartlett, and that sort of thing...John Laws,
2 'cause Dad got me listening to that, 'cause when I wasn't driving he used to listen to
3 them all the time."
4 "Student 1: Maybe when you're older. When you're normal and go for walks and stuff."
This youth conceded that through the contact with a parent, he continued to copy his parent's behaviour, illustrating the influence that this parent had on not only his behaviour but also his taste in radio commentators.

Line 4 implies that this youth considers his parent's behaviour as being normal and predicted that he too would mimic this and other associated normal behaviour, as he got older.

5.2.2.1.6 Dependency
The participants expressed a strong reliance, almost addiction, on being able to access electronic communications, including MSN chat and SMS text messaging. They indicated that this was a regular activity each night, and that they suffer from withdrawal symptoms after two weeks of isolation in the country.

5.2.2.1.7 Financial Constraints
The only financial constraints apparent were upon the use of mobile phones, including SMS text messaging. None of the participants had problems with access to the Internet from home or at school. They accepted the provision of such electronic communications in their homes as being completely normal.

The following is the remainder of this hierarchy

5.2.2.2 Communication
This encompasses all modes of electronic communication. The participants who communicate with the members of their social network do so frequently, not only to reinforce their existing relationships, but also an entertainment based activity.

5.2.2.2.1 Time filler

5.2.2.2.1.1 Addictive for boys

5.2.2.2.1.2 Different degree of maturity of girls versus boys
5.2.2.3  Informative, Entertainment Media

While the participants distinguished different forms of electronic communications, they also unified this technology as a source of entertainment.

For example:

1  "Student 1: Yeah, sometimes you get funny messages so you like (all agree) text
2    them to other people or something like that.
3  Speaker: Do you send around screens by SMS, welcome screens and that sort of
4    thing, or music tracks?
5  Students: Yeah, ring tones.”
6  Speaker: ...[...What do you really use chat sessions for?...]
7  [...Student 2: You just muck around. Sometimes you don't even talk about anything,
8    You just muck around.
9  Student 1: Sometimes you send pictures of each other, or new sites and stuff."
10 Student 3: We go on there just to fill in time really. Like, you've got nothing better to
11    do and you know maybe people are in the same situation as you are, like there's
12    Nothing on TV. It's the same all over Launceston.
13 Student 2: I usually type something and go and do something else. I'm usually on
14    The Internet while I'm on MSN, so I type something and a little noise comes up and
15    so you click whatever they said and you type back and then you go back to doing
16    whatever you were doing.
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17 Speaker: One of the things, do you look up jokes on the Internet?

18 Student 6: Oh yeah.

19 Student 2: Funny movies, and

20 Student 3: Crashes, and stuff like that...on their bikes and stuff.

21 Student 1: Sports disasters.

22 Student 2: They make whole shows about people hurling themselves.

23 Speaker: What about CDs? Do you prefer bought CDs, or do you make your own collections?

24 All: Make your own.

25 Student 1: ‘Cause on some CDs you get like really hopeless songs

Interpretation

Through such forms of electronic communication as SMS and MSN chat, these youth actively exchanged funny messages, ring tones or images of interesting websites to other respondents, both to fill in time and to just 'muck around'. One student revealed in lines 10 - 12 that due to the lack of interesting television shows that air in Launceston, these youth in the Launceston region were all in the same situation. As evident in lines 13 – 16, the Internet provided these youth with a pull-based entertainment technology, which they searched whilst communicating with respondents on MSN chat. They also confirmed, in lines 23 - 26 that all participants compiled their own CD collections, sometimes due to unpopular songs on some albums.

5.2.2.3.1 Connection Globally

The participants saw connectivity with other parties on a global scale as easy to facilitate as normal connectivity. For example, one participant used SMS to communicate with a friend in Canberra, another participant used email to communicate over a relatively long period of time with a friend in the UK, and another participant had a range of communicating parties in Europe.

For example
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"Student 5: I met a girl from Britain...][...I've been talking to her for about three years over the Internet 'cause I added her in my chat and we're just friends now...][...I went on the public screen and um I was just talking to everyone on there and she just seem interesting and seem interested in the same things as what I was so I put her on a personal chat and we talked for about 15 - 20 minutes and then we exchanged and she wanted me to put her on my MSN chat so I thought, sure thing and then we kind of just kept on talking since then."

Interpretation

This youth confirmed the procedures undertaken when initiating and maintaining a long distance relationship, implying the ease in which relationships are developed and maintained via MSN chat. By visiting the public screen in MSN chat, this youth commenced a 15 - 20 minute conversation with a respondent who seemed to possess similar qualities and tastes. This respondent requested that the youth add them to their list, thereby progressing to the next stage in relationship development. This youth decided to accept this request, and in lines 5 - 7 have continued to communicate at this relationship stage with each other via chat.

5.2.2.4 Customisation, Personalisation

The participants expressed a strong desire for pull-based communication technology in which they determined the mode of delivery, the timing and even the nature of the content. For example, they rejected commercial television because of the imposition of having to watch advertisements. They also rejected CD albums in favour of compilation of their own CDs based upon the selection of individual tracks of their own preference. They regarded television and radio as being examples of push technology in which their choice was fairly limited.

5.3 Core Categories from Case Study Two

The second case study involved 8 students from years 11 and 12 at Launceston College, which is a state government senior secondary school. The
students were self-selected from a computing class, from amongst those students who satisfied the theoretical selection criteria.

The core categories identified in this case study are:

5.3.1 The Nature and Complexity of Relationships

Definition: electronic relationships are distinguished from physical relationships by the former being maintained solely by electronic communication, whereas physical relationships an ongoing face-to-face contact. Entry into the society of this focus group requires the participants to be able to assign a visual image to the name of each other participant in that social grouping. There is no place for deceitful role-playing because such role-playing would always be discovered.

Physical appearance is the deciding factor for entry into the social network of the participants in this case study.

This focus group distinguished between virtual or ‘e-relationships’ or physical or ‘real relationships’. The electronic exchange of pictures, and meeting face to face was seen to be points of transition between virtual relationships and physical relationships. The participants in the focus group considered that e-relationships are of little value and cannot be expected to last.

The participants identified a range of stages in the development and decline in relationships, the first stage of relationship development was typically face to face meeting for example at a party. If mobile phone numbers were exchanged then the relationship could develop to the stage of exchange of SMS text messages from this stage could further develop to encompass phone communication and communication via MSN chat.

For example:
"Student 1: Go to a party, to meet them go to a party or something or someway of meeting them, get a bit drunk um you start talking to someone and think 'oh, this person's okay' so you get their number, email address and

Student 7: I never keep/get their emails, man. I don't have...

Student 1: you get their number and get their email later.

Speaker: Okay, you've got it so know what do you do?

Student 1: Next day, send them an SMS or something

Student 7: The thing is you're never sure whether it's like you know an alcohol thing or an extra...

Student 1: Yeah, this is the problem when you're, alcohol clouds the judgement so...

Speaker: yeah, you've got your beer goggles on.

Student 1: yeah,

Student 7: exactly.

Speaker: so then you go through sms and you work out whether you've got something in common with this person.

Student 7: yeah.

Student 1: yeah, you work out whether you've got similar interests or you've got yeah, you've got something in common that's going to

Speaker: do you guys feel that you've got to have enough courage to get to mobile phone use, like to call them or that's not a problem?

Student 7: I'd um

Student 1: sms is a lot easier than calling than calling someone

Student 7: yeah, I'd sms before I'd call just to in the development stages, just to make sure that I wouldn't make a fool of myself to start off with.

Students: yeah.
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26 Student 1: to make sure of 'what did I do last night?'

27 Speaker: just to build up the confidence and that you're comfortable. Okay, so you're at the point where you're comfortable, you like them, how do you maintain it from there?

29 Student 7: dates and stuff.

30 Student 1: organise a time to meet up through sms or ring them.

31 Speaker: so sms are a quick, the purpose of them are to make arrangements to see them?

32 Students: yeah.

Interpretation

To initiate a relationship, these youth view physical contact as essential. They reveal in lines 1 – 2 that such relationship development is enabled through invitation to attend a party. Through the assistance of alcohol, these youth gained the confidence to initiate a conversation with the opposite sex. Once communication had been made and approved of the respondent, they would take the opportunity to request a phone number or email address in order to proceed to the next stage in the relationship lifecycle. In line 3, a student confirmed they initially requested their mobile number and at a later stage in the relationship, would obtain their email address.

After a time period of approximately a day the respondent initiated communication via an SMS message. In line 10, the youth conceded that often there was uncertainty that the relationship was clouded by alcohol consumption. Through SMS, the participants could again determine the value of the relationship at this stage in the lifecycle, and as seen in lines 17 – 18 work out if there are similar interests or other things in common with the respondent. In the development stages of a relationship (in lines 24 – 28), these youth employed SMS text messages to make contact again with the respondent, but also they confirmed that it was easier than telephoning the respondent to ensure that they were embarrassing themselves and confirm their actions from the previous night. Once they gained confidence, SMS text messages were again employed to progress to the next stage in the physical or real relationship development (lines 29 – 32), for the purpose of arranging a date consisting of physical contact.

Physical appearance plays a very significant role. Participants expressed the view that a face-to-face relationship was not enough and it needed to be
supplemented by other means of contact through electronic communication. This could impose a social burden upon those who are forced to sustain communications via a range of different modes.

Participants in this group expressed the opinion that e-relationships were depersonalising and were not considered realistic or worth the time and effort to develop further. This implied that the participants viewed effort expended in terms of potential value returned.

The nature of synchronous and asynchronous communication was also highlighted in that one participant expressed the observation that there is "no obligation to talk while connected to the Internet" (Case Study 2: Line 403). Asynchronous modes of communication, such as SMS text messaging and chat ensured there was no social awkwardness associated with silences, and no social obligation to be always talking.

Role-play was considered to be an important part of communication. The participants separated their real selves from their electronic identities that were anonymous, not accountable for their actions. Included in these roles there were those that could also be characterised as that of The Deceiver, and that of The Counsellor. Yet, at the same time they were also seeking long-term relationships or partnerships, and saw the consequences that arose from role adoption as essentially stupid and self-defeating.

For example:

1 Student 1: Aaahh, not really. You're pretty stupid if you try to make up that you're
2 something else or someone else. It's just going to dig you into a hole.

Interpretation

This confirms that these youth viewed adopting another identity and continuing the charade, separate from their real life was essentially foolish, time wasting and saw the inevitability of being caught. By
phrasing the consequences as digging yourself into a hole implies the effort required by the respondent to reverse the situation.

5.3.2 Communication

Definition: The participants appeared to be open in the type of material they sought over the Internet and the modes and purposes for which they use electronic communication. Because this focus group essentially restricted itself with people with whom they had physical contact, the role of MSN chat was substantially reduced to the maintenance with already established e-relationships and with the occasional introduction of a new member of a social group.

The following fragment of data illustrates this definition.

1 "Student 7: I met someone who I just got added onto my list. I think it was because
2 someone else was signed onto my computer and the list got cut over and we started
3 talking and I said 'oh yeah, Brad's this' and she said 'I know Brad blah, blah, blah, blah,
4 blah, blah. He used to got out with one of her friends, or something, um and then so I
5 started talking to her and we talked for a long time and just you know, and I was mates
6 with her mate and blah, blah, blah, blah, blah, blah. Then we met and then we built a
7 personal relationship from that, um but like as much as this chat stuff goes on, it's nothing
8 like, its nothing compared to an actual personal relationship."

Interpretation

The accidental inclusion and subsequent development of the relationship between this youth and the respondent was initiated via chat, which progressed from a virtual or e-relationship through to, as the youth confirms, a personal/physical or real relationship. This youth confirms in a line 6 – 8 that although MSN chat occupies a high percentage of their lives, e-relationships are assigned little or no value and it is invalid to compare the two relationship types against each other.
They identified the following purposes with respect to the different modes of communication:

5.3.2.1. Forms of Communication

5.2.2.2.1. Different purposes

5.3.1.1. Modes

5.3.1.1.1. Chat

5.3.1.1.1.1. Distance/comfort degree;
5.3.1.1.1.2. Resolution of differences;
5.3.1.1.1.3. Friendship maintainer;
5.3.1.1.1.4. Reflect on writing;
5.3.1.1.1.5. Distraction from study – procrastination;
5.3.1.1.1.6. Counselling;

5.3.1.1.1.6.1. Only with friends;

5.3.1.1.1.6.1.1. Trust;
5.3.1.1.1.6.2. Advice seeking;
5.3.1.1.1.6.3. Confessions;
5.3.1.1.1.6.4. Distant friends – neutrality;

5.3.1.1.2. SMS

5.3.1.1.2.1. Organiser of events – social network;
5.3.1.1.2.2. Entertainment

5.3.1.1.2.2.1. Jokes;
5.3.1.1.2.3. Negative effect on language;
5.3.1.1.2.4. Ease of use – protocols;
5.3.1.1.2.5. Immediacy;
5.3.1.1.2.6. Connection – keep company;

5.3.1.1.3. Internet;

5.3.1.1.3.1. Source of news;

5.3.1.1.3.1.1. Speed of access;
5.3.1.1.3.2. As another channel;
5.3.1.1.3.3. As consumerisation;
5.3.1.1.3.4. As entertainment;

5.3.1.1.3.4.1. MP3 and DVD download;
Social communication via electronic means was considered to be essential to maintain one's place in society. A participant who did not have access to SMS text messaging or a chat facility was considered to be disconnected from this society.

For example:

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1  "Student 7:...][...a group of friends that all of them go to uni and one of them does not
2  have a mobile phone and it is the most frustrating.
3  Student 8: Mmm.
4  Student 7: Person to get hold of.
5  Student 8: Can't find them anywhere.
6  Student 7: Like most of my, like you can only leave messages with his mum or his
7  girlfriend, 'cause she's got a mobile phone, and that's pretty much how you get hold of him
8  or just rock up at his house and see if he's there. And like, you always have to find him
9  through a friend.
10 Speaker: So do you find that you don't make contact with him as much?
11 Student 7: Um, oh, yeah, I suppose.
12 Student 8: You have to put more effort into it.
```
Student 7: It comes down to that. Like, it's all right, but it's if you really need to speak to him, it doesn't happen most of the time. I don't know. He goes onto the Internet some of the time, like you know, once or twice a week. But most of the time, I just go to his house or leave a message his girlfriend or whatever.

Interpretation
The youth confirms in lines 1 – 2 the level of frustration they experience when attempting to maintain a relationship through making contact with a friend. They confirm that without a mobile phone, they 'can't find them anywhere'. Contact via electronic communication is made through either the friend's girlfriend or mother (lines 6 – 7 and 16) or the occasional communication via MSN chat (line 14). The youth concedes that the effort to maintain the relationship is primarily exerted by him (lines 12 – 13) and confides in lines 13 – 14 that majority of the time attempts at communication are unsuccessful.

The participants indicated that electronic communication was predominately within their own social group. In particular, they indicated no current desire or inclination to use electronic communication for cross cultural or global purposes. While some of the participants had communicated internationally in the past, all had agreed that this was no longer a significant component of their communication pattern.

The participants demonstrated different patterns of usage of e-communication depending upon the time and place. For distance communication they typically used email and a variety of other forms. SMS text messaging was used as a form of entertainment during school classes and as an idle time waster. Chat was also used during class as a relatively mindless activity without real purpose.

For example:

Student 1: Yeah like, I was SMS'ing Lee in the last class. We um were like asking, what class are you in? I'm bored. What are you going to do after this class? And that sort of
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3 thing.

4 Speaker: and what about chat sessions during the day?

5 Student 1: Chat sessions are pretty mindless dribble.

Interpretation

These youth primarily employed SMS text messages to maintain relationships within their existing social network. They confirm in lines 1 – 2 that the communication exchange involves simplistic queries involving the current and possible immediate future activities of the other respondent. During the day, MSN chat was mostly a time filler involving conversations that were involved minimal mental stimulation.

5.3.3 Electronic Communication as Entertainment

Definition: the use of both bi-directional and uni-directional communication media solely for the purposes of stimulation and passing of time.

These students expressed a preference for pull-based technology so that electronic communication became a form of entertainment over which they could express choice and select the mode and content most appropriate to their preferences. They saw the World Wide Web as an information resource for education, research and access to news or current affairs. They indicated that they had a busy lifestyle and this restricted the time that they could make available to communicate with others. Hence, they expressed their wish to consider the return derived from the investment of any effort.

For example:

1 Student 7: That's what he does most of the time. He's always watching. Like he won't

2 watch normal TV. He has his computer hooked up to his flat screen TV and he'll watch,

3 you know he's "got episodes of Faulty Towers, Scrubs whatever. Movies, whatever. And,

4 he'll watch that, do that

5 Student 7: I don't download them. I just go to his house and borrow them 'cause

6 Student 1: You get them from other people who have made the effort to download them
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7 Speaker: Yeah, so the problem is that you've got to go searching for it, rather than.

8 Student 1: Making the effort and deciding whether, ah that's the right quality, the right size,

9 the right blah, blah, blah.

10 Student 6: I'd rather the nerd. It's cool. I just get everything off him."

11 "Student 8: Well, I was writing my last psychology essay for the year last night and I found

12 a site called Psychology Essay Site, and I was gutted 'cause they were the deadest just

13 psychology essays. Thousands of them, on every topic imaginable. I just went bugger."

Interpretation

The students described how a friend sought and discovered various forms of entertainment such as television shows and movies. In lines 5 – 8, the confided that they would source their entertainment via friends such as those described above due to the ease of obtaining their entertainment preferences, and viewed the effort required downloading these files as being a problem (lines 8 – 10).

Lines 11 – 13 illustrates the frequency in which these students actively search the Internet as an education resource, assisting with the completion of assignments. This student revealed his devastation when discovering a website catering solely to psychology essays.

It appears that the participants need to be constantly stimulated through being exposed to forms of entertainment, both passive exposure such as television, and active engagement such as MSN chat. Frequently, such entertainment would involve concurrent exposure to a number of different mediums such as MSN chat plus television plus audio CD playing.

For example:

1 Student 7: [...] as soon as I'm home, the computer's on and it's connected and it's got my

2 little buddy list up there, which is everyone that's on there and then you know I'll talk to

3 whoever's around and if I need to say anything to them, sometimes people just say g'day,

4 how are you? And I'll say 'fine, how are you?' and that's it and other people will be on

5 There. Yeah, me and Brad are best mates. Sometimes we don't say a thing to each other
6 at all 'cause there's nothing to say.

7 Speaker: Mmmm.

8 Student 7: But we're still there.

9 Speaker: Yep.

10 Student 7: and I'll be just sittin, 'cause my computer's just there, my DVD player's there and my bed's there.

12 Speaker: so you're all set up.

13 Student 7: So I'll just be watching telly or whatever. I'll watch a movie, or in the kitchen with Mum, or just doing stuff. It'll be still on, but I won't be using it so it's available...see what's going on.

16 Speaker: So it's a past time rather than to make plans. It's more to catch up.

17 Student 7: Yep. Well, you can do it as both. Like that's why it's so convenient to have it on all the time.

Interpretation

Student 7 reveals in line 1 that as soon as they arrive home they are instantly connected to the Internet and MSN chat, with either the DVD or television passively playing in the background. The objective of the communication with respondents is either to initiate idle chitchat with respondents or, as with lines 5 - 6 to communicate with friends they have a deep level relationship with. They view the role of this electronic communication, in this context, is to maintain relationships either as a past time or to make arrangements to make contact at a later date, identifying in lines 17 - 18 the convenience and ease of constant connection.

5.4 Core Categories from Case Study Three

The third case study involved a number of participants who are currently employed. These participants were gathered through a network of associations with one another. Because they had a busy business and social life it was very difficult to arrange time for them all to be together. However,
three sessions were held with them despite the time available being shorter than the researcher would have preferred. Within this focus group two very distinct patterns of behaviour emerged. One group of participants almost exclusively used SMS text messaging to maintain connection within their social grouping and another group almost exclusively used ICQ chat as a means of meeting people and a potential ‘pick up’ forum.

The core categories derived from this focus group are:

5.4.1 Modes of Communication

Definition: use of a range of modes of electronic communication that are particularly suited to the participants’ lifestyles and purposes. Only media with a well defined purpose or function for the participants are utilised by them in this case study.

Please note: this definition of communication is specific to case study three and hence differs from the definition of communication in section 5.2.2.2, which was specific to case study one

The mode of communication played an important role in determining how the participants used electronic communication:

- Print Media was seen as low value because of its 12 – 24 hour obsolescence and was really only of value to scan for job advertisements.

- Television

Was largely rejected as an example of push technology entertainment except to watch late night drama and as a source of news. All participants regarded the need to be acquainted with current news as highly desirable, but they did not consider that it was necessary to give up their time to consult news services. Rather their access to news was more incidental through late night television newscasts, occasional radio news and the consultation of
online news via World Wide Web. One participant was required to read the news daily as part of her work in order to maintain awareness of current developments in the economy.

- Radio was hardly used apart from incidental listening while driving in the car.

- CDs represented a preferred source of music, rather than radio. However the participants did not consider that buying CD albums was worthwhile when individual tracks could be downloaded as MP3. They did not consider the prospect of paying a fee of US$1 per MP3 track download to be convenient because they did not have access to appropriate credit card or similar facilities to make such micro payments.

- ICQ chat was viewed differentially by different participants. One group indicated that they did not consider that chat was 'modern', and that they had grown out of it in favour of SMS text messaging. Another group viewed ICQ chat as the preferred medium for long term relationship building, with the prospect of meeting interesting people and developing closer relationships.

One participant characterised the iconic messaging via ICQ as a way of sending subtle signals to other respondents. For example the participant could enter a chat room and remain invisible while listening to the other respondents in the room, or the participant could indicate her availability in a room but fail to respond to chat requests as a way of indicating her disinterest in the relationship with that respondent. This participant also indicated that ICQ chat could be improved by the provision of more such subtle iconic signalling to facilitate more sophisticated role-play.
SMS text messaging was viewed as an immediate, convenient, modern, low cost, informal communication medium, through which they could establish new relationships, build and sustain existing relationships, and maintain the social 'glue' which kept their friendship society together. Lack of access to SMS text messaging was seen as leading to social disconnection. Each of the participants emphasised traditional language values and limited use of abbreviations. This tended to contradict the image they were otherwise presenting of a busy lifestyle. The asynchronous nature of SMS messaging caused some frustration in that one participant expressed the desire of synchronous acknowledgement of the receipt of SMS messages.

The Internet, especially the World Wide Web, was seen as a source of entertainment, or research material for assignments and as a reference for current affairs. An essential aspect of the Internet was its pull-based technology that enabled participants to choose when and how they used this medium.

Mobile phones were viewed as a social necessity and as a highly convenient mode of communication. There was an active exchange of mobile phone contact numbers, primarily through acquaintances within existing social networks.

Email was considered to be inconvenient due to its asynchronous mode of communication, not a priority for the participants, restricted to formal correspondence and hence a very low usage.

Conventional telephones were seen as being inconvenient in terms of access points and as requiring a formal protocol or etiquette in conversation. Hence they were seen as less preferable to mobile
phone conversations, which all participants regarded as being essentially less formal.

A paradox became apparent when analysing this focus group. The participants are immersed at a particular developmental stage of the communication technology. Technology is a driver in that they have adapted certain aspects of their lifestyle to suit the currently available technology. However they have an expectation that their lifestyle will become the driver and that future technological development will adapt to and enhance their current lifestyle. Customisation is perceived to be a means by which they will be able to select and adapt a technology to suit their own ends.

5.4.2 Distinct Patterns of Relationship Formation and Maintenance

Definition: Two distinct patterns of relationships became apparent in this case study. One group of participants sought to maintain active frequent communication within their social circle using SMS text messaging. Another group of participants saw ICQ chat as a means through which to establish and maintain relationships partly with the objective of selecting those respondents who will be permitted to advance to a deeper stage of relationship, such as a face-to-face meeting.

The participants distinguished between virtual relationships that are maintained by electronic communication between geographically distant parties and real relationships that involved direct physical contact.

Chat was seen by some participants as a medium for maintaining long-term virtual relationships, without really knowing the person at the other end. The participants regarded it as important to be able to build up a mental image of the respondents via chat but emphasised also the importance of trust in that
each party was essentially anonymous and could potentially destroy the trust relationship at any point.

For example:

```
1  "Employed 1: After a few months then, you know, you're, you're starting to develop a belief
2  That, you know, they're not going to say anything weird or, you know, start freaking out or
3  something like that, although that thought never really leaves your mind, and I 'spose, I
4  s'pose it's just the nature of the communication which means that you have to be on your
5  guard usually."
```

Interpretation

This respondent revealed that within a timeframe, which comprised of constant communication, potentially one develops a level of trust towards the other respondent, believing that the other respondent is essentially 'normal'. Whilst this online trust towards the respondent is established, the participant reveals in lines 4 – 5 that the nature of chat electronic communication requires participants to be wary and realistic about the anonymity associated with chat and the subsequent possibility of being deceived. This therefore requires participants to essentially protect and be guarded towards any electronic relationships developed and maintained via chat.

ICQ chat was also seen as a means of establishing new relationships. One participant actively searched a database of potential respondents to locate local contacts in her desired demographic as future chat partners. She saw the establishment of long term relationships via ICQ chat as a means towards the development of a real relationship.

The participants placed a great deal of emphasis upon physical appearance as the gateway to a real relationship.

For example:

```
1  "Employed 1: I s'pose if you sort of connect with someone and then you meet in real life
2  and the sight of them does not make you physically sick then can contemplate that"
```
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Interpretation

This confirms that acceptance of the physical appearance of a respondent with which an electronic based relationship had been formed and maintained, provided the opportunity or opening to contemplate progressing to a real relationship, hence progressing to the next stage and different lifecycle of relationship development.

One participant who established relationships initially via ICQ chat illustrated a well-defined relationship lifecycle. She developed these relationships via chat over a period of several months and then made a decision as to whether to physically meet the respondent and establish a real relationship. Trust was a major element in determining how vulnerable the participant felt and the consequent belief that each respondent may let her down if she dropped her guard. The participant indicated intensity and rated progression of relationship development through chat as being much faster than in a real physical relationship.

For example:

1 “Employed 2: I s’pose that form of communication is like, it has, I mean, parallels with real

2 life interaction but it’s quite condensed. So, I s’pose talking to someone for three weeks is

3 Like knowing someone for three months”

Interpretation

The comparisons between the two worlds of physical and electronic based relationships illustrate the separate experiences, and possibly separate identities that this respondent associated with their life/lives. The electronic interaction and virtual relationship formation with participants enabled this respondent to speed up time and condense conversations within a shorter timeframe.

5.5 Core Categories from Case Study Four

The fourth case study was conducted at the Launceston skate park. Numerous efforts to organise a cohort of unemployed youth had been unsuccessful, through such means as contacting employment agencies. Hence
the researcher decided to take a small number of incentives in the form of food and drink to the skate park and conduct focus group sessions in situ with an initial group of 8 skaters that eventually led to total of about twenty skaters and onlookers. Of these, about twelve were active participants in the discussion, although at any one time only four to six participants were engaged in discussion, with some of the others being onlookers. While the discussion was being held participants came and went as they left to skate and then rejoined the group.

The core categories that emerged in the analysis of this focus group are:

**5.5.1 Limited Functional Communication**

Definition: The participants universally displayed relatively weak language skills and spoke in short, direct often-imperative utterances.

It was evident that this was not only their style of communication in response to the researcher's requests but was also the nature of their communication with each other.

**5.5.1.1 Modes of Communication**

The participants employed landline phones, mobile phones, including SMS text messaging, and MSN chat. Both MSN chat and SMS text messaging were seen as means of conducting casual conversation, or for light entertainment purposes.

For example:

1 Unemployed 1: I go onto chat during the day and start up conversations with people from
2 all over the world.
3 Speaker: So is it used to initiate relationships?
4 Unemployed 5: Oh yeah, and to see what's going on in the world.
5 Speaker: ... Do you organise with them to be online at a certain time or is it luck when
Interpretation

This motivation to seek and initiate relationships is primarily to start up conversations with other MSN chat participants. Those that participated with this respondent were centred on those who were signed in at the same time. Another youth conceded that communication via MSN chat was to fill in time.

It was not evident that either media was employed to develop deeper relationships, or even that the participants sought deeper relationships, since these appeared to be established through physical relationships in street based activities.

5.5.1.2 Language

The participants exhibited curt forms of responses that were often simply two to three word utterances and not complete sentences. It was evident that this was a predominant mode of communication except when a participant employed longer narratives for descriptive purposes.

For example

1 Speaker: So what forms do you use most often?
2 All: mumbling.
3 Speaker: All of them the same?
4 Unemployed 7: Yeah.
5 Unemployed 4: All the same...giggle.
6 Speaker: What about you?
7 Unemployed 5: Yeah, all of them the same.
8 Speaker: What types of messages do you send and receive? What...
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9 Unemployed 3: G'day...laugh.

10 Unemployed 5: Meet me here, 3:00 o'clock.

11 Speaker: organising where to meet up?

12 All: Yeah.

13 Unemployed 1: General how's it going?

Interpretation

Often these youth only spoke in simple, one to two word sentences, often repeating the previous respondent's answer. Even describing the types of messages sent were brief and direct.

In order for such short bursts of communication to be effective, it was necessary that the participants had a high degree of social and cognitive cohesion. As illustrated in the core category below a significant component of their communication was nonverbal in the form of gestures and actions. This nonverbal communication is unsuitable for electronic communication, especially the type of communication technology available to these participants.

5.5.2 Activity-Based Engagement

Definition: A significant proportion of the interaction between the participants occurred in a nonverbal fashion. They demonstrated skating tricks to each other, and engaged in acts of physical bravado.

Much of the participants’ verbal communication was directly related to the activities, such as discussion of features of bicycles.

For example:

1 Unemployed: If a guy's hooked on bikes or something, then girls take that as offence.

2 When you're with a girl they expect to be number one.

3 Speaker: And so a girl doesn't cope well with not being number one.
Unemployed 9: They get the shits when you take up too much time with your bike.

Interpretation

These youth focused much attention on past time activities such as riding their bikes at the skate ramp, often resulting in the termination of relationships with the opposite sex.

5.5.2.1 Social

It is evident that the culture of these unemployed youth centres around street based activities such as skating. One participant indicated that he spent the day at home waiting until 3:00pm when he could go out and meet his friends at the skate park. The participants were almost all male and displayed macho forms of behaviour. A darker side to this culture was evident in references to the use of drugs and other illegal activities.

For example:

1  "Student 3: you go do a hell mission with someone and get their number after that.

2  Speaker: what's a hell mission?

3  Student 3: going searching for drugs, steal something. Kids these days are up to all sorts

4  of shit."

Interpretation

Through the use of culture-based language, this youth concedes whilst they initiating relationships, the youth within this community actively seek drugs or undertake illegal activity.

5.5.2.2 Role of Communication Technology

Consistent with the action focused lifestyle of these participants, electronic communication played a relatively minor role, such as synchronisation of meetings, basic greetings and other short functional messages. While mobile phones were quite prevalent, this Internet technology did not constitute
‘social glue’. Rather, physical meeting together at the skate park and other social activities appeared to form the mainstay for the society.

5.5.2.3 Relationships
The participants recognised the lifecycle of relationships in that they were expected to have a finite period of existence. MSN chat was identified as a means by which relationships could be initiated. SMS text messaging was seen as a method to make the transition from a virtual relationship to a real physical relationship. It was also seen as a means of ending a relationship.

For example:

```
1 Speaker: So what sorts of relationships have you initiated through electronic
2 communications?
3 Unemployed 5: Girlfriends through chat.
4 Speaker: Were they locally based?
5 Unemployed 5: Yeah.
6 Speaker: So how did you know them? So were they through a third party or something?
7 Unemployed 5: Yeah.
8 Speaker: So did you guys meet up?
9 Unemployed 5: Yeah.
10 Speaker: So did the relationship end?
11 Unemployed 5: Eventually, yeah...[[...all relationships are going to end eventually. They
12 can't last forever.
```

Interpretation

These youth revealed that although they initiated relationships through MSN chat via third parties, relationships progressed from an electronic based relationship in lines 1 – 2 through to a physical relationship (lines 8 – 9). However in lines 11 – 12, they also conceded that all relationships, whether they were virtual or real relationships, were destined to doom.
5.6 Propositions

Within the constraints of the case studies in this project and the participants chosen from the specific socio economic groupings, aged 17 -19 years and living in the region Launceston, the following propositions have been observed as being universal across these four case studies. That is evidence has been found to support each of the propositions and no evidence has been found to refute them. The identification of the core categories and their elaborations plus the development of an explanatory theoretical explanation of the phenomena observed, expressed through the following propositions are presented as the major contribution of this thesis.

5.6.1 Proposition One

The following example of data illustrates how the participants will only expend energy on relationship development and maintenance relative to the perceived level of guaranteed return.

“I went on the public screen and um I was just talking to everyone on there and she just seemed interesting and seemed interested in the same things as what I was so I put her on a personal chat and we talked for about 15-20 minutes and then we exchanged and she wanted me to put her on my msn chat so I thought sure thing and then we just kind of just kept on talking since then. I haven’t actually emailed her, ever. I’ve just talked to her on MSN and when I’m on then she sometimes just comes on and then I’ll start talking to her.”

This example illustrates the ease of in which a relationship between the participant and respondent was initiated and maintained via MSN chat.

“It’s easier than phones as well ’cause you don’t have to talk to them at the time...You just hang up. Laugh. You can do other stuff and you’re still connected and you can talk every now and then...][...Like with some people, they’re so boring. Like if you say ‘g’day’ then they’ll say ‘g’day’ and you go ‘what’ve you been up to?’][...Then ‘what did you do yesterday?’”, like normal people say this to me, they go
'what did you do yesterday?' and then I'm just thinking to myself, 'you don't care what I did yesterday'...[...] 'why do you want to know?' and I'll just go 'not much' 'what did you do yesterday (saying unenthusiastically)?'...[...] It's just boring, I talk to people that have got something to say. Like if I've got nothing to say, then I won't talk to anyone...[...] This is on MSN in general."

This example illustrates that when participants assign little or no value to relationship maintenance via MSN chat, they will not expend the energy.

"Student 7: Another group of my friends...one of them does not have a mobile phone and it is the most frustrating...[...] person to get hold of...[...] like most of my, like you can only leave messages with his mum or girlfriend 'cause she's got a mobile phone and that's pretty much how you get hold of him or just rock up at his house and see if he's there. And like, you always have to find him through a friend.

Student 8: you have to put more effort into it.

Student 7: it comes down to that. Like, it's all right, but it's if you really need to speak to him, it doesn't happen most of the time. I don't know. He goes onto the Internet some of the time, like you know, once or twice a week. But most of the time, I just go to his house or leave a message his girlfriend or whatever."

This example illustrates the conceded level of effort expended by a participant in order to maintain a relationship, implying the high level of value assigned by this participant to this relationship.

"I guess it is just sort of a social glue once you have established, you know, that bond, then you can keep it going without much effort, and I suppose that's just another way of things being convenient. We want easy ways of catching up with people, once you have met them...[...] just sort of being able to, to, you know, sustain a network of people around you without, with not as much effort as it would require to send each one, you know, a lengthy email, you know, talking about whatever you have been doing and asking them questions, or calling them all up. It's easier to just fire off a round of text messages, and then, you know, everybody gets that special glow because they know that you have thought of them, and it really does not take much effort for them to send one back. And then you feel popular when you get six messages back. And, you know, it's pretty good.
This example illustrates, through the use of SMS text messages, the level of effort expended by a participant to maintain relationships and the guaranteed return.

The following examples of data illustrate how the participants will only expend energy on electronic entertainment and communication for which they see a guaranteed return:

"The Internet, it's very easy. That's why, that's why you do it every night 'cause it's so easy. That's why you talk to anyone you want 'cause it's so easy and convenient...][...you can just walk away...][...There's no obligation to talk to someone."

"Student 7: That's what he does most of the time. He's always watching. Like he won't watch normal TV. He has his computer hooked up to his flat screen TV...I don't download them. I just go to his house and borrow them 'cause

Student 1: You get them from other people who have made the effort to download them...making the effort and deciding whether, ah that's the right quality, the right size, blah, blah, blah.

Student 6: I'd rather the nerd. It's cool. I just get everything of him."

These examples illustrate how these participants perceive the ease and convenience associated with Internet technology for entertainment and communication purposes, and the perceived level of value in return.

The following example of data illustrates the level of effort that the participants exert through the use of electronic communications for educational and research purposes, based upon the level of guaranteed return.

"Student 6: I was writing my last psychology essay for the year last night and I found a site called 'psychology essay site' and I was gutted 'cause they were just deadest just psychology essays. Thousands of them, on every topic imaginable. I just went bugger...]

[...Student 7: Every essay that I've done this year has been referenced with five to six web pages, and teachers don't respect it. They say, somebody had um a reference with seven books, and they were like
long references because referencing a book is a lot longer than putting a web page in, and they said the
difference between mine and theirs was the reference page. And I just went, well I've got five, six web
sites and they've got 7 books. Because they've spent the time to go and find these books because it
would've taken them five times as long...]

[...Student 8: the teachers don't like us using the Internet 'cause they think that it's too easy."

Across all four case studies there is consistent evidence that the participants
will only exert levels effort on relationship initiation, development and
maintenance, electronic entertainment, education and research through the
use of electronic communication for which they perceive a certain level of
value guaranteed in return. There is no evidence to support the counter-
propo­sition. Hence the researcher offers the following proposition:

The participants in these case studies will only expend energy on relationship
development and maintenance, electronic entertainment and the use of
electronic communication for education and research for which they see a
guaranteed return.

5.6.2 Proposition Two

The following example of the data illustrates that interpersonal relationships
are structured into stages during the development and termination:

"I'd SMS before I'd call just to in the development stages, just to make sure that I wouldn't make a fool of
myself to start off with."

"I s'pose...the easiest way out, um...'cause if you don't like somebody anymore, then you're not going to
want to see them.

It's the same ladder up as down. You see them less, and you use SMS or"

The following example of data illustrates that interpersonal relationships are
structured into potential levels, especially during the development and
termination of such relationships:
"if my friends are online...][...family issues, relationship issues, all sorts of...with a friend. If you've got a relationship issue with someone else, you can discuss it with another friend...][...You have to trust the friend to talk to them in the first place...][...I've got some friends from other schools that have nothing to do with my group of friends here...][...It's a neutral party. Someone who doesn't have any bias towards what you're talking about...][...I know I've done it with friends of mine...][...a supportive role...][...to give you the confidence that you have made the right decision."

"It's no big deal, and like nothing, it's not even, it's so much lower than personal contact that sometimes it doesn't mean a thing, like a thing at all, but you still have a base that you're building just by talking to someone on the Internet...I met someone who I just got added to my list...I started talking to her and we talked for a long time...Then we met and then built a personal relationship from that, um, but like as much as this chat stuff goes on, it's nothing like, it's nothing compared to an actual personal relationship."

"where you can talk to someone really easily...][...They've got no idea about what's going on around here so you can talk to them and they seem to understand and like and so they tell you their problems and that so you just try and help them out as well."

The following example of the data illustrates that interpersonal relationships are structured into stages during the development and termination

Across all four case studies there is consistent evidence that particularly during the development and termination phases, interpersonal relationships are structured into stages and levels. There is no evidence to support the counter-proposition. Hence the researcher offers the following proposition:

| That interpersonal relationships involving the participants are structured into stages and potentially levels especially during the development and termination of such relationships. |

**5.6.3 Proposition Three**

The following example from the data illustrates that the use of SMS facilitates a particular stage of development in their relationship:
"SMS text messages...[...you get to know them a bit more instead so, if you don't want to call. If you're not at that stage...][...if you're just meeting them and you don't want to, like you just their number or something. You just SMS rather than phoning them so it's not awkward or something. You just ask them general questions. And you just keep replying back and then say a week down the track you actually get up the courage to call them"

This illustrates that SMS text messages facilitate the initial developmental stage of the relationship.

The following example from the data illustrates that the use of Internet based chat programs facilitates a particular stage of development in their relationship:

"I find the people that, um, well there's a white pages so that you can, you know, look up all the people who live in Hobart, that, you know, are 23 to 27, and, you know, choose all the variables you like...people ICQ me and just say 'Hi'"

This illustrates that ICQ chat program is employed to initiate relationships.

Across all four case studies there is consistent evidence for the use of particular electronic communication modes at different stages of relationships. There is no evidence to support the counter-proposition. Hence the researcher offers the following proposition:

That electronic communications play a significant role in the developmental stages of interpersonal relationships involving the participants.

5.6.4 Proposition Four

The researcher believes that there are two propositions that relate to the influence parents have upon the use of electronic communications by the participants. The first of these is:

That parents of the participants play a significant role in influencing the morals of the participants with respect to how they use this technology.
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The following example of data illustrates how youth perceive the legal obligations when using electronic communications:

"Speaker: Does it bother you that you're breaching copyright whenever you copy?
All: Nah.
Student 1: It's alright to copy them, just as long as you don't sell them...[we like hire DVDs and we'll just copy them and take them back...[and so we get to keep them...]'cause my dad does it. He like hires them and like..."

This example illustrates that these students observe and repeat their parents' behaviour. Across all four case studies there is consistent evidence that parents play a significant role in influencing the morals of these youth regarding their use of this technology. There is no evidence to support the counter-proposition.

The following examples of data illustrate how these youth observe and repeat the parents' modes of usage of electronic communication:

"I tend to listen to...John Laws 'cause Dad got me listening to that, 'cause when I wasn't driving he used to listen to them all the time."

"Sometimes 'cause like my parents listen to like 7BU, ABC Melbourne...And they talk about all these sorts of political things. Yeah, it's fairly interesting."

This illustrates that these youth mimic their parents' modes of usage of radio. Across all four case studies there is consistent evidence of the significant role of parents in influencing the modes of usage of electronic communication. There is no evidence to support the counter-proposition. Hence the researcher offers the second proposition:

'\textbf{That youth observe and repeat the parents' modes of usage of electronic communication, which then has implications on their use of electronic communication.}'

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5.6.5 Proposition Five

The following example from the data illustrates that the financially privileged participants perceive the benefits associated with ubiquitous electronic communication:

“Speaker: If you could carry around with you a device that you could chat constantly, would that be useful to you?
All: Yeah.

Student 5: I wouldn't be able to do anything else but sit there and walk into things or something.
Student 2: I'd have one...][...well, it would depend on how much it would cost firstly. If it was no more than a computer, then I'd rather just have a computer. Otherwise, yeah i'd have one.”

Student 1: Yeah, 'cause you'd definitely get one just to keep in touch all the time. Just to meet up, just like that so."[...Student 5: I can't last more than two weeks without it. I go up to my aunt's place. She has absolutely no electricity at all, and so it's kinda boring after a while. After you've walked all the walking tracks and you've rode all the horses, it's like I'm over it. Now what?"

“like my routine is...as soon as I'm home, the computer's on and it's connected and it's got my little buddy list up there, which is everyone that’s on there and then you know I'll talk to whoever’s around and if I need to say anything to them, sometimes people just say g'day, how are you? And I'll say ‘fine, how are you?’ and that's it and other people will be on there.”

This illustrates that the participants foresee the attraction and necessity, and potential usage of pervasive communication technology.

Across all four case studies there is consistent evidence for the perceived need of pervasive acquisition to electronic communication technology for financially privileged participants. There is no evidence to support the counter-proposition. Hence the researcher offers the following proposition:

The financially privileged participants perceive a need for ubiquitous access to electronic communication.
5.6.6 Proposition Six

The following example from the data illustrates that rather than experiencing push-based technologies, these participants employ pull based communication and entertainment technology:

"We go on there just to fill the time really, like you've got nothing better to do and you know maybe people are in the same situation as you are, like there's nothing on TV. It's the same all over Launceston."

This example illustrates that participants use the Internet as a form of entertainment, rather than watch television.

"Sometimes you send pictures to each other, or new sites and stuff"

This example illustrates how these participants use the Internet as a form of entertainment, and exchange information between MSN chat respondents.

"I usually type something and go and do something. I'm usually on the Internet while I'm on MSN, so I type something and a little noise comes up and so you click whatever they said and you type back and then you go back to whatever you were doing."

This illustrates that participants employ Internet pull based communication technology.

"Well I s'pose it's, I s'pose it's quite liberating way of communicating, because there are just certain expectations and codes of conduct that people accept which gives you a greater freedom to, to form social connections...I find the people that, um, well there's a white pages so that you can, you know, look up all the people who live in Hobart, that, you know, are 23 to 27, and, you know, choose all the variables you like...people ICQ me and just say 'Hi'"

This example illustrates that participants view Internet based communication technology as a refreshing method to search and source potential participant relationships.

"TV's taken such a back foot since they put on, um lifestyle shows. Like TV's all like backyard blitz, Better Homes and Gardens. None of us want to watch that anymore. We go onto the Internet...We do
not want to be around watching stupid lifestyle programs... I don’t want to watch telly anymore, so I just go and talk to my friends, surf the Net, or whatever."

This example illustrates how the push based technology television does not satisfy the participants’ entertainment preferences. They instead use the Internet as a form of entertainment and communication technology.

"Student 1: I don’t know who like, really buys CDs.

Student 2: If it’s a band that I like, I’ll buy their CD, but if it’s just like one song from a band that I don’t know, let’s say that it’s a good song then I’ll download that one, but if it’s a band that I like (buy CD)."

"if I want something, you just go to the websites, like from the people that make them and you can see what music’s coming out.

Student 7: Me and Brad listen to heaps of songs at the moment that no one hardly else listens to...[[...Brad got them from somewhere and he gave them to me and I love them. They’ve never been on the radio...[[...There are awesome bands. Someone else was listening to them through my microphone last night and they’re going ‘who’s that? They’re awesome’ and I was like, yeah, it’s this band."

"You can make compilations and stuff that you can’t make normally...[[...I’ve got a mini disc that I put songs off my computer onto this so I don’t listen to the radio."

These examples illustrate how the participants employ pull based entertainment technology to source and exchange music between respondents, rather than push based entertainment technology, such as radio.

Across all four case studies there is consistent evidence that participants prefer pull based communication and entertainment technology to push based technologies. There is no evidence to support the counter-proposition.

Hence the researcher offers the following proposition:

That the participants prefer pull based communication and entertainment technology, over push based technologies.
This proposition refers to the extent, to which they can exercise personal choice of content and mode of delivery.

These propositions have been derived by complete interpretation of data gained through open coding, axial coding and categorical aggregation.

5.7 Reflections

What was evident to me as I began to expand on each of the focus groups' core categories was the complexity of these participants, not only in the relationships that they are forming, maintaining and breaking, but their lives generally and the hectic lifestyles that they're leading. They are constantly multi tasking, whether that is the multiple concurrent conversations they hold with fellow recipients, or organising their schedules, even to fulfill entertainment purposes. This hectic lifestyle, I believe leaves them little or no time to reflect on what they are doing or achieving, both the levels of relationships and the subsequent conversations held with each one.

At an age in which these youth are experiencing self-discovery, it is surprising to recognise that the participants are relatively indifferent about their revelations and exposure of their 'real' selves to the recipients. These youth are facing this period head on, without uncertainty or scepticism, yet are realistic, rational and perceptive of what relationships they are developing.

The relationships that these youth form and break progress through distinct stages, within potential specified time periods, but yet they possibly are predetermined. This is not to detract from their distinctive and complex nature, but yet the cynicism or potential realism expressed by these youth relating to the eventual ending of these relationships makes me curious as to how or why these youth have come to believe this. Yet I believe there is a paradox to this scenario, in that these youth also strive to find their soul mate or what they refer to as the 'perfect' relationship while at the same time believing that all relationships have limited life cycles.

Within this cynical or realistic viewpoint, they explicitly separate the forms of relationships they experience, e-relationships and physical relationships. To them, a relationship that is of true value can only occur when it is physical. Any other relationship, they do not assign real value or expend effort, as they view these relationships as worthless. Personally, I see how mature and worldly these youth are. What I also believe is significant and has immense impact on their culture, within and across each socio economic grouping, is the integration that these modes have on
each of their lives and on in a societal context. These devices are not additions to the youth, like skateboards or handbags, but rather are incorporated into their physical selves. These modes of communication are integrated not only in their lives but also are extensions of their personality. I am uncertain as to whether they fear being alone or lonely, or are they are always connected with someone and therefore are never actually alone or have the fear of being alone. To these youth, possibly it is not their objective to always be connected, but rather they know nothing else.

In what is often considered a period of rebelliousness, these youth are guided by, and reliant on, their parents. The participants looked to their parents for guidance and were influenced in their modes of behaviour and beliefs by their parents.

In terms of downloading and copying forms of digital entertainment, these youth don’t engage in illegal activities in order to deliberately break the law. They don’t do it to be rebellious and they are indifferent to the legal implications of their actions. To them, they cannot justify nor logically comprehend how someone would pay for something that you can obtain for free. They have no loyalty to brands or methods of gaining access to this entertainment. They don’t debate whether to remain loyal to something that cannot be provided to them but rather they find alternate avenues to gain access to their desired forms of entertainment, such as MP3 music tracks.
Chapter Six – Discussion

6.1 Introduction

The main aim of this research study was to seek to understand the nature of the usage, and the cultural implications of the use, of electronic communications. This study was confined to participants in four focus group based case studies, that satisfied the following theoretical parameters:

- Were aged between 17 – 19 years of age;
- Lived in the vicinity of the city of Launceston; and
- Satisfied one of the following focus group membership criteria:
  - Attended a private senior secondary college; or
  - Attended a state senior secondary college; or
  - Were employed; or
  - Were not currently employed.

6.2 Research Objectives

The specific research objectives of the study are:

- To undertake exploratory research in order to understand the factors that influence the use of electronic communications by youth from a variety of socio-economic backgrounds, as determined by the theoretical parameters of the study;
- To seek to gain insight into relationships between uses of electronic communication across different socio economic groups, as determined by theoretical parameters of the study;
- To seek to gain insight into the nature of communication protocols between youth selected within the theoretical parameters of the study; and
• To seek to understand individual and small group perceptions of the form and function of electronic communication, amongst youth selected according to the theoretical parameters of the study.

6.2.1 How Research has Addressed Research Objectives

Within the constraints of the research method, that is the use of focus groups and also the interpretative analysis, what the researcher has been able to achieve is to identify the distinct modes of electronic communication that are used in each of the focus groups, mainly how they use SMS text messaging, how they use chat, and how they've used email and their attitude towards other communication such as television and radio. In particular, the researcher has also been able to determine how the usage of the particular modes fit into their lifestyle, how they see them performing a particular function that is relevant to their particular social needs. In particular, each of the focus groups has demonstrated distinct patterns of behaviour. While the aim of this research has not been to compare those, it does illustrate that different social groupings have developed different adaptations of these modes of electronic communication.

In addition, the researcher has also uncovered not only that they use the different modes of communication at different stages and different levels of relationship but has performed some analysis in identifying that distinct protocols are utilised by the participants relative to the purpose that are employing the technology. However further investigation of these protocols would require more detailed analysis of the actual conversations being used and may employ techniques such as discourse analysis in order to analyse such protocols. In addition to looking at how these modes of communication are used by individuals, the researcher believes that they have also achieved some of the objective in terms of determining what social functions these perform, namely to what extent do they provide the social glue that holds
these groups together and to what extent do they provide other social functions such as keeping in touch with parents late at night and providing general background asynchronous communications that enable these groups to stay together.

6.3 Research Questions

The primary research question of this research project is:

What is the nature of the usage, and the cultural implications of the use, of electronic communications amongst youth aged 17 –19, living the Launceston region, and drawn from a range of socio economic backgrounds?

In the introductory chapter a consideration of the issues that arise from the research question led to the identification of the following sub research questions:

a) What is the nature of the relationship between the use of distinct modes of electronic communication and the functional requirements of such modes of electronic communication?

It was apparent from the study of the focus group discussions that the participants utilised distinct modes of electronic communication for distinct purposes. While this association was not explored in detail in this study some understanding of the manner in which the participating youth saw distinct modes of electronic communication as fulfilling their needs in particular circumstances was apparent. For example, several participants in different focus groups referred to their use of SMS text messaging as a means of reassuring their parents of their whereabouts and intents when out late at night.

b) How do youth from distinct socio economic backgrounds employ distinct modes of electronic communication?
It was surprising to witness the distinct modes of usage of electronic communication across the different socio economic groupings represented in the four case studies. Participants from different institutional backgrounds, such as a public and private senior secondary schools exhibited quite different patterns of usage of electronic communication. The most distinct grouping were those with an unemployed background who displayed limited communication skills and consequent messaging that was limited in its richness of content and was very functionally orientated.

c) What impact do the distinct cultural implications associated with the use of electronic communication have for different socio economic groupings?

The abstract nature of this research question and its broad interpretation meant that little progress was made in addressing it within this study. In particular detailed cultural analyses of the different focus groups, and of the content of their discourse via electronic means, were both outside of the scope of the project. However some insight was gained into the way in which electronic communication technology was both impacting and also been used to construct the culture of these micro societies.

d) What is the nature of the association between the use of distinct modes of electronic communication and interpersonal relationship development?

The association between distinct modes of electronic communication and interpersonal relationship development became very apparent from the conduct of the first focus group. This association is well documented in the findings of the thesis and represents significant research outcome that is based upon analysis at the micro societal level,
rather than at the macro societal level, such as been reported by (Ling, 2000).

The researcher believes that significant progress towards an understanding and partial resolution of the research question has been achieved through this research program. In particular the richness of the findings are reflective of the depth of analysis of the focus group discussions and the consequent insight that has been gained through interpretative means. In particular the use of four focus groups, drawn from different socio economic backgrounds has added considerable richness to the findings and has permitted the researcher to gain an insight into impact and integration into their culture that electronic communication technology is having upon youth in regional Australia at a micro societal level.

The literature review has indicated how relatively little published research there is in this area. Within the constraints of the research program progress has been made towards an understanding of how youth from different socio economic backgrounds perceive and utilise current electronic communication technologies. In addition, insight has been gained into the roles that such electronic communication play in the provision of entertainment for individual participants, and in the maintenance of social relationships amongst peers and wider social groupings. In particular, the distinct roles that electronic communication plays during the different stages of relationship development and of breaking up have been identified.

From the introductory chapter, the following are the objectives for this research program:

- Insight into the relationship between uses of electronic communication across different socio economic groups;
• Understanding of individual and small group perceptions of the form and function of electronic communication;

• Insight into the nature of communication protocols between youth in regional Australia.

Against these objectives the following original research outcomes have been achieved through this research program:

• The identification of distinct stages and levels of interpersonal relationship development and the association that the participating youth make between these stages and the use of distinct modes of electronic communication. While Ling (Ling, 2000) refers to different stages of relationship formation, he does not provide a rich analysis of the associations between those stages and the use of modes of electronic communication.

• An analysis of the integration and impact of electronic communication upon the youth who participated in the study. The use of focus groups and interpretative analysis has provided the researcher with an insight into this phenomenon at a micro societal level, which does not appear to be reported elsewhere.

• The participating youth from distinct socio economic groups and under distinct functional requirements appear to employ different protocols in their communication. While this phenomenon has been identified it needs to be researched further, for example through the use of discourse analysis of the actual communication between these youth.

The remainder of this chapter deals with the implications of this research and highlights areas for further investigation.
6.4 Implications of the Research

Through consideration of the above findings and naturalistic generalisation, one may consider the following are relevant implications of this research. This does not mean that these implications follow from the research, since that would be a process of generalisation, but rather that the phenomena observed in this research study can be considered to form the basis for the development of wider implications.

The first implication is that the world of these youth and their conceptualisation of electronic communication are vastly different of that of adults and ICT suppliers. These youth have largely grown up with particular technologies, are comfortable with them and they use them in way in which both the ICT suppliers and the adult population cannot envisage.

The diversity in the use of electronic communications is illustrated through the case studies of youth of the same age group from the same geographic region. The implication of this is that there is a great deal of cultural diversity to be discovered amongst other societies such as inner city, large city suburban, rural and remote etc.

Another revelation in this study is through the choice of just these four case studies illustrates how segmented the population of youth who use electronic communications is. The implication is that we are developing, in some sections of these youth, a highly connective and highly communicative section of society that not only see communication as purposeful, but also see it as entertainment. It is all pervasive, in that it is a background activity that pervades their entire life, and if given the opportunity, they would spend their entire life communicating.

The paradox that became apparent is that while these youth exhibit a high degree of connectivity, and hence expect strong social cohesion; at same time
exhibit signs of insecurity when confronted with withdrawals of this technology resulting in social dysfunction. There is tension between lifestyle and technology, as to which drives the other: How they model their life accordingly with the technology and how they think that this technology will adapt to their lives. An implication is that they have a stable lifestyle with technological determinism, believing that there is particular way which technology will change and deliver outcomes for society. There is also adaptiveness in that although they may not realise, there is a tension between their lifestyle and the evolution of communication devices. Technology makes major leaps forward and they're not prepared for that. Their expectation is that the next versions of mobile phones are going to be inexpensive and within their price bracket. However, in reality, they may be more expensive and unattainable. Currently, they are on even terms with regards to what technology is available and in their price bracket whereas as they become older, they will become more differentiated in terms of what market segments they fit into, such as early adopters or laggards or new technologies and products.

This is a society that is highly dependent upon written and verbal language skills. Youth that don’t have these skills, such as those who are literally disadvantaged are going to find themselves excluded from the society. This divide would appear to be more significant than the widely discussed digital divide in that all groups of participants indicated that cost of access to communication facilities was not an impediment. It is the cost of the frequency of use that is the issue, not the cost of access. For example there are online access centres readily available in the city, but this is not considered an important factor or incorporated into the lifestyle of unemployed youth. They do not include this form of communication in their lives.
The high frequency of use of textual based communication does not imply that these youth have a high degree of literacy. The relationship between text based electronic communication and traditional literacy, such as book reading, was not investigated. Despite claims that youth of this generation are highly influenced by television and other pictorial forms of entertainment, these studies suggest that they use text based communication as a predominant form of entertainment and even reject mass communication push based technology, such as television.

For these participants electronic communication played an important role in relationship initiation, development and maintenance. The implication of this is the apparent necessity of technology for the health of relationships (current and future relationships) and the high degree of promiscuity of relationships that they have. They are leaping from relationship to relationship, and having many partners including many partners at the same time. Associated with this is the belief that all relationships have a finite and relatively short lifecycle.

They constantly evaluate the degree of effort expended and the value assessment of relationships against the perceived level of guaranteed return. The differential value assigned to different relationships is partly dependent upon the effort expended on that relationship.

An implication is that of this is that these participants may have difficulty in establishing and maintaining long term relationships, due to the ease in which these relationships can be formed, their habitual lack of emotional commitment to these relationships, their belief that such relationships are essentially finite and the belief in which that there may always be better partners elsewhere. The global network implies that the market for partners is also global or effectively infinite.
The researcher is well aware of the limitations of this study and does not seek to generalise the findings beyond the scope of the four focus groups involved in this study. However the above section considers reasonable implications of this research, based upon naturalistic generalisation, and is included to indicate future directions for research.

6.5 Reflections

After reading the final chapter, I hope that the reader will appreciate my derivations of the findings and interpretations. After conducting the focus groups, my primary objective when completing this thesis was to accurately convey the richness of the data, and for the reader to appreciate the participants as individuals, rather than just the phenomena to be observed and studied.

It was also my aim for the reader to identify and accept the uniqueness of this research, recognising the depth of information relayed through these findings. Identifying the lack of literature published within the area has made me realise that this research area is possibly not being identified or explored to its potential. While Ling (Ling, 2000) discusses the stages of interpersonal relationship, from the generalised viewpoint of his findings I believe he fails to recognise and reflect on the uniqueness of these relationships, the complexity of the individuals and the distinctiveness of each participant, whether this is within a micro societal context, as undertaken with this research, or analysed on an individual basis.

After reading the literature available I was concerned that the reader could potentially interpret my stance of possible indifference, as I did with other researchers. I recognise that I may not accurately convey, and hence the reader interpret my findings without appreciating the intricacy of the core categories and associated interpretation for each socio economic grouping. I believe that there is so much to explore and reveal regarding these youths’ lives and relationships, particularly through the facilitation of modes of electronic communication. I sincerely hope that future researchers acknowledge and appreciate the complexity of these youth as individuals, and gain insight into who they are, what relationships they are initiating and maintaining, and the cultural implications of these technologies.

After reading the reflection sections of each chapter, I believe that I as a person, and not just a researcher, have been revealed and as consequence the reader may appreciate how my own personality has influenced my analysis and interpretation.
The reader is then able to take these revelations and transform them from a one dimensional to a three dimensional portrait.
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References


Appendices

Appendix A – Focus Group Letter

The Principal
Launceston Senior Secondary College
Cameron Street
Launceston
Tas 7250

Re: Request to Conduct a Study of the Perceptions of Youth of Electronic Communications

Dear Sir/Madam,

As part of the Master of Information Systems program, Ms Brigid Rawlings wishes to undertake a research project to study the way in which the use of electronic communications is perceived by youth in the age range of 17 – 19 years. The rapid advancement of these communication technologies, and the their widespread adoption by youth makes this a very topical project. Very few studies have been undertaken of this generation, and the ways in which they conceptualise their use of electronic communication.

This project has been approved by the Northern Tasmania Social Sciences Human Research Ethics Committee and the Tasmanian Department of Education has granted its permission for this research to be conducted in Tasmanian Government Schools.

I have attached a copy of the information sheet dealing with the project, and the consent form that will need to be signed by each participant, or their parent/guardian, if the participant is under 18 years of age. Please note that the identity of each participant will be kept confidential, and no identifying details of the participants will be included in any research papers that result from this research project.

I request permission to conduct a series of three focus group discussion sessions, involving the same six students, over a period of approximately one week. Each discussion session is expected to last approximately forty minutes. I would be grateful for any assistance that your members of staff may be able to offer in conducting an information session where students attend in order to receive the information sheet, consent form and Brigid’s contact details. Such students simply need to be in the age range of 17-19 years, currently be in the Launceston region and use some form of electronic communication. If they wish to participate in the focus group sessions, each student attending then has the option to contact Brigid.

Please contact me if you have any queries.

Thank you,

Chris Keen
Professor & Head of School of Information Systems
Re: Request to Conduct a Study of the Perceptions of Youth of Electronic Communications

Dear Sir/Madam,

As part of the Master of Information Systems program, Ms Brigid Rawlings wishes to undertake a research project to study the way in which the use of electronic communications is perceived by youth in the age range of 17 – 19 years. The rapid advancement of these communication technologies, and their widespread adoption by youth makes this a very topical project. Very few studies have been undertaken of this generation, and the ways in which they conceptualise their use of electronic communication.

This project has been approved by the Northern Tasmania Social Sciences Human Research Ethics Committee and the Tasmanian Department of Education has granted its permission for this research to be conducted in Tasmanian Government Schools.

I have attached a copy of the information sheet dealing with the project, and the consent form that will need to be signed by each participant, or their parent/guardian, if the participant is under 18 years of age. Please note that the identity of each participant will be kept confidential, and no identifying details of the participants will be included in any research papers that result from this research project.

I request permission to conduct a series of three focus group discussion sessions, involving the same six students, over a period of approximately one week. Each discussion session is expected to last approximately forty minutes. I would be grateful for any assistance that your members of staff may be able to offer in conducting an information session where students attend in order to receive the information sheet, consent form and Brigid’s contact details. Such students simply need to be in the age range of 17-19 years, currently be in the Launceston region and use some form of electronic communication. If they wish to participate in the focus group sessions, each student attending then has the option to contact Brigid.

Please contact me if you have any queries.

Thank you,

Chris Keen
Professor & Head of School of Information Systems
Re: Request to Conduct a Study of the Perceptions of Youth of Electronic Communications

Dear Sir/Madam,

As part of the Master of Information Systems program, Ms Brigid Rawlings wishes to undertake a research project to study the way in which the use of electronic communications is perceived by youth in the age range of 17 – 19 years. The rapid advancement of these communication technologies, and the widespread adoption by youth makes this a very topical project. Very few studies have been undertaken of this generation, and the ways in which they conceptualise their use of electronic communication.

This project has been approved by the Northern Tasmania Social Sciences Human Research Ethics Committee.

I have attached a copy of the information sheet dealing with the project, and the consent form that will need to be signed by each participant, or their parent/guardian, if the participant is under 18 years of age. Please note that the identity of each participant will be kept confidential, and no identifying details of the participants will be included in any research papers that result from this research project.

It is our intention to conduct a series of three focus group discussion sessions, involving the same six persons, over a period of approximately one week. Each discussion session is expected to last approximately forty minutes. I request your assistance in selecting at least six unemployed persons who may be involved in the project. I would be grateful for any assistance that your members of staff may be able to offer in conducting an information session where youth attend in order to receive the information sheet, consent form and Brigid’s contact details. Such people simply need to be in the age range of 17-19 years, be currently unemployed, currently be in the Launceston region and use some form of electronic communication. If they wish to participate in the focus group sessions, each person attending then has the option to contact Brigid.

Please contact me if you have any queries.

Thank you,

Chris Keen
Professor & Head of School of Information Systems
Re: Request to Conduct a Study of the Perceptions of Youth of Electronic Communications

Dear Sir/Madam,

As part of the Master of Information Systems program, Ms Brigid Rawlings wishes to undertake a research project to study the way in which the use of electronic communications is perceived by youth in the age range of 17 – 19 years. The rapid advancement of these communication technologies, and the widespread adoption by youth makes this a very topical project. Very few studies have been undertaken of this generation, and the ways in which they conceptualise their use of electronic communication.

This project has been approved by the Northern Tasmania Social Sciences Human Research Ethics Committee.

I have attached a copy of the information sheet dealing with the project, and the consent form that will need to be signed by each participant, or their parent/guardian, if the participant is under 18 years of age. Please note that the identity of each participant will be kept confidential, and no identifying details of the participants will be included in any research papers that result from this research project.

It is our intention to conduct a series of three focus group discussion sessions, involving the same six persons, over a period of approximately one week. Each discussion session is expected to last approximately forty minutes. I request your assistance in selecting at least six employed persons who may be involved in the project. I would be grateful for any assistance that your members of staff may be able to offer in conducting an information session here youth attends, in order to receive the information sheet, consent form and Brigid’s contact details. Such people simply need to be in the age range of 17-19 years, be currently employed, currently be in the Launceston region and use some form of electronic communication. If they wish to participate in the focus group sessions, each person attending then has the option to contact Brigid.

Please contact me if you have any queries.

Thank you,

Chris Keen
Professor & Head of School of Information Systems
Appendix B – Focus Group Information Sheet

INFORMATION SHEET

Date: ..................

Title of investigation
An investigation into the conceptual shape of electronic communication by youth across different socio-economic groupings in the Launceston region.

Name of Chief Investigator
Professor Chris Keen – Head of the School of Information Systems

Purpose of the Study
It is obvious that electronic communication, such as SMS, mobile phones, email, chat and the Internet play a big role in the lives of many young people today. However, very little is known about the ways in which they think about these communication technologies and the parts that they play in their lives and the people they interact with. This study is intended to gather information on these topics by talking to young people from a variety of backgrounds in the Launceston region.

Nature of the Study
This study will take the form of a series of focus groups, with discussions amongst small groups of people to explore the sorts of things that they associate with the use of electronic communication devices. The discussions in each focus group will be used to identify the key issues, attitudes and concepts that young people have with regard to the use of electronic communications. This information will be of significant use to people who are researching electronic communications and to companies who are planning new communication technologies. Young people, especially those in late teenage-hood, form a very important section of the market that is well aware of these technologies and have strong opinions about how it might be used.

This study will be based on four focus groups, each drawn from people with different backgrounds, so that a wide variety of opinions and ideas can be gathered. You will be asked to meet with each focus group three times, each time for about forty minutes to discuss aspects of electronic communications. Brigid will lead these focus group discussions and introduce a series of topics and questions, but the most important part is your contribution. Please feel free to express your ideas and to contribute as much as you wish, as your opinions will be highly valued. Each focus group discussion will be taped and transcribed later. However, the identity of each person participating in each focus group will not be included in the transcriptions, so that you can assume that whatever you say will be kept confidential.

The recordings of the focus group meetings will be encoded and stored in a locked cabinet so that no one else but Brigid has access to them. If you have any reservations about your participation in any focus group meetings or if you feel uncomfortable about any aspects being discussed, please let Brigid know immediately, or as soon as possible after the focus group, about your concerns. All data, including both audio recordings and transcripts will be held in electronic form and will be securely encrypted using password protection. The copies of this encrypted data will be kept confidential in locked cabinets and on secure file stores. It is a requirement of the University that such data be retained for a period of five years after its collection in order to ensure the authenticity of any research publications that are derived from the data. A register is maintained of the existence of this confidential data in the School of Information Systems, and this data will continue to be held for five years in locked and secure storage. At the end of the five year period the data will be securely and successfully destroyed, so that no traces of the data are kept beyond this period.
Appendices

Freedom to refuse or withdraw
There is no intention to embarrass or inconvenience anyone through the use of these discussion groups. Discussion groups are a convenient way of gathering information from a variety of people in an efficient and enjoyable fashion. You are free to leave or to withdraw or not to contribute to any discussion group, as you wish. There will be no ill feelings if you decide you do not wish to participate in any more of the discussion groups.

Most importantly of all, Brigid values your important contribution to this significant project.

Participant Benefit
By participating in these discussion groups you will have a chance to have your opinions heard and also be able to discuss issues with others in the group. Hopefully you will gain a better understanding of your own use of these electronic communication technologies, as well as becoming more informed about how other people in your age group see them.

Exclusion Criteria
This study is restricted to people who are in the age range of 17 – 19 years, and who live in the Launceston region.

Payment to subjects
There is no payment available for participation in this study. However, there will be refreshments provided at each focus group.

Contact persons
The contact person for all queries relating to this study is Professor Chris Keen (Head of the School of Information Systems at the University of Tasmania). Phone (03) 6226 6200 or email Chris.Keen@utas.edu.au. The researcher in this study is Ms Brigid Rawlings, who can be contacted on (03) 6324 3145 or by email Brigid.Rawlings@utas.edu.au.

Statement regarding approval
Details of this study have been approved by the Northern Tasmania Social Sciences Human Research Ethics Committee and the Tasmanian Department of Education.

Concerns or complaints
If you have any concerns of an ethical nature or complaints about the manner in which the project is conducted, you may contact the Chair or Executive Officer of the Northern Tasmania Social Sciences Human Research Committee. Inform subjects that, if they have any concerns of an ethical nature or complaints about the manner in which the project is conducted, they may contact the Chair or Executive Officer of the Northern Tasmania Social Sciences Human Research Ethics Committee.

Results of investigation
You will be able to obtain a copy of the results of this research project when the project is concluded via

- The URL of the School of Information Systems website where reports of the results will be posted, and will be made available to you;
- Contacting Ms Brigid Rawlings via email Brigid.Rawlings@utas.edu.au.

Information sheet and consent form
You will be given copies of the information sheet and statement of informed consent to keep.

Chris Keen  Brigid Rawlings
Chief Investigator  Researcher/Facilitator
Appendix C – Focus Group Consent Form

CONSENT FORM

Title of Project: An investigation into the conceptual shape of electronic communication by youth across different socio-economic groupings in the Launceston region.

1. I have read and understood the 'Information Sheet' for this study.
2. The nature and possible effects of the study have been explained to me.
3. I understand that the study involves the following procedures:
   a. Data will be recorded from a series of focus group discussions, using an audio tape recorder;
   b. The data will be transcribed into textual form for analysis and identification of key topics and themes.
4. I understand that all research data will be securely stored on the University of Tasmania premises for a period of 5 years. The data will be destroyed at the end of 5 years.
5. Any questions that I have asked have been answered to my satisfaction.
6. I agree that research data gathered for the study may be published provided that I cannot be identified as a subject.
7. I agree to participate in this investigation and understand that I may withdraw at any time without any ill effects to myself.

   Name of participant ____________________________________________________________

   Signature of participant __________________________________________ Date

8. As the parent or guardian of the person named below, who is under 18 years of age, I agree for this person to participate in this investigation, and understand that he/she may withdraw at any time without any ill effects to him/herself.

   Name of participant ____________________________________________________________

   Signature of participant __________________________________________ Date

9. I have explained this project and the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation.

   Name of investigator __________________________________________________________

   Signature of investigator __________________________________________ Date
Appendix D – Focus Group Questions

FOCUS GROUP QUESTIONS

The first focus group discussion will consider personal use of electronic communication technologies.

The questions that will be considered are:

- What form of electronic communication do you use?
- How do you use them?
- How often do you communicate with others and in what forms?
- What type of messages do you send and receive?
- What does the use of these forms of technology mean to you?
- How important is the use of this communication to you?

The second focus group discussion will consider the types of relationships that are established and maintained through the use of electronic communication. The questions that will be considered are:

- With whom do you communicate and what forms of communication do you use?
- What are the purposes for which you use these forms of communication?
- To what extent do you use these forms of communication to meet people?
- What types of relationships do you hope to make?
- How do you do that?
- How do you use these forms of communication to maintain these relationships?

The third focus group discussion will consider the roles that electronic communication plays in the communities/societies of the youth involved. The questions that will be considered are:

- What roles does the use of electronic communication play in your life?
- How is electronic communication used to maintain contact with your friends and acquaintances?
- What are the ways in which different communication technologies contribute to your social life?
- How would your social life differ if you did not have access to these communication technologies?
- What are the models of how you see the use of a particular communication technology in your head?