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The self-concept of spinally-injured people: the role of frequent internet communication within cyber-communities

By

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This dissertation is dedicated to my parents, Julius and Silke, without whom all this would not have been possible. Also to Aye-Htun, who is an inspiration to anyone who wants to make the best of life.

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Summary

The Internet and cyberspace are still relatively new occurrences in our lives, yet they already exert powerful influences over us. Research in South Africa is still limited and this is an attempt to begin correcting our lack of knowledge in the field.

The study was conducted entirely in cyberspace. E-mail was used to gather information from six participants, who where recruited from the Quadriplegic Association of South Africa website. It is a qualitative examination of the unique experiences of spinal cord injured people, who are regularly interacting in cyber-communities with other injured people and people without injuries. The study attempts to describe the role that computer-mediated communication and cyber-communities play in the spinal cord injured person's self-concept.

The information was collected in unstructured, asynchronous interviews, which were e-mailed on a regular basis. The participants included one woman and five men, with a mix of quadriplegic and paraplegic injuries. The questions revolved around two central themes: 1) the participant's experiences of other people offline and 2) their experiences of people online. These experiences were identified and grouped into 14 different categories. The categories were then integrated with the literature on cyberspace and self-concept theory.

Although the participant group was small, their experiences were richly illustrated and often confirmed previous results by other cyberspace researchers. Essential to this study was the embodied isolation that participants experienced offline, which evoked a number of negative emotions and consequently affected the self-concept and self-esteem. Online the participants were often able to experience a release from isolation and felt empowered by the expansion in their social support Networks and the practical information they gained. In some cases self-esteem improved. In general, more skills and concepts were integrated, increasing the complexity

of the self-concept. Applications of this study's results include greater rehabilitative speed and increased continued support for the spinal cord injured. The online spinal cord injured person can moderate her/his reintroduction to uninjured social circles. In certain situations, adapting to the new injured self-concept may become easier.

Key words:
Spinal cord injured users, embodiment, self-concept, self-esteem, cyber-communities, equalisation, stigmatisation, isolation, belonging, social ties

Opsomming

Die Internet en kuberruimte is steeds relatief nuwe verskynsels in mense se lewens, en tog het dit 'n kragtige invloed op hoe mense lewe en kommunikeer. Die Geesteswetenskappe was tot dusver traag om die uitdaging te aanvaar om navorsing te doen oor hierdie verskynsel en die nuwe wendinge in mense se gedrag vanweë hierdie ingewikkelde toevoeging tot die fenomenologiese veld. Navorsing in Suid-Afrika is tot nou toe baie beperk en hierdie studie is 'n poging om ons kennis van die veld uit te brei.

Die studie is in totaal in kuberruimte uitgevoer. E-pos is gebruik om informasie in verband met die deelnemers in te samel. Die deelnemers was van die Kwadriplegiese Vereniging van Suid-Afrika se web-tuiste gewerf. Die studie is 'n kwalitatiewe ontleding van die unike ervaringe van rugmurg-beseerde persone wat, op 'n gereelde grondslag, met ander rugmurg-beseerde persone en mense sonder beserings in kubergemeenskappe kommunikeer. Die studie poog om die rol wat rekenaar-bemiddelde kommunikasie en kubergemeenskappe in die rugmurg-beseerde persoon se selfkonsep speel, te beskryf.

Data is ingesamel deur die voer van ongestruktureerde, individuele onderhoude, wat op 'n gereelde grondslag deur middel van e-pos gestuur is. Die navorsingsgroep bestaan uit een dame en vyf mans wat verteenwoordigend is van beide kwadripleë en parapleë. Die vrae wat gestel is het basies om twee sentrale temas gehandel: 1) die deelnemers se belewenis van mense buite kuberruimte, en 2) hulle belewenis van mense tydens die gebruik van kuberruimte. Die belewenisse is in 14 verskillende kategorieë gegroepeer en met die literatuur oor kuberruimte en selfkonsepteorie geïntegreer.

Alhoewel die navorsingsgroep klein was, is omvangryke beskrywings van hulle belewenisse bekom, wat sommige van die bevindinge van vorige navorsings oor kuberruimte bevestig het. Party bevindinge het vorige bevindinge van kuberruimte navorsing bevestig. 'n Belangrike aspek van die

studie is die beliggaamde isolasie wat die deelnemers buite kuberruimte ondervind, wat negatiewe emosies ontlok en die selfkonsep en selfbeeld beïnvloed. Tydens die gebruik van kuberruimte het die deelnemers 'n verligting van die isolasie ervaar vanweë die uitbreiding van hulle sosiale ondersteuningsNetwerke, en die verkryging van praktiese inligting. In sommige gevalle het die selfbeeld verbeter. Oor die algemeen is meer vaardighede en konsepte geïntegreer wat die kompleksiteit van die selfkonsep verhoog het. Toepassing van die studie se resultate behels versnelling van rehabilitasie, en voortgesette ondersteuning aan die rugmurg-beseerde persoon. Die Internet gebruikende rugmurg-beseerde persoon kan so heelwaarskynlik haar/sy rehabilitasie in onbeseerde sosiale kringe beter beheer.

Sleutelwoorde:
Rugmurg-beseerde gebruikers, beliggaming, selfkonsep, selfbeeld, kubergemeenskappe, gelykmaking, stigmatisering, isolasie, samehorigheid, sosiale bande

TABLE OF CONTENTS

LIST OF FIGURES

Chapter I

Introduction

1.1 Introduction

In this chapter, we will review the various dimensions that this study attempts to integrate. Chapter 1 creates a basic awareness in the reader of the multiple factors - technology, communication and psychology, which will play roles in our understanding of the unique experiences that people have of cyber-communities.

People generally have unique experiences in cyberspace (online) that are often very different to their physical 'real' world (offline) experiences. Self-concept theory is one framework, which can illuminate those experiences. In the future, it may offer doors toward a deeper understanding of the effects that cyberspace and cyber-culture have on people. For the moment, we will attempt to describe the relationship between on- and offline experiences, and how they together contribute to the development of the self-concept.

1.2 The Internet

The Internet (Net) has exposed people to different behaviours, values and traditions. This technology may affect our behaviours and perceptions more than anticipated. It is a malleable environment, in which we can assume different behaviours and roles, an environment in which we feel disinhibited and depersonalised due to our perceived anonymity and the perceived lack of an authority to enforce values. We have an incomplete disembodied and removed experience, and often assume invulnerability because of that.

The Net has introduced a new, fluid dimension to our social existence. Spatial, gender, age, racial and other boundaries tend to dissolve online, where people are faceless e-mail addresses, and often represented by nicknames (nicks in the jargon) or virtual characters or identities. We have the choice to interact more freely with more people than ever before, because the social and physical contexts of our interactions have changed. Our imagination can now play a greater role in our choice

of social partners. As long as people play with their presentation of selves, they can easily assume whatever they want about the person on the other end. We often assume, when little information is available about another person, that s/he is like us (Gergen, 1971). These assumptions become important when increased self-disclosure and friendliness is witnessed online.

Language patterns are changing, with the written word experiencing a re-birth as a new hyper-practical linguistic entity (Argyle & Shields, 1996). Abbreviated, text language may look strange (for example, Cyber cowboy: lol -laughs out loud- 'cu later, have 2b smwhere'). Written, non-verbal simulations are making it possible to communicate cues. Emoticons (emotional icons) are graphic representations of emotions such as: ☺. Action lists are communications of bodily expressions, including facial expressions and voice tone (Argyle & Shields, 1996). Wallace (1999) maintains that these linguistic softeners (symbols used to provide a limited, embodied context for typed words) serve to make the Net a more comfortable and lived-in place.

Without going too far back into the history of the Net, we can see that new dimensions in human relationships are becoming more common. Cybersex, greater openness and awareness, as well as fantasy identities are some of the more common new dimensions. We are still dealing with individual humans and their experiences and can therefore easily draw on a long history of psychology. Parallels can be drawn between the cyber-experience and our face-to-face experiences.

A Net user has increased access to different cultural and political values. This may cause confusion in the person attempting to define her/himself as an individual, as s/he attempts to adopt values from increasingly complex social Networks. This confusion can penetrate as deeply as one's self-concept when communication technology can lead to over-saturation of the Self with significant others' views (Gergen, 1996). Systematic investigations into these new dimensions of human existence are needed, to better understand the impact of this new technology, and to affect it in a way beneficial to society.

1.3 Cyber-communities

Cyber-communities (virtual communities, online or Net communities), as a research concept, pose difficulties. Net researchers are still struggling to grasp the term firmly, each attempting to develop a satisfactory definition, name and parameters for the communal occurrences online (e.g. Jones, 1997; Mitchell, 1995; Rheingold, 1993). The debate stems in part from the difficulty of pinning terms such as "group" and "community" down (Duffy & Wong, 1996; Wallace, 1999). There are two important concepts embedded in the word *cyber-community*.

Firstly, *cyber* is derived from 'cyberspace', a term first used by the author William Gibson in his groundbreaking, cyberpunk book *Neuromancer* (1984). *Cyber* denotes the computer-mediated, collectively *imagined space*, where people meet and interact using a variety of visual representations. Net users have adopted *cyber* and *virtual* as the popular terms, to indicate all Net activities. However, Jones (1997) argues successfully that the word 'virtual' can mean a number of other communications, such as TV and is therefore not exclusive to Net communication.

Secondly, the term *community* refers to the sense of belonging or cohesion that many people feel when they interact with people online. Researchers like Weinreich (Jones, 1997) argue that this term should not be used, as the word community incorporates physical proximity as well. This researcher agrees with others (Jones, 1997; Mitchell, 1995; Rheingold, 1993; Wallace, 1999) that the *experience* of place and the *sense of belonging* are of greater importance than the physical manifestation of a geographical location. Sempsey (1995) notes a study done by Resnick, were respondents reported, that the major benefit of cyber-environments was the sense of belonging experienced. Parallels exist between cyber-communities and offline communities. A concept such as place or locality, so important in understanding community, needs to be revisited to include a cyber-place.

Cyber-environments must be theoretically distinguished from cyber-communities. Many different kinds of software support cyber-communities at present, each sustaining a distinct environment, which can sustain community development. News-groups, bulletin boards, Internet relay chat (IRC) and multi-user dungeons (MUDs)

are all different kinds of basic structures that allow people to build social Networks and communities. It will be argued that communities only exist when a sense of belonging exists amongst the people sharing a cyber-environment, when they have a sense of shared history and interdependence. This experience of community plays an essential role in the values and behaviours a person adopts, as well as the person's sense of well-being, which are all related to the self-concept.

To speak of an individual we must not only focus on the person and her/his internal processes. The person is also an individual in terms of her/his community. Personal identity and individualism may only be expressed when there are others to take note of the person. Significant others, as well as the generalised other, have an effect on a person's self-concept (Meyer, Moore & Viljoen, 1997; Ritzer, 1996). Although significant people are often people the person is intimately familiar with, strangers can also have a significant impact on how s/he thinks of her/himself. It is important to realise that the self-concept relates to the social phenomenal field and other people affect it. The relationship between the phenomenal field and the self-concept is close; the phenomenal field is the sum of all a person's perceptions and experiences. The self-concept initially develops from this phenomenal field and continues to be influenced by it (Meyer et al.; 1996).

Many use the Net to keep in touch with important people that they have met in offline reality. It will be shown that when Net users form intimate relationships with people they have only met via Net groups, a sense of belonging to a cyber-community can develop. Once a community has been established it can become a pool, from which new, intimate relationships can be drawn, affecting the individual personally.

1.4 The self-concept

The self-concept is constructed from experiences of the phenomenal field and is continuously influenced by it (Meyer et al., 1997). When many experiences are incorporated to form appropriate schemas i.e., the self-concept becomes increasingly complex, then it can be deduced that the self-concept has developed in such a way, that the person is able to cope better with her/his world. Linville (Baron & Byrne, 1997) has shown that this complexity of the self-concept, can serve as a cognitive

buffer against depression and stress-related illnesses. An environment conducive to this integration must exist before the individual will effectively incorporate these experiences. A context in which the person can test a variety of reactions, behaviours and insights without the perceived need for restraint, is such an environment, which Carl Rogers understood as an unconditionally accepting environment (Meyer et al., 1997)

At a glance the Net seems to offer such an atmosphere, as it exposes the person to many more experiences and alternatives from which to draw different schemas and possible selves. Experimental behaviour manifested online, may be indicative of dissatisfaction with the Self or a person actualising possibilities in the self-concept. The online exploration of idealistic and different qualities may be indicative of people diversifying their self-concepts.

Communication on the more serious forums, where people are usually honest about who they are, could also provide such an unconditional atmosphere. The replacement of many social rules with other norms equalises the social environment for many Net users. Perhaps the different conditions of approval that may apply can mean that people will feel more comfortable exploring themselves in cyber-social situations. These experiences may be internalised, if the person takes the lessons learnt to heart and does not discount them as virtual and unimportant.

The Net, as an experimental environment with different rules, could thus lead to greater self-insight, a strengthening of the self-concept and heightening of self-esteem. The marked disinhibition online noted by researchers, seems to be the essential ingredient of this experimentation (King & Moreggi, 1998; McKie, 1994; Sempsey, 1995; Wallace, 1999). Language and behaviour no longer checked and verified in physical reality lose their grounding. Disinhibition and deception can then sometimes escalate (Nguyen & Alexander, 1996). This loss of grounding in embodied rules and values could become discouraging, as the Net user attempts to conform to new conditions of acceptance online. The Net user's imagination can interfere with interactions and set standards that may later disappoint him or her, when s/he imagines characteristics not clearly apparent. Unrealistic expectations can develop, which the other person might not be able to live up to. Flame wars

(escalating verbal abuse between Net users) and the many forms of deceit and manipulation that proliferate online may actually inhibit personal growth.

The research indicates paradoxical results. Cyber-interactions have been shown to be superficial. Nguyen and Alexander (1996) believe that the simulation of physical presence diminishes the responsibility of a bodily commitment, which can undermine our commitment to other Net users. Trust, essential in developing intimate relationships between people arises, amongst other things, from our shared vulnerabilities and frailties in an offline situation. That trust, according to Dreyfus (2001) cannot be developed fully in cyberspace, where those embodied exposures are lacking or are very much toned down. Brown (Sempsey, 1995) discovered that computer-mediated communication (CMC) groups avoided sharing sensitive and personal information. Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay and Sherlis (1998), in their intensive longitudinal study, found that increased Net use led to increases in loneliness, depression and isolation from social circles.

Yet, intimacy has also been observed (Mitchell, 1995; Nguyen & Alexander, 1996; Wallace, 1999). According to Resnick (Sempsey, 1995), the positive social aspects of CMC include collaboration, assistance, playfulness and a community spirit. Many respondents consider CMC a rewarding social experience. Buchanan (2000), McKenna and Bargh (1998), as well as Wallace (1999), show that anonymity can encourage self-disclosure, which is almost certain to enhance the development of intimate relationships and perhaps increased trust.

The relationship between the self-concept and cyber-communities can only be understood, when the *experience-of-others* is understood as a channel for others' behaviours to touch the Self. The Self is in constant contact, and therefore constantly affected by, the phenomenal field through an individual's experiences and perceptions. Cyber-reality, where some perceptions are heightened and where other perceptions are decreased by CMC, augments the experience-of-others. To what extent do cyber-others without offline contact, as well as the cyber-space medium, affect the self-concept? Do Net users experience changes in their self-concepts and to what degrees? A discussion of the media and the Net users' experiences will reveal the role of cyber-interactions in self-conception.

1.5 Spinal cord injured people: Users of the Internet

The abbreviation SCI will be used for a spinal cord injured person and SCIs for spinal cord injured people.

People with severe permanent injuries face unique challenges in offline relationships. According to the Quadriplegic Association of South Africa (QASA) (2001), the greatest limits that people with spinal cord injuries face, when regaining their independence, are not those imposed by their injury, but those imposed by people's attitudes towards disability. From the moment of the injury, a SCI experiences great changes in self-esteem, body image and emotional well-being (QASA, 2001). This may be largely due to the stigma that SCIs acquire in their offline social groups and society. Shakespeare (1975) points out that uninjured people become over-controlled and inhibited in their conversations with injured people. This can significantly affect the quality of interactions that SCIs can access. Deprivation of quality social interactions can lead to a reduction in the quality of experiences that SCIs have of uninjured people and their phenomenal field, which can negatively affect their self-esteem and self-concept (Williams, Cheung & Choi, 2000.)

This study focuses on spinal cord injuries to illustrate the large gap that a person with, for example, paraplegia can close between her/himself with uninjured others on the disembodied Net, as opposed to offline interactions. The study can lead to an understanding of other marginal people's experiences of CMC and cyber-communities in opposition to offline interactions. Without bodily presence, stigmatising reactions may be delayed or not present at all. The potential advantages of CMC and online social groups for SCIs seem obvious.

Studies (e.g. McKenna & Bargh, 1998; McLeod, Baron, Marti, & Yoon; 1997) suggest that minorities, particularly those with visible disadvantages, can benefit by using the Net. Anonymity is to these marginal groups' advantage. They are identified by what they have to say, rather than what their bodies say about them (Mitchell, 1995). These groups may feel more empowered using a medium where they can exhibit behaviour that is normally restricted. Their experiences determine the degree to which their temporary behaviours online can tentatively affect their offline behaviour

by exacting changes in the self-concept. A linear causality is not suggested here; instead a reflexive relationship between on- and offline living and self-conception is described.

Yet, Nguyen and Alexander (1996) note the *virtual* equal treatment that attracts people to the Net. The virtual is also temporary. These groups may feel at a greater loss when they do not experience a continuation of the recognition gained online, in their offline social lives. Bromberg (1996) refers to this as the illusion of empowerment arising from disembodied interactions, which do not normally include those aspects of the Net user that relegate him/her to a minority. Confusion may arise in some disadvantaged Net users when they experience one set of reactions from intimate others online and another set of reactions offline, perhaps even from the same group of Net users who chose to finally meet the individual offline.

A SCI's phenomenal field may expand, when her/his experience of it is not limited anymore by her/his mobility and embodied status. Clicking the mouse brings near instant access to phenomenal regions and social groups previously inaccessible to SCIs. This may affect the way they think about themselves as persons relating to others and groups. The greater access to information and knowledge may boost their self-confidence and help them to develop increasingly complex self-concepts. By contacting others similar to them and others who can offer helpful information, SCIs may learn to cope with their injuries better.

The hope of complete disembodiment, as envisioned by John Perry Barlow (Dreyfus, 2001), should be a cautious one. In *On the Net*, Dreyfus (2001) points out that complete freedom from our bodies, and thus our human being, can never be achieved. It is through our bodies that we make sense of the world and experience emotion. The SCI experiences the world in a unique way and must rather learn to accept it than try to escape it, using the Net. Although interactions online seem to promise a social omission of the body, the person will always communicate in terms of her/his unique situation, even if s/he does not reveal her/his true embodied state.

Intimate relationships can develop online for those who normally have trouble communicating, due to stigma and other social difficulties. Nguyen and Alexander

(1996) show that online, people may feel more inclined to be sociable and friendly, since they have more control over how they represent themselves. People are also more willing to disclose personal information (discussed at length in Chapter 2), since the online anonymity allows them to represent themselves as deindividuated people, who need not fear negative social reaction, compared to offline situations. People dealing with prejudices offline may communicate freely, without others focussing on their stigma all the time and without offline social pressures to conform or perform. They may develop relationships with others unlike them online, where they might not have managed otherwise. Online extension of social support Networks may very well be beneficial to anyone who is isolated for a variety of reasons.

1.6 Aim of the study

This study will attempt to determine how the individual, SCI Net user experiences her/his social phenomenal field through regular interaction with groups s/he feels are her/his cyber-communities. These experiences may play a role in the unique way that a person conceives of her/himself. This self-conception plays an eventual role in her/his behaviours on- and offline.

Certainly, spinal cord injuries are complex with many variables. This research will focus on those SCIs who have managed to develop their skills to a level where they can use the Net extensively. This may already indicate a certain level of self-esteem, and perhaps a more complicated self-concept, as the SCI has met social and intellectual challenges developing those skills with success. The successful completion of these tasks may have raised their self-esteem to new heights as they have realised new degrees of worth and independence. This trend may or may not continue as they begin to enlarge their experiences online from technical challenges to social challenges.

Green (Bromley, 1991) points out that, SCIs who believe themselves to be as independent as possible have a higher self-esteem than those who experience themselves as less independent than they are capable of. The increased social mobility that the Net and cyber-communities afford the SCI may boost the positive experience of independence. If the overall online experience and cyber-communities

is largely positive, then the person may feel more confident in exploring her/himself socially as the perception of conditional regard decreases and positive self-regard increases. Conditional regard will be discussed in greater depth in Chapter 3. The self-concept may become more complicated and self-esteem may increase, as those experiences are internalised. These may then lead to the SCI's expectations that stressors can be handled more effectively (Oelofse, 1996). If the person experiences her/himself more negatively due to negative experiences, s/he may feel less capable of coping with her/his environment.

The community spirit the Net user experiences distinguishes cyber-communities from other online groups. As Net users, we may be part of many collections of people online. The deciding factors are whether we experience other Net users as significant others, and whether we experience the collection of people as generalised others. These significant people will have the greatest effect on how we see ourselves, since their important opinions of us will influence our opinions of ourselves. The study will build a framework of what cyber-community may actually mean to the Net users and what the significance is of cyber-community others in the SCI's life. Only then will we be able to understand the significance of experiences the individual has had and what those have meant to her/his way of self-conception.

The use of cyberspace and cyber-communities by SCIs may have strong rehabilitative ramifications. Programmes may be developed to empower SCIs by teaching them computer and Net literacy, teaching them the advantages and disadvantages of cyber-community participation and the pitfalls they may encounter enlarging their phenomenal and social world in this way. SCIs are not newcomers to technology. Perhaps they have been cyborgs the longest, in the way that Donna Haraway (1985) conceives of cyborgs? They are a lot more symbiotically in touch with technology, dependent on it for physical mobility and independence. Perhaps in this way SCIs can be at the forefront of developing a responsible understanding of the way that cyber-communities and CMC will shape the future of human social interaction.

1.7 Motivation for the study

Net research within the paradigm of psychology is a relatively new phenomenon, particularly in South Africa. To stay competitive with the rest of the world we need to accumulate the same wealth of knowledge about this young and very important subject, knowledge that is scientifically grounded and not merely incidental.

Changes in the technology of human communication affect human interaction and behaviour. The Net is a highly interactive medium of mass communication and information exchange. The unique social characteristics of the technology, detailed below, affect the behaviour of people (Mckie, 1994; Mitchell, 1995; Sempsey, 1995; Wallace, 1999). Its effects on relationships and individuals need to be wholly understood. It is important to study all we can now, as the Net is still in its infancy, so that accurate strategies can be implemented at a pace that is not completely reactive.

Empowering Net users, to make informed decisions on their use of the Net, is an essential element of this study. If disadvantaged groups experience cyber-communities negatively, then perhaps this information will allow them to choose their activities and goals online better. More effective strategies for personal and social fulfilment might be discovered, both electronically and face-to-face. Strategies for cyber community administrators may be developed to maximise beneficial aspects of CMC communication in their cyber-communities. Corporations employing injured people, or people that are marginalized offline, could develop strategies based on these findings. Social contexts could be recreated; pulling stigmatised and unstigmatised employees together using a combination of on- and offline communication forums. The power of the Net to influence us as individuals must not be underestimated.

1.8 Unique challenges of computer-mediated research

The extent to which a researcher can locate her/his work online is a great challenge to computer-mediated researchers. Critics may point out a variety of factors attributed to the Net, such as the anonymity of respondents and the limited controls over variables, which disrupt valid and reliable findings. Yet, these same factors are intrinsic to the methodologies we use, and not the medium that we are using. A mailed questionnaire for example, carries much the same risks as an e-mailed questionnaire.

Online laboratory studies have shown greater validity and can be controlled almost as well as offline experiments. Researchers have had positive correlations between on- and offline research methods, indicating no unexpected factors influencing the results of online research. Birnbaum (2000) found that laboratory studies and Net studies showed an overlap in findings. Where offline lab studies could be controlled better, Net studies yielded results with greater external validity, since the populations drawn were larger and more diverse. Krantz and Dalal (2000) compared co relational, experimental and survey studies, done both off- and online. They found that in nearly all cases the results were similar. They also concluded that web-based studies have stronger external validity due to the larger samples and greater heterogeneity of the population.

Qualitative research designs, such as field- and ethnographic research, can also be implemented effectively. Researchers like Hakken (1999), Paccagnella (1997) and Suler (1999a) are developing ethnographic approaches with success. These findings also suggest that people do maintain their offline values and that the Net is not a virtual reality of anarchy, abandon and deception. Social research has been successful online, but the Net's capacity to mediate valuable research should be explored with caution.

In this study, Sheehan's (2001) findings were embraced. She compared postal and e-mail surveys, and analysed the dropping response rates in e-mail surveys. She points out that unsolicited e-mail easily ends up in the recycling bin for a number of reasons. Filtering systems allow people to avoid unwanted mail clogging up the

inbox. Many people delete mail without reading it. People also fear viruses that may be attached to unsolicited mail. Offline recruitment is believed to secure the interest and response of possible online participants.

The stability of information collected via the Net may also be questionable, since many respondents contacted by CMC may change their e-mail addresses or may even completely cease to be online. On the other hand, stability can be enhanced by the use of saved information available online, servers and on respondents' computers. The technology, as do different offline environments, offers disadvantages and advantages, which can be manipulated by the social researcher.

This study will contribute to the growing psychological insight into 'cyberpsychological' (Suler, 1998) data and data collection techniques. It is not exactly testing new limits. The framework for psychological research on the Net exists, but a greater repertoire of research studies is needed, before the full potential of it can be understood. This research will emphasise the phenomenal world of the SCI Net user, gaining insight into the personal experiences of human beings communicating on a virtual frontier- relatively unexplored as a social environment, but meaningful to social scientists.

Chapter 2

Psychology and the Internet: Salient occurrences in cyberspace

2.1 Introduction

The important characteristics of the Net distinguishing it as a unique social environment will be discussed first, so that the relevant psychological theories can be understood in the context of cyberspace. The principals of self-concept theory alluded to in this chapter will be discussed in depth afterwards.

The unique effects the Net has on human communication have by far not been completely studied. The research will focus on the relationship between a person's experience of cyber-communities and her/his self-concept. Investigating the impact that the Internet has on people's self-concepts may provide some answers to the increasingly complex role that technology plays in society and people's private lives.

2.2 Perceived anonymity, depersonalisation and disinhibition

Rosenberg (1997, p. 435) should provoke some thought on the subject:

> *'...what are we to make of such communities, whose existence depends on the acceptance of deception as a fundamental basis upon which to explore relationships?'*

The degree of anonymity afforded a Net user will vary dramatically across the expanses of cyberspace. Chatrooms can be relatively anonymous compared to e-mails, where your address appears on the mail you send. Similarly, many Net groups demand some forfeitures of anonymity for the sake of developing a sense of belonging, which amongst other things, is founded on trust. Of course, one's ability to remain nameless is also augmented by your technical ability and knowledge of the Net. For example, some services, such as anonymous re-mailers, exist which can hide the usual, personal information that is available to others when you are in contact with them online.

2.2.1 Nicknames as disguises

Research has shown that a nickname awarded offline, can have a lasting effect on self-esteem and the self-concept (Bechar-Israeli, 1996). Consider what a person may feel when called 'Fatso' as opposed to 'My Sweet'. Besides the basic anonymity that a nickname (nick) affords the Net user, it has other functions too. Bechar-Israeli (1996) found that nicks are important sources of self-relevant information in a contextually limited environment. Everything about the Self must be overtly communicated. This allows people to represent themselves in a variety of different ways that tell different things to other Net users, depending on the discretion of the actor. Users' social circles online depend entirely on recognisable nicks. The self exists very much as part of a social system and it is therefore not surprising that Bechar-Israeli (1996) found that people rather stuck to nicks than abandoning them or continuously changing them. If Net users cannot be recognised by their names, then they in a sense, do not exist for other Net users used to a particular name.

Your name is at once your existential centre ('I am Simon') and your social key to relate to others ('You are Samantha'). Your name is a category for you and others, into which your unique characteristics can be filed. Without a name that transmits information about you, you are depersonalised and difficult to relate to (Bechar-Israeli, 1996). Wallace (1999) shows that a Net user with an androgynous nick is the least likely to inspire trust in other Net users. A nick, as a representation of the self, is a message from the Net user about how s/he conceives of her/himself. It tells an underlying story about the Net user that s/he does not want to necessarily discuss, but nevertheless, wants to communicate.

A chosen nick and characteristics can be expanded to manifest a unique online identity. The permanence or seriousness of that online identity may also then be indicative of how purposefully you want to be identified by that nick; that online identity. When others interact with the Net user based on that emphasis, the way the Net user relates to others might change accordingly. Her/his self-concept and behaviour may adjust to the acceptance or rejection experienced as others react to the cues embedded in a nick.

2.2.2 Depersonalisation and disinhibition: The effect of anonymity

Play and the masquerade are traditionally contexts with different social rules and values. These changed contexts often license people to act and feel less accountable (Danet, Ruedenberg-Wright & Rosenbaum-Tamari, 1997). Responsibility for behaviours that challenge the status quo can always be laid at the foot of the game or the mask. The perceptions of anonymity and playfulness online have perpetuated interesting behaviours and experiences online. Disinhibition and depersonalisation are at the core of these behaviours and experiences.

When people believe that they can go unnoticed, behaving in certain ways, when they believe there exists little authority to effectively control them, and when they feel that they are in a context imposing few restrictions on their behaviour; they are likely to exhibit behaviour they would normally deem unacceptable to others (e.g. Kiesler, Siegel & McGuire, 1984; Sempsey, 1995; Wallace, 1999). 'When people believe their actions cannot be attributed directly to them personally, they tend to become less inhibited by social conventions and restraints' (Wallace, 1999, pp. 124-125). In anonymous situations, they will feel less publicly identifiable and less at risk of receiving social sanctioning behaviour. This situation is amplified online, where the audience is anonymous as well and contextual cues are limited.

The 1) perceived anonymity, 2) limited contextual cues, 3) the perception of distance separating Net users and 4) the absence or alteration of norms governing social interaction can all lead to feelings of depersonalisation. The person's sense of self may weaken as s/he is submerged in the anonymous crowd online. The person becomes part of the masses and may lose a sense of individuality and identity (Joinson, 2001; Kiesler, et al., 1984; McKie, 1994; Sempsey, 1995; Wallace, 1999). If the person feels part of a greater anonymous mass, without individual recognition for behaviours, then s/he may feel even more disinhibited.

Disinhibition is a reduction in self-regulatory behaviour (Kiesler et al., 1984). It has been linked to increases in antisocial verbal behaviour such as swearing, insults, obscenity and hostile comments (Kiesler et al., 1984; Wallace, 1999; Witmer & Katzman, 1997); but also to self-disclosure (Joinson, 2001; McKenna & Bargh, 1998;

McLeod et al., 1997; Rafaeli & Sudweeks, 1997). Reid (Sempsey, 1995) argues successfully that disinhibited behaviour must be distinguished from uninhibited behaviour. Uninhibited behaviour can be defined as complete freedom from social values. Disinhibition denotes an attachment to values that may be anchored in the embodied social world, as well as changed values inherent to cyber-communities.

This effect of CMC may have a number of advantages and disadvantages. On the one hand, people may find it much easier to discuss difficult or sensitive issues. This is one reason why support group sites flourish (see for example Grohol, 1997). Self-disclosure is less anxiety provoking when anonymous, than when speaking face-to-face with others (e.g. Argyle & Shields, 1996; Joinson, 2001; McLeod et al., 1997; McKenna & Bargh, 1998; Rosenberg 1997; Suler, 1998; Wallace, 1999). These support groups seem to offer much more positive regard due to disinhibition, since people are more readily accepting and disclose personal information easier.

People may feel more predisposed to explore previously unexposed behaviours and attitudes. These can be safely tested against the reactions of others, without fear of recriminations from the community and significant others. As McKenna and Bargh (1998) have shown, people can make gains in confidence and self-esteem when positive regard is shown for behaviours that a person would like to express, but could not, due to conditional regard by offline others. These gains can eventually translate to permanent and offline behavioural and attitudinal changes, as the person adopts behaviours and attitudes either closer to her/his ideal self, or that cause the least dissonance. As the person experiences more about her/himself by exploring these aspects, and as s/he explores others in conversations that are not as stressful as face-to-face ones, the self-concept may move toward greater complexity and enlargement.

2.3 Developing trust, intimacy and personal relationships

The development of intimate relationships online is an issue as yet unclear in the literature. On the one hand, the increases in self-disclosure may increase the likelihood of people developing trust and intimacy (Baron & Byrne, 1997; Parks & Floyd, 1996; Rheingold, 1993). The removal of the pressures some feel in face-to-

face encounters can also be conducive to the development of intimacy. Self-disclosure and the development of trust are not only promoted by depersonalisation and disinhibition, but also by the control that a person has over her/his representation (Joinson, 1998; McKenna & Bargh, 1998; Rheingold, 1993; Wallace, 1999). In cyberspace the person is putting her/himself at less risk, disclosing sensitive information, and could therefore be more willing to do it. Self-disclosure is easily reciprocated in its intensity and frequency and could lead to greater attraction between communicators.

On the other hand, trust may be more difficult to establish when physical proximity and accountability are lacking. People may develop trust faster with more non-verbal cues available to them (Dreyfus, 2001). Embodiment promotes attraction between people due to physical proximity and because sharing embodied vulnerabilities can put people more at ease.

Deceptions and other antisocial behaviour online may let the person feel insecure about social situations. This may develop into mistrust uncharacteristic of the person. The person may change the way s/he thinks about her/himself and her/his social phenomenal field, especially if the experiences are abusive or traumatic (see MacKinnon's (1997) analysis of virtual rape and Stone's (1994) reference to Julie, the deceitful psychiatrist). Negative experiences in social environments may reinforce a person's beliefs that extreme conditions of acceptance exist, which s/he cannot fulfil.

The key to trust may lie in people's beliefs about others' motivations, and in the extent to which self-disclosure is reciprocated; starting the cycle of self-disclosure, which often begins with discussions of shared interests in cyber-communities defined by interests. Parks and Floyd (1996) found that the factors conducive to development of friendships online were: 1) length of time spent in a particular group and 2) visibility of the Net user (as per frequent messages). These indications of proximity may lead to intimate relationships if the communication lasts, and when the communicators continue to discover high proportions of similarities in each other (Baron & Byrne, 1997). Greater intimacy depends on extensions of communications into topics other than the shared interest sustained by a cyber-community (Bromberg, 1996; Heim, 1994; Parks & Floyd, 1996). Many cyber-communities have not catered for such

freedoms (Kraut et al., 1998). These topics can also be delved into when communicators decide to interact privately, with e-mail, or in other cyber-environments as well.

Regular, intimate contact with others increases the likelihood of them becoming significant people in your life, as a group (if there is contact between the other people as well) and as individuals. The generalised other and significant other will affect you in many important ways, as you seek positive regard and are rewarded for exhibiting acceptable behaviours and attitudes. Evidence for significant relationships online (Parks & Floyd, 1996; Rheingold, 1993) shows that online significant individuals and groups may also influence a Net user in important ways, because they can also offer rewards. A person may find it easier to adapt her/his behaviour online to gain positive regard, since behaviours and attitudes are more malleable in the disembodied environment than face-to-face.

The positive opinions of these significant others may boost the person's self-esteem and confidence in ways that may eventually lead to offline expression of behaviours, which may have been restricted by more conditionally accepting, face-to-face, significant counterparts. Negative opinions may lead to the comparatively easier abandonment of behaviours; or even the easy abandonment of the group, as the person seeks another group, with the touch of a button, that is more accepting of exhibited behaviours. If the person finds it necessary to express certain characteristics to relieve dissonance, boost self-esteem and reach greater integration of the self-concept, then finding a sympathetic group online can often be easier than finding one offline.

2.4 Equalisation

The Net environment gives almost no cues about your socio-economic position, race, age, physical appearance and gender. Only your textual expressiveness will hint at anything, whether you are telling the truth or whether you are fabricating your entire life story. When you release selective and limited information online, people who have never seen you before, will find it difficult to draw on embodied stereotypes, on social contexts and many other cues, to judge you.

Expressions (Goffman, 1959) by Net users are brought to a bare textual minimum and every Net user, of whatever status, gains a large degree of control over their dramaturgy. Kiesler et al. (1984) found that CMC is blind concerning the hierarchical structure of social organisations. Computer mediated groups participated more equally than their face-to-face counterparts. For example, dominant individuals could still be identified by their messages, but their dominance was weakened by the anonymity of the cyberspace environment. People that may have been timid in the face of a dominant individual were more likely to challenge that person's dominant role, due to the protection online interaction afforded the person. Wallace (1999) believes that this equalisation phenomenon promises hope in reducing stereotypes and discrimination, through *initial* equal status contact. Users bring almost no pre-existing information on which they can be judged to an online interaction. Instead they begin the relationship from an equal basis, from which they expand self-relevant information. In this way online communication is initially equalised and it is up to the people whether they include valuable background information that may change the equality of the contact.

Sempsey (1995) points out that people are less critical of differences between each other in CMC than face-to-face. This means when cues are unavailable regarding the status of another Net user, then we are more likely to treat them as equals. This is especially true, when we like them and share interests with them. This flattening of the social hierarchy can lead to people also being more helpful to each other, as people perceive the anonymous other as an in-group member (Wallace, 1999).

Baron and Byrne (1997) and Wallace (1999) point out the many studies that give overwhelming evidence that we have a tendency to favour those physically more attractive. The Net, for the time being, retards that physical advantage and puts others, less attractive, on equal footing. Different rules for social attraction apply online. Many researchers (e.g. Baym, 1995; Bechar-Israeli, 1996; Danet et al., 1997; Rafaeli & Sudweeks, 1997) have found for example, that humour and playfulness online are valuable tools to enhance attractiveness when physical cues fail. A level of physical equality is therefore maintained online, as CMC reduces physical prejudices (Weisband & Atwater, 1999).

Stigmatised groups are temporarily relieved of social labels in online share-groups and they seem to feel safer discussing their difficulties in an anonymous environment (Wallace, 1999). Mickelson (1997) found that online support was almost exclusively pursued by men, who seemed to favour anonymity in the face of stigmatising roles, such as being fathers of children with special needs. One reason suggested for them favouring online groups, was that the anonymity allows them to break with traditional male gender roles and actively seek emotional support. Self-disclosure is not only high in online support groups, although it is most visible in these groups. It is also prevalent in a variety of other cyber-environments and communities (Rafaeli & Sudweeks, 1997).

The people who struggle to make a popular or impressive, physical first impression, such as SCIs, may find that the Net opens new dimensions that could increase attractiveness and the possibility of engaging relationships. As long as it remains hidden, their injuries do not influence the other online. They are not faced with the choices that people must make (e.g. should they squat down to chat with a person in a wheelchair, or remain standing?). They are not faced with the evasive eye contact or the staring of people that do not know what to do with an injured person in the room.

SCIs, in particular quadriplegics, have limited mobility and are often dependent on caretakers. Consequently, they are limited in their embodied states to contact others like them with whom they can share in their unique experiences. Offline social events are also limited for stigmatised people (McKenna & Bargh 1998). Online those limitations do not exist, and they are likely to find others more equal to them in their situations. SCIs that develop relationships online with similar others may develop deep sentiments towards each other and the group, since they can conveniently rely on each other online for emotional support and information.

Aside from the easy availability of support groups online, Barak and Wander-Schwartz (1999) found that people in therapeutic groups online showed positive support, personal disclosures, interpersonal sensitivity and group cohesiveness during the course of their therapy. The therapist in Barak and Wander-Schwartz's (1999) online treatment group observed faster developments of interpersonal

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relationships than she experienced in offline groups. These findings can be applied to cyber-communities for stigmatised people, communities in which these people feel at ease and supported.

Nguyen and Alexander (1996, p. 104) pose the very important question whether online equal treatment is authentic or whether it is 'virtual equal treatment'. Could this virtual equal treatment, which at first seems empowering, actually disempower Net users as they realise their hopes for the social technology are false? How would a minority feel, treated equally in anonymous cyberspace, but unequally in face-to-face reality where s/he actually counts as a stigmatised, but embodied person? The contrast and perhaps hypocritical nature of virtuality versus reality may serve to accentuate her/his stigmatised status. The Net may exacerbate the continuation of these stereotypes. McLeod et al.'s (1997) study points out that minorities are given more voice in online majorities, but their influence is much more reduced. This is most likely due to the reduced risk the speaker takes in an anonymous environment. Yet the McKenna and Bargh (1998) study seems to indicate that as long as stigmatised groups can form an in-group online rather than featuring as a minority, the reinforcements of support through in-group self-disclosure can lead to powerful offline ramifications.

Online SCIs, along with many others that experience trouble asserting themselves or otherwise interacting in social situations, can play by the different rules of conversational engagement that exist online. Social stigmas may be seen as barriers against effective access to the social phenomenal field. Consequently, people with stigmas may have a limited range of social experiences available to them, and are hindered from gaining valuable experiences, which could lead to better integration and increased complexity of their self-concept. It may be said that stigma limits their understanding of themselves and their social world. This may greatly affect the coping strategies they have for difficult situations.

An environment that allows for greater embodied equalisation, arguably offers more unconditional regard as far as those behaviours are concerned. In such a case, the person can move towards greater congruence as behaviours are accepted more

readily and s/he can actualise certain characteristics in a social environment less conditionally accepting.

2.5 Controlled self-representation

For some people, face-to-face social contexts can amount to a lot of perceived pressure to perform publicly. A clichéd example is the nervous public speaker. Online things are different. People are removed from the immediacy, the unpredictability of the social context. Anxiety provoking, non-verbal cues from the audience are not immediately available. At the same time, the audience cannot immediately notice the speaker's discomforts. Anonymity grants you more control over how you represent yourself. The text-based environment allows you to control much of what you let others know about you, even in the heat of the moment. The time lapse between typing something and sending it off, allows you to think about and plan your conversation. It makes the entire social context more predictable, more controllable and therefore less anxiety provoking and more agreeable as a social medium for many Net users.

Nguyen and Alexander (1996) argue that when people have greater control over their self-presentation, they are friendlier and more inclined to socialise. This is quite understandable when many people worry about unconsciously letting slip something embarrassing or disadvantageous.

Goffman's (1959) work seems a fitting explanation for why people enjoy the control over their self-representations online. People want to present a certain Self to others, which they feel will most likely be accepted (Ritzer, 1996). In offline self-presentation, factors outside of the actor's conscious control are numerous and contribute to a picture that may be unlike that which the actor is attempting to project. Take for example the nervous person trying to portray the bold adventurer. He belies himself as his voice quivers and a sheen of sweat breaks out on his forehead. Online that same actor has more control over those factors as the medium separates him from his audience and he can concentrate on the impression he is trying to project. The textual communication online allows the audience only to read what the person is

saying and to interpret the small amount of non-verbal information embedded in the message.

Goffman (1959) defined the process by which people attempt to control their self-presentation as *impression management*. Through impression management the actor attempts to ensure that his entire performance in the presentation of the Self is as flawless as possible. At the same time the actor and audience manipulate each other in such a way as to make the performance either a convincing or an unconvincing one. The willingness of each to collaborate with the other in a self-performance arises from the fact that everyone is simultaneously an audience and an actor engaged in a performance (Ritzer, 1996).

Offline disruptions of that performance by the audience can also be numerous, as people constantly refer to other contexts and information available to them. Online, Net users often have very little contextual information available to them, to disrupt the performance of the actor. They cannot refer to the clothes the actor might be wearing or his physique to judge him. They also do not perceive the actor in his natural environment to determine whether the information he is supplying is true or not. His mannerisms and demeanour as an adventurer are also not available to them to compare with the mannerisms of other people. *Self-representation* may accurately describe the greater control that an online actor has over the revelation of the Self to others.

The representation of a certain controlled Self by an actor online shows how the self-concept and its presentation can be manipulated in an environment with limited contextual cues. Any person attempting to actualise certain secondary self-concepts can make extensive use of such an experimental environment to test 'versions' of her/himself. The person unhappy with her/himself due to the effects of conditional regard may attempt to break from that regard by approaching similar groups online. In such groups the actors and audiences, in anonymity, lend each other support (more friendliness and willingness to converse) for attempting to exhibit behaviours and attitudes more similar to the way they would like to see themselves. When successes are perceived and self-esteem is boosted as greater congruence is

achieved, the person may move beyond those similar groups and experiment in other groups, until enough confidence exists for behaviours to be exhibited offline.

2.6 Role experimentation

Having discussed nicks, we saw that many people adopt certain names online that have personal meaning. Some of these people adopt a nick to represent certain characteristics and even adopt normally different behaviours to go with that nick, forming a unique surrogate identity online. Heim (1994) believes that many surrogate selves can be manifested in many different cyber-communities, much in the same way that we manage different roles and aspects of ourselves in different contexts.

'The construction of virtual communities creates atomised spaces as well as atomised selves' (Reid, 1998, p. 39). Online the different groups and communities that we belong to, can function extremely independently, where offline overlaps exist in our different social groups. This is due to the physical proximity of our embodied existence. Suler (2000b) urges caution in the maintenance of fragmented selves, an identity for each community that we visit online. Online, your different roles can exist in a fragmented way as you interact with people in isolated cyber-communities, in complete separation from others.

When our different roles and characteristics become so isolated and separated, when there are few people that can confirm our existence as a person with a variety of behaviours, then the Net user may experience self-concept differentiation. Here self-concept differentiation means that a variety of aspects are incorporated into the self-concept, but nevertheless remain unassimilated (Donahue, Robins, Roberts & John, 1993). For a detailed discussion of this conception of differentiation, refer to paragraph 3.2.3.2. The Self exists in relation to others (Gergen, 1996). If that Self is confirmed only by the separate characteristics exhibited in an isolated cyber-community, then little integration may occur across the general self-concept. This can have a variety of ill effects on the person's sense of well-being (Donahue et al., 1993).

It can be reasoned that when people we meet online only have a certain set of cues to draw on in an attempt to know you, then they will only interact with you based on those. When cyber-communities foster the development of a multitude of different identities in their isolated, unique contexts, then integration of the self-concept may become difficult. In this respect, offline physical proximity aids people to maintain a level of integration between possible selves, because we cannot wholly escape physically near individuals and groups. Our embodiment represents the core of everything we do, i.e. we can be identified with our different behaviours.

Role experimentation manifests from the moment that a person decides to use a nick online. Donning a certain name invested with certain characteristics may heighten the personal experience of those characteristics. Even those that do not make a conscious decision to experiment with their identity usually experience some freedom from their usual social norms, due to anonymity and the resultant depersonalised experience online. In the many MUDs, geared for identity play in a variety of entertainment genres, role experimentation is rife and can lead to the exploration of different personal aspects.

Apart from the nicks that people cloak themselves with and the assumption of fantastical hero identities on MUDs, the other prevalent experiments in roles online seem to be gender swapping. The reasons for the proliferation of this activity have been explored by many researchers (see Wallace, 1999 and Suler, 1999b) and seem to differ as much as there are different types of CMC. Online people can experience what it is like to be treated as the opposite sex, rather than observing treatment (Bruckman, 1993). This treatment can even be expanded to other identities: What is it like to be treated as a person without a spinal cord injury?

Role experimentation can take a variety of forms. People may represent or highlight certain characteristics of their self-concepts and hide others. Some people make up facts about themselves and others engage in wish fulfilment- emphasising their ideal selves. Although these activities say something about the people, it becomes harder for the other to place and understand the Net user when facts are made up or are an idealisation. In such cases the other will probably react to the vastly changed surrogate representation in a different way than to the representation of a person that

seems to represent an offline complex, embodied person. A convincing representation may be accepted better than an extreme representation and this conviction will possibly determine how the other interacts with the Net user, and ultimately how her/his reactions affect the nature of the Net user's self-concept.

Some Net users prefer to lurk, (taking no part in the conversations on a cyber-community) remaining nearly invisible to other Net users, while others are intensely active in cyber-communities. Others are simply 'themselves', representing in much the same way they present in offline social groups (Suler, 2000a). These differences depend greatly on what needs the Net fulfils for the person, particularly with respect to their self-concept.

Sherry Turkle (Rosenberg, 1997, p. 436) makes a powerful statement on the nature of Self and the place of cyber-self experiments:

> *'...People who assume online personas are aware of the lives they have created on the screen. They are representing different aspects of themselves and move fluidly and knowledgeably between them. They are having an experience that encourages them to challenge traditional ways of thinking about healthy selves as single and unitary.'*

We may surmise that Turkle feels that a new way of thinking about themselves is arising in Net users. Users are becoming very aware of the hand they play in self-representation online. This self-awareness may give them the freedom to explore themselves, typing out who they are, and what they represent. Such people may have greater insight when they find they act differently, sometimes hypocritically, in certain contexts. People may become more adaptable in different situations if they broaden their own horizons. Gergen (1971) alludes to this phenomenon as well. This will be discussed in Chapter 3 under the multi-faceted self-concept, which exists as a relational unit rather than a construct.

Role experimentation may serve to extend the experience of Self- to know different aspects of the Self, to integrate those different aspects and to know oneself in different contexts. Experimenting in this way can lead to greater complexity in the

self-concept rather than differentiation, which allows the person to cope better with life stressors (Baron & Byrne, 1997; Donahue et al., 1993). This may only happen when opportunities exist to integrate the different exhibitions of behaviours and identities.

The discovery of an online environment that facilitates such identity play may support the perception of greater unconditional regard, which in turn will support the person's tendency towards actualisation (Meyer et al., 1997) and a more congruent self-concept. The online environment seems suitable as such a catalyst, but factors countering such positive realisations are the anonymity, disembodiment and depersonalisation online. These can make the interactions between the Net user and her/his social phenomenal field appear less authentic and less powerful, or important in their lives; consequently undermining such achievements. Only when the Net user can interpret online discoveries as personally and significantly relevant, can the person integrate those discoveries into the self-concept and move toward greater self-acceptance and congruence.

A SCI may have a variety of reasons to engage in role experimentation. The wish to be treated as one without injury and stigma may be great and can be achieved relatively easy online. The person may feel hindered in actualising her/himself as a person of worth by the limits that others impose on them. Their self-esteem may easily suffer as a result of these conditions of worth. Without stigma, their other characteristics can be better manifested in relations to uninjured people, and their potential as intellectual and emotional equals to uninjured people can be tested. SCIs may even find that they can explore (with greater mobility, independence and equality), more issues such as sexuality, courtship, intellectual debate and friendship with the uninjured. They may do this across a broader spectrum of people than they might otherwise have been exposed to offline.

As they realise their successes in such an environment, they may experience a rise in their self-esteem, as they come to appreciate themselves more positively. They may even manage to integrate larger parts of their self-concepts, as they feel lesser discomfort about their injuries in the presence of uninjured people, and can accept their physical self-concept more readily. The influence of these possibilities on the

SCI's self-concept may be startling and deeply moving, with lasting changes on and offline.

2.7 Net demographics

Two demographic aspects online should be mentioned. Firstly, male users largely dominate the Net (GVU, 1998; Krantz & Dalal, 2000; Savicki, Lingenfelter & Kelly, 1996; Sempsey, 1995). This comes as no surprise, since men often choose careers and hobbies in the traditionally male domain of science and technology. Gender roles can be explored online, with little fear of social ramifications. Changing attitudes through new, direct experiences of one's and others' gender can lead to changes in the self-concept. It may be argued that offline males have traditionally been prevented from exploring their feminine sides by the stereotypes and expectations of their cultures, families and friends. Some of these males may strongly identify with women (Suler, 1999b) and can actively explore their feminine aspects online. Online, men can easily explore more expressiveness and traditionally more feminine aspects, protected by the anonymity (Mickelson, 1997).

Secondly, a large group of the Net population falls between the ages 21-35 (GVU, 1998). This presence may reflect the many free accounts university students get, the changing job market, orientated towards information technology and perhaps the greater optimism and willingness this age group has towards this new technology. This group may also be using the Net largely, due to the high degree of job-mobility they need to maintain. At the same time, their use of the Net may also be reflecting their need to maintain contact with social circles that include Networks of strong and weak social ties.

Twenty-one to 35 year olds often wrestle with major life changes and personal demands. Consequently, an environment that allows them to experiment with different ways to react to their phenomenal fields may be attractive. The period of grace given to teenagers and young adults (Meyer et al., 1997) to resolve identity crises may possibly be extended online; where accountability is limited and many attitudes and behaviours can be manifested without ramifications. Individuals dissatisfied with themselves, because of their failures to resolve difficult issues in

earlier periods of development, can now adopt behaviours not experienced before and test them without causing severe reactions from those surrounding them (Wallace, 1999). Online a second period of grace can be effectively achieved. Consequently, individuals may discover behaviours and attitudes that they identify with, with greater satisfaction. With enough acceptances, they will begin to exhibit those behaviours and attitudes more freely, achieving greater integration and complexity, enhancing self-esteem and their ability to cope with a stressful environment.

2.8 Disembodiment

When one is, metaphorically speaking, unattached to one's body, one may feel less accountable and responsible for one's actions, because the body, in so many ways the essence of our mortality, is safe from harm. Engaging in cognitive and imaginary activities, our bodies seem to become irrelevant, as we are absorbed in the task at hand. This appearance is only on the surface; everything is processed through the body, including the range of feelings we experience online. Nguyen and Alexander (1996) argue that our embodied experience of our environment characterises our feelings, thoughts and values. This appearance only manifests so strongly because our body constantly deals with important issues in ways that we hardly notice.

Dreyfus (2001) presents a reminder of our bodies in the age of cyberspace:

> *'...our body works silently in the background. Its ability to get a grip on things provides our sense of the reality of what we are doing and are ready to do; this, in return, gives us a sense of both our power and our vulnerability to the risky reality of the physical world. Furthermore the body's ability to zero in on what is significant, and then preserve, that understanding in our background understanding, enables us to perceive more and more refined situations and respond more and more skilfully; its sensitivity to mood opens up our shared social situation and makes people and things matter to us; and its tendency to respond positively to direct engagement with other bodies, underlies our sense of trust and so sustains our interpersonal world'* (pp.71-72).

Comparing on- and offline reality, one may see that one important dimension of embodied presence is an establishment of trust and bodily intimacy. This is, amongst others, a connection between others and the Self in a social phenomenal field. We have seen that researchers have found that trust can be established online through self-disclosure, but the depth of that trust is questionable. That depth is particularly doubtful when trustworthiness and intimacy often need to be confirmed by Net users meeting face-to-face (Argyle & Shields, 1996; Rheingold, 1993). Weisband and Atwater (1999) encouraged support for the necessity for people to meet face-to-face if they were going to develop a liking for and trust in each other. The sensitivity that people have for disembodied deception often leads to a stage when one participant feels that it is time to meet face-to-face for *bodily* confirmation of the other's real identity (Hamman, 1996; Suler, 1999b; Wallace, 1999).

One can perhaps make the distinction between your stand-in Self (Heim, 1994) and your embodied Self. The stand-in Self, your Net identity, which includes all the characteristics embedded in your nick, *represents* you. However, your *present* Self is your embodied, personal identity. It has *presence*, something only other embodied people have direct access to. Your bodily existence is important in that it is the source of your personal identity and individuality (Heim, 1994). You are a body, a *somebody*; separate from all other bodies (*anybody*). It is your boundary in a world, where it is easy to distinguish your personal space. Online, you manifest a surrogate body, identified by your representational nick or e-mail address. It does not occupy a specific space and does not have boundaries. That stand-in Self lacks the vulnerability, fragility and primary identity, which your presence confers to other bodies (Heim, 1994).

The present, embodied Self is the tangible you (Dreyfus, 2001). In face-to-face reality somebody has a more complete, more authentic 'you' available with whom to build a relationship. Online all that a user has to go on, is what you represent. In offline reality, the embodied relationship is an exchange of vulnerabilities embedded in non-verbal cues that communicators have no control over. To exchange those vulnerabilities conveys a trust, as each communicator progressively establishes that the other keeps those vulnerabilities safe (Dreyfus, 2001). This exchange of trusts through verbal and non-verbal cues makes for an embodied, authentic and

committed relationship (Nguyen & Alexander, 1996). In the words of Heim: 'The living, non-represent able face is the primal source of responsibility, the direct, warm link between private bodies' (1994, p. 75).

Your surrogate identity/ties (Heim, 1994) or your puppet/s (Stone, 1994) online might still be passable as a manifestation of you online, particularly if others relate to you in that way over a longer period of time. This is especially so when people treat each other and their cyber-communities as virtually embodied online (Stone, 1994). The difference must be kept in mind that these are *imagined* bodies and places. This fact is extremely obvious when surrogates or puppets flit through cyberspace with no special connection to their Net users, i.e. when the user has developed little emotional attachment to his cyber-surrogates. Dreyfus (2001) refers to the actuality or authenticity of committed action in an embodied world that is missing in cyberspace, where opinion rather than embodied necessity plays the larger role.

MacKinnon (1997) also poses a strong argument in favour of this evidence of the superficiality that manifests in puppets and places. It is a reminder that not everyone conceives of her/his online identities as a powerful self-representation. MacKinnon (1997) refers to the case of Mr Bungle in a powerful article *Virtual Rape*. In it, the disembodied state online is the central theme and it asks the question whether a rape can actually occur when physical assault is not possible. He effectively draws on feminist theory to illustrate that rape is a social and psychological construct. The physical sphere only plays a small part. He argues that in effect, everything psychological is experienced in the body as well. Interestingly he states that the effectual death sentence meted on the Mr Bungle character bore hardly any impression on its Net user. His reaction was that it was purely a sequence of events not affecting his real life existence (Dibbell, quoted in MacKinnon, 1997).

This case depicts that an embodied paradox seems to exist online that must be resolved in order to understand the full ramifications of disembodiment on the physical self-concept. Some Net users may perceive disembodied actions as affecting their physical self-concepts. Other users, those seemingly uncommitted to their virtual existences, may experience hardly any effects on their physical self-concepts. Perhaps this committed/uncommitted virtual existence lies at the core of

the roles that cyber-communities may or may not play in a person's self-concept. The virtual existence of a person seems to depend on how much effort the person puts into representing her/himself online and how important continued existence is to him/her through ongoing interaction with others in a cyber-community.

Whether he is hiding behind a façade of nonchalance cannot be known, but the fact that many users adopt a transient, rather than a semi-permanent or permanent, residence in cyberspace cannot be denied. Those wanting to develop their online identities, like Bechar-Israeli (1996) pointed out, need to do so in the social realm of cyber-communities. They need to build reputations and relationships online to confirm their existence in the imagined embodiments and memories of other users. To anger other users, as Mr Bungles did, is to commit a virtual suicide, a denial of the surrogate self by attracting complete ostracism. This, argues MacKinnon (1997), is the crux of the matter between embodiment and disembodiment: For those preferring transience, there is every way out of any situation for which you may be held accountable. Without physical presence, emotions may still be felt, but other social effects, such as social punishment, effective in offline life, are easily changed. The perpetrator need never face anyone, is comfortable that no one knows him or her, and can move on with complete ease to the next cyber-community. Transience, rather than a sense of belonging, becomes the norm for that person and it is unlikely that the community will have any major impact on such a person.

The depersonalisation embedded in that anonymity, for better or worse, also leads to a loss of accountability. What happens in a world that is a 'consensual hallucination' (Gibson, 1984)? This etherealness may pose a threat to our identities, simply because anything established about ourselves in cyberspace, may not hold particularly well in offline reality. Heim (1994) for example, argues that a lurker, who does not get involved in online communication, participates superficially, as opposed to the offline present person, who communicates to others at least *some* non-verbal cues just by being present. The ephemeral, surrogate body in cyberspace attempts to establish a dichotomous existence- the illusion of presence, but at the same time maintaining a distance. In offline encounters, when we assume different characteristics of our identities, it still means that we have to maintain a bodily closeness in the communication. That closeness still communicates that there is

more to us than our current role. The authenticity of communication caught in this cyber-dichotomy must be questioned.

Researchers show concern for the disregard of the body (our embodied world) in favour of the mind (disembodied cyberspace experience), and the neglect of embodied social ties in favour of convenient and controlled social ties online (see Bromberg, 1996; Kraut et al., 1998; Nguyen & Alexander, 1996; Rosenberg, 1997. The Internet paradox (Kraut et. al, 1998) of a social technology, which actually enhances offline loneliness and social withdrawal, also furthers non-virtual disempowerment, isolation and alienation (Bromberg, 1996). Other researchers place a different emphasis on the issue of embodied communication (see Argyle & Shields; 1996; Bromberg, 1996; Rheingold, 1993). They feel that signs like Net users developing emoticons and adopting language that transfers deeper meaning over the Net, show us that people are taking the initiative to inhabit cyberspace with greater authenticity and depth. A user experiencing a variety of emotions online with depth seems to be a positive sign for authentic relationships. Yet, the evidence against authenticity online and the development of intimate relationships, without offline confirmations, is strong.

Argyle and Shields (1996), argue that there are ways that we may present to each other our bodies over the Net. They believe this may be done in a holistic manner. Technology is *only* a mediator for communication. As argued above, we cannot *present* to others over the Net, only *represent*, a rehash of what we think we are and what we think we should self-represent to others. We portray aspects of ourselves that we believe others will find attractive, but it may often be that in an embodied world, others find characteristics in us more charming than what we actively display and are aware of. Argyle and Shields (1996) correctly argue that our bodies cannot be escaped when interpreting information from others. It is questionable that a represented smiling face :-), is as powerful an interaction as a real smile, which encompasses a much larger range of feelings. Even if our imagination and memories invest an emoticon with embodied emotions, the immediacy and the physical presence of such an interaction is broken.

An integral part of our self-concept is our body-image and what we believe others to think of our embodiment. Our physical self-concept will be discussed at a later stage. For now, disembodiment is difficult to manifest in the true sense of the word, since our self-concept (and our physical self-concept) is an integral part of our interaction with others. Online disembodiment may mean that the user is temporarily freed from the physical presentation s/he must manage in social interactions. For the SCIs, this may mean the world of difference. On the one hand, online interactions may heighten self-awareness, but on the other they need not focus as greatly on the uninjured other's reaction to their physical state. Instead they can mobilise other characteristics of the self-concept in the interaction and experience a more rewarding conversation.

In this way, a larger variety of people may become influential in their lives and involve the SCIs in more experiences. This can eventually lead to greater positive self-regard, self-esteem and a more complicated and integrated self-concept, geared to handle a variety of different situations, particularly social situations.

This ideal state of affairs may be undermined by the continued necessity of embodied contact to develop deep levels of trust and intimacy. For others to conceive of a person as trustworthy, a physical, embodied concept may be needed. When interactions often lead to mutual, truthful self-description online or offline, and others discover that the SCI is actually injured, they may feel a sense of betrayal, since the SCI may have been imagined closer in likeness to the communicator. When that fantasy is betrayed the other Net user is likely to feel deceived and disillusioned about future prospects of likeness and can end the communication. The represented, virtual, limited Self, manifested nearly independent of the SCI's physical self-concept exists in tension with the presented Self. The SCI may be walking a tight rope between an experience of equality and greater social interaction through a representation and presentation where physical facts are included. Presenting may not be fully conducive to equal treatment, but at least the SCIs get to interact with others in a more fully integrated way. Are they accepted for what they portray, or can they be accepted for whom they really are offline?

Embodied committed action may have greater influence on the self-concept than disembodied and lessened commitment. When you can be positively identified with

actions, you may be more likely to maintain them, for better or worse. You are then also more likely to integrate your new behaviours into the self-concept according to dissonance theory (discussed in chapter 3). When accountability is lessened, your changed or new behaviours and attitudes may be more readily abandoned. In this way, disembodiment may also undermine the integration of new characteristics into the self-concept. The characteristics may seem ephemeral and due to the environment, not you. This may be regarded as much less important than offline developed characteristics.

Realistically framing the issues of embodiment and the development of personal relationships, we are likely to find that mediated communication, at its best, complements offline relationships. Kraut et al. (1998) found that CMC leads to greater feelings of loneliness, isolation and depression. We must however, also recognise the fact that our increasingly mobile and transient industrial societies may also be leading to those same feelings. Especially so, when society is structured in a way that does not facilitate habitation and social interaction (Stone, 1994). Is it any wonder that people attempt to stay in contact, using mediating technologies such as telephones and cyberspace? Even if it is not the ideal, they can at least stay in touch with offline relatives and friends. For the social scientist, it is a matter of studying the trade-offs that people make and not to confirm or disprove the various sides of a dichotomy, which resembles the nature versus nurture issue.

2.9 Information and experience saturation

Gergen in *Technology and the Self* (1996) argues that technology, particularly communications technology, dismantles the inner world of the Self. That inner life is characterised by one's reasons, opinions, motives and personal passions. To lack these is equivalent to erasing one's identity. By increasing the presence of others, most of all those outside of traditional geographic communities, technology challenges the separateness of the inner world from the outer. We are increasingly exposed to the world of others through technology and becoming caught up in a socially saturated world. This exposure occurs firstly, by the ever-expanding vocabulary of being, which we attempt to integrate from others, other cultures and other communities. We are enveloped by a multitude of understandings. The

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increasing intrusion of the outer-world through relatedness and interdependence (Gergen, 1996) may exercise greater force on the self-concept to adapt to the outer-world by either differentiating or integrating towards complexity.

The proliferation of information (the external world of others), rather than knowledge (the inner world of the self) suggested by Heim (1994) and Nguyen and Alexander (1996) may also be indicative of this situation. This accumulation of possibilities into the interior experience could culminate in an alienation from the Self and a sense of depersonalisation in a highly fluid world.

Cyberspace and individuals' uses of it (and perhaps other social technologies) should be guided by the realisation that the Self exists in relation to others (Gergen, 1996). It is only by establishing interdependence of the Self with others online that the individual will reap the benefits of such large-scale social exposure. An acceptance of the Self as part of the greater whole may make the integration of a large amount of self-relevant information easier; thus moving towards complexity of the self-concept. To pursue group-cohesiveness over selfish personal gratification should lead to an enriched life rather than an impoverished one (Wallace, 1999).

Dreyfus (2001) puts forward a similar argument that the virtual public sphere results in a multiplication of concerns that should not really concern people, since those virtual concerns are not anchored in the specific, embodied life world of the person. Instead, those concerns are various interests, ripped from other localities saturating the person with information, which divides her/his resources for committed action and eventually disempowers him or her and results in despair.

The changing phenomenal field may have severe implications for the self-concept. The communication technologies that are making many more behaviours and attitudes available, which are not necessarily anchored in the person's immediate surroundings, also augment the contexts of the behaviours and attitudes. Experiences of the world at large are often mediated technologically and these mediated experiences may affect the person in different ways than embodied experiences of the same occurrences.

The person accepting her/his relational place with others and the outer-world may likely establish a greater sense of belonging online and thereby reap the benefits of cyber-communities. S/he may be the one interacting with others with less inhibition and greater self-disclosure, developing alternative selves in a variety of different situations, and perhaps completing greater integration of the self-concept.

It seems that the person should take care not to confuse information with knowledge and that knowledge should be grounded in her/his embodied offline world and needs. This should ground the person's experimentation with self-concepts and may perhaps lead to more favourable self-insights and self-esteem, which may culminate in a fuller actualisation of the Self, increased self-esteem and positive self-regard in the embodied world.

These arguments pose very important questions about the long-term effects that such an interactive worldwide and accessible technology may have on the individual and her/his communities. Could the alienation from communities, the depression and isolation as argued by Interrogate the Internet (1996), Kraut et al. (1998) and Nguyen and Alexander (1996) be a symptom of this saturation?

2.10 Cyberspace, imagination and the cyber self-concept

Cyberspace has been described as a 'consensual hallucination' (Gibson, 1984). The term is not far off the mark; the Network systems of information technology are invested with a great deal of imagination. We speak of chat rooms and communities, of all the wonderful people that we have met online, all the great places we have visited. In fact, a very large part of that experience is an amalgamation of the information, the technology and our imaginations. 'Fantasy is what drives the relationships in online chat rooms' (Hamman, 1996, p.2). This is not the first technology where small amounts of cues lead to complex fantasies, says Stone (1994), when she compared the narrow bandwidth effect of cyberspace with phone-sex interactions.

Mark Lajoie (1996) uses the analogies of object relations to place the power of this imagined space into a context. Users, in a sense, may idealise other Net users to a

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greater or lesser extent. Since t[illegible] ground fantasy and desire online, [illegible] object, fulfilling whatever desires of the user. Virtual space is ideal for this to happen, since there exist almost no tangible consequences for their actions and it is an environment that seems all-permitting. Lajoie (1996) radically argues that the move to inhabit a symbolised world is a way of rejecting an embodied existence that demands realistic attention.

The reality of the situation is not so morbid. Most people balance their online communications with their offline lives. Lajoie's (1996) work does explain why people are so often completely disappointed when meeting online friends or romances face-to-face for the first time, as Hamman (1996) and Wallace (1999) point out. Users are willing to play along in the dramaturgy of cyberspace, they are willing to fill in the gaps for people representing themselves, precisely *because* there exist so many gaps to fill.

The imagination, in conjunction with self-disclosure, plays a large part in personal attraction online. People feel more attracted to each other when the proportion of similar attitudes they have is greater than dissimilar attitudes (Baron & Byrne, 1997; Wallace, 1999). In cyberspace, where there are fewer environmental cues to help us figure out if we have more in common with the other users, we will often fill in the gaps with imagination (Hamman, 1996). This could be why relationships often develop and then die out very quickly online (Wallace, 1999). Once topics of self-disclosure move beyond the realm of cyberspace and a shared interest, when disclosures are made about the personal embodied world, Net users may quickly find that they do not have anything in common. It is important to note that this fact is most apparent in cyber-communities that do not focus on shared interests embedded in the physical world, for example IRC. Mailing lists and support groups, for example, are anchored in offline interests and can therefore carry a relationship further.

In the discussions above, the concepts of a cyber-puppet or online surrogate self have been suggested. It may be quite possible that in this unique environment of cyberspace, people adopt altogether unusual characteristics in their self-representations. People adopt a variety of roles in a variety of different contexts in their day-to-day lives. In this way, they accentuate different characteristics of their

self-concepts, according to the reinforcements that they receive in those different situations. Cyberspace is not just another context; it is a different environment, as the observed changes in social behaviours above have shown. When the social context changes, the internal world of the Self can change as well (Gergen, 1996), since the internal world is so closely linked with the phenomenal field.

Cyberspace is a largely disembodied realm, where social experiences are not only changed, but are invested with a large amount of creativity and projection from the inner world of the Self. The online phenomenal world can be more tainted by the inner-world of the individual, because the limited cues available allows him/her to project or imagine characteristics. That taint indicates the increasing fluidity mentioned by Gergen (1996) between inner and outer boundaries of the Self. It may be possible that the person experimenting with self-conception in such a fluid environment is more likely to experience it as more unconditionally accepting than offline relationships. S/he can manipulate the conditions through some degree of imagination, a play which others may be willing to engage in along with the Net user and in this way create conditions that s/he may experience as less conditional.

2.11 In conclusion

Findings often seem conflicting at this stage of social Internet research, perhaps because the Networks between the variables have neither been fully discovered nor understood. The Net is riddled with paradoxes, much in the same way that offline life is. On the one hand technology can be seen as a source of separation; but on the other, although the experience is disembodied and deceit is a common occurrence, it also brings people together (Shields, 1996). The variety of different cyber communities and software that support them may also be one reason why the research seems so conflicting. What may hold true for one cyber-community may not hold for the next. The confusion about the paradoxes of this environment may only be such an issue, because it is a social environment that seems more separated from us than the embodied social environment. We do not directly live online, but interact with the technology and virtually experience others. Often social scientists seem to either take a distopic or utopian technologically determinist stance in their

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loading the situation with predict[illegible] 1997; Hakken, 1999).

Below is **Figure 1: Important behavioural occurences in CMC**, a diagram that summarises the salient issues of cyberspace. The diagram depicts the flow of issues that may arise once a person logs on. People will experience these issues to greater or lesser degrees, depending on their usual approaches to social situations. Some of the issues are connected. It must be kept in mind that many of the phenomena are not yet fully understood.

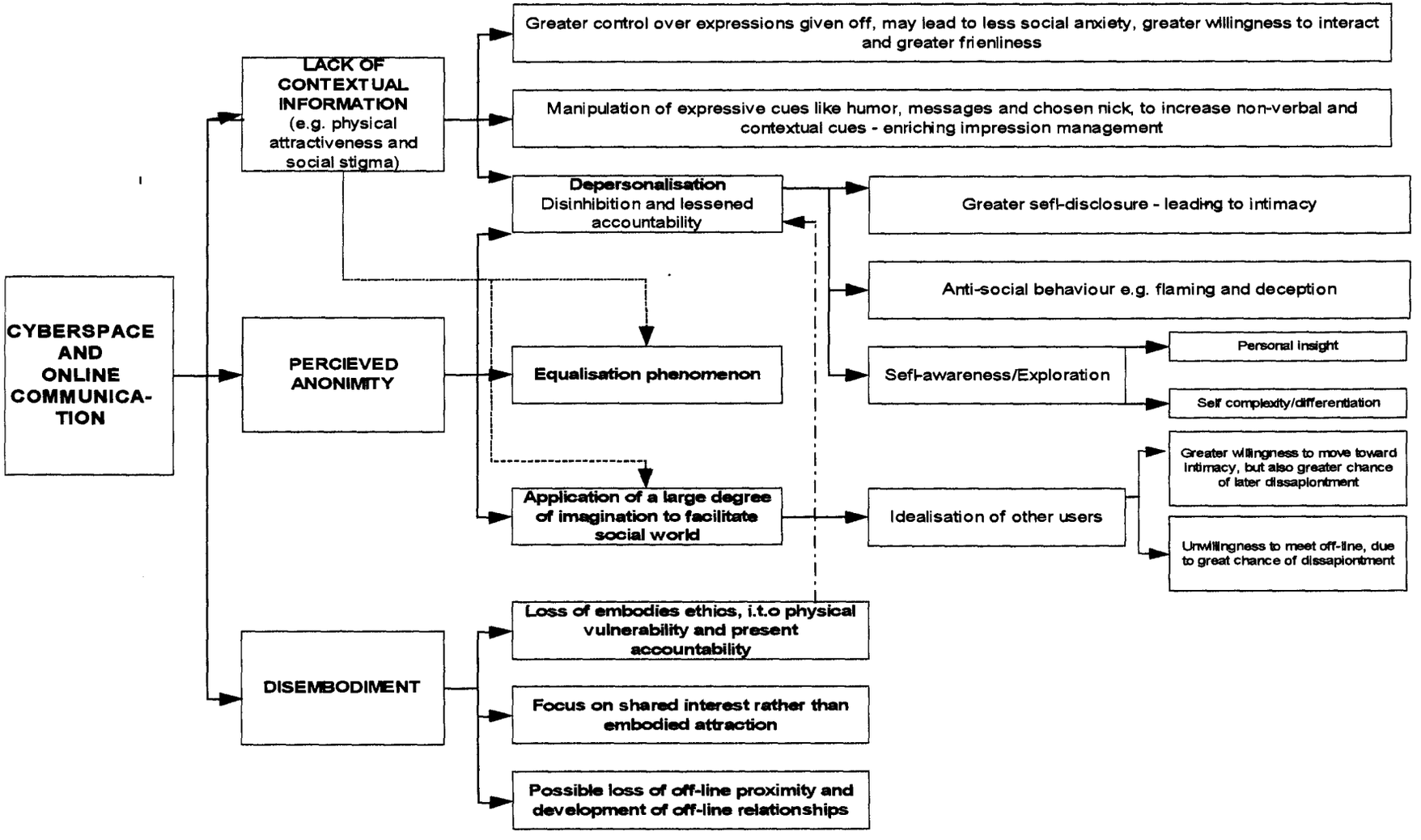

Figure 1: Important behavioural occurrences in CMC

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Chapter 3

The self-concept

3.1 Introduction

The aim of this chapter is to integrate the various, important elements of self-concept theory into a usable model for the understanding of how CMC can affect how people see themselves. It must be emphasised here that the self-concept of the inner-world does not exist separate from the outer-world of the phenomenal field (Gergen, 1997; Meyer et al., 1997). The Self is constructed from the meaningful relationships and experiences surrounding the developing person (Ritzer, 1996). Consequently, it may be wise to take into account the contributions that social psychology and social constructionism have made to our fuller understanding of the importance to psychology of the outer-world. Where self-concept theory has developed the language of the internal processes occurring as a person internalises the outer-world, it sometimes lacks a detailed description of the phenomenal field that impacts on the person so meaningfully.

Drawing on some aspects of social constructionism and social psychology may provide a bridge between the important discussions of the outer-world, such as cyber-community, and the internal processes, such as experience. The phenomenal field is a result of our interaction with an environment in which common understanding and action mingle. The experienced phenomenal field is that reality from which our self-concepts first arise, and in which we later act and influence others as well.

The continued importance of self-concept theory and the description of the inner-world of the individual, specifically with the advent of new communication technologies, must be emphasised. The self-concept is important to the individual in three ways (Gergen, 1971):

1. The individual develops a concept of Self in an attempt to assess personal characteristics, which may be conflicting with, or appealing, to the group. It also

serves an important purpose in helping the individual weigh her/his capabilities in situations.

2. It helps the person conceive of her/his general attributes, so that knowledge about oneself can be accumulated instead of constantly relearning them. Having general attributes to which one can refer, prepares one better for new experiences.
3. The efficiency of human communication is also greatly increased as self-concepts and the presentation of those concepts, facilitate the building of relationships between people.

The psychological importance of these three functions in determining a person's behaviour and Self must not be underestimated. Cyber-communities as technological occurrences may play an important role in the changing inner life world of the individual. The relationships that play a role in a person's core experience of her/himself can eventually maintain new and different behaviour both on- and offline. This is because the user often experiences other regular users in some cyber-communities as significant others. Once the user has discovered relationships online that are rewarding, s/he may perpetuate those positive experiences.

Gergen (1971) points out that it is necessary to understand that the self-concept is actually a hypothetical construct, which explains certain phenomena we observe. Even after so much research has been done, it must be recognised that it is a simple construct of a complex issue. For example, if we are asked to describe ourselves [the self-concept is after all a self-theory (Epstein, 1973) or a self-understanding (Martin & Sugarman, 2001)], we tend to have a wide variety of different, even opposing views of ourselves. These various descriptions have led to a variety of ways in which psychologists attempt to describe what the Self may be and how self-conception should be described. The self-concept should be understood as a multi-faceted, fluid concept of human sentience with many identifiable aspects playing parts in a still inadequate scientific description of something that is not concrete. The term Self is understood as 'the ability to look at oneself as an object; the Self is the peculiar ability to be both subject and object' (Ritzer, 1996, p. 341). The Self is the subject's ability to view her/his personal attributes as a *separate* entity, while at the same time *being* that entity. The Self develops from social activities and relationships. It is a

self-understanding that reveals a [illegible] field (Martin & Sugarman, 2001)

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The self-concept will be discussed firstly in terms of Gergen's (1971) framework of the self-concept. Afterwards we will turn to the various facets of the self-concept that have been identified, but which are nevertheless inseparable from the whole concept. The salient issues revealed in Chapter 2 will be woven into the discussion in such a way that the reader comes to terms with self-concept theory as it may be applied to cyberspace.

3.2 A conceptual framework for the self-concept

Gergen (1971) in *The concept of Self* proposes a comprehensive framework for understanding the self-concept in its many aspects. The central issues discussed by Gergen will illustrate a framework for the self-concept and the online phenomenal field's effect on it.

3.2.1 The senses, perception and experience: The self-concept

A dilemma that self-concept researchers face is what area of the self-concept they will focus on. Will they focus on the process in which experiences are assimilated or will they focus on what is assimilated? Working with the two facets will encompass so many factors of human existence that the information collected will seem dispersed and scientifically unfocussed (Gergen, 1971). The focus of this research and self-concept theory lies mainly in the subjective experiences of the individual's reality and not her/his sensory experiences. The subjectively experienced world is the phenomenal field of the individual and includes the totality of *perceptions* of sensory experiences as they relate to the person and the *meanings* attached to those experiences (Meyer et al., 1997). For example, one SCI might experience his injury as 'debilitating', where another might describe it as an 'eye-opener'. Both have access to similar sensory experiences, but the perceptions and meanings are different.

Stimuli from the environment can only be described as experiences of the phenomenal field once the individual incorporates the sensory information as significant and categorises the information as relevant to the person. It could be understood that once this information is interpreted in this way, it influences people's interpretations of themselves and their actions.

Of concern in CMC is the self-relevant information the user gathers in social situations online, and how s/he deals with that information. Understanding this complex issue will contribute to our understanding of a Net user's development of intimate relationships online. What environments, which people and what information does the SCI choose as relevant and important to her/his needs? Virtual non-verbal cues have been developed, but these still cannot compare to the vast range of non-verbal cues immediately available to all the person's senses (Argyle & Shields, 1996; Mitchell, 1995; Nguyen & Alexander, 1996; Rheingold, 1993; Sempsey, 1995; Suler, 1998). The potential for research into the person's sensory experiences of the Net exists, but for now we will deal only with what has been already perceived and experienced.

3.2.2 The processes and structure of the self-concept

To understand the hypothetical concept of Self, we must break it down into two complimentary and deeply entwined facets, namely its structure and its processes (Gergen, 1971). The terms are difficult, if not impossible, to completely untie. Their entanglement is the essence of the self-concept. For clarity's sake, we may speak of structural components and processes; but realistically speaking, one cannot speak of one without the other (Gergen, 1971). The self-concept is made up of various dimensions such as the general or core self-concept; secondary components, such as the social self-concept and other components, such as the everyday roles we play. These components are only separated for convenience of explanation and will be discussed later. To illustrate how complex the self-concept can be Shavelson (Oelofse, 1996) shows that individuals categorise and simplify complex everyday experiences internally, thereby reconstructing their phenomenal world internally. Therefore it can be said that it has hypothetical, structural properties (in the form of categories) that lend it stability and therefore permanence.

The processes of self-conception are the integration and comparisons of characteristics. Where structure is the parts that the self-concept is composed of, the processes of self-conception are the relationships between those parts and the incorporation or movement of perceptions from the phenomenal field into the system of self-conception (Gergen, 1971). Self-esteem may be understood as a process of self-conception, since it indicates the evaluative or comparative relationship between the parts. These processes can be said to organise self-relevant information and structures according to the *perceived* demands of different contexts. For example in a social situation, processes of self-concept will heighten the importance of socially relevant schemas, rather than for example existentially orientated schemas.

Oelofse's (1996) work can be integrated with Gergen's (1971) framework. He states that the different structures of the self-concept are neither interchangeable nor identical, precisely because they can be identified as distinct parts of the self-concept. He also stressed that '...the self-concept is not a collection of parts but an organisation of parts' (Oelofse, 1996, p. 34). The parts of the self-concept can be argued to be its structure, where the organisation of these structures is by a continuing process of integration of the phenomenal field and an evaluative process-self-esteem.

When studying the role that cyber-communities have in the SCI's understanding of her/himself, we are interested in how the person interprets cyber-community experiences in understanding her/himself. The role of cyber-communities in the SCI's self-conception can be better understood by how far up the self-concept hierarchy (Byrne & Shavelson, 1986; Oelofse, 1996) new information and experiences are integrated. One of our interests is whether relevant experiences are integrated into the self-concept on a deeper, more stable level than just a role or context specific self-concept.

Two diagrams from different researchers may aid us in understanding the theoretical structures and processes of the self-concept. Both diagrams indicate different categories, with group characteristics, indicating a structural view of the self-concept. Figure 2 indicates that the self-concept may have a number of categories, which function simultaneously in the person's self-conception. Figure 3 indicates different

levels of self-conception, which can be activated as contexts demand. It also indicates that evaluative processes may 'channel' the importance of certain categories. Both diagrams are accurate descriptions of the self-concept, but focus on different aspects of this complicated concept.

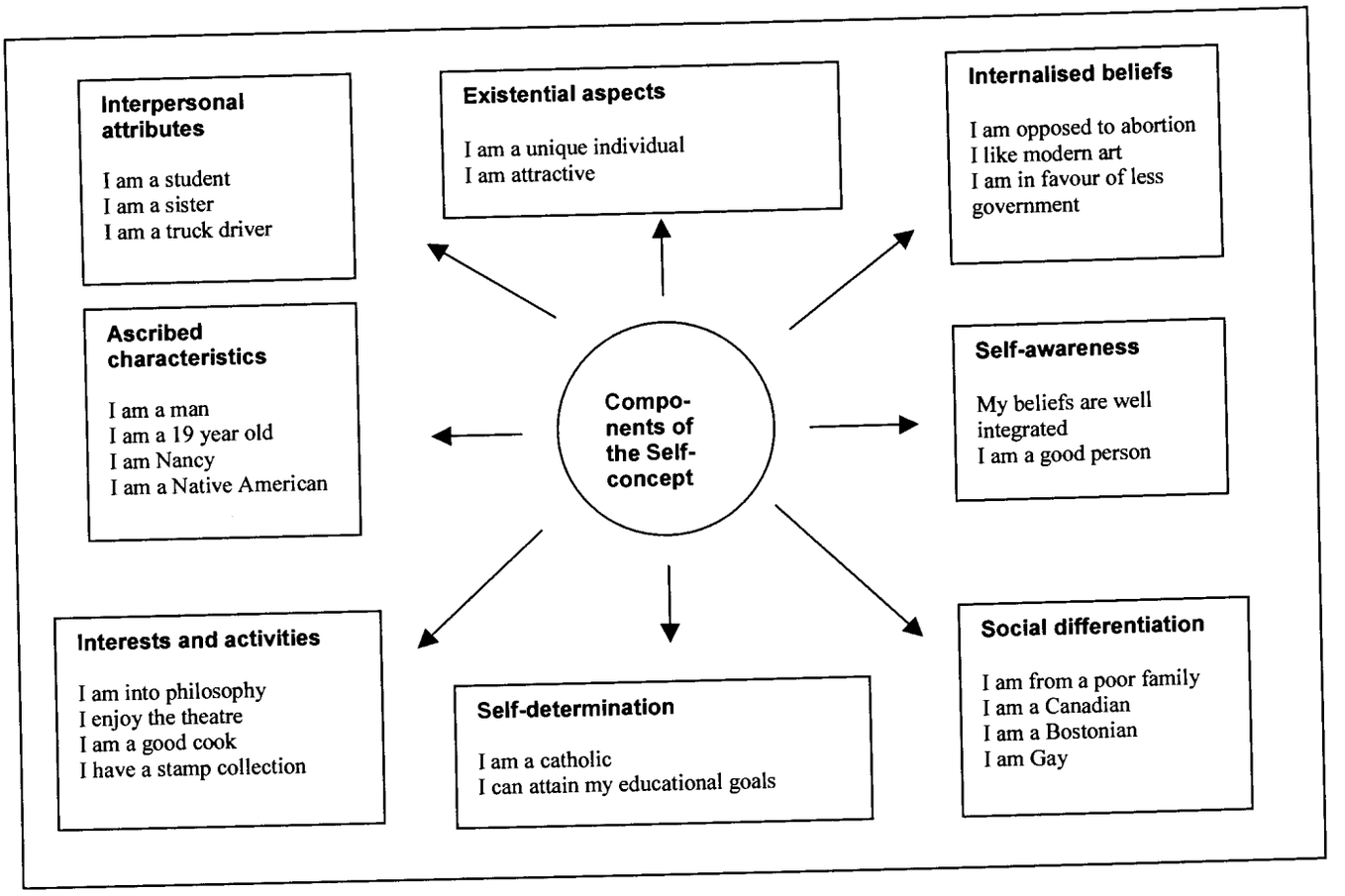

Figure 2: Components of the self-concept (Baron & Byrne, 1997, p. 154)

This figure is based on the findings of Rentsch and Heffner (Baron & Byrne, 1997). They found that the specific content of the self-concept differed dramatically, but the structures of the self-concept across their respondents were the same. The descriptions of the Self above, point out how complex the issue of the self-concept can become, since each structure can hold many different descriptions. It may be assumed that there will be a process of comparisons between those characteristics for the individual as s/he evaluates which characteristics are most relevant to a specific situation.

The above diagram does not adequately depict the evaluative nature of self-conception and the levels of theoretical concepts that may exist in the self-concept. It does not incorporate the levels of importance a person can attribute to characteristics. The individual weights descriptions of her/himself hierarchically. This may well depend on the demands of the situation and on the person's goals, motivations as well as socialisation. For example, I might consider myself a good swimmer, but I would only use this description of myself in a situation where that skill is relevant. This conception of myself would fall under my physical self-concept, with all its other characteristics, but would have very little bearing on my self-conception when surfing the Net for like-minded science fiction readers. This weighting of various Secondary self-concepts of Self can be represented as follows:

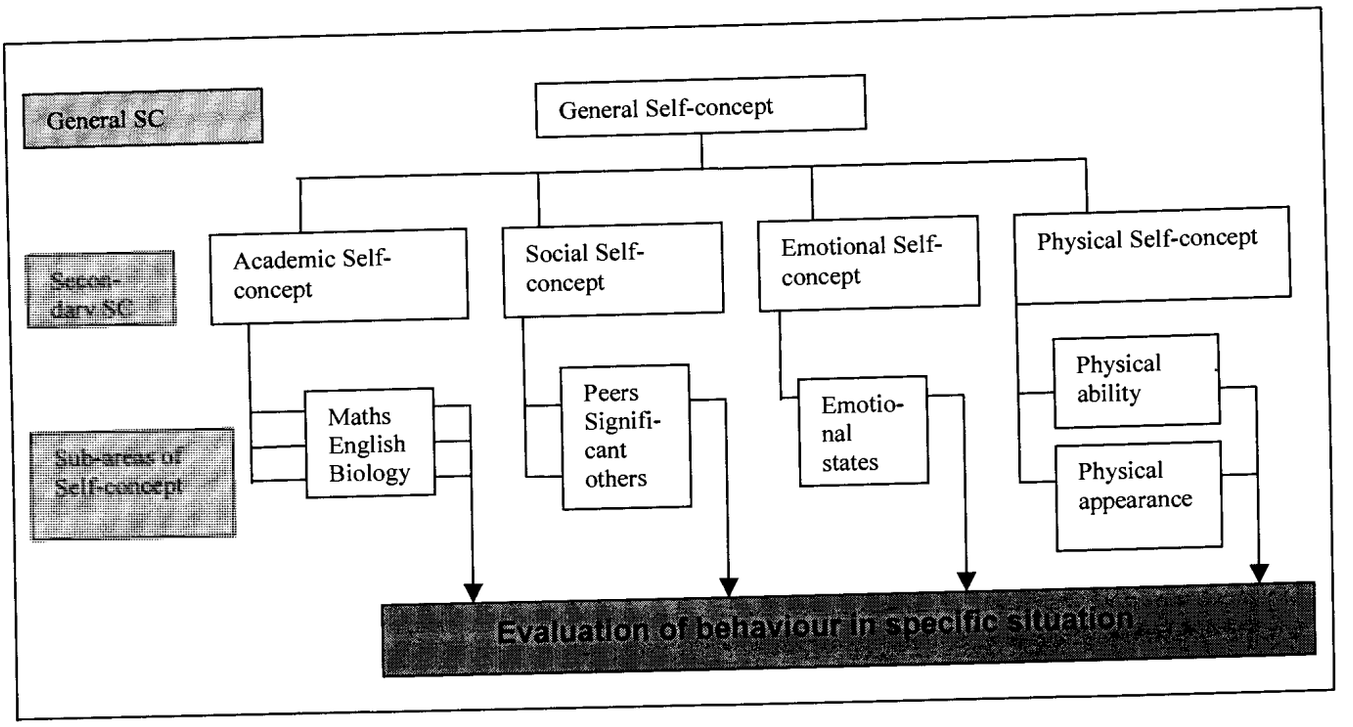

Figure 3: The hierarchical organisation of the self-concept (An adaptation of Byrne & Shavelson, 1986, p. 413).

3.2.3 The self-concept: One or many?

3.2.3.1 The plural nature of the self-concept

Often when we speak of the self-concept it seems as if it were one entity, one structure that can be studied. It has been shown that we do not just have one point of view of ourselves. We have many viewpoints and characteristics from which we draw a description of ourselves (e.g. Byrne & Shavelson, 1986). Cinnirella (1998) has even suggested that possible social identities can also exist temporally. We are conscious of ourselves in relation to others across time: We were members of groups, we are members of groups and we may become members of groups. Social identity is a complex concept, which may refer to either the social self-concept or the collective self-concept (Oelofse, 1996). These many viewpoints are largely dependent on the situations we find ourselves in (e.g. Echabe & Castro, 1999). These viewpoints might also be defined by time as we develop possible selves according to our perceptions of where we want to be in the future (Baron & Byrne, 1997). They also reveal the category system adopted by the individual to make sense of her/his phenomenal world. Consequently it is easy to argue as Bracken and Howell (Oelofse, 1996) have done, that there may be as many self-concept characteristics as there are environmental contexts. In addition to this Baron and Byrne (1997) show that the greater the complexity of the self-concept (the more possible selves the person has access to) the greater is the person's ability to cope with a variety of stresses.

3.2.3.2 Integration of the various self-concept characteristics

It is generally believed that to have a complex self-concept means to have greater self-esteem, better coping strategies and a greater sense of well-being (Donahue et al., 1993). The complex self-concept must however be separated from self-concept differentiation, since the differentiated self-concept lacks integration. The differentiated self-concept allows a person to adopt a variety of roles and identities across personally important social contexts, yet these adaptations and contexts continue to exist in isolation (Donahue et al., 1993). It is very well to argue that it is healthy to have many possible selves; but this entirely depends on how these possible selves function together and how they strengthen the general self-concept.

Integratively, they may empower the person to adjust beneficially to different situations.

Self-concept differentiation is more indicative of self-concept fragmentation and not the possibility of specialised role identities coping with certain situations (Donahue et al., 1993). Fragmentation diffuses characteristics and weakens their role in the self-concept. It is characterised by 'interpersonal and intrapersonal difficulties marked by emotional distress, rejection of social norms and failed role relationships' (Donahue et al., 1993, p. 838). Individuals high in self-concept differentiation show more anxiety and depression. Their self-esteem is generally lower, and so are their feelings of well-being. Self-concept differentiation thus stands in contrast to self-concept complexity, which is, according to Linville, having a greater number of self-concept characteristics and maintaining greater distinction between those aspects (Donahue et al., 1993). Although they are more distinct from each other, they function with greater organisation and interdependence. Self-concept complexity prevents certain aspects of the self-concept from undermining the general self-concept and self-esteem, thus providing a buffer against stress from different roles affecting the whole person.

When experimenting with identities online, people often maintain different identities in different cyber-communities. They could maintain a fragmented state between those identities, not only between the different cyber-communities, but also a changed virtual identity, somewhat distinctive from the offline person. Such role specialised identities could lead to self-concept differentiation, because the different aspects of the Self are not maintained integratively and complexly but separated by the roles the person maintains in the different communities. 'Virtual communities encourage multiplicity but not coherence' (Reid, 1998, p. 30).

Suler (2000b) also argues the necessity for people to integrate their identities across the board, because synergy leads to a sense of well-being. When users often abandon an identity the moment they meet opposition, it may very well exacerbate the situation. Reid (1998) argues pointedly that where the virtual identity is a creation, it is also more focussed and therefore significantly less flexible than the identities we maintain in face-to-face relationships. This rigidity of the virtual Self smacks of the

differentiated self-concept, where identities geared for specialised roles do not function in conjunction with the rest of the general self-concept.

Instances where identity play online has lead to greater self-awareness and self-satisfaction have also been recorded (Bromberg, 1996). This indicates that people experimenting with different aspects of the Self can very well integrate new concepts formed online into the whole. It is likely that these are people, who communicate with others as an integrated person and not a fragmented, inflexible, virtually constructed Self. These people will conceivably communicate about various aspects of their lives, integrating all their roles and identities in their self-descriptions and arriving at new meaningful insights about themselves. It is unlikely that they only focus on the shared interest of a site and may tell their online friends about their offline lives and vice versa. Such people will also most likely have met online acquaintances offline and vice versa, and will have made an effort to develop their presence in cyber-communities (Suler, 2000b).

3.2.4 Self-consistency versus inconsistency

It has been shown that people offer different descriptions of themselves. These descriptions can often change over time and across a variety of situations. It may then seem nearly impossible to pin down exactly what a person's self-concept may be since it is so dependent on context. Although it has a theoretical structure, the contents of that structure may often seem fragmented and inconsistent (Gergen, 1971). Gergen points out that dissonance research shows three qualifications of a trend towards harmony or consistency in the self-concept, because inconsistency is essentially intolerable to human beings, as social beings, who develop trust through consistent behaviour. This trend towards harmony is firstly only achieved when the person experiences her/his behaviour as inconsistent. People only experience their behaviour as inconsistent when inconsistent behaviours are manifested in the same environment. In such a case, they would feel a high level of dissonance. In different environments, the person easily understands the different behaviours as a result of the demands of the different contexts. Consequently low dissonance is experienced (Gergen, 1971).

Secondly, the functional value of personal descriptions is also important. If the person finds two descriptions of her/himself of great value (i.e. they feature high up in the hierarchy of self-description) and they are antitheses of each other, then a high degree of dissonance is likely to occur. If the person does not consider the descriptions important in defining who and what s/he is, then s/he might consider them with indifference. In this regard, cyber-communities may well play a larger role in the self-concept, since the person can experiment with a range of new behaviours and attitudes. If these behaviours and attitudes are of great significance to the person, but are experienced as inconsistent with other aspects of the Self, whether online or offline, dissonance may occur. However, if they are not regarded as important, little dissonance will occur.

Lastly we may assume that dissonance reduction is a learnt quality and not genetically inherent to our species. In the same way we reason differently, we also learn to react to inconsistencies differently. Some may be very bothered by inconsistencies in their own behaviour, where others learn to be more accepting of the differences in how they behave in situations.

3.3 The self-concept

Not all aspects of the self-concept will be discussed in this study. This is important for two reasons. Firstly, the attempt to incorporate the role of cyber-communities into all aspects of the self-concept would prove nearly impossible, since there are a vast number of factors at play. Secondly, we will focus on a few pertinent aspects, to understand the role that cyber-communities play in the SCI's self-concept better.

Carl Rogers (Meyer et. al, 1997, p.466) describes the self-concept comprehensively:

> [It is] *the organised consistent conceptual Gestalt composed of perceptions of the characteristics of the I or Me and the perceptions of the relationships of the I or Me to others and to various aspects of life, together with the values attached to these perceptions. It is a Gestalt which is available to awareness though not necessarily in awareness. It is a fluid and changing Gestalt, a process, but at any given moment it is a specific entity.*

This definition fits well within the framework established by Gergen (1971) for understanding what the self-concept entails. This researcher would concur with Shavelson (Oelofse, 1996, p. 30) that the self-concept is not a specific entity:

> [The self-concept] *is a person's perception of himself. These perceptions are formed through his experience with his environment ... and are influenced especially by environmental reinforcements and significant others. We do not claim an entity 'self-concept'. Rather, we claim that the construct is potentially important and useful in explaining and predicting how one acts.*

The self-concept is useful in psychological investigations, but to name it a tangible entity, a specific part of the human, is forcing a vague and simplified construct onto human *being*, which is very complex. Epstein (1973) has distilled some characteristics of this elusive construct:

- It is a structural system arranged hierarchically, which is a part of a larger system such as the personality.
- It contains many different descriptions of Self- such as the social self-concept, the body self-concept and academic self-concept.
- It is a fluid construct, which changes with experience.
- It develops from the experience of the phenomenal field and is continuously affected by it, particularly by significant others.
- The self-concept must remain organised for the person to function properly. The self-concept functions properly when it is complicated and not differentiated.
- It has at least two basic functions: 1) it organises all perceptions, particularly those experiences involving social interaction and 2) it facilitates the fulfilment of needs and avoidance of disapproval and anxiety. These perceptive and evaluative functions are the processes, which maintain the relationships between the various categories of the self-concept.

For the purposes of this study, we will consider the self-concept a hierarchically organised construct, which comprises both structural properties and processes. It

organises experiences into many descriptions of the Self, which in turn aid the person to consider which behaviours and attitudes would be to her/his perceived best advantage, in a given situation, to fulfil needs and reduce anxieties. A discussion of the relevant structural components and processes follows.

3.3.1 The general self-concept

Van Tuinen and Ramanaiah (Oelofse, 1996, p. 33) offer us the following definition of the general self-concept:

> [It is] *a person's feeling of adequacy and worth as a person, his feelings of being a 'good' or a 'bad' person, his views of his state of health, physical appearance, skills and sexuality, and his sense of adequacy in social interaction.*

This definition places a large emphasis on the esteem that the person holds for her/his attributes. The self-esteem process, which will be discussed, plays a large part in the various structural components of the self-concept. It is not the only aspect of the self-concept, but does play a vital role in the way we understand ourselves.

When people describe themselves, it may often seem that no permanent characteristics exist that the person refers to, since self-descriptions are often situation specific. Van Tuinen and Ramanaiah (Oelofse, 1996) have shown that secondary self-concepts predict behaviours in specific situations better than the general self-concept. Research has however shown that characteristics, which solidify into a general or core self-concept, exist. The individual often refers to these core characteristics across a wide range of contexts (Baron & Byrne, 1997).

The general self-concept (Oelofse, 1996) or core self-concept (Baron & Byrne, 1997) is relatively resistant to change and is a collection of the most salient and permanent conceptions of Self. As one moves down the hierarchy shown in figure 3, behaviour and self-description are increasingly dependent on specific situations (Oelofse, 1996). The general self-concept is made up of a number of attributes the individual considers her/his most important qualities. These structures influence the general

self-concept and the latter simultaneously influences those structures and the consequent behaviours in situation bound contexts. There is a constant comparison of experiences with secondary- and core self-concept attributes, as the person considers experiences that may lead to dissonance and changes in attitudes towards the Self.

The self-concepts of young children are general, undifferentiated and situation specific. As the child is increasingly able to perceive her/himself through social activities and relationships with discrete (significant) and generalised others, s/he develops more complex categories about the phenomenal field and her/himself (Oelofse, 1996; Ritzer, 1996). '[The] sociocultural world of linguistic and other relational practices comes increasingly to constitute the emergent [self]-understanding of the developing infant' (Martin & Sugarman, 2001, p. 105). This internalisation of the phenomenal field means that people will relate to themselves in much the same way as their phenomenal field has related to them. Once reflexive self-understanding has developed, it is no longer entirely dependant on the phenomenal field and the person can also come to influence the phenomenal field (Martin & Sugarman, 2001).

The general self-concept settles towards the age of thirty into a relatively permanent construct (Baron & Byrne, 1997). Dimensions of the self-concept become increasingly independent from each other with age, even when the hierarchical structure weakens (Byrne & Shavelson, 1986). Major life changes and stressors may cause the person to re-evaluate strongly who s/he is, which may change the general self-concept. The emphasis is on the *re-evaluation* as a change in the general self-concept, since it is doubtful that core characteristics will be replaced.

Drawing on Rogers' definition, characteristics are available to awareness but not always in awareness. A person who is unhappy with a personal attribute will often attempt to change it, since it is causing anxiety and dissatisfaction. If an SCI viewed her/himself badly as an SCI, a need for a more positive or accommodating view of the physical self-concept may be sought. When new ways of seeing oneself come into awareness, the person may rather opt to understand her/himself in these ways, rather than constantly referring to negatively weighted self-concepts.

As an example: Sam is happy with himself except for one thing; he feels he should be more assertive (assertiveness being a central pre-occupation of his, i.e. part of his general self-concept). The category assertiveness exists coupled to a negative evaluation of his ability. Online, he finds it easier to voice his opinions because no one is looking at him. As his confidence in chatrooms grows and he manifests greater assertiveness, his self-esteem shifts from a negative position to a positive position in the hierarchy of his self-concept. The structure of his self-concept may shift slightly as a result. The anxiety-causing lack of assertiveness is challenged by role-specific information: I am assertive when I am online.

This positive experience of his need to be assertive may result in assertion shifting to a higher level of the general self-concept, because it boosts Sam's general esteem of himself. It may be that due to future successes, Sam's dynamic self-concept and behaviour begins to move toward more assertive stances in his offline behaviour. In this way, a reduction of anxiety about non-assertiveness occurs from a role-specific context to a more general level in his self-concept. Through dissonance reduction, Sam changes the concept of 'I am not very assertive' to 'I am assertive'. The general self-concept attribute of importance to Sam is assertiveness, but its qualities can change along a continuum through self-esteem.

It has been argued that the general self-concept is the most rooted structure in the self-concept, and it may therefore seem unlikely to be affected by cyber-community interaction. The offline phenomenal field may also seem to be more pervasive in an individual's life than online experiences. It could therefore be argued that core attributes are mostly drawn from the offline phenomenal field and may perhaps be more powerful than any behaviours, attitudes and values learnt online. Yet, the individual's attitudes and needs must not be ignored. Sensory information from any source are translated as experiences, therefore cyberspace is as much part of the phenomenal field as offline 'reality'. Since people shape their experiences as they are internalised, their experiences online may carry as much importance as their offline experiences. When online experiences help a person reduce anxieties and

dissatisfactions, then their effects on the general self-concept could be interpreted just as powerfully as offline experiences. The possibilities of the Net's influence will be discussed later when dissonance as a force in the change of attitudes or conception of Self is discussed.

3.3.2 The self-esteem

Self-esteem is a positive or negative evaluation of one's self-concept, with a preference existing to evaluate oneself positively (Gergen, 1971; Meyer et al., 1997). Self-evaluations occur on a positive – negative continuum (Baron & Byrne, 1997) and are roughly learned according to a pleasure-pain principle (Gergen, 1971). Self-esteem, say Goldenberg, McCoy, Pyszczynski, Greenberg and Solomon (2000), functions as a buffer against anxiety; thus people continuously attempt to maintain it at a level as high as possible. Sedikides (Baron & Byrne, 1997) argues there are three motives for self-assessment:

1. Self-assessment - seeking accurate self-knowledge, both positive and negative
2. Self-enhancement - seeking favourable self-knowledge
3. Self-verification - seeking obvious self-knowledge that is probably true.

A person's self-esteem is a constant, fluid comparison between characteristics embedded in the various structural dimensions of the self-concept (see Baron & Byrne, 1997; Gergen, 1971 and Oelofse, 1996). A person comparing different characteristics and allocating them levels of importance reveals a hierarchical nature of the self-concept. Where the structures of the self-concept are largely about self-knowledge, self-esteem is emotional in nature and the person weighs characteristics with positive or negative emotional connotations. From the definition above we can deduce that a person will mostly attempt to be successful at something, thereby increasing her/his self-esteem and improving the impression s/he makes on others for continued positive reinforcements. Consequently, a person may select characteristics to be emphasised in a particular situation according to her/his perceptions of her/his chances to succeed, while manifesting those attributes. Self-esteem will fluctuate across the various contexts the person encounters; in some

s/he may feel more confident than in others. Yet, there is evidence suggesting that each person has an averaged level of self-esteem (Heatherton & Polivy, 1991).

Self-esteem, as does the self-concept, depends on social learning (through direct experiences or verbal exchange) and specific events. This self-evaluation may also develop and shift over time as the person is exposed to varying experiences (Gergen, 1971). It is important to understand that this evaluation is not just a measure of the person as superior or inferior (a global evaluation). Instead the person weighs her/his different abilities in different situations, constantly comparing characteristics in different structures of the self-concept to see how s/he should behave in a situation or make sense of it (Gergen, 1971). It may be argued that self-evaluation occurs in at least these ways:

- People evaluate themselves by social comparison
- They evaluate themselves against an ideal Self
- They evaluate themselves according to the imagined judgements of others or the looking-glass Self (Gergen, 1971; Ritzer, 1996)
- Through positive or negative regard by others and positive or negative self-regard.

As mentioned above, structure and process cannot wholly be separated. One is understood in terms of the other, and it is for this reason that various facets of the self-concept are often described in terms of self-esteem. Distinct characteristics most likely exist in the self-concept, but the person in terms of her/his self-esteem may simultaneously and emotionally weight these. It may be said that self-esteem saturates all characteristics of the self-concept, since the person could hardly be adaptive to her/his environment without being able to judge which qualities of Self are most relevant to the situation. Bracken and Howell, as well as Shavelson (Oelofse, 1996), believe that the self-concept and self-esteem may be treated as synonymous or at least closely related. It is however, conceptually important to distinguish the two, so that the process of self-conception may be better understood. Without a theoretical distinction, it may prove difficult to understand how new experiences are incorporated into the self-concept. Researchers seem hesitant to distinguish the two, but in their arguments, there nevertheless seems to be a clear distinction: 'An

individual does not only [describe] her/himself in particular situations, but also [evaluates] her/himself in these situations…' (Oelofse, 1996, p. 33).

The position of this researcher is that self-esteem is inherent in the self-concept. It can be described, but it cannot be described completely without reference to structures in the self-concept. Adapting an allegory of Gergen's (1971): The process of a car running cannot be described without the mention of its parts and the need of its parts cannot be explained without an allusion to the processes linking them.

3.3.3 The social self-concept and the collective self-concept

Personal self-concepts can be differentiated from the social and collective self-concepts. For many researchers there exists no distinction between the social self-concept and the collective self-concept (e.g. Bettencourt & Hume, 1999; Cinnirella, 1998; Ellemers, Kortekaas & Ouwerkerk, 1999). There may be some overlap, but it would serve us better to separate the two theoretically. Van Tuinen and Ramanaiah (Oelofse, 1996, p.3) define the social self-concept as:

> *A person's sense of adequacy or worth in his social interaction with people in general, and is important for understanding and predicting social behaviour.*

The self-concept develops from our social phenomenal field, to which we may relate largely in terms of our social self-concept and collective self-concept. Personal self-concepts are more about traits and characteristics (Bettencourt & Hume, 1999). The social self-concept is our personal reference to others, the way we see ourselves *in relation to others*. Collective self-concepts are orientated to group membership constructs, such as group self-esteem and group commitment (Ellemers et al., 1999). The collective self-concept is the way a person thinks about her/himself in terms of her/his *belonging* to a group.

> 'General self-concept and social self-concept are seen as part of a person's *personal* identity which includes that which one believes about one's personal

attributes, while collective self-concept is part of one's *social* identity' [italics added] (Oelofse, 1996, p. 3).

People identify with groups amongst other reasons, to raise their self-esteem. When one associates with people similar to oneself (the in-group), one's behaviours and attitudes may be reinforced raising one's self-esteem. Through the social identity, one may compensate for problems involving personal identity (such as a poor self-esteem) (Baron & Byrne, 1996). Bat-Chava (McKenna & Bargh, 1998) for example found that identification as a deaf person bears little relevance on a person's self-esteem, *unless* that person finds that identity important as an identity in a community, such as the deaf community. When the identity is important in a supportive community, it can significantly raise the person's self-esteem.

The social self-concept derives from a person's assessment of her/his behaviour within a social context (Oelofse, 1996). This assessment of oneself occurs in a number of ways, including social comparison and positive regard. The influence of significant others and the generalised other must be stressed here, since secondary self-concepts are especially integrated from the social environment. The Self develops from social activities and relationships and this social realm continuously offers new experiences to the person, who develops new conceptions about her/himself. It may thus significantly influence what the self-concept looks like.

Researchers have suggested various lower hierarchically placed components of the social self-concept, such as peer-, family- and significant other social self-concepts (see Oelofse, 1996). This researcher agrees that these further distinctions can be made. The reader should be able to break the social self-concept down further, until the concept is so situation specific that contextual roles, as highlighted in diagrams 3 and 4, serve to describe the self-concept.

So far, it seems clear that the self-concept manifests itself in behaviour as a reaction towards the demands of social situations. Social groups are also immensely important to us, not only because we develop in social contexts, but also because they satisfy our needs to belong. They also affect our self-esteem positively when we belong and reduce our uncertainties about ourselves (McKenna & Bargh, 1998). We

may assume that where there exists a very different environment, such as cyberspace, there will also be marked different behaviours. There could then exist a unique way in which the person sees her/himself as s/he adopts behaviours in this new environment.

The way this cyber-environment, particularly as a social aspect of the phenomenal field, plays a part in the person's self-concept remains to be seen. Let it suffice for now, that cyber-communities may influence the self-concept through the virtual or cyber social self-concept. Characteristics that the person nurtures online may be grouped as the virtual, represented, self-concept. When these characteristics are successfully developed in the virtual context, they may finally spill over into the rest of the general self-concept, as the person's sense of well-being and heightened self-esteem grow across the self-concept. The way such cyber-social influences may be incorporated do not seem to be that different from any other social context, since cyberspace is just another aspect of the phenomenal field. The concept of a cyber self-concept is still vague, but what can be said about it has been stated in Chapter 2. This study will probe the possibility of such a concept as we discover the role that cyber-communities play in the self-concept and perhaps even how people modify their self-concepts online.

The increased use of the Net promotes asocial activities in many ways, discussed in Chapter 2. People often also substitute strong social ties for weak ones (Kraut et al., 1998). They often interact with each other in ways that deny their present selves, in favour of representative fantastic fabrications or virtual identities with limited self-relevant characteristics embedded in them. In these ways, the person may become separated from authentically meaningful groups and present significant people, from whom to draw accurate social- and collective self-concepts. This may be why people often feel loneliness and depression (Kraut et al., 1998). Through self-disclosure and increased idealisation of surrogate others, the person may come to believe that Net others are more important to them than offline others. A person spending significant time online, may find it increasingly difficult to distinguish the authentically relationships s/he has from less meaningful relationships. One reason for this state may be the lack of contextual cues. When we have little access to others' reactions to us, our self-awareness may suffer as we may loose sight and judgement of how

they see us, how our behaviour impacts our audience (Joinson, 1998). A reduction of public awareness - our awareness of others and their roles in our lives also occurs.

According to Joinson (1998), the reduced social cues model (RSC) posits that due to the loss of contextual cues, people become more task focussed (see also Weisband & Atwater, 1999) and the group becomes more equalised in terms of status cues. Deindividuation or depersonalisation also occurs due to the anonymity of the medium and the loss of public awareness (Joinson, 1998). All this culminates in less attention paid to others, self-ratings that are more inflated and a colder, testier, less friendly social environment online. People are also more prone to disagreement and less willing to maintain civilities in social interactions (Weisband & Atwater, 1999; Wallace, 1999). Since the person has less access to complete information about others, s/he is likely to become more self-aware and focus less on others, communicating in less socially desirable ways (Joinson, 1998).

Due to the reduction in contextual cues, the anonymity and depersonalisation, people are less publicly aware. They are therefore less likely to conform to group positions online and more aware of their own position in a matter (Wallace, 1999). This impact on a person's social and collective self-concept is not only disadvantageous, as personal self-concepts can develop when there exists greater self-awareness. The person may also develop productively when there does not exist a need to conform to group norms. The person may learn to be more assertive for example or may learn to treasure her/himself more as a person set apart from the group.

All this may very well affect your mood, the way you see yourself and the way you see yourself in groups and as a group member. Your heightened self-awareness and lowered public awareness has been shown to lead to greater self-disclosure. Such self-disclosure may be a result of your attempt to clarify your social and collective self-concepts again in an online context, where it is very difficult to maintain a social presence in a group of others (Joinson, 2001).

McKenna and Bargh (1998) found extremely compelling evidence for the transformation of self-esteem and self-concepts, when people with concealable stigmas, were finally able to air their secrets in cyber-communities geared for self-

disclosure on the topic. These people found a social group in which they were accepted unconditionally (at least in terms of their stigma), and allowed to integrate their 'alien' characteristic with the rest of their self-concept. This raised their self-esteem to a level where they felt confident enough to reveal their stigma in offline reality.

The self-concept was strengthened by their sense of belonging. The social and collective self-concepts were affected positively in a social group where positive social comparisons could be made and positive regard for the stigma could be felt. The self-concept benefited from greater, integrated complexity, a heightened self-esteem and confidence. Thus the presence of a social group in cyberspace to whom a person can belong, encourages the formation of stronger social ties with similar others, when offline groups are not available.

3.3.4 The physical self-concept and embodiment

The physical self-concept is a very powerful structure in the self-concept, because people experience each other as embodied beings. Even in the ephemeral cyberspace the other is imagined in an embodied way (Stone, 1994). The body is a source of many of our values, our emotions and is often the object of judgement. It affects the way we think about ourselves and how we evaluate ourselves. For example, people that meet the cultural values of what a physical body should look like, have a greater self-esteem than those who do not meet those cultural values do. Those that do not meet the standards often exhibit psychological and physical problems (Goldenberg et al., 2000).

The physical self-concept is the source of our body-images and a source for how we interact with other people with other embodiments. The body-image or presentation is largely the reason why so many injured people experience prejudices. When that interaction, based on unavoidable offline contextual cues, is nearly erased by cyberspace, the researcher must pay attention to its meaning. It may be that the SCI is trapped in an unavoidable paradox. On the one hand s/he may want to communicate with uninjured people without their focus on her/his injury, and may find the Net an effective way to do this. On the other hand, relations online may actually

emphasise the disembodied nature of the online communication and the offline physical situation, precisely because the SCI does not reveal the injury. S/he may be forced to communicate with less authenticity. This study may reveal ways the SCI deals with the physical self-concept in on- and offline relationships.

3.4 The phenomenal field

New behaviours and values can be easily adopted and maintained in cyberspace, which is a disembodied, social realm. It is invested with a large degree of imagination and expectations. It may therefore be assumed, that as a field of perception, cyberspace can have quite different characteristics to our offline phenomenal field. Even the experience of time can be distorted in this 'cyber-phenomenal field' (Nguyen & Alexander, 1996; Suler, 2000b; Wallace, 1999). In Figure 4, the virtual phenomenal field has been separated from the offline phenomenal field for conceptual purposes. It indicates the influence that the two contexts will most likely have on the person's perception of her/himself. It is in no way argued that there exist two phenomenal fields, only that online/offline reality can be conceptually differentiated by unique characteristics.

As the person is exposed to cyberspace, the contents of the higher structures of the self-concept will probably remain the same, since the person's exposure to the offline phenomenal field is by far the largest over the course of her/his development. The greater impact of the offline phenomenal field will most likely have played a larger role in how a person sees her/himself. Consequently, the user takes relatively permanent characteristics with her/him when entering the virtual phenomenal field. The contents of lower structures that are not part of the general self-concept may change significantly as s/he communicates in the altered environment. Gergen (1971) has noted studies where people (such as actors) have identified with behaviours and characteristics artificially adopted. This can similarly happen online, as people assume surrogate selves. The permanence of such attitudinal or behavioural changes may vary. If the person experiences significant occurrences in ways that would impact greatly on the general self-concept, as when unfulfilled actualisation tendencies suddenly become possible, then online behaviour may steadily migrate to offline behaviour and self-conception. If the person finds that

virtual self-conceptions, behaviours and attitudes are just that- virtual, with no significance to the general self-concept, then changes will most likely not occur.

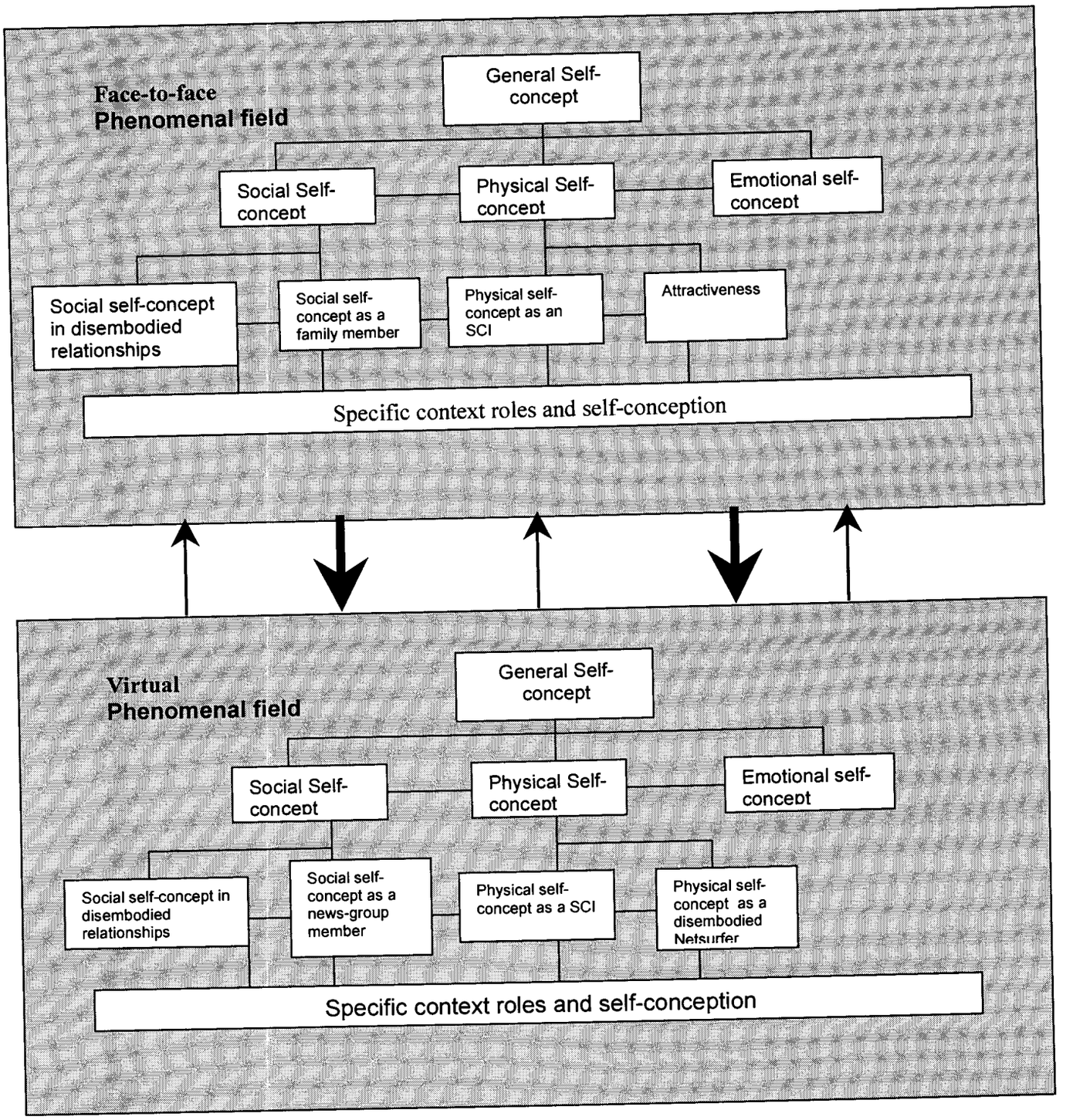

Figure 4: Possible influences of on- and offline phenomenal fields on the self-concept

The phenomenal fields and self-concepts have only been separated for the convenience of showing how the offline and cyber-phenomenal fields influence the self-concept. The arrows between the phenomenal fields indicate a smaller influence on the person by the virtual phenomenal field than from its offline counterpart. They represent the lesser sensory stimuli online and *not* necessarily the lesser role that the Net might play in the person's self-concept. Argyle (1996), Argyle and Shields (1996) and Interrogate the Internet (1996) hold that virtual experiences do have *real* effects. The social encounters online are experienced with the richness of full social encounters in terms of the range of feelings that are experienced by the Net user. Acceptance, rejection, esteem and denial are as much part of virtual encounters as they are of offline encounters. Bromberg's (1996) research has also indicated that respondents did experience changes in how they responded to their offline realities after interactive participation in MUDs. These emotions are undoubtedly felt by Net users, but to what extent and how influential they are in how a person understands her/himself, remains to be seen.

The importance of the phenomenal field as the source of all self-concept characteristics is paramount in this study. Here we are dealing with the interaction between the self-concept and cyber-communities. The interaction between the self-concept and the phenomenal field is greater than just the social context. The person's exposure to the social technology, and what it can actually do for her/him, is a prime interest of this study. Consider for example the exposure that an isolated quadriplegic can have to the rest of the world at the touch of a button. That exposure is more than that of television, the person can seek out her/his own interests and can interact with other people. The acquisition of skills to use the technology can play a role in the self-concept, so can the increases in convenience and independence.

The SCIs exposed to a larger world than what stigmatisation, dependence and the injury previously allowed, may experience phenomenal changes in their perceptions of themselves. As they acquire new technological skills, as they increase their social circles online and as they seek out knowledge about their injuries and other SCIs' predicaments, the self-concept is affected. Even if their physical mobility does not increase, their social and mental mobility does. Through this unique technology, they are given the opportunity to explore themselves in larger social contexts. They can

explore previously untried behaviours, gather almost any information and they can find similar injured groups with whom they can strongly identify. Whether they tell or do not tell others about their injuries online, these SCI Net users can develop greater ranges of human contact with lessened or no stigmatisation. They can conveniently visit many places using the Internet, including banks, museums and shopping malls. The SCIs who develop themselves in spheres with little stigmatised resistance and who develop their different skills will most likely experience influences on their self-concepts. They may for example, feel more independent and self-assertive when and after using the Net and participating in cyber-communities. Movements in self-esteem and the evaluative hierarchy of the general self-concept may be experienced. The virtual phenomenal field will most likely play a role in their social, collective and intellectual self-concepts in much the same way as the offline environment.

The phenomenal field is the totality of a person's perceptions and experiences, and includes all her/his inner experiences, as well as the experiences of the outside world (Meyer et al., 1997). These experiences occur through the media discussed in the following section.

3.4.1 The other and the social phenomenal field

3.4.1.1 The significant other and the generalised other

Significant others are the people that play an important role in a person's development and the development of the self-concept, and who satisfy the person's need for positive regard (Meyer et al., 1997). The generalised other is the significant group that is important in the person's development (Ritzer, 1996). The attitudes of the group are most likely not only a collection of attitudes of individuals, but also a Gestalt of attitudes towards the individual. A significant other may hold a certain attitude towards the individual and offer positive regard founded on that. When acting as a member of a person's generalised other, that same person may defer to the opinion of the group and award positive regard based on the values of the group. There are many generalised others in an individual's life and their effect depends on the contexts, in which the person refers to the group for comparison and positive regard (Ritzer, 1996).

Cyberspace, being part of the phenomenal field, does hold significant others and generalised others, who may affect the person in significant ways. Significant others are bound to the individual with close, strong and authentic social ties, whereas generalised others relate to the person via weak social ties (Kraut et al., 1998; Wellman, 1997). These sources of positive regard, and the ties that bind them to the individual, fulfil different roles for the individual and both exist in the individual's life, on- and offline. These social ties will be discussed in Chapter 4.

3.4.1.2 Positive conditional and unconditional regard

The powerful influence of significant and general others in the development of the self-concept lies largely in the individual's basic need for positive regard (see Gergen, 1971; Meyer et al., 1997). Rogers distinguished two ways in which this regard is awarded. Conditional regard is dependent on a person's meeting the criteria set by the other for the reward of positive regard. Unconditional regard is positive regard awarded irrespective of the behaviour exhibited by the individual. When regard is conditional, self-regard also may become conditional. The consequences of this may well be, that the person reinterprets experiences in terms of the criteria s/he maintains and thereby often distorts her/his perceptions of Self and social relationships (Meyer et al., 1997).

Positive regard by others has a strong influence on how we see ourselves and how we behave towards others. We are easily attracted to those that view us positively. We are also more likely to incorporate positive facts about ourselves and are more likely to exhibit roles that have received positive reactions by others (Gergen, 1971), but this is not always the case. The acceptance of positive regard depends on other factors as well.

Unconditional regard may exist, to a larger extent, online than in offline reality. The equalisation effect online alluded to by some researchers (e.g. Nguyen & Alexander, 1996; Wallace, 1999) may move a person closer to a feeling of unconditional regard. When building online relationships, people are usually aware that deception is rife and are consequently more accepting of it (Rheingold, 1993). They may therefore

accept you more unconditionally, since it would be difficult to impose criteria for acceptance on a disembodied individual.

According to Gergen (1971) we are caught in a paradox that is only resolved when certain conditions prevail. On the one hand we need positive appraisal from the other, but on the other hand we are highly suspect of appraisals given that are not in accordance with our own self-appraisals. People, who offer positive appraisals for behaviours that we esteem negatively, are often considered untrustworthy as appraisers. How then does the person eventually weigh and incorporate information from the other as positive regard? Gergen (1971) proffers a number of conditions, which are supported by research.

I. Characteristics of the evaluator

When the individual deems her/his evaluator as honest and trustworthy, then positive appraisals are incorporated more easily, than when the evaluator's motives are suspect (Gergen, 1971).

If another Net user evaluates us in terms of traits that s/he does not really have access to, then we may consider her/him a suspect appraiser. This may also apply to situations where, other Net users offer praise, although we have hardly had a chance to let them know who we are. Trust has not yet been established and the praise may be deemed inaccurate and the motives questionable. Should the evaluations conform to our self-appraisals, we may be more likely to pay attention to this Net user, who seems to know us very well, and consequently we work to reinforce our relationship (Gergen, 1971).

The quick movement towards self-disclosure online may facilitate people's faster development of intimate relationships. Provided the relationship weathers differences, people may appraise each other faster and more accurately. Once people have moved toward intimacy online, the other's opinions may be as respected as the opinions held by offline counterparts.

II. Characteristics of the evaluation: Conditional versus unconditional

Conditional and unconditional regard is important to us, but they do not affect us in the same way. A higher premium is placed on the accuracy of conditional regard (Gergen, 1971). Knowing what the criteria are for conditional regard, we weigh our performances according to those criteria before appraisal is duly accepted as trustworthy. Unconditional regard is free from accuracy, since it is not founded on criteria. It is a general feeling of acceptance and appraisal and is incorporated without accuracy judgements based on self-appraisal (Gergen, 1971).

When a person is deemed witty and innovative online by other users, when other users evaluate him or her based on her/his good language skills rather than looks, then s/he is likely to incorporate those evaluations as positive (conditional) regard. Likewise, if a person receives unconditional regard in terms of empathy and support from other Net users, then s/he is also likely to view them positively.

When the conditions of regard are changed online and when significant and generalised others offer conditional regard for behaviours that the person *wants* to manifest, but never found support for offline, then it will be much easier to manifest online. Consequently, specialised interest groups and support groups often give conditional regard for behaviours with which the person is there to experiment.

In the anonymous, depersonalised and disinhibitive cyberspace environment, where people treat you more equally, and the prevalence of self-disclosure gives you the impression of intimacy, you may also experience those groups and people as more unconditionally accepting. Due to the limits of contextual cues, people may accept you more willingly, in order to relate to you more effectively.

III. Characteristics of the situation

Certain situations demand that accuracy about the Self is maintained. In situations where the emphasis lies on the accuracy of information about the Self, it will greatly affect the incorporation of appraisals deemed accurate or inaccurate.

For example, if I do not know much about computer hardware and somebody refers a newbie (new user of a cyber-community) to me for answers, I would consider the referral as an inaccurate appraisal of my abilities and therefore, I would not incorporate the information as positive regard.

IV. The need for self-esteem

People differ in their need for self-esteem. Social approval may also be sought differently at different times. For example if our self-esteem is low, we might need constant reassurance of our abilities. If our esteem is high, we may need little assurances, since we assure ourselves easily in our self-confidence. Consequently, the person who is constantly deprived of praise may appreciate it most when it is given and the accuracy of it may not even greatly matter.

Example: A person with exceedingly low self-esteem may withdraw from offline relationships, preferring to stay at home and spend long hours in front of his computer. There he feels comforted by the other Net users, who seem to offer unconditional acceptance in the anonymous environment, irrespective of how well they know him.

V. Functional value of relevant self-concepts

It has been argued that some self-concepts are more important to individuals than others. Some self-concepts will consequently augment the need for positive regard. For example, if we believe ourselves to be confident, we may need little assurances and praise from others.

A person who is self-reliant, may not seek out regard from others as much, and will not be affected as much by the judgements of others, as a socially dependent person.

The conditions of worth online may differ from offline reality, since the measure of a person depends on other exhibited characteristics. Consequently, the functional characteristics that a person will refer to in her/his self-concept may be different ones to those s/he would normally refer to offline. A person may be assessed on her/his ability to type quickly and well on IRC, or her/his language skills. Her/his knowledge of a subject may win more regard than status in a community, or her/his physical prowess.

This may mean a great deal for the SCIs where offline, their stigmatised physical status often comes into conflict with people's conditional regard for physical appearances. Uninjured people may award regard to social partners based on physical characteristics and physical presumptions. An SCI may find it difficult to meet these criteria for positive regard and may therefore experience failure in gaining acceptance. If the situation is perpetuated, as when the SCI does not have similar others with whom to interact, those negative views can become internalised.

Online they may experience positive regard on bases that are easier to fulfil and may consequently feel more accepted. Their social and collective self-esteems may therefore significantly improve and they may find it easier to integrate appraisals. When their injuries are not viewed so negatively online, they may find it easier to integrate it more fully in their self-concepts and may find it easier to develop relationships with others outside of the groups that traditionally accepted them.

3.4.2 Social comparison and reflected appraisal

Social comparison is '... our tendency to evaluate our opinions and abilities based on comparisons with other people and our preference for making comparisons with others similar to ourselves' (Baron & Byrne, 1997, p. 248).

Self-esteem and the self-concept are greatly dependent on the social comparisons that we make. Depending on your comparison group, specific successes and failures will contribute to your self-evaluations (Baron & Byrne, 1997). We might therefore easily say that self-esteem is affected specifically by the way a person integrates attributes socially learnt into the social and collective self-concept. Baron and Byrne (1997) refer to three ways in which social comparison affects self-esteem:

I) *The contrast effect*: When comparing oneself with the perceived inadequacies of others in the group, self-esteem may be raised. If the SCI is in a group of uninjured people, where her/his qualities exceed those of the others, then the self-esteem may be raised. This may similarly occur in an injured support group, where the SCI experiences her/himself as having met challenges with which others struggle.

II) *The assimilation effect:* A comparison with a significant other will lead to a raised self-esteem, when the close other has perceived good qualities. If the SCI cannot achieve certain good qualities, as when the close other is uninjured, the SCI may experience a decline in self-esteem.

III) A person comparing unfavourably with her/his in-group will have lowered self-esteem, as compared to an unfavourable comparison with an out-group member. The SCI may compare her/himself excessively to uninjured people, who treat her/him unequally, and may consequently experience a lowering of self-esteem

Social comparison clearly affects how we esteem ourselves and therefore affects our self-concepts, as we adjust the salience of attributes according to our comparisons with the outside social world.

Social comparison is not only by comparison with other members of a group, or comparisons to the group itself; it is also a comparison to the *imagined* opinions, values and behaviours of others. A SCI may compare her/himself not only to uninjured people, but also to how s/he believes members of the uninjured group appraise her/him.

Cooley's *looking glass self* (Gergen, 1971) occurs in three basic stages and serves to illustrate the power of imagined opinions and comparisons. Firstly, the person imagines some belief about her/him held by the other. Secondly, s/he imagines the judgement of her/him by the other and thirdly, s/he develops a self-concept based on that comparison of Self to the imagined appraisal of the other (Ritzer, 1996). These reflected appraisals are augmented by a variety of factors (Gergen, 1971):

- The credibility of the appraiser,
- The appraiser's personal, rather than impersonal approach,
- S/he creates a large discrepancy between the appraisal and the person's self-concept,
- The appraiser may augment the discrepancy above by the number of times the appraisals are given,
- The appraisal is not contradicted by equally powerful appraisals,
- His or her appraisals are positive.

These appraisals will have a powerful effect on the self-concept according to dissonance theory discussed later. What remains to be seen is how the Net affects these processes of reflected appraisal, especially when a lot of information about the other Net user is filled in by a person's own imagination.

Social comparison affects the person in a variety of different ways. For one, if the person is quite inconsistent in her/his self-concept, then it has been shown that s/he can shift her/his self-concept more easily, depending on the stimulus of the situation (Gergen, 1971). If the self-concept is consistent, self-regard may still change but will not be as malleable.

As the person matures, social comparisons and reflected appraisals settle into internalised standards of comparison, similar to the internalisation of others' behaviours towards the self as discussed by Mead (Gergen, 1971; Ritzer, 1996). These standards of self-regard may become as permanent as the general self-concept. Very few experiences may challenge the way we see ourselves, since all experiences will be interpreted in terms of these standards and the general self-concept.

Online, it may often be very difficult to gauge exactly what others think of you and what your non-verbal communication is saying about you. In an environment where most non-verbal cues are lacking, others have little to go on when forming an opinion about you. At the same time, you have very little access to the cues you give off online, and what those cues mean to others (Weisband & Atwater, 1999). Consequently your self-awareness and your awareness of others are reduced, and it may well be that social comparison plays a lesser role in self-representation online than your imagination in relating to others. This inaccessibility to personal information has been linked to electronic groups liking each other less and evaluating each other more on input, than face-to-face groups. In face-to-face groups, people based their impressions of each other more on embodied cues such as visual and vocal behaviour (Weisband & Atwater, 1999)

3.4.3 Dissonance theory

The Net user may sometimes experience dissonance when participating online where the environment is considerably less threatening than offline reality, and s/he opens more in terms of experimenting with behaviours and attitudes. The lesser threat online is characterised by the 1) equalisation effect, 2) perceived anonymity and 3) the greater control the person has over information about the Self that is revealed to the other.

Deep-rooted dissatisfaction in the general self-concept may initiate significant, evaluative changes in the self-concept when a person finds an opportunity to test alternatives. Exploring these alternatives, the person may experience inconsistency and the resultant dissonance in these three important ways online:

1) The person acquires knowledge and skills that are interpreted as discrepant with current evaluations of the self-concept,
2) Significant others or the generalised other online offer conditional regard for different roles and behaviours than offline significant others,
3) Through reflected appraisal and the adoption of other identities (raising the salience of different self-concepts little explored) the person has access to new ways of experiencing her/himself, and consequently experiences dissonance between different conditional self-regards.

Consider this diagram of attitude change:

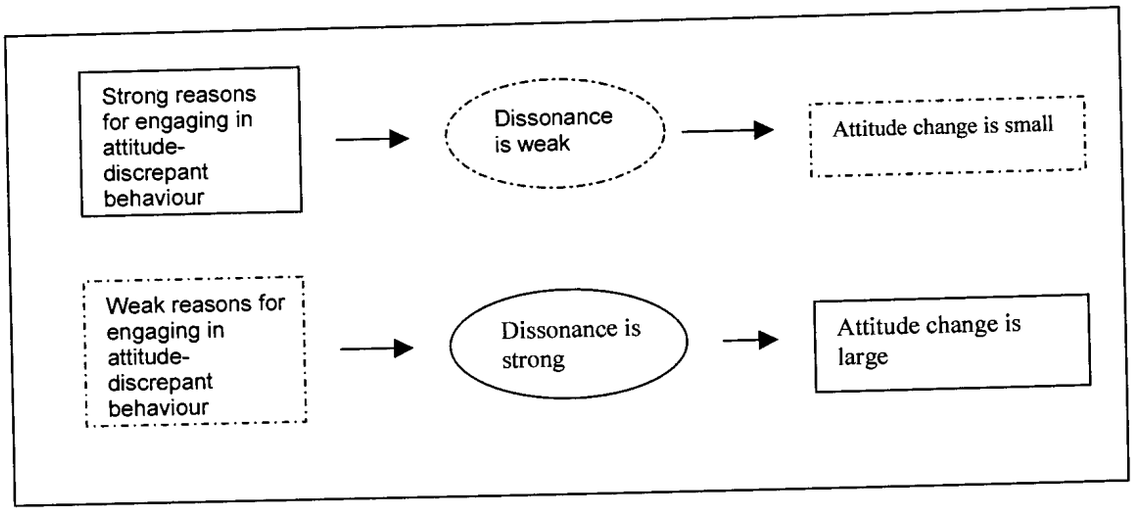

Figure 5: Model of attitude change
Baron & Byrne (1997, p. 143)

The social psychological model of attitude change presented, may provide a better framework for us to understand how virtual experiences can be incorporated through what may be, the virtual or surrogate self-concept. These experiences could ultimately play a large role in the general self-concept. Playing different identities (assuming different sets of salient self-concepts) may be interpreted as assuming different attitudes, behaviours and values. The relevance of the above process of attitude change will become clearer as we discuss what happens when a person experiences inconsistency and dissonance.

3.4.4 Dissonance and the inconsistent Self

In virtual space, where the conditions of worth may be different, the user may be able to explore aspects normally considered out of bounds in a conditional offline social world. The anonymity online provides the opportunity for the person to experiment with attributes that cannot be satisfactorily maintained in a conditional social environment.

The reason for the exploration of different aspects of the Self may be embedded in the ideal Self. Many people who are dissatisfied with themselves have a discrepancy between the ideal Self and the Self they can maintain in a conditional environment. It may stand to reason that the greater the discrepancy between the ideal Self and the self-concept, the more likely the individual is to experiment with different identities online. It may also explain the addictive power of the Net, as self-concept research uncovers the support that the Net provides for deep-seated needs for self-exploration and self-expression.

Bromberg (1996) shows that MUD players often gained personal insight about themselves as they explored behaviours comfortably disguised by the anonymity online and the *fictional* disguise of a MUD character. The fictional disguise of a character is never truly made up as the person invests the character with aspects of the Self, which may have been previously untested. Bromberg (1996) quotes a respondent from the MUDs:

> I can't completely leave my personality behind. My sense of morals is always preserved to some extent in whatever I play (p. 148).

Another mentions this:

> Some of my more played characters are much like myself when I'm with close friends, yet I'm with people I don't even know (p. 148).

Movement towards dissonance reduction between conflicting behaviours or attitudes maintained offline and online, will be greatly dependent on the individual user's interpretation of cyberspace as different to offline reality. If the user feels that cyberspace does not differ from offline reality as a social medium, then high dissonance may occur. If s/he feels that the two are far removed from each other, then low dissonance may occur (Gergen, 1971).

Whether the person experiences the Net as a different environment depends on:

1) How disembodied s/he experiences it,
2) How anonymous s/he feels,
3) How much different s/he experiences the conditions of worth of cyber-significant others,
4) How disinhibited and depersonalised s/he feels in the environment,
5) How richly the person experiences the relationships online.

Figure 5 can also be interpreted as follows:

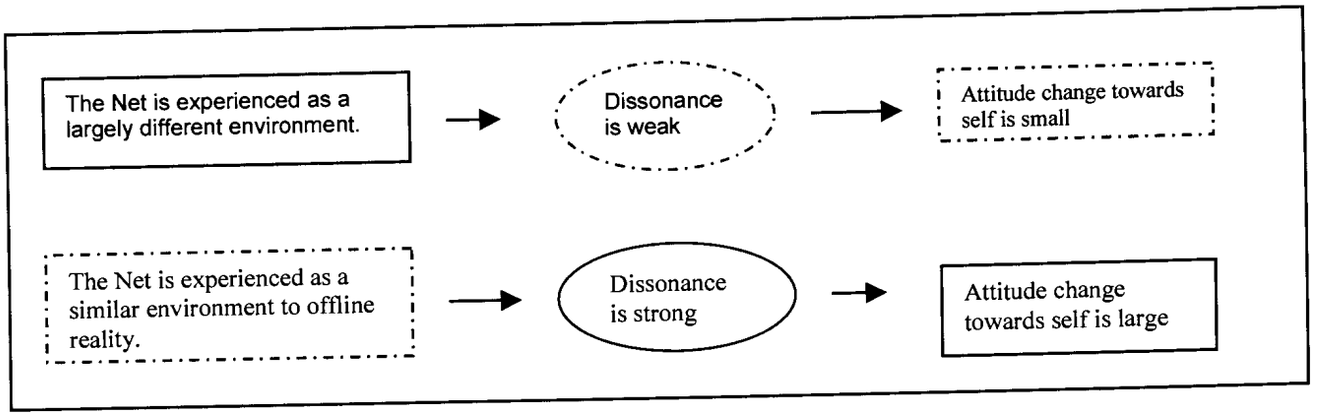

Figure 6: Model of dissonance as a result of different contexts

From the literature, we have seen that some people do experience cyber-communities with the same emotional passion as offline social events. Others do not. The way that the Net user adopts the technology is then important in understanding what role cyber-communities play in the SCI's self-conception. The SCI's experience of the Net will greatly affect whether cyber-communities will play a role in her/his self-concept. If her/his orientation towards the Net is one of acceptance and likeness to

her/his offline social world, then perhaps cyber-communities and others can play a significant role in her/his life. If the SCI feels the Net is extremely different and the environment has little to offer her/him, then the possible influence that people and communities online will have on her/him will be undermined.

Dissonance between inconsistent behaviours and attitudes or self-descriptions may help us understand whether the SCI Net user experiences tangible roles played by cyber-communities and CMC in her/his self-concept. To some, the experience may be negligible, where others may experience cyber-communities as profoundly influential. How they experience cyber-communities as *personally* meaningful depends entirely on 1) how they interpret the technology, 2) reinforcements from communities and significant others, and 3) the amount of dissonance and incongruence they experience.

3.5 Conclusion

The self-concept has been shown to be a concept made up of various hierarchical structures and processes, which contain various characteristics. Although a core or general self-concept seems to exist, it has a plural nature, which must be diverse, but fully integrated, for the person to have a sense of well-being. A self-concept can contain consistent and inconsistent characteristics, which actually diversify the different situations with which a person can cope.

Included in the general self-concept are secondary aspects such as the physical, intellectual, social and collective self-concepts, which diversify further down the hierarchical structure into roles that are situation bound. These self-concepts are interdependent, with self-esteem performing an evaluative function between all the self-concept's aspects. Certain aspects may become more salient than others may in the general self-concept when they provide the highest sources of self-esteem for a person. Such aspects are modified by factors in the phenomenal field, such as conditional and unconditional regard, social comparison and the opinions of significant and generalised others.

In online reality, which is similar to offline reality, people also find significant relationships. The nature of the Net seems to create an environment in which conditional and unconditional regard are modified and in which people can uniquely experiment with behaviours and attitudes with reduced accountability. In a sense, it resembles a therapeutic environment, in which people may test different self-concepts. In such an environment, the SCIs may find a number of ways to expand their phenomenal fields and consequently expand their self-concepts. They may also find that their social relationships may be augmented to fit their needs and may, when conditions are right, lead to lasting changes in their self-esteem and the way they see themselves. To this end, the role of cyber-communities and CMC will be studied, as they influence the social, collective, physical and invariably the general self-concept through the processes of perception, experience and esteem.

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Chapter 4

Communities and cyber-communities

4.1 Introduction

The self-concept has been described in the previous chapter. In order to understand the role of cyber-communities in how a person sees her/himself we need to understand what a community is and how a cyber-community might differ from the traditional definition of it. The channels through which the social phenomenal field affects the person have already been discussed, but now we turn to the sources of social influences in the phenomenal field. In order to do this we will refer to the following:

1) Significant others and generalised others
2) The need to belong
3) Weak and strong social ties

4.2 Towards an adequate definition of cyber-community

4.2.1 Traditional definitions

The accurate conceptualisation of community is elusive. Jones (1997) presents us with a clear exposition of the difficulties in defining what community is, especially cyber-community. Wellman (1997) maintains that traditional concepts of closely tied and bounded communities should be revised. Community should be understood in terms of the social Networks that are established, since modern technology has extended community Networks (Wellman, 1997).

Heller, Price, Reinharz, Riger and Wandersman (1984) define community as a relational interaction that draws people together through social ties. It is typically characterised by a location or place. The social ties can be interpreted, amongst other things, to mean the experiences of belonging that people may feel to their groups. Social ties will be discussed later in this chapter. Duffy and Wong (1997) believe that a sense of belonging is essential when studying the individual in a

community. This sense of belonging has a variety of attributes, which feature in the role communities play in the person's self-concept. These are:

- It is a feeling the individual has that a relationship does exist between the person and her/his in-group,
- There exists the perception that the person is similar to the rest of the in-group,
- The group members depend on each other, and
- The individual experiences her/himself as part of a larger unity that forms a dependable and stable structure within which a state of interdependence is recognised and willingly maintained.

These features illustrate the channels along which the self-concept is internalised from other people in the person's communities. Without these channels - relationships, some similarities, interdependence and the maintenance of these - the social phenomenal world would hardly be perceived as significant and relevant by the person.

Dotson's (Schaefer & Lamm, 1992, p. 546) definition of community concurs:

> [It is]*...a spatial or territorial unit of social organisation, in which people have a sense of identity and a feeling of belonging.*

This sense of identity may refer to the collective self-concepts that people develop in groups. In addition, Schafer and Lamm (1992) mention other phenomena that are useful for understanding the nature of communities. Firstly, communities influence who our significant others will be. Secondly, it is a source of social standards and formal and informal control. In other words, the shared histories between individuals in a community become the legacies of the people in them, and consequently continue to influence people joining the community, even when the original members of the group are gone.

Community and place are emotional and cognitive phenomena, which direct the people's experiences of the social phenomenal field. Mitchell (1995) argues that not

only is a place or space relevant in defining a community; a particular situation is also a powerful shaper of our self-concept as well as the roles we adopt. It often defines our speech, body language and behaviour. Relationships usually exist within larger social contexts. It must be stressed that an in-group can exist on many different levels, depending on the reference point of the individual. The in-group might be the nation, the city or the gang of friends meeting on Fridays. People are no longer members of one specific community or neighbourhood, instead we are members of many, specialised communities (Wellman, 1997). Bernard (Jones, 1997) stresses that people might exist spatially in one area, but their communal existence might be located elsewhere. It is important to recognise that the experience of community by an individual is of primary importance, because that experience is that which is eventually incorporated into the self-concept.

The sense of belonging to a community has been shown to promote a subjective sense of well-being (Duffy & Wong, 1997). This may be because the person feels more able to cope with changes, since a support Network of like-minded and interested people are available to him or her. A community is both a source from which a person draws significant others and a significant group. Its rules and mores provide guidelines for a member's behaviour and attitudes, creating conditional regard, which we have seen, affects an individual's self-concept.

From a psychological point of view the main characteristics of a community are:

1) A sense of belonging,
2) A perception of a psychologically constructed locality to which members have an affinity and through which they interact with each other. Locality therefore needs not be bound to a physical space.

The sense of belonging can be better distinguished. McMillan and Chavis (Duffy & Wong, 1997) offer four elements that are inherent in that spirit of community:

1) There is an experience of membership and belonging,
2) The individual feels that s/he has influence and a role to play in the group,
3) Members' needs are fulfilled by the community, and

4) There exists a subjective sense of shared history and experiences; i.e. there exists an emotional connection.

These four points emphasise once again the social aspects of the phenomenal field, which defines what self-concepts the person internalises. The experience of belonging means that it is likely that the person will consider others in her/his group significant and will attempt to conform to their conditions of regard. These significant others will also provide the person with experiences that may be internalised to form self-concepts. The strength of the significant and generalised other's opinions is modified by the degree to which the individual feels that an interdependence exists and that others value the individual. An individual will only consider others in her/his group significant as long as some of her/his needs are met and a degree of trust exists. A shared history means that a relationship has developed. This means that the individual is more likely to develop a sense of trust towards the generalised and significant other and that their opinions and attitudes towards the individual are prized.

4.2.2 Defining cyber-communities

It is important to distinguish what we mean by cyber-communities, since some uses of the word indicate only the various CMC environments, for example Internet Relay Chat (IRC) or newsgroups (e.g. Jones, 1997). A cyber-community is more than just the form of communication and a series of communications. Community falls in the sphere of human experience, and does not only entail the technology that facilitates it.

Some argue (Jones, 1997) that communication is not the same as community and therefore hold that cyber-communities cannot exist online, since it is only a communication technology, like the telephone, that links people. However, unlike the telephone, social artefacts are left behind and a shared history is developed (Jones, 1997). People can also simultaneously communicate in a way that resembles public forums and community life closely. Communication between many Net users is on going, both one-on-one and as a group. Communication is a precondition for the establishment of a community. It may be said that traditional spaces of community,

such as neighbourhoods, became the foundations of definitions, because distances between social groups restricted regular communication between people far apart. The Net however, amongst other social technologies, has certainly changed those limitations. Community can now easily be maintained across the world.

The development of the self-concept is not geographically limited anymore, because the phenomenal field has been extended. As Gergen (1996) has shown, the inner-world or self-concept has been exposed to a much larger variety of possible behaviours and attitudes. The internalisation of all of these may even become problematic. At the same time, people such as SCIs, can now enrich their self-concepts by testing a greater range of characteristics in a social world, which is virtually far easier to access than traditional online community forums.

Rheingold (1993, p.3) notes that 'virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling to form webs of personal relationships in cyberspace.'

The definition includes the relationships that people perceive they have with other community members and the history that they build together. Yet, it does not refer to the context in which people can meet and interact. The concept of a space online seems difficult to grasp, unless it is seen as a space created by human meaning and perception. We have given birth to an imagined geography online, with words such as 'site', 'e-mail address' and 'Go to' commands. Since this space is purely conceptual, we need a different way of making it concrete. Jones (1997) offers the following criteria, which indicate that a cyber-place can be manifested:

1) A minimum level of interaction will keep the sense of a public place alive,
2) A variety of communicators will add to its richness and diversity, and
3) A minimum level of sustained membership is needed for a shared history to develop.

Fernback and Thompson (Jones, 1997) add that the specific topic of the interest group visited, delineates the boundaries and therefore the space of the cyber-

community. The criteria for community mentioned in 4.2.1 fully enrich our understanding of what a cyber-community might entail. Nguyen and Alexander (1996), as well as Rheingold (1993), maintain that people connect (communicate) because of *shared* interests, not physical location. Physical location has traditionally meant that interests were shared, because people were coping with the same environment.

Cyber-communities are another form of specialised community, which arises from our modern, highly mobile life-styles. Wellman (1997) believes, contrary to Kraut et al. (1998), that cyber-community does not erode offline social ties and communities, but are rather complimentary to them. Cyber-communities have been created to respond to our modern lifestyles and extend our social Networks, which may otherwise have been impossible to maintain.

The existence of a cyber-community is greatly dependent on the sense of belonging that Net users experience when visiting that cyber-place. When people feel they are making a contribution to the cyber-group to which they belong, and they feel emotionally connected to the other Net users, while sharing common ground, then it is sufficient grounds for psychologists to accept that community does exist in cyberspace. Such a community will also exist in a certain space defined by the topic, the level of interactivity and membership of regular Net users visiting the site. Consequently, these places are not only open to experience for the members, but also to researchers, and should be considered a valid source of social influence in the Net user's life.

4.3 The need to belong and rejection

Baumeister and Leary (1995) integrated extensive research to develop a theory of belonging. They argue that people have a fundamental need to belong and are therefore highly motivated to form social ties. Shared emotions and interdependence between people is an essential reason for the formation of small groups. People are very reluctant to break these ties, even when these ties no longer serve their purposes well, and when they are difficult to maintain. These social ties or feelings of belonging are maintained through frequent, affectively pleasant contact, with the

same individuals in a long-term framework. That framework should optimally be stable, caring and concerned.

People spend a large amount of cognitive energy on their social ties, on maintaining them and thinking about them. Consequently, people in intimate relationships often have a higher level of subjective well-being and happiness than others. Love, when experienced in belongingness, is a positive experience, whereas love without belonging, such as unrequited love, is experienced with distress and disappointment (Baumeister & Leary, 1995). Often the beginnings of new relationships, such as marriage or employment, are also positive experiences. Positive emotions solidify social attachment. Happiness in life is also strongly related to the person having intimate, personal relationships.

There are a number of psychological and physical ill effects that people experience when belonging is lost or lacking. People show emotional distress at the break-up of a meaningful relationship and have a greater level of stress when quality social Networks are not available to them as a coping mechanism. Those who lack strong social bonds experience, most notably, unhappiness, loneliness and depression (Baumeister & Leary, 1995). There are psychological and physical ill effects stemming from those three qualities. They will however not be discussed in this study, since this would deter from our central arguments.

Comparing these findings with those of Kraut et al. (1998), it should be considered whether Net use weakens offline strong relationships and therefore threatens people's fundamental need for belonging. These findings should be interpreted with caution. It may seem likely that cyber-communities do not provide the same intimacy that individuals can get from intimate face-to-face relationships. The issue is ambiguous and may depend on the Net users attitudes toward technology, CMC and relationships. People who struggle to maintain intimate offline relationships may find it easier and more comforting to interact in cyber-communities. This is should not be the ideal, but for some it may be a solution to highly mobile lifestyles and stigmatisation.

Ostracism has been studied as one way to regulate the norms and behaviours of individuals in a cyber-community (MacKinnon, 1997; Williams et al., 2000). Ostracism is social exclusion, which undermines people's needs for belonging. The loss of a social bond is accompanied with a high degree of anxiety and other ill effects. People therefore find it difficult to withdraw from social bonds, and will often rather comply to demands from others in their relationships, than loose the social bond.

To be ignored produces negative self-evaluations, even when the individual merely imagines it. Social exclusion quickly threatens four fundamental aspects: 1) belonging, 2) self-esteem, 3) a person's sense of control and 4) a person's sense of a meaningful existence (Williams et al., 2000). In this way, the need to belong and the person's self-concept can be manipulated by the generalised other or significant others, to conform. When ostracism means that a Net user's needs are not met, it sustains the values that provide the framework of a community. Therefore the sense of belonging remains, but the individual's self-concept may be challenged.

The impact of exclusion on the self-concept may be great when we see that the loss of belonging has such a drastic impact on the person's levels of depression, anxiety and stress. These factors can easily lower a person's self-esteem and the person may very well attempt to present characteristics that are more favourable in order to win back group acceptance. If the Self really does arise from interaction with others, and if it is continuously redefined by social situations and the influences of others, then to be ostracised is essentially to be denied the expression of the self-concept and many social experiences that feed self-conception. For this reason, ostracism is a very effective way of manipulating people online.

Such social exclusion is not always dealt out purposefully. It has been documented that the lag time between e-mails or an IRC message appearing on the other Net users' screens can lead to similar feelings of rejection (Williams et al., 2000). Therefore, the technology can be responsible for a person's belief that s/he has been rejected and those feelings will hurt the person's self-esteem in the group. Due to the anonymity and the disembodied transience of the technology, people may find it easier to escape the situation, rather than attempt to restore her/his place in the cyber-community. Such a decision will be based on whether you already have

invested a large amount of energy in developing relationships and a reputation in the cyber-community or whether your motives are selfish, rather than community orientated, as in identity play or antisocial behaviour.

The need to belong is a very powerful process, which can affect the self-concept as we have seen. It may be said that it is the link from the individual's side to the phenomenal field, and it ensures, in a sense, the continued development of the self-concept. The need to belong is the manifestation of the individual's self-concept as part of the social phenomenal field. Consequently, when belonging is threatened, we are quick to adjust our behaviours to preserve the link between our self-concept and our phenomenal field. The sense of belonging is deeply embedded in our community life, and for this reason, the self-concept cannot be fully discussed without reference to the role that communities play in the self-concept.

4.4 Weak and strong social ties

Weak and strong social ties can also be illustrative of a person's feelings of belongingness. These ties have different functions in interpersonal relationships (Wellman, 1997). Strong ties are characterised by frequent contact with significant others and the generalised other, deep feelings of affection, interdependence and emotional support. They also exist across a broad range of interactions and do not only focus on shared interest and information. Strong ties are therefore best fostered by physical proximity (Kraut et al., 1998). Weak ties are superficial and easily broken bonds, suggestive of infrequent contact and the focuses of the relationships are narrow (Kraut et al., 1998). Weak ties are however often important sources of new information from other social groups. It seems clear that both forms of social ties are advantageous to people.

Kraut et al.'s (1998) fear that the Net only supports weak social ties could be extreme. Their study did not explore the possibility of strong ties developing online. It also focussed on people that already had strong offline social Networks. Lastly, it was a study of Net use rather than cyber-community use. Of course, social involvement and loss of social contact will be experienced when people spend most of their time surfing for information, rather than socialising. It must however, be taken

into account that some people, perhaps quadriplegics would make a good example, are severely limited in their abilities to go out there and maintain strong, offline relationships. CMC has also made it possible to maintain strong social ties that might have broken up by people moving away.

Some people, such as stigmatised groups, may easily have cultivated stronger ties online due to their offline isolation. It seems difficult to visualise that online relationships will ever be better than offline relationships, when physical social contact fosters so much more authenticity, in terms of contextual and non-verbal cues. The Net however, may be able to foster some sense of strong social ties, especially with software that fosters a sense of proximity.

4.5 Conclusion

According to Haythornthwaite, Wellman and Garton (1998), offline and online communities are not so vastly different. Research has suggested that people have created very similar communities for themselves, after importing their habitats online. Both kinds of communities have their own kinds of language conventions, developing their own jargons, histories, acronyms and social ties. The communities are similar in the different roles people adopt. The communities both establish boundaries in their different ways and maintain them with norms, values and rituals. Although it may be said that online communities equalise people in terms of status, social stratification is not completely ruled out. For example, the title webmaster ranks you higher than a newbie. A person therefore has access to a different stratification online, and equalisation may more accurately mean exchanging a less favourable offline status for a more favourable online status.

> *'Electronic virtual communities represent flexible, lively, and practical adaptations to the real circumstances that confront persons seeking community'* (Stone, 1994, p.111).

Cyber-communities may represent people's changing needs for belonging to a community, in societies that demand higher mobility and more flexibility (Wallace, 1999). These societies, which often provoke a sense of anomie and alienation

(Nguyen & Alexander, 1996), rather than a sense of belonging (particularly for younger, technologically orientated generations), may not seem as attractive as cyber-communities. These cyber-communities must then be pro-actively developed to suit the modern needs of people. Cyber-communities will not go away and people will continue to try to inhabit their virtual worlds more effectively. Communities and people, both on- and offline, influence individuals through the strong and weak social ties that bind them.

The individual can identify very strongly with others online, and others may influence them very strongly. In a social atmosphere such as this, the social construction of the self-concept is very much alive. Perhaps Gergen (1996) is right, when he states that the conception of the Self is occurring increasingly in the social realm, than as an inner construct. People are relating more and more with others outside of their traditional boundaries online, reciprocating self-disclosure with greater depth, although the other may be anonymous. The Self in terms of the imagined and mediated responses of the other is increasingly influenced by the imaginary, the many and the distant.

Behavioural and self-conceptual changes are occurring in people caught up in a highly mobile and increasingly mediated world. Our communities and our needs may be changing along the same lines. Studying those changes and the roles our phenomenal field plays in those changes is important as we attempt to face the future.

Chapter 5

Method

5.1 Introduction

In this chapter, we will discuss the research process of the study. It will address the various phases of the process and the basic concepts underlying it. Net-based research has unique qualities and these will be discussed in full. Qualitative research principles from a variety of disciplines are applicable and have been imported into this qualitative work.

The researcher would like to note that the entire study could have been conducted outside the realm of CMC. South African psychological research should focus on developing the possibilities of CMC-based research. The advantages are numerous, including a drastic reduction in costs and access to larger demographic populations. It may be argued that the majority of the South African population will not realistically have access to the Net, but it must be kept in mind that relevant developments are occurring in cyberspace that must be observed. Using the Net to recruit participants, rather than recruiting them face-to-face, may be much more effective. The strength of psychological research in cyberspace has been affirmed (e.g. Birnbaum, 2000; Hakken, 1999; Paccagnella, 1997), it is therefore a very feasible and cost-effective way to approach research in the future.

The research focuses on South African SCIs who regularly inhabit cyberspace. These people are likely to have experienced stark contrasts in terms of representation online, as a surrogate Self, and the offline presented, inconcealable spinal cord injured Self. This contrast may mean that these participants have a greater awareness of the role that CMC and cyber-communities have played in the development of their self-concepts. This small group of participants may be elite at this stage, but their numbers will increase, as the numerous advantages of CMC and Internet technology for the SCIs are realised. The impact of their injuries may be lessened as they gain access to a variety of experiences and social Networks in a disembodied field, which does not stigmatise them to such an extent as offline social

reality. The rehabilitative possibilities of cyberspace seem promising and worthy of research.

5.2 The research method

5.2.1 Introduction

A qualitative method was chosen for this study, with a strong emphasis on the experiences of the participants in their phenomenal field, which includes the vastness of cyberspace. Information was gathered using questionnaires and e-mail interviews. The data was collected, analysed and interpreted, based on qualitative assumptions. The motivations for using these will be discussed below. The discussion will be followed by a focus on the unique aspects of CMC research and their implications for this study.

5.2.2 Qualitative assumptions of the research

The nature of the information that was required to meet the aim of the study, dictated the use of a qualitative design, as the most effective way to gather and present data. The essence of the research is to understand the experiences of the SCIs of cyber-communities and what role these experiences play in their self-concepts. Such meaning is best accessed through an in-depth focus on what the subjects have to say about their experiences.

Similar to other qualitative approaches, such as phenomenology and social constructionism, this study attempts to understand and describe the participants' experiences from their perspectives, before interpreting it from a theoretical perspective. The researcher can provide insight into the unique experiences of a human being in her/his environment, by revealing the meaning of experiences. A focus on the meaning and context of the people must be maintained at all times, if the true meaning of a context for the person is to be discovered. Qualitatively speaking, the context includes the investigator and participants' personal contexts, as well as the immediate setting of the observations. It is necessary for the researcher to report on that context as deeply as s/he can discern it (Stiles, 1993).

Quantitative research abstracts and formalises data into useful statistics and breaks from the grounded meaning structures of subjects (Kruger, 1979). 'Describing an experience in words abstracts it and simplifies it, but not nearly so much as does projecting it onto a manageable number of quantifiable dimensions' (Stiles, 1993, p. 594). The researcher and the participant's interpretative contexts, will always have a level of subjectivity embedded in them and will always remain context-specific. Quantitative analysis injects into the data an abstracted bias, which betrays the immediacy of the subject's description of her/his phenomenal field, in favour of generalisability. Stiles (1993) argues that the emphasis of qualitative research lies in the understanding created by the study and the usefulness of the study to readers, and not its generalisation. Readers of a work must be able to apply the knowledge to their own contexts.

Quantitative analysis often lacks insight into the actual environment the person experiences, focussing largely on what is verbalised, but insulated from the bases of meaning. 'Numbers offer precision in scientific communication and efficiency of aggregation and manipulation... but their characterisation of a person's experiences is usually far more impoverished than are her/his words' (Stiles, 1993, p. 595).

5.2.3 The qualitative researcher

> *'The task of the psychologist is to create the conditions to make it possible for all the subjects to reveal that which is their openness towards the world... The research psychologist must therefore create an atmosphere in which the subject is free to explicate'* (Kruger, 1979, p. 37).

Qualitative research designs are particularly well suited to describe the social phenomenal fields of subjects and the meanings they ascribe to those realities (Neuman, 1997).

> *'A qualitative researcher focuses on the subjective meanings, definitions, metaphors, symbols, and descriptions of specific cases. S/he attempts to capture aspects of the social world for which it is difficult to develop measures expressed in numbers'* (Neuman, 1997, p. 329).

The researcher has a number of obligations towards the data in order to collect it in its purest form, without culling the essential meaning of what is communicated. The researcher must first, adopt a transcendental attitude, which is a 'process of suspending or bracketing all personal preconceptions and presuppositions by making them explicit' (Kruger, 1979, p. 142). The researcher brings to the interaction between research and participant her/his own biases and subjectivity, which can never be wholly escaped. Those assumptions of the researcher shape every aspect of the research. Instead of burying those assumptions in the use of 'objective' instruments, they are made as permeable as possible, since the researcher may not even be aware of some biases (Stiles, 1993). In this way, the researcher ensures that s/he remains true to the meaning that the researcher and the subject co-create in the research process. The researcher frees her/himself to acknowledge the influence s/he brings to the social situation of the research, and at the same time, acknowledges the meaning that the subject is attempting to describe to the researcher.

Qualitative research understands the non-linear causality that is so often imbedded in human behaviour and sentiments. Quantitative designs often attempt rigid control over factors, in an attempt to determine causal relationships. Yet, it often happens that both visible and invisible factors have seemingly chaotic influences on each other that cannot always be controlled nor predicted. The generalisations that quantitative researchers aim for are particularly sensitive to these disruptions and are often untrustworthy (Stiles, 1993). The qualitative researcher continually adjusts her/his approach to accommodate these chaotic dimensions in a way similar to the psychotherapist communicating with a client. S/he reflexively accommodates new information and works towards the best understanding of the situation, rather than forcing certain boundaries onto that insight (Stiles, 1993).

Although the researcher has orientated her/himself early on in her/his investigation, towards the phenomena with what is already known, s/he nevertheless makes the effort to postpone her/his interpretations until the information has been fully revealed. Thus, the researcher works inductively from the given phenomena towards a better understanding. The description of phenomena occurs before theory and hypotheses. This prevents the phenomena from being distorted by the researcher's presumptions

on how the data should conform to psychological theory or the requirements of a discipline. This however does not limit the researcher from focussing her/his intent by acquiring the necessary framework from the literature and other sources (Kruger, 1979).

The social reality of research means that the phenomena reported are a convergence of two intentions; those of the researcher and her/his design, and that of the subjects, since they bring their own behaviours and expectations to the research interaction. Subjects are involved in the research for specific reasons (which can be made overt as well). They are participants in the research, but also observers. This means that as soon as there is any form of studied phenomena by a researcher, the context changes through the influence of a present researcher. The researcher is a participant observer, and may add valuable insights and perspectives to the process. S/he may thus influence how the participants experience the research as well (Kruger, 1979). Whether the information remains true to its purest form is not the question, the question is how closely can the researcher express the meaning of the subjects and state her/his own meaning derived from the research experience.

The researcher's ability to communicate this complex interaction to the reader is tested by her/his accuracy to reproduce the main themes of the study: '...the *essential theme*, but not necessarily its *identical manifestation*, needs to be replicable as an index of reliability' (Kruger, 1979, p. 149). Due to the unique context of a research project, it can never be fully replicated. The similarities between contexts are a matter of abstraction. This must always be kept in mind when the reader of a work attempts to confirm research or expand on the ideas (Stiles, 1993).

5.2.4 Flexibility and reflexivity

Research in a new field such as cyberspace, where theory is far from clear and empirical evidence is slowly building, must be orientated towards constructing meaning. Qualitative approaches in this sense are complimentary to quantitative designs in the early stages of the discovery of a new field, as meaning and experience build in a reflexive path (Stiles, 1993). Qualitative designs allow for a cyclical path between the literature and observations (Neuman, 1997). This cyclical path develops through the major phases illustrated by Wester and Peters (1995):

- Data collection
- Observation and interpretation
- Reflection

These phases are not mutually exclusive and occur continuously and inseparably in the research process. Wester and Peters (1995) explain that the content of each phase is influenced by the preceding phases, as the process moves reflexively towards new questions and answers. In this way the information is continuously re-organised and re-processed, creating new interpretations and meanings.

The explorative nature of this design may necessitate the researcher to retrace his steps in an attempt to build a theory true to the actual phenomena observed. Theory that is entwined with the data is grounded. It builds potential insight into societal phenomena by establishing the foundations of the theory in specific contexts (Neuman, 1997).

When theory is developed over the course of data collection, when interpretation begins early in the research, then the researcher has greater flexibility in his exploration of new avenues in psychology. The qualitative researcher may modify the design and theory based on the development of meaning in the data collection process.

The unique fundamentals of qualitative data can be readily applied to designs that are explorative, that attempt to understand the phenomenal field of subjects and that focus on a social phenomenon, such as cyberspace, which cannot be easily controlled. Quantitative designs can be flawed when attempting to discover the

unique human experience of Net users surfing the fluid, ever-changing structures of cyber-communities.

5.3 Fusion of interviews and questionnaires into the e-mail interview

An aspect of this research, which branches from the usual qualitative designs of research, was the complete use of the Net and CMC in gathering the information needed for this study. This necessitated the adoption of a textual structure for interviews. A questionnaire was e-mailed to participants, which both gathered information and attempted to create a level of self-awareness in the participants. After the questionnaire a series of e-mail correspondences occurred, reflecting data collection more akin to qualitative interviewing.

5.3.1 Motivation for adopting interview techniques

The qualitative interview constructs a relevant description of the participant's phenomenal field through an integration of the participants' stories and the interpretations of the interviewer. The reciprocal, joint nature of the social interaction that is the interview yields information on the topic of mutual interest (Kruger, 1979; Kvale, 1996; Neuman, 1997). In order for the participants to communicate their experiences as completely as possible, the researcher must rely on open-ended interviews, conducted informally and non-directively. Due to the flexible nature of such an interview, clarification can always be pursued later (Kruger, 1979). The unstructured interview also does not have the potential biases of closed-ended questions, or questions that limit the answers, which participants may provide.

Other characteristics of the qualitative interview are (Neuman, 1997):

- The qualitative interview has the same features of all qualitative designs. The constant circulation of interpretations and data enriches the information. There is no clear-cut beginning and end between the interpretation of answers and the gathering of information. One may always lead to another,
- The interview and questions are tailored to the specific needs of individuals,

- The interviewer shows interest in responses and encourages elaboration,
- It is friendly and conversational, but focussed at the same time,
- It may be interspersed with jokes anecdotes and stories, which are noted as well,
- The interviewer and the participant jointly control the pace and direction of the interview,
- The noted social context is important for interpreting the meaning the participant attempts to describe, and
- The interviewer adjusts to the language and norms of participants.

The researcher also recognises that people reconstruct their experiences and add present interpretations. This in itself is crucial, since those experiences are also ways in which people shape themselves in their context. It is also ideal that the interview takes place in the participant's environment, so that s/he feels comfortable (Neuman, 1997).

5.3.2 Motivation for using a questionnaire

A questionnaire with predominantly open-ended questions was created, and pre-tested, to determine the areas on which future interviews could focus. The questionnaire can be found under Appendix 1. The questions elicited three different dimensions of information:

1) Biographical information that is necessary to put the meanings into the person's social context. It specifically focussed on the nature of and experience of the person's injury.
2) Information regarding the person's Net and cyber-community habits. The person was asked to give a detailed account of her/his experiences with cyber-communities.
3) The last dimension focussed specifically on the participant's experiences of cyberspace as a SCI.

The questionnaire served to focus the discussion topic on personal experiences relevant to how the person thinks about her/himself. It directed the participants to be self-aware and to think particularly about how they have come to conceive of themselves, in terms of their spinal cord injuries and their use of cyber-communities. It was later found that a few of the questions were unnecessary, as the research continued to evolve and focus on particular topics.

The questionnaire included explicit information on the basic framework of the research, a non-authoritative focus on what the person experiences, and an openness to discuss anything participants felt unclear about. It also served as a conversational opener and introduction.

Sending a quantitative survey questionnaire was briefly considered but abandoned. The explorative nature and the highly personal and individual nature of experiences necessitate in-depth qualitative analyses. The researcher felt that as long as the participant group remained small and personal contact was maintained through e-mail, then more detailed information could be collected, using asynchronous interviewing.

5.3.3 The unique nature of the e-mail interview

The Net and e-mail have many things in common on a technical level. It is therefore reassuring to the researcher, using this technology, that web experimentation has been successful, since it appears to be as valid and reliable as offline research (see Birnbaum, 2000; Buchanan, 2000; Krantz & Dalal, 2000; Michalak & Szabo, 1998). Online experiments successfully indicate that participants can be drawn effectively from the Net and experimental designs can be located online, accessing a wider population. The great value of ethnographic research, field research and discourse analysis has also been indicated by researchers such as Baym (1995), Bromberg, (1996), Hakken (1999), Paccagnella (1997) and Suler (1999a), amongst many others. The potential of the Net as a medium to gather not only online, but also offline data, is being realised fast.

Researchers must exhibit caution in their use of the medium, specifically when they import certain constructs from offline reality in conceiving online reality. MacKinnon (1997) and Hakken (1999) argue that inaccurate or hasty meanings attributed to Net behaviour may begin self-fulfilling prophecies, reinforcing meanings 'artificially' introduced by the terms constructed by irresponsible researchers. Researchers have the opportunity to guide the development of this exciting new environment and they must do so for the benefit of its denizens.

The great potential for e-mail interviews lies in the lessened likelihood of people distorting information online in an attempt to appear socially more desirable (Richman, Kiesler, Weisband & Drasgow, 1999). This may be due to the lessened public awareness and the heightened perception of anonymity and privacy, elicited by CMC. People need to focus less on the reactions of others during the course of their communication; therefore they focus more on what they have to say (Joinson, 2001). The limited contextual cues may comfort the participant as a speaker, reducing anxiety and weariness about sensitive information shared (Kiesler et al., 1984). The limits on contextual cues also limit the possibility of the researcher's non-verbal behaviour influencing the description process. The high degree of self-disclosure noted when people make use of the Net (Joinson, 2001; Kiesler et al., 1984; McKenna & Bargh, 1998), can be usefully tapped, as the researcher attempts to experience the intimate phenomenal field of a participant. The heightened levels of self-disclosure, the reduction of social desirability distortion and the increase in self-awareness, all contribute toward an increase of validity (credibility) and reliability (stability) in the research.

The convenience of conducting e-mailed interviews cannot be understated. Firstly, participants can answer the questions in their own time and in the comfort of their usual computer environments. In this way, the participant is put at ease and may focus on describing her/his meanings, without the influence of unusual circumstances presented by the research or the researcher's presence. It is also a cost-effective way of collecting detailed information, cheaper than other, traditional ways of collecting qualitative data such as mailed questionnaires and interviews (Babbie, 1992; Neuman, 1997). The researcher was able to draw participants from all-over the

country with little effort in terms of costs and time. The information is also easily archived or saved and is readily available in a textual format for interpretation.

Other techniques for interviewing were also considered, such as synchronous interviewing, which may have resulted in more spontaneous information from participants and may have developed greater intimacy and trust. It was however felt that the heightened self-awareness of asynchronous communication should suffice in revealing the phenomenal field of the participants. Synchronous IRC or instant messaging (ICQ) would also have meant that participants be available at specific times, which could have inconvenienced them. The software supporting these media is not as convenient as e-mail.

Standard e-mail is the easiest and most common form of CMC communication. All participants were comfortable with e-mail use. E-mail is also the safest way of maintaining a high degree of confidentiality, compared to newsgroups and IRC. E-mail may also have comforted participants with the fact that they are in conversation with the researcher one on one, where other forms of CMC may have given the impression of a group interview. In a group context, the level of self-disclosure may have suffered and the data may not have been as personal. A focus on a group experience would have changed the unit of analysis and the focus of the research. The focus would have been on the participant's *research group* experiences, rather than the participant's *own, natural group* experiences.

For all its advantages, e-mail interviews may have a number of disadvantages. The presiding fears about Net research amongst researchers, who are not comfortable with the environment, are the presence of respondent anonymity. These fears are grounded in the perception of lessened control over participants. Net research has been shown above, to be at least as consistent and reliable as offline research. The reader is reminded that surveys and other forms of offline data collection can be manipulated anonymously as well.

Williams et al. (2000) noted an exceptionally high drop out rate in their Net experiment. This may have occurred for two reasons. Firstly, the purpose of their study was to see what the effects of ostracism are on Net users. Users may then

simply have chosen to leave the experiment when they discovered they were ignored. It may secondly, have been possible that the levels of anonymity and the reduction in public awareness, resulted in lessened perceptions of obligation towards a researcher and therefore participants left the experiment for a variety of reasons. This was an undue concern in the current study. The researcher believes the personal interest participants had in the present study, maintained devotion to the topic. They were recruited via a mailing list devoted to circulating and creating new and useful information for SCIs; this could have contributed to their continued participation in the research.

The online reduction of contextual cues affects the amount of information the researcher can glean from the interview context. Part of the value of interviews is the added information the spontaneous context brings into play. When using e-mail interviews, many non-verbal cues are unavailable to the researcher. Consequently, the benefits of allowing e-mail interviewees lengthened time for introspection and online convenience must be weighed with the loss of potentially meaningful, contextual information. On the one hand, social desirability is reduced, and self-awareness and self-disclosure is increased, but on the other, the control the Net user can exercise in presenting her/himself is also significantly increased. The person may omit or exaggerate certain information, which may have been picked up in a face-to-face interview situation, but not on e-mail. These fears however exist in offline research designs as well (Babbie, 1992; Neuman, 1997) and are not exclusive to Net research. All in all the crucial benefits of e-mailed interviews strongly outweigh subtle fears and have proven very useful in this study.

5.4 Stability, credibility and consensus in qualitative research

Certain scientific principles must be maintained in order to maintain a level of quality work in scientific discourse. These are known as reliability, validity and generalisability in the received-view paradigm of quantitative research (Stiles, 1993). Qualitative research struggles with questions that fall mostly outside of the realm of quantitative research. It also upholds different research assumptions than quantitative research. These differences, together with the emphasis that qualitative research puts on shared meanings constructed between readers, the researcher and

the participants, necessitate the use of words whose meanings differ from those of quantitative research. To communicate clearly to readers what is meant by the adopted terms, reference will be made to the quantitative equivalent of a term. The reader is however asked to contemplate the layered meanings that the qualitative word communicates. The quality of qualitative research relies on the trustworthiness of the data and trustworthiness involves issues of reliability and stability. 'Reliability refers to the trustworthiness of observations or data; validity refers to the trustworthiness of interpretations and conclusions' (Stiles, 1993, p. 601).

5.4.1 Stability

The stability (Fiedeldey, 1991) or the procedural trustworthiness (Stiles, 1993) of data refers to the reliability of data. Not only does this concern the repeatability of the data (allowing for contextual differences), it is also the measure of whether the reported investigation illustrates what you have observed.

Since qualitative discourse focuses so much on stories and meaning, the investigator is obliged to instil a number of guards against miscommunication. After all, words mean different things to different people according to their contexts. Consequently the researcher must disclose her/his orientation (Stiles, 1993). This disclosure must be made to the greatest extent possible (since the researcher can only disclose that which s/he is aware of). S/he includes in her/his narration expectations, for the study, preconceptions, values and theoretical commitments. These disclosures help readers to place themselves in the frame of reference of the researcher and they provide a basis for understanding how the observations affect the existing scientific discourse on the subject (Stiles, 1993).

The researcher is also obliged to reveal, as fully as possible, the social and cultural context of the investigation. Embedded in these contexts are many assumptions, unique to the situation, which channel the interpretations (Stiles, 1993). This revelation reminds the reader that the data derives from a specific situation. Readers must view these personal reports with a level of criticism, since the researcher is not always aware of, and can distort personal insights.

The stability of the research can be improved by constant confirmation with participants of observations and by an immersion in the material at hand. This is characterised by prolonged engagement, persistent observation and discussion with other investigators regarding preliminary interpretations and an active pursuit of contradictory evidence (Stiles, 1993). Reflexivity or the cyclical nature of qualitative research strengthens observations, as the researcher re-evaluates and confirms insights with the participants. S/he also checks the accuracy of findings by moving through the work more than once and stabilising the various insights until little or no deviations can be made in consecutive passes through the work (Stiles, 1993).

Of course, there is no more reliable source than the actual source of information itself. Qualitative researchers must ground their abstractions in the actual observations. Quoting the participants is a good way to convey to the reader the actual meaning unit from which interpretations stem.

The stability of qualitative research refers to the rigours that an investigation must endure, if it is to paint a trustworthy picture of the contexts, the meanings and the procedures to readers. They may want to export the information to similar situations, where it may prove useful.

5.4.2 Credibility

Is an investigation internally consistent and useful? Can it be generalised to similar situations and is it useful to readers of the work? If so, then the work is credible or valid. The truth of the statements made in qualitative research is not as important as the *understanding* of phenomena that people derive from the work (Stiles, 1993). There can be no irrefutable facts. Instead, the different levels of credibility of information attempt to paint an informative picture as possible. Readers must be convinced of the interpretations' integrity in order to accept the research as applicable to similar situations.

Credibility is enhanced when the interpretations are the result of *triangulation*, i.e. the report is a convergence between multiple influences including methods, the data sources and prior theories and interpretations (Stiles, 1993). When the findings

logically confirm previous observations or stand in logical, critical opposition to standing observations, then the work is more likely to be trustworthy. The interpretation must be fair in that it honours all alternative constructions - it incorporates seemingly conflicting information and alternative explanations of the observations (Stiles, 1993). Triangulation is facilitated by the use of multiple sources and constant empathic interaction between the participants and the researcher.

The report on the data must be *coherent*, the quality of the interpretation and the description of it, to the reader, must be as strong and transmittable as possible (Stiles, 1993). Internal consistency, detail and powerful relationships between all the elements of the study are all aspects of a high degree of credible coherence. Rival interpretations should not only be acknowledged but also addressed. The information is enhanced when juxtaposed to other possible interpretations, building alternative reference points to the phenomena, so that they may be fully viewed and understood by the reader. Ideally the coherent narrative explains the existence of rival interpretations and offers logical explanations why they are inadequate (Stiles, 1993).

What is most important to the reader is whether the report answers their concerns. This is what credibility should also attempt to address. The report should evoke changes or growth in the reader's perspectives. When a large amount of readers feel that the work is self-evident, it is likely to be credible (Stiles, 1993).

The accuracy of the interpretation, as evaluated by the participants, is also a measure of credibility, alternatively called *testimonial validity* and *representational validity* (Stiles, 1993). It is a comparison between the reconstructions of meaning by the researcher and the constructions of the participants' realities. Yet, consulting with participants regarding the interpretations cannot always result in complete confirmation. Self-deception, poor self-knowledge and complicated language explaining the phenomena, can confound credibility (Stiles, 1993).

A last level of credibility, described by Stiles (1993) as *catalytic validity*, focuses on the level of change that credible information induces in the participants. Credible interpretations should have the power to allow participants to see themselves in a new light, and empower them. Insights derived from the interpretation of their

experiences will only motivate participants if they adopt the information as truthful and honest (Stiles, 1993).

5.4.3 Consensus and generalisability

A powerful way to justify interpretations is to seek agreement from other researchers in the field. When others familiar with the raw data, are also convinced of the interpretations and conclusions, the reader may feel more secure about what s/he reads (Stiles, 1993). Near replication of the work by different investigators, from different perspectives, is a strong measure of consensus.

The qualitative researcher develops insight into a specific situation as completely as possible, in order to describe it as best as possible to researchers involved in similar situations. The emphasis falls on the pragmatic value of the work and not its truth across contexts. A qualitative study should offer valuable insights into possible strategies that can be successfully employed in understanding situations and people who exhibit similar phenomena. Consensus therefore, cannot be fully explored in replication of the work; it must rather be reached based on the same raw data. If the interpretations were credible and stable enough, the work should be fit enough for other researchers to make powerful use of it.

5.5 Participant recruitment

5.5.1 Recruitment of South African spinal cord injured Net users

5.5.1.1 Defining the spinal cord injured group

Participants with a variety of spinal cord injuries were recruited. The injuries exhibited by the group in this study were (QASA, 2001):

Paraplegics: This group featured damage to their backs between the 1st and 12th thoracic vertebrae or the first and fifth lumbar vertebrae. This group has full or near complete use of their arms and hands.

Quadriplegics: This group has a substantial or total loss of function in all four limbs. A quadriplegic is someone who has sustained an injury to the neck, between the first and seventh cervical vertebrae. What allows many quadriplegics to continue functioning independently is their incomplete injury - an injury where some of the neural pathways have been spared at the site of the injury. Some movement of muscles and sensation can therefore occur. The amount of damage in an incomplete injury can vary. When the injury is complete and not fatal, all movement and sensation is lost below the area of the injury.

The spinal cord injured group was not only composed of those who acquired the injury. Two members of the group exhibited a congenital condition known as Spina Bifida. This condition results in complications, where the spinal column does not develop correctly in the embryo stage, and can affect the spinal cord as well. Physical effects of the spinal cord damage leave the injured person with an underdeveloped body below the affected area. The result is very similar to spinal cord injuries sustained later in life.

According to the QASA homepage (2001), the majority of people sustaining spinal cord injuries are in the age group between 15 and 29 years. The participants in this study are aged between 25 and 38 years, but those that incurred their injuries were between 20 and 28 years of age when it happened. None of the participants were under eighteen.

5.5.1.2 Recruiting a South African group

It was considered appropriate to focus on the South African population in this study, although many studies on the Net use the cyberspace population indiscriminately. The reasons for this is that it was at first considered more viable to recruit participants face-to-face, so that a high dropout rate could be prevented. A participant known personally to the researcher helped in recruiting participants. Besides giving useful information on the online SCI sites, he attempted to recruit participants face-to-face. They were informed of the research and were asked whether they were interested. If they were, permission was attained to send their e-mail addresses to the researcher, so that contact could be established between them

and the researcher. This method did not prove successful, perhaps the reason being the approach style of the researcher's acquaintance, who also attempted the recruitments. The fact that these SCIs did not volunteer themselves may have indicated a lack of motivation and interest. Instead, the researcher recruited participants from a local mailing list.

Participants were recruited via the mailing list of QASA (The QASA mailing list is available at http://quad.stormNet.co.za). The list administrator was contacted and asked if it were possible to collaborate with them in circulating information regarding the research. The QASA administrator maintains contact with approximately 60 people across the Southern African region, predominantly through an electronic newsletter and e-mail. Various regional offices also disseminate the information received from the administrator. This particular group could not be described as a cyber-community, since the different subscribers to the newsletter are not all in contact with each other.

All interest, except for one participant, came from members of the QASA mailing list. This should not have come as a surprise, since Lubka and Holden (2000) as well as Young and Levine (2000), make the observation that mailing groups are generally very involved with their subject. Thus, the level of interest and self-motivation for participating in the research was highest in the group that kept a purposeful eye on developments in spinal cord injury news and research. It was thought that Net users would be more cautious about joining the research. This was not the case. Contact after the information went out was almost immediately established. This indicates a high degree of interest in the field. It also indicates that at least these participants were not exceedingly mistrustful of the anonymous researcher's motivations. Perhaps because of having won the administrator's trust, by making all information about the researcher and the research available, the participants felt that they could trust the researcher with their personal e-mails and other information as well.

The prospect of embodied contact, which the researcher made available in the introductory information, may have been responsible for a high level of commitment. The researcher named his affiliations and offered various contact numbers, ensuring that participants could reach him face-to-face if they wanted to. He also sent

respondents a letter of introduction, stating his personal reasons for this research, offering a more personal connection to possible participants as well. Respondents contacted the researcher telephonically to show their interest, sent business cards by e-mail and even pictures of them and their families.

The unique cultural situation of South African SCIs is significantly different. The resources available to them, to establish contact with each other and with organisations that cater for their social needs, are limited compared to other countries. Comparing what close acquaintances pay in first world countries and what people in South Africa pay, Net connection is significantly cheaper in first world countries than in South Africa. For example, connection packages in Canada and the United States offer free connection to a local server. The South African SCI wanting to connect, has to invest a significant amount of resources, and possibly cannot invest as much time and money surfing the Net as their American equivalent. South African SCIs therefore have fewer opportunities to adopt cyber-communities as their 'virtual home'.

5.5.2 Criteria for the selection of participants

Once participants indicated their interest in participating in the research by e-mailing the researcher, they were sent consent forms (see Appendix 2) and a letter of introduction. The consent forms were 'signed' by the respondent providing their names and personal e-mails. The legitimacy of this kind of consent form is confirmed by the ethics recommendations of Michalak and Szabo (1998). When the researcher makes it explicit that completion of such a form, delegates consent to her/him, it may be considered valid.

The consent forms indicated all relevant information pertaining to the study, and included three questions, which would qualify participants for the research, or not. It was decided that a minimum level of time online and time in cyber-communities was needed, in order to create a standard temporal framework, in which people feel that they have developed relationships with others online. A relatively low amount of hours a week was chosen, three hours a week, anticipating the lower levels of Net use that may feature in a country where the technology is still relatively expensive.

Participants were also asked whether they participated in virtual/ Net/ online/ cyber-communities. No definition was given as to what may compose cyber-communities, relying on participants to define for themselves whether they felt they belonged to cyber-communities or not. Of importance was the sense of belonging of a participant. If they felt they belonged to such a group, they would have replied yes, if not then no. If a definition had been given, the researcher would have been imposing his conceptions on the participants' judgements.

Participants who responded negatively were probed to discover whether they had formal conceptions of what a cyber-community may be. Many cyber-communities exist online, but very few call themselves that explicitly. Often these overtly cyber-communities are commercial ventures, where Net users actually pay to belong to the community. None of the respondents probed, felt any connection with any group online. They only used the Net for data retrieval and to stay in touch with offline acquaintances. None of them felt they had even formed a relationship with people contacted online.

It was decided later, during the research, that 'participation' might have been too general a term. The word participation was more indicative of people's use of the online media in which communities exist, such as IRCs and newsgroups. The question was reformulated and presented to participants again: 'Do you feel that you *belong* to cyber-communities?' No deviation was detected from their original standpoints, but the revised question was answered with greater reference to feelings, attitudes and behaviours toward a group of people, rather than a CMC environment.

The letter of introduction served one main purpose and that was to establish rapport with the participants. Only one of the participants, Adam, has met the researcher in person. Although high levels of disclosure are recorded for CMC, the researcher felt that this should be as complete as possible. By revealing personal information, a process of reciprocal self-disclosure was started (see Appendix 3). It was hoped that this would end in an intimate relationship between a non-authoritative observer and the participants. Information on the researcher's background as a student, his motivations for the research and personal friendship with a SCI, was included. The

researcher and participants co-construct the research relationship and the meaning-constructs, and it was felt that the relationship should start on the friendliest and most involved note possible.

The participants were comprised of six people, aged between 25 and 38 years. All except one participant had a tertiary education. There was only one female participant in the study. Three paraplegics and three quadriplegics made up the study group, of which two of the paraplegics suffered from a congenital disease, rather than having been in an accident. Those that incurred their injuries suffered them between the ages 20 and 28 years of life. The participants were distributed across South Africa, and were not only drawn from the Gauteng region. Refer to section 6.3 for a fuller description of each participant.

5.6 The data collection process

Once it was established that participants had a minimum level of involvement with cyber-communities, they were sent the initial questionnaires. These questionnaires had predominantly open-ended questions, since the participants could fill in any amount of information with their computers. The focus of the questions fell more on the 'what' than the 'why' of their experiences. According to Stiles (1993), the stories that participants tell to answer 'what happened?' carry better, embedded theories, theories that are more truthful and genuine, than answers of 'why did you do it?' The latter kind of answers can often be misleading, particularly when participants are not sure why they experienced things the way they did. They may also draw far easier on actual situations than abstractions of those specific instances (Stiles, 1993). Once the questionnaires were completed and sent back, the researcher did an initial analysis of them, to establish new lines of questioning and to clarify answers that seemed vague and uncertain.

After the questionnaires, the enquiry followed the qualitative design of unstructured but asynchronous interviewing. The researcher maintained constant contact with his participants and was the sole interviewer. All information exchanged could instantly be archived on a personal computer, both for the researcher and for participants, who could refer back to their previous statements. The participants did not participate

as a group, but did know that a group of them was being studied. The researcher often formulated questions according to a general impression received from the participants as a group. The interviews stretched over a period of five months, with weekly, rather than daily, contact.

Depending on the participants, information other than that relevant to the research proper was often spontaneously shared. This information was recorded and served as additional contextual information.

Constantly evolving questions based on answers and the researcher's changing understanding of the field, were phrased specifically for individual participants, with general questions being regularly sent to the group. These purely textual questions were laced with 'emotional softeners' (Wallace, 1999) so that the researcher maintained a committed and involved representation in the limited textual format, rather than just purely logical, interrogative, questions streaming across the Net.

Empathy and the investigator's imperfect understanding orientated and directed the interviews. Empathy moves the investigator's understanding towards the meanings, including the purposes and significance, which people attach to experiences and their behaviours (Stiles, 1993). This researcher's imperfect understanding was refined, using techniques such as rephrasing, reflection and frequent summaries. Questions and insight were in this way tested, following a reflexive path from misunderstanding and not understanding, towards focussed and clear questioning. Encouragement, openness and appreciation for the information shared were often shown in the text to motivate participants. Full interpretation was left until a later stage, when the meanings and experiences of the participants were clearer. As Kvale (1996) notes, typical of qualitative interviewing and research, meaning and interpretation started at an early stage of the research and continued right through to the end of the study.

5.7 Data Analysis

5.7.1 Approach to data analysis

The object of qualitative procedure is not to build an objective truth of the world. It rather refines the work in such a way that true understanding can be fostered in the reader (Stiles, 1993). This procedure clarifies the framework in which the research was conducted, as much as the researcher can consciously manage. This should include all the boundaries of the researcher's approaches and the boundaries of the interaction between the researcher and her/his participants. The analysis exists mostly in the realm of words, texts, their associated meanings and what we can construct from the language. The power of qualitative discourse is summarised by Stiles: '...stories are often more vivid, compelling, engaging, and realistic than theories, and hence can permit clearer communication' (1993, p. 601).

The assumption is made in qualitative research that the stories, which participants tell, are their interpretations of events according to a personal logic (Stiles, 1993). Thus, the stories that people tell also transmit a set of latent theories on reality. A researcher can build psychological theory, based on a collection of stories, by identifying common themes that can be extracted from those stories. The predictive power of stories in qualitative research does not lie in generalisations, but in 'stories [that] can record the possibilities and limits of what people *may* do in similar circumstances, even when we cannot predict *what* they will do' (Stiles, 1993, p. 601) [Italics added].

5.7.2 Process of analysis

Following the researcher's rough orientation toward the framework in which the research will occur, the data was collected. The interviews and questionnaire were collected over a five-month period and stored without the need for transcription. Hard copies of all the information were made. The collection of data served to continuously challenge and modify the researcher's sensitisation towards the concepts through the initial orientation. The interaction between the researcher's growing knowledge and

the observations, served to ground concepts, to define them and to formulate a substantive psychological theory (Wester & Peters, 1995).

A topic of interest cannot be defined without an objective. The researcher first sensitises her/himself to the occurrences and concepts s/he is likely to encounter investigating something new. This sensitisation equips the researcher with a rough framework, which should not be overdeveloped for fear of entrenching the researcher's preconceptions (Wester & Peters, 1995). The researcher is directed towards the questions that could be asked and the procedure to be followed, in order to collect the right kind of information.

Once the researcher understands what s/he wants to investigate, questions are developed through the cycle of reflection, data collection and analyses proposed by Wester and Peters (1995) above. When the researcher believes that this informative cycle has been saturated, i.e. when the information collected becomes repetitive, even when different questions are asked, then s/he orientates her/himself towards the protocols.

Kvale's (1996) approach to qualitative analysis and interpretation served to direct this study's process of analysis. It must be stressed that although distinct phases are mentioned here, they are deeply entwined in the reflexive cycle of qualitative data analysis.

I. *Orientation towards the research and the protocols*

The protocols were continually read and reread, as new information was gathered over the five-month period, so that the researcher could acquaint himself intimately with the stories. New questions were particularly pursued where explanations were lacking in detail, and where the literature and existing understanding, grounded in observations, were lacking. When the information became saturated, the protocols were viewed in their entirety, focussing specifically on unexpected and new observations, which could be seen in the protocol as a whole and in light of all the information gathered (Fiedeldey, 1991).

Continuously cycling through the protocols, the researcher not only becomes intimate with the different layers of theories embedded in a participant's story (Stiles, 1993), s/he also becomes close with her/his own ideas and insights. Once all the information had been completely worked through as a whole, the information was laid aside for two weeks. It was then revisited and worked through a second time along this line of analysis. In this way, new themes can often be picked up that were missed in previous readings.

II. *Identification of meaning units*

The meanings, which the participants meant to confer in their stories, were sought in this phase. They establish themselves as different from other meanings on conceptual grounds; i.e. they revolve around different topics (Wester & Peters, 1995). Experiences can be separated and related to each other, because they share similarities and differences; they together, create a larger meaning.

Each protocol was analysed separately and on a temporal continuum. Some questions were sent out later than others were. The answers to these may have been a development of the participant's increasing understanding of her/himself in the context of the research, as well as factors outside of the research. The protocols were then compared to biographical information that seemed significant, in an attempt to understand a larger context for the story told. Lastly, all the protocols were examined together in order to identify common ground and unique meanings.

III. *Description of the categories of meaning*

The collections of phrases and sentences resulted in specific meanings that could be collected into categories. The meanings that arose frequently were included in the results. They form the common ground between the protocols. Quotations and definitions of what the categories represent were included, in an attempt to build clarity as well as credibility.

Each category was developed individually, with continuous references back to the original protocols. In this way, the many layers of meaning and context, in each

category, were effectively created to present as accurate a picture as possible of the participants' experiences.

IV. *Establishing stability and consensus*

The different meaning units and categories were developed from the six different protocols. Initially 16 categories of different experiences were identified. Two weeks were allowed to pass, in an attempt to enhance intra-coder stability (Fiedeldey, 1991) across time; then the first process was repeated. The two results were then compared to test the stability of the coding. Twelve categories were identified the second time round. The discrepancy was due to a restructuring of the categories, in order to include meaning units that were at first separated in more categories. It was found that displayed together, these units enhanced the depth of their meaning. Many of the experiences were very closely related, making it difficult to separate them.

Consensus and professional agreement will enhance the stability and credibility of research (Stiles, 1993). Replication by other researchers can lend stability that has been validated outside of the context of the research. For this reason, three colleagues were approached to confirm the categories. The colleagues included a professor of psychology, an educational psychologist and a research psychology student. After independent examination of the raw data, discussions and comparisons, it was agreed that the 14 categories adequately represented the data.

V. *Establishment of credibility*

The credibility of the interpretations was tested by referring to the participants for validation (Stiles, 1993). Correspondence between the ways the researcher and the participants understood the experiences was sought. During the process of data collection, the researcher continuously verified his understanding of what participants communicated, by summarising and asking questions. Towards the end of the process, summaries of what had been said in total were also sent to participants. Finally, the research results were sent to participants to test whether the findings

were credible to participants. Corrections, confirmations and expansions were based on their comments.

Contextual information on the researcher and participants was also included in the presentation of the results (see Chapter 6), in order to strengthen the reader's understanding of the contextual influences and enhance both credibility and stability. This served to strengthen the particular trustworthiness of the information created between the researcher and the participants.

According to Stiles (1993), the credibility of the data is also enhanced when existing theories and data in the literature lend support to the results. In the discussion (see Chapter 7), it can be noted that there are many overlaps with the findings discussed in Chapter 2, which implies that SCIs often experience cyberspace in the same way as other people do.

5.8 Ethical considerations for computer-mediated research

Some researchers have assumed that the public nature of CMC communication allows for analyses without consent. Consent and confidentiality are hot issues for debate in online research, since the two cannot be fully guaranteed or received and remain controversial. Dissemination of information and other ethical issues in the context of cyberspace are also controversial issues. Ethical standards for cyberspace are continuously being reshaped.

The recommendations by Michalak and Szabo (1998), as well as Suler (2000c) were followed:

- Researchers should identify themselves, their affiliations and provide as much contact information as possible, so that the legitimacy of the research can be verified.
- Potential participants should be assured of confidential treatment. In cyberspace participants should be given the opportunity to remain pseudo-anonymous whenever possible (it is easy for a researcher to chase down the e-mail address of a representing Net user, but this is not her/his right).

- Participants should be told at all times, what use will be made of the information and that they may be quoted, with consent and a guarantee of confidentiality.
- Participants should be reminded that their participation is completely voluntary and that they may withdraw at any time.
- Information regarding the study, participation, procedure, potential risk and the use of data should be made explicit.
- Pre-tests and pilot studies should be made, especially in cases where software clashes may become a problem.
- Dissemination of research results is encouraged.
- The moderator of any system (cyber-community) should be made aware of the research.
- Informed consent, which is documented, is highly encouraged.

Many of these recommendations are based on the ethical standards of the American Psychological Association. They are available at www.apa.org/ethics/code.html. Researchers are also advised to familiarise themselves with Netiquette, the special rules of responsible Net communication. These are available at http://www.vip.at/cfeichtner (it is courteous to reveal all the Net sites that the researcher constructively used.)

Continuing the tradition of ethical research online is just as important as offline. Ethical research ensures the credibility of our research and the quality of it. Research for the betterment of the human condition is what it is all about, and to abandon some of the most basic principles, just because the research occurs in an online environment, is unacceptable.

5.9 Conclusion

This chapter has clarified the various considerations the qualitative researcher internalises, before gathering data. Following the steps alluded to in this chapter, the researcher attempted to create as stable and as credible a work as possible. The ethical context of social research online was also alluded to. In the following chapter, the findings are illustrated with reference to the contexts of the participants.

Chapter 6

Results

6.1 Introduction

The research findings will be described in this chapter. The researcher's main motivations for the study are included, and so are short histories on the participants. These are necessary to frame the results in their proper contexts. The categories of meaning will then be presented, briefly defined, then described with verbatim illustrations that ground the categories.

6.2 The researcher

This short description of the researcher's personal motivations for the study is based on the introductory letter sent to all the participants. It should be illustrative of the initial contact established between the researcher and participants, as well as the researcher's context.

This investigation partly arose from my need to improve my understanding of a close injured friend's experiences. It arose from some discomforts and questions I still have after six years of friendship. At first, I was quite uneasy about getting to know him. One could say I also had prejudices toward the injured. Nowadays, I hardly notice the reality of his injury, instead I understand him better on a number of other qualities. I however still notice his stigmatised status. I often wonder about how I used to have presumptions about him, and how strangers continue to discriminate. I think about the difficulty SCIs have in communicating with people. My personal history guided my approach to the research question. My goals are clear: To understand injured people's experiences, to empower them and to change uninjured people's perceptions.

Computer literacy was a second concern that guided me towards Internet-based research. Working in this field I managed to further my understanding of information

technologies, and to look towards futures in psychology involving increased use of computers socially as well as technologically.

6.3 The participants

The following background information on the participants should enable readers to expand on their understanding of the interpretations and experiences that participants have of their involvement in cyberspace and cyber-communities. Sensitive information has been omitted, preserving confidentiality and their names have been changed.

The participants were questioned in the final phases of the enquiry about their motives for getting involved in this project. All of them hoped to gain more knowledge about their injuries and more insight into CMC's effect on them. They also mentioned the proactive role they hoped to play in creating awareness for SCIs. They felt that by participating, they could empower themselves and others. When asked how the research had affected them, Vicki and Alan agreed it made them more self-aware. They had to think more about their experiences and motivations, as well as the changes they experienced once they went online. For Alan it created a greater awareness of people's stereotyped perceptions of injured people. Cameron believes that it made him more aware that cyber people and groups were *real* and could be affected by his disembodied behaviour.

The protocols have been preserved to the greatest extent, with grammatical changes and inserts only featuring where meaning may be unclear.

6.3.1 Alan

Alan is a 38-year-old male, single and a T-12 paraplegic. He has a tertiary education. His injury occurred ten years ago. He has only been using the Net in the last four years, after he was forced to learn to use it due to an operation that isolated him socially and confined him to bed. He considers this operation a turning point, since the computer skills he learnt, together with the extraordinary access to information, instilled him with revived confidence in his abilities. A great sense of achievement

and joy filled him as the world became more accessible to him at the touch of a button.

Today he is an avid fighter for SCIs' rights and considers himself an educator of people ignorant of spinal cord injury. He is a successful entrepreneur and considers himself independent, resourceful, positive and highly motivated.
'[I] try to always look at the bright side rather than the negative one.'

He is competitive and takes up adventurous challenges. He seems well adjusted with a high self-esteem. When asked what he might change about himself he replied: *'Nothing.' 'I had no problem at all communicating with other people, because your personality does not change after the accident.' 'People accept me in my wheelchair and look beyond it. ... [This] makes [me] confident in myself.'*

Challenges of a physical nature have frustrated him and depressed him. Yet, they have also provided him with a great sense of achievement when he managed to overcome them. He alludes to the frustrations that putting in a light bulb caused him. In the end, he did overcome this physical limitation, and refers to his innovative thought as a skill with which he conquered embodied limitations.

His understanding of cyber-communities is this: *'I define a cyber community as groups of people that act as information centres, only they are people with emotions.... You can either meet with cyber communities in real life or not.'* He is very active in a number of cyberspace environments.

6.3.2 Wayne

An immediate remark that must be made about Wayne's protocol is that only the initial questionnaire was returned. More information was not shared, even after a number of appeals. It was considered to abandon his incomplete protocol, but it was decided against this, since some information could be reaped from it. The shortness of his protocol and his answers, together with a failure to answer sensitive questions, may indicate a great guardedness and mistrustfulness. Interpretation of his exact meaning was at times difficult; nevertheless, his statements strengthen the stability of the study as a whole.

Wayne is a 29-year-old, single male who has been living with his injury for five years. He is a quadriplegic with a tertiary education and employed. The length of time he has been using the Net is unfortunately unavailable. He learnt to cope with his injury through a process of *'acceptance, faith, understanding, humour and anger'*. He felt a sense of worth and achievement when he managed to help others and *'achieved things in and out of the chair'*.

6.3.3 Adam

One factor that sets Adam apart from the other participants is that he is the only respondent personally known to the researcher. However, all information was collected from him in precisely the same way as the other participants. The only difference that may exist is an embodied obligation towards the researcher. Comparing with other protocols, this seems not to have affected the richness, as well as the credibility of his responses.

Adam is a 26-year-old, single male and paraplegic since birth, by congenital disease. He has a tertiary qualification and has been active online for 6 years. He feels he has a large amount of confidence, illustrated by his acceptance as a top, paraplegic sportsman in South Africa. He states that his greatest sense of self-worth arises from challenges successfully met and helping others. He is a very competitive person and enjoys challenges of every sort. He says that he is an understanding and adaptable person, who copes well with stress. However, he thinks he often over-commits himself, is sometimes lacking in direction, and is emotional as well as envious.

He believes the key to his successful acceptance of his injury lies in his and his family's patience and understanding, as well as their improvisation. Adam is not as active as some members of this study online, but nevertheless defines cyber-communities in similar veins:

'Cyber-communities are individuals who devote part of their daily/weekly time to communicate over the Information Highway for entertainment, social affairs, and exchange ideas or business research on a regular basis. Many individuals will relate to each other as information sources.'

6.3.4 Cameron

Cameron is a single male, 30 years old. He is a quadriplegic who has been living with his injury for two years. He has been using the Net for two years and is a high school graduate. He was also involved with ballet before his injury. He thinks he has learnt to live with his injury and sees himself as a person who has achieved many successes. He says he has not yet failed himself. He does see himself as a private, defensive person, suspicious and distrustful. Like Alan, Cameron claims that without his injury, he would never have made use of the Net. His injury forced him to rethink his social position, since mobility became an issue. He radiates a sense of achievement and pride in the Net skills that he learnt.

Cameron's definition of cyber-communities is: *'Cyber-communities are groups of people who connect regularly online without being 'offline' buddies. People who chat online about things that interest each other. One must realise that not each person is a 'genuine person'. There may be false personas.'*

Cameron's injury does interfere with his abilities to type fast and to type long sentences, but this did not stop him from providing a rich protocol. It is surprising that he only makes use of IRC, which can be known for its demand on speedy typing. This defies the initial assumption made by the researcher that quadriplegics will favour cyber-environments where they can take their time responding. This assumption was made based on a general belief that slow typing is a form of disability in fast-paced IRC discussions.

6.3.5 Peter

Peter is 25 years old, with a tertiary education. He is a single, male quadriplegic. He was injured five years ago and has been using the Net ever since. He is still learning to cope with his injury and he finds the process difficult: *'I haven't learnt yet [to cope with my injury], [I] just take 1 day at a time'*. Peter seems to be self-critical and fatalistic. When asked what he would like to change about himself, he answered it would be his physical condition. He however realises that he is too self-conscious and critical. However, his positive qualities that he mentioned should allow him to have great success online. Intelligence, sensitivity, humour and loyalty are prized characteristics in many cyber-communities.

He has had a wide range of exposure to cyber-environments and prefers different ones at different times. As a quadriplegic, Peter says that, due to his injury, he also struggles to type long messages. Peter's definition of a cyber-community is: *'Any group of individuals who correspond primarily over the Net, sharing a similar interest in one or more topics, which keep them together and interested in each others' views and opinions.'*

6.3.6 Vicki

Vicki is the only female participant in the study. She is single, aged 30 and a paraplegic- by a congenital disease. She has a tertiary education, which is her greatest source of pride and confidence. She describes herself as open, stubborn and honest. She grew up isolated from other injured people, in a rural town. She has had access to the Net for three years now, which in her opinion has changed her life.

Vicki radiates positive self-esteem and confidence in her protocol. She is enthusiastic and optimistic and seems to have fully accepted herself: *'Being disabled, is not the end of my life and every new day brings new possibilities and experiences, which are wonderful and exciting.' 'I have no reason to be ashamed of my appearance.'*

Vicki enjoys chatrooms the most, although she does not limit herself to these. Her definition of cyber communities is: *'It is all the real people from all over who connect to each other, on a regular basis, on the www, either by websites or e-mail on some subject matter which forms the common ground of interest.'*

6.4 The meaning categories

6.4.1 Offline stigmatisation

Definition: It is the impact of negative, prejudiced treatment that SCIs experience, interacting offline with uninjured people. Uninjured people express such discrimination distinct ways, such as ostracism, sympathy, lack of understanding and negative attitudes about employability and mental capacity. SCIs respond to these reactions in different ways. The feelings that they experience are often self-consciousness, embarrassment, anger, frustration and loneliness. They cope with this negative affect in different ways, often ignoring reactions, isolating themselves and withdrawing. Often they also seek to educate others and assert themselves.

Alan finds it easy to communicate with uninjured people and feels they do not see him as severely different. He however still believes there are problems in the way people understand him: *'Your friends do not understand the complex diversity of your injury…that's where we have to educate them.'* Alan sees himself as an educator and often confronts people with their prejudices. Wayne says: *'People [are] not understanding [of] disability.' '[They have] scared, ag-shame [condescending and sympathetic], unaware reactions.'* Adam has also experienced that same unwanted, sympathetic attitude: *'[The] most obvious communication problem with the able-bodies is the fact that they pity my condition.'* He says compliments are only expressed at inappropriate times, for example when uninjured people are drunk. He therefore experiences them as hypocritical or condescending.

Peter feels stigmatisation has affected his career opportunities as well; when asked what has made him feel worthless he replied: '*Lack of respectable employment and associated success, as well as my physical condition.*' Vicki felt intensely distressed when she was given employment, and then dismissed within the hour, due to objections to an injured person working in the office. '*I drove around for hours and cried until my entire body ached. I could not …face my mother; my life had no meaning and purpose at that moment. …It made me realise that no matter what I did, I remain disabled [to others].* She experienced the full brunt of ostracism as a stigmatised person.

Peter experiences ostracism when people look away from him and they do not want to appear staring. People's reactions tend to make him feel embarrassed and self-conscious. Adam says the following about appearing in public: *'I get stares from people.' 'I feel like I don't exist.'* Cameron has experienced much rejection and ostracism as a stigmatised person. He describes his experiences powerfully: '*People are nervous about saying the wrong thing and so tend to ignore you. People think you have a mental problem that caused your disability. People tend to talk over your head because you're not their height.' 'Face-to-face the reality is loud and clear…in trying to treat one as normal they can't get away from the issue of trying and hence end up accomplishing the opposite.'* Similar to Cameron, Vicki finds people treat her as if she is mentally retarded and they make an effort to avoid eye contact.

Stigmatisation also isolates SCI's. Peter says: 'I don't go out and socialise as much and do not see as many people face-to-face.' Vicki gives a very touching account of her development and the growing realisation that she is a stigmatised person. As she grew up with '*normal*' people, they gradually withdrew from her. She realised that she '*reached a stage when she was left behind.'* This depressed and frustrated her immensely. Not wanting to impose on others, she resolved to '*suffer in silence and to suffer alone.*' She felt misunderstood and lonely.

6.4.2 Physical self-awareness

Definition: The extent to which the online and offline physical reality of a SCI's injury forms the background to interactions. This background includes the SCI's reaction to physical situations and social responses. Offline, interactions are often precluded by the impression the injury makes on uninjured people. Offline physical situations are often sources of frustration and self-consciousness. The online reduction of physical contextual cues can often lead to a variety of experiences different from offline interactions, including different levels of physical self-awareness and qualitative differences in social interactions.

Mobility and appearance are often affected by confinement to a wheelchair, and consequently impact on the SCI's experience of her/himself. Alan sometimes feels self-conscious about the way he looks in public places, designed for uninjured

people: *'[At a bank counter] you look like a monkey looking over a wall.'* Alan, Vicki and Peter refer to the discomforts of stairs, restaurants, restrooms, parking spaces and buses, to name a few examples of the things that frustrate them. Peter illustrates his discomfort in public places: *'I feel awkward and ungainly. I use the ostrich, head in the sand approach, and stare straight ahead until I get to my destination where I relax a wee bit.'*

Cameron says his body always comes up in online conversation, since he has a very physical background: '*Physical appearance is important to me. Thanks to my ballet background it always comes up.'* The Net has had one major influence on how Cameron conceives of himself: '*It's made me less aware of physical appearance as a criteria [for acceptance].'*

When out-group members or able-bodied people, focus on the injury, it often discomforts the SCI. Adam describes the experience as condescending: *'Some who are either brave or absolutely intoxicated will unleash their curiosity and declare how much I inspire them.'* Adam prefers it when people do not focus on his injury when it is not an issue for him in the conversation: *'Those [offline] who become my close friends will forget that I am in a wheelchair.'* All the participants have alluded, in general, to their need to be considered as someone more than a person with an injury. Vicki states she found it positive when people interacted with her *('just the person, without having to deal with the 'obstacle' of physical appearance')* online.

6.4.3 Social Networks

Definition: The discovery of similar others online, with whom the SCIs can identify and share information, can expand their social and support Networks, which often have been cramped offline due to stigmatisation and loss of mobility. The discovery of others with similar experiences leads to relationships varying in their depth of trust and reduction of isolation and loneliness. These Networks are sources of strong and weak social ties and particularly relate to the enlargement of their social phenomenal field.

When asked which cyber-communities Alan liked the most and why, he said: *'[The] independent living centres, because they are like me ... disabled. ... I will only share problems with close or confidential friends that know my situation. I trust them because they are in my situation. Although I cannot see them, I know they will keep it to themselves. I feel responsible to share information that is mutual to us.*

Wayne also takes part in cyber-communities largely dedicated to SCIs. The people on these sites are the only ones with whom he converses and they are the only ones whom he lets know that he is injured. He does this because: *'They are in the same boat.'* Peter also experiences a sense of belonging to online groups, where individuals share his condition. He has had personal and moving experiences with quadlists, cyber-communities geared for the special needs of quadriplegics: *'It's difficult to say how, but communicating with other quads has helped me.'*

Adam has found similar groups online to be more personal; he can share experiences with them. He however feels disappointed as a paraplegic, since he has not found a group catering for his specific needs. He is also reluctant to share sensitive information with someone he has not met face-to-face. Cameron does interact with other injured people via the Net, but he does not necessarily feel they are amongst his most intimate online contacts.

Vicki felt connected to uninjured people for the first time, as she discovered people with the same interests and concerns as herself online - people who were unavailable to her in her physical locality. She realised, she was not alone at all. Her isolation was largely broken, as she connected with others, sharing her disability and other interests. '*It helps to have some form of support especially from other people in similar situations.'*

6.4.4 Intimacy

Definition: The extent to which SCIs have experienced various degrees of intimate and authentic relationships online. It is characterised by different frequencies of interaction and different levels of trust and self-disclosure. Some consider online, intimate others as interdependent friends, who fulfil emotionally supportive roles in

different proportions. Some participants do not experience others as intimate; instead they focus on other Net users' roles as information sources.

Alan considers people he has met online as his friends *'because we communicate [regularly] and feel confident sharing any problem...'* He trusts others with confidential information and says he is there for them as well. Alan has a large Network of Net relationships, people with whom he experiences intimacy. When asked why he would consider acquaintances online friends, he answered: '*There was regular communication between us.'*

Peter believes he has found friendship online. His perception of friendship online, is due to help shared or interdependence, and because they *'talk like in-the-flesh friends would '.* Peter has found cyber-communities especially fulfilling, since he was a community leader as a web administrator. The level of intimacy he experiences differs online, much in the same way we might experience different levels of offline intimacies. He differentiates between Net friends and offline friends: *'Flesh friends shared real experiences and choose to spend time together, whereas Net friends could almost be equated to work colleagues, we discuss general issues and topics related to online experiences.'* Vicki believes that CMC makes befriending people easier. She talks of her friendships with other Net users with remarkable depth, unlike the other participants: *'I have shared some of my deepest, honest, thoughts and troubles with these people and they have not judged me.'*

Adam is of the opinion that he has made only acquaintances online, and they have not had any lasting impact on him, mainly due to very irregular contact. Overall, they do not mean much to him. Wayne does not experience others online with intimacy. He prefers to lurk and is hesitant to communicate with others online.

6.4.5 Embodied Isolation

Definition: The degree of embodied isolation maintained by SCIs in contact with people they have met online, either by choice or by distance between them and meaningful others.

Alan would have liked to meet members of cyber-communities with whom he had formed intimate relationships, but he says: *'All those I communicate with are overseas so I always explain why I cannot be there.'* Vicki claims that she would love to meet her cyber-friends, but they are all located overseas.

Adam has experienced similar limitations. He would have met with some people, had they lived in proximity. He would prefer to meet people similar to him offline. Cameron maintains that embodied meetings should not occur*: 'The unseen should remain as such.'*

6.4.6 Expansion

Definition: The extent to which SCIs experience a deepening and expansion of their knowledge, skills and social Networks, as they become more familiar and skilled with the technological medium, cyber-communities and the information in which they are interested. This is an expansion of their phenomenal field. Social Networks are included here as a source of expansion, but their character may be illuminated better by other categories.

Speaking with other Net users online, about their experiences and opinions, matters to Alan: *'It's nice to hear other people's opinions…I learn more about life.' 'Cyber-communities …are very important to me because I get answers that I'm looking for.' ' … the Net can influence your life drastically because the information…[is] at your fingertips.' 'I have more information and friends and the world is getting smaller.' 'My outlook on life is much broader now.' 'I am more educated now.'* Cyber-communities are sources of self-enrichment, and the information available defines whether he stays in the community or moves on. They must spark an interest or *'talk sense'*, before he engages in conversation. Peter also uses the Net to reap information; not for social play and emotional support: *'I prefer groups who have intelligent members who can offer more than hugs and smileys.'*

Alan uses cyber-communities as information sources: *'I do a lot of research [online with regards to disability] and communicate with doctors in the USA and with Independent Living Centres [cyber-communities] world wide.'* For Wayne, the

greatest benefit of cyber-communities is information. Wayne's preference for lurking limits him exclusively to the information that others are exchanging. Adam also focuses on gathering information: *'It is my main source of information for my business and hobbies.'* Cameron is of the opinion that the Net has expanded his horizons beyond his physical preoccupations: *'It is a tool to a world outside your physical world.' '[I focus on] gathering info on any desired topic, I love the easy access to information.'*

Vicki finds that her horizons have broadened and her life has been enriched *'in a way otherwise not possible.'* This occurred by: *'meeting more people and sharing of new ideas and concepts other than dull, boring local gossip.' 'The Net enables me to gather information, which I would otherwise not have access to, and to use this info and technology to strive for improving the quality of my life.'*

6.4.7 Superficiality

Definition: Online relationships are often questionably authentic. The degree to which people find online relationships satisfying, may be cramped by the limited contextual cues available to SCIs, the fickleness of relationships, the feigned interest and concerns, which SCIs have often experienced online. The need to imagine many of the contextual gaps is experienced as superficial, when offline confirmations run contrary to what was imagined. Online superficiality is also exposed by comparisons to embodied, more authentic relationships.

Alan experienced chatrooms as especially fickle. He likes them the least of all the cyber-environments because they are about: *'Chitchat on politics in other countries and love online. Some of them talk sense and some of them just use the Net to keep themselves busy.'* Wayne and Adam feel that cyber-communities are hardly meaningful to them, indicating the low or superficial effect that cyber-communities have on them. Adam states the social environments, specifically IRC, are childish. Speaking of cyber-communities in general, Adam indicates his sense of superficiality clearly: '*[It's] another way to pass the time.*' '*They just fill in the gaps when I have nothing to do.*' Cameron makes the superficiality of relationships developed online very clear in his pursuit of privacy: *'Cyber-relationships are also easier to discontinue,*

making it easier to change personas.' Peter finds IRC especially lacking in genuine human interaction*: 'Cyber-socialising is far less intimate and you can be very casual.'* Vicki realises that, a great deal of play is inherent to the superficial online environments, and decided that she would: *'enjoy the moment…and feel happy for those few minutes.' 'I try to enjoy the moment without attaching any expectations.'*

Non-verbal communication can be shallow and confusing in cyberspace, leaving a great divide between embodied and disembodied interaction. Alan believes: *'Everyone is looking for the perfect woman/man with wealth, looks, sex ability …and when I'm offline and in real life this is impossible because of my situation' 'Kinda weird if you put the face to the writing.' 'Sometimes I wonder if it could be the same person.'* Peter also experienced the divide between the imagined and the embodied. When he finally met people befriended online, he describes the experience as: *'odd, people never look the way you imagine them.' 'Simple things like accents don't exist online, while online mannerism do not translate well into real life.'*

Alan compares on- to offline reality: *'Offline is better because the person you talk to can be evaluated immediately and you will know if it is a go or no go.' 'Communicating through the Net and not seeing the person, makes it difficult to get the whole picture.' '[It's] weird meeting someone offline-what you see on your PC screen is not what you are going to get.'* Cameron compares cyber-relationships to offline ones: *'[In face-to-face] it is more difficult for someone to hide small mannerisms that would give away their awkwardness.'* He perceives cyber-communities as *'non-realistic'* and *'unreal'*. Peter believes time spent socialising online, is better spent with intimate friends and family offline: *'It takes away time I should be spending with real people.' 'I am now consciously leaving my PC to interact more with real people…[I] realised my priorities were a bit skewed.'* It must be said that, when he made the decision to spend more time on offline relationships, he felt: *'a bit guilty towards [those with whom] I generally interact online.' 'I have now met a real life friend, who I enjoy far more than any cyber-communities.' 'The Net is an easier environment…and seems so fulfilling, when in all honesty I don't think it is'.*

There also exists the need to enhance relationships with embodied meetings, another indicator that the Net does not fulfil important intimacy needs. Alan, Adam, Vicki and Peter wanted to, or have made an effort to, meet users met online, offline.

6.4.8 Representational comfort

Definition: Representation is the disembodied presentation of Self, through a medium that allows the Net user nearly complete control over self-relevant information. Representational comfort is the degree to which cyber-communities are experienced as comfortable social environments compared to offline social environments. The important aspects affecting comfort here are the many pressures and contextual cues lacking in online representation. Representational comfort is often related to the voluntary omission of the physical body in CMC social relationships. This is closely related to Equalisation.

Alan neither uses nicknames communicating online, nor adopts a pseudo character. He does not play MUDs, and lets people know about his injury. He feels comfortable enough to release sensitive information to others: *'[I] put a photo of myself on the Net to put a face to the writer and, well, they see the wheelchair.' 'You are more relaxed, whereas face-to-face you tend to be under more pressure with eyes focussed on you while communicating.' 'It's less effort to communicate with them because they can answer you in their own good time.' 'It therefore makes it easier to communicate, especially with difficult issues such as love-life, medical problems and personal problems.'*

Peter feels nearly the same way as Alan: '*Making friends online is actually easier, because of the anonymity factor, you can approach people without rejection-fear because you can simply disconnect and nobody will ever know who you are.*' Peter makes this clear when he states: '*I can comment and respond to the extent I wish.*' Vicki says that she has learnt to befriend people online in a way that is much easier than offline meetings.

Amongst other things, representational comfort is also the choice to reveal the injured Self online. The injured Self is usually only consciously revealed, in an

environment conducive to sharing that information, such as SCI sites. In these environments the SCI gains more, and may be more comfortable, revealing the injury. Consequently, the SCI Net user, in most cases, is spared stigmatised and isolating reactions by representing an uninjured Self. Peter says, *'I can choose to reveal my paralysis or not, take on any persona…'*. Vicki replied that she does not need to tackle the difficult issue of judging people's reactions to her in face-to-face interactions.

6.4.9 Depersonalisation and disinhibition

Definition: The limits of contextual cues and the perception of anonymity have led to various levels of depersonalised and disinhibited experiences. The extent of the experience of a virtual reality is also fundamental in the depersonalised experience. These experiences vary in degrees of responsibility felt towards others, in power felt, in self-doubt and, in some cases, confusion. These experiences also vary between the experience of others and the Self as depersonalised. Depersonalisation can also have a very real, practical benefit regarding Internet safety. It is one way to protect oneself against anonymous strangers.

Part of Alan's definition of cyber-communities was that, you have a choice to meet others or not: *'Do you want them to become real or leave them where they are?'* He experiences other people online as emotional, informational units, rather than as embodied people. He rather calls them: *'Cyborgs with emotions,'* but he also experiences a detachment from himself: *'I am also just a cyborg…they cannot touch me or harm me physically…'* His experience of others and himself online is detached and mediated. It can be controlled and manipulated and it is therefore not immediate and authentic.

Adam illustrates the online environment as a play. When asked what the positive influences of cyber-communities were on his life, he replied: *'[It increased] my ability to role play.'* Adam hints of a darker effect on him as well: *'Apart from my eyes, I sometimes forget who I really am.' 'My surreal self can sometime take over my personality.'* His use of cyber-identities has surprised him when he later reviewed chats, emphasising the depersonalisation again: *'There have been times when I*

came across my cocky personality while I chatted with a stranger.' He says that: *'cyber-social groups were surreal and all 'made-up' while face-to-face was more honest and personal.'* The experience of a play emphasises a removal from an authentic reality. Detachment from the Self and interactions with virtual others is deeply entwined with a sense of confusion, disembodiment and virtuality. Cameron found himself often asking: *'Are these people real or are they fake personas?' 'One must realise that not each person is a 'genuine person'. There may be false personas.'*

Alan perceives mutual levels of unaccountability: *'They are cyber-persons and could tell you anything you want to hear.' 'It's like reading a newspaper... you could either ignore the article or be interested.' 'I can decide to send this guy/girl to the moon or not. It's so easy... you just click 'block sender'.'* When Wayne was asked how he compares CMC to face-to-face communication he replied: *'[You] can walk away from cyber.'* He states that anonymity allows him to be involved when he wants to. Cameron describes IRC as: *'informal, non-committal with the option of privacy.'*

Speaking of CMC, Peter states that: *'it is a great anonymiser.' 'The Net is like TV, you can turn it on or off when you feel like it and virtually no action has long term repercussions.' 'You can be uninhibited and express your feelings without fear of jeopardising who you are in real life.'* Vicki describes what disinhibition allows her to do in a new cyber-social situation: *'there is no hesitation or feeling of holding back, very spontaneous without fear of rejection. Even if I get kicked out of a room, there is no way I would take it personally, it is all part of the fun and thrill of technology [anonymity].'*

Adam uses pseudonyms and representational identities, preferring to remain anonymous. Why? He replied: *'It makes me feel mysterious and [it] gives a sense of awe.'* He experiences a sense of power when people have incomplete knowledge about him. Peter seems to assert the same power when chatting to online familiar people, in disguise - *'it's fun.'* The fun seems to be related to the sense of awe and mystery that Adam likes seeing in people.

Vicki uses nicks and anonymity to keep safe from strangers' deviant behaviour online. She has also represented herself through cyber-identities. Wayne takes advantage of the online depersonalisation. He uses the full range of anonymity available to him - he adopts pseudonyms and nicks and never reveals himself through conversation in a cyber-community, suggesting that he feels protected by anonymity and depersonalisation. Cameron is mistrustful of CMC and he prefers not to deepen relationships with cyber-people met online. Instead, he prefers to keep in touch only with people he knows offline. Cameron remains impersonal and anonymous. He does not make use of nicks and cyber-identities. Instead, he relies on the intrinsic anonymity of the Net.

6.4.10 Equalisation of status

Definition: SCIs experience different levels of reactions by uninjured people online, which are often compared to offline experiences. The lower degrees of stigmatisation experienced online may be related to depersonalisation and they may often be temporary, as relationships become more personal and the SCI are often forced to reveal an omitted injury. The experience of equalisation is not an experience of complete equality. Rather, presumptions and prejudices cannot be fostered online, based on physical appearance. The SCI experiences relationships with others, in which the injured body is not the only quality that people look at. The SCI may consequently be exposed to new experiences, which may be integrated to different degrees.

Depersonalisation equalises the embodied level of contact between individuals, as Alan describes: *'You are cyber, just another e-mail address.'* Depersonalisation and anonymity also affect physical equality. Cameron compares social environments: *'in the online world, everyone is physically equal. In the offline world going to a bar... is a nightmare.'* Cameron found that the stark reality of his injury disappeared online: *'In a cyber-group I have no disability.'* Cameron also thinks that people's reactions to his injury are softened by CMC. *'People are more willing to talk to you without seeing you and judging you on your appearance.'* Online, people react with curiosity. Offline, their reactions have been experienced more negatively, as described in the first category. For Peter, CMC *'levels the playing field'*, where Vicki says: *'I am on the*

same plain as everyone else online, there are no barriers.' The experience of not getting special treatment, after revealing his injury online, was positive for Peter.

A central issue for the participants was the revelation of their injury online. Physical awareness is therefore an important factor in the experience of equality. Essential to their conscious decision to reveal an injury, is whether it would stigmatise them or not. Most participants only revealed their injuries, when seeking advice from, and interacting with, other injured people or health care professionals. In similar groups, they would use the revelation to assert similarity and in-group acceptance. Alan, Wayne, Peter and Adam ascribed to this approach. Cameron finds that embodiment is always an issue, due to his physical background in ballet. Alan found that, in the instances when he did reveal his disability online, '*it made no difference to the communication.'*

The experience of being treated as someone with qualities other than an injury, in a disembodied environment, can create other expectations, which can lead to disappointment in, and frustration with, other people. Alan says: *'It becomes a matter of what other persons' intentions are… everyone is looking for the perfect man/woman…and when I'm offline and in real life this is impossible because of my situation…I feel … disappointed in people.'*

Equalisation is often only temporarily maintained. As the relationship deepens, embodied questions can arise. For people such as Alan, who do not maintain a cyber-identity very differently represented than their presented Self, the questions ultimately lead to revelations of offline stigmas: *'the other person does not know that you're disabled, until it reaches a point of personal questions about [your characteristics].'* Vicki also found the equality online could be lacking. When she revealed her injury in chats, people acted accepting, but gradually ended their involvement with her.

Cameron feels powerful when he can share information with the curious, when he is the expert. Yet, the self-awareness evoked when explaining spinal cord injury to the novices also brings home the fact that he *is* injured. A rise in status, due to exclusive information held, is therefore balanced by the growing self-awareness accompanied

by it. Peter also gains a sense of power interacting with others online, particularly when he lets them know that he has defeated them at something (e.g. an online game), although he is injured. Movement toward equality is not only through the omission of an injury online, but also in the assertion of an injury online. Online it is easier to show people that the SCI is equal to them in many skills.

6.4.11 Loss of Control

Definition: The extent to which SCIs have experienced a loss of control over their use of the Internet.

Alan believes that all the information he now has access to, is very seductive: *'I'm hooked to the bloody thing [the Net] like a drug addict to cocaine.'*

Although Wayne is not very involved with other people online, he does feel that cyber-communities have an addictive influence on his life.

Vicki hints at lessened control: *'I enjoy it far too much and have no one to complain about it.'*

Peter warns: *'we need to be careful. The Net is an 'easier' environment to live in and unless you make the effort to reclaim your real life, it can become addictive and seems so fulfilling, when in all honesty, I don't think it is. We just tend to fool ourselves.'*

6.4.12 Transformation

Definition: The participants experience different levels of changes in their self-concepts. The category of Expansion refers to their phenomenal field, and links to Stigmatisation and Social Networks. Transformation however refers to the extent to which those experiences and changes in their phenomenal fields play a role in how they see themselves. Different experiences of the Self occur at varying depths.

Self-awareness features greatly in the protocols. For Alan, the Net has allowed him to expand on who he is and what he wants to achieve, it has not changed him in any perceived significant way: *'The Net did not change my personality.'* He thinks that interactions with people online (including this researcher) have forced him to become more self-aware and reflect about his motivations and himself. He says: *'If it wasn't for you and this other guy, I would never have dug up more information about what happened.'*

Vicki claims that the Net and cyber-communities have affected her positively in terms of self-awareness: *'I am more aware of myself as a person'.* The extent, to which access has changed her understanding of herself, is emphasised in her protocol. She says: *'I have become more aware of myself and my interactions with people…I have become more accepting of myself and allowing myself to be more as I am the way that I am, rather than wanting to become more 'acceptable' to how I think others might want me to be.' 'My online personality is shining through more in my everyday interactions with people.'* She has experienced herself in social situations with uninjured people without stigma: *'just the person, without having to deal with the 'obstacle' of physical appearance,'* in this way the physical self-concept was highlighted. *'I've realised that I AM equal status regardless of my physical appearance.'* Vicki also discovered other aspects in herself, her flirtatious and sociable sides, which are aspects of her social self-concept. She felt these were *'hidden'* from her or were *'unable to come out, 'cause there was no opportunity to or rather it was just never triggered before.'*

Vicki has experienced boosts in her self-confidence and assertiveness: *'[I] have become confident about myself in certain ways.'* She offers a powerful comparison between jobs she had before and after changes initiated by cyber-community participation: [Before] *I worked for an organisation in a job that I hated…I did not know where to turn to for support and proper advice.* [After] *I was in another job situation, where I was …unfairly treated, according to labour law. This time around, most of my sources of factual information came from the Net. I stood my ground…confident I went the distance.'* Vicki experienced empowerment through her online access to the right knowledge and the right support Networks. Consequently, she experienced greater confidence and assertiveness in herself as she confronted

difficult situations. Peter also experienced a transformation in the depersonalised environment. He experienced his physical limitations online as less important than his wit and intelligence. He remarks that these two qualities are enormous boosters of his self-confidence.

Adam and Cameron perceive no sustainable changes in themselves that CMC might have had a role in. Adam hints at a shallow touch of change offline after cyber-community interaction: *'I also remember this pseudo self-confidence transpiring, minutes after I had gone offline.'* This indicates the possibility of changes in experiences, but these wear off as offline reality imposes itself.

6.4.13 Independence

Definition: The extent to which SCIs experience a sense of autonomy, which is associated with different benefits that the social technology alone has introduced into their lives. These benefits relate to mobility in terms of the physical and interpersonal environment.

Alan uses Net banking as an effective strategy to avoid SCI unfriendly banks: *'...less hassle of asking people to help you up the curb.'* Adam also proclaims that, the Net is a convenience to avoid public buildings. He favours online shopping, where he can research products, not available locally, before purchasing them. CMC also allows him to stay in contact with family and friends.

Cameron is happy that CMC allows him stay in touch with offline, international friends. Offline social Networks, which may have disintegrated are maintained through CMC contact. Peter likes the ease with which he can communicate with people, using CMC. He used to prefer the convenience of CMC to telephones and face-to-face meetings. During debriefing, Peter however revealed that, the Net is receding as a dominant force in his social interactions. He has recently made offline friends who have become considerably more important to him than virtual friends. The Net used to be very important to him at a time, because it allowed him to maintain strong offline relationships, which might otherwise have disintegrated, when friends moved away.

Vicki, geographically isolated, says her Net access has expanded her social Networks and support systems greatly. In terms of surfing the Net, Vicki thinks she can: *'go anywhere and do everything and anything- there is no restriction on mobility.'*

6.4.14 Belonging

Definition: Participants have experienced different degrees of group-membership in cyber-communities. For these participants, their sense of belonging is an understanding of cyber-communities as frameworks supporting their interactions with specific members. This sense of belonging largely shapes their collective self-concept as group members.

Peter experiences some belonging to cyber-communities, but the individuals with whom he interacts online play a greater role in his experiences than his membership of cyber-communities. That experience is vague but fulfilling: *'No strong feelings but [it's] nice to be part of something, comforting I suppose.' 'Knowing there is an online environment, of which I am a part...has given me extra life.'* His experience of a group in cyber-communities was amplified by his position as administrator or community moderator. Peter mentions a specific site where he frequently meets friends in a way he finds similar to a favourite pub. Cameron's description is very near to Peter's: *'It's kind of like being a club member...the feeling of affiliation to the group is kind of a base from which you connect with specific individuals.'* Yet, Cameron emphasises that a cyber-group as such, has little rewards, other than *'prickling his interests'*. Cameron states that his involvement with cyber-groups has neither had any lasting impact on him, nor changed his behaviour. Adam has no sense of belonging to a cyber-community. He blames this on his poor commitment to regular interaction.

Alan thinks the group is a framework for his interactions and in this way, he experiences a sense of belonging to the community. Vicki experiences cyber-groups as a group of people sharing interests and information, and in this way, they make up a community and a place of belonging.

6.5 Conclusion

In this chapter, the biographical information of the participants was described. Their experiences where broken down into meaning units, which could be sensibly collected into categories of meaning. These categories provide the reader with grounded data, which reveals the SCIs' experiences in cyber-communities and with CMC. Different experiences were collected, which are heavily entangled at times. The complexity and the seemingly conflicting natures of some of the experiences, indicate that cyberspace is also a complex part of the phenomenal field, with many similarities to offline contexts occurring. The rich results collected here indicate a rewarding field for psychological study.

Chapter 7

Discussion of results

7.1 Introduction

In this Chapter, the results will be interpreted and integrated with the literature. The different meaning units and categories will be discussed, with reference to biographical contexts where necessary. The results will be meaningfully linked to the psychological theory and the unique occurrences on the Net, discussed in Chapters 2 and 3.

The results in Chapter 6 have been separated for descriptive ease. Yet the reader may immediately notice certain undercurrents, which are repeated throughout the categories. The discussion that follows will focus on these themes, because they maintain a valuable link between all the meaning units and illustrate each experience with vivid inter-relatedness.

7.2 The injured body: Embodied and disembodied

This is a study of spinal cord injured people's unique experiences. The permanence of their injury necessitates changes in their self-concepts and changes in their social world. QASA (2001) reminds us that the greatest challenges SCIs face in rehabilitation are their offline groups' attitudes. Uninjured people discriminate against them based on their physical condition. Chapter 6 describes how their bodily condition often limits social communication, as people's prejudices create barriers between them and SCIs. The uninjured will often limit their interactions with a SCI, because of their prejudices. They also behave differently around the SCI, as Shakespeare (1975) also noted. SCIs, as participants showed, often spared themselves a range of negative consequences, by limiting their communication with the uninjured.

The physical body often remains a sensitive and conscious issue, even when the injured person prefers to interact with people without reference to the injury. SCIs

often yearn to interact with people on different social levels, as described in Chapter 6 under Equalisation. They would like to show a side of themselves that goes beyond their injury, they would like to be acknowledged for the other skills and characteristics they have, which can put them on par with everyone else. Stigmatisation limits the extent to which they can actualise themselves. Rehabilitation and greater acceptance of the physical self-concept becomes difficult and can lead to dissatisfaction with the Self.

The body therefore, being such a difficult part of the Self to deal with, for others and for the person, may actually increase the importance of the physical self-concept, especially when it is a source of low self-esteem. When the physical Self was an important feature before an injury (e.g. Cameron), or when it is an important part of the injured sportsman's general self-concept (Adam), the importance of the physical self-concept may be emphasised. The relationship between the physical self-concept, as embodied and disembodied, and the phenomenal field, will be discussed next.

The relationship with others can be a sensitive issue for the SCI. Offline interactions with the uninjured will be discussed more fully below, but the majority of strangers treat them with prejudice. The complete person is largely ignored and ostracised. No wonder the SCI faces an important decision online - whether to reveal an injury or not. The revelation of an injury is almost exclusively made to injured others or others that can be trusted with that information, usually medical professionals or people involved in injury research. Otherwise the injury may be revealed in a conversational slip. In these cases, the injury is often handled with curiosity or much milder levels of discrimination, as Sempsey (1995) also witnessed, most likely due to the depersonalised and disembodied effect of CMC. Whether the SCI decides to reveal the injury, or introduces it in a conversation by accident, it often still forms a central focus of conversation, and thus continues to stay at a conscious level. Embodiment therefore remains very much in the foreground, even if Net users experience a disembodied state.

When the injured Self is represented online to other injured people or to people accepting of the condition, as Alan says people who can be intimately trusted with

the information, positive rewards may come of it. The individual in an online group meeting enlarges her/his social support Network with people who may become sources of strong social ties. The online in-group that forms can easily become a source of greater unconditional regard. Conditional positive regard, based on injury-related achievements, may be met far easier than regard based on embodied appearances or uninjuredness. Positive regard based on an uninjured body is impossible to achieve. Online it is often easier to access people who would be more supportive of an injured body. The person's social self-concept may quickly acquire greater positively evaluated characteristics, particularly assertiveness and confidence. The collective self-concept may also improve in esteem, as a sense of belonging increases and group membership is experienced as a source of positive self-appraisal. In this way, the general self-concept benefits as a whole and social comparison can occur, in many ways on a more realistic level, than when comparisons are made to the uninjured group.

The positive effects of online exposure to similar others may be questionable, as Bromberg (1996) and Nguyen and Alexander (1996) point out. The experience, as they argued, may eventually be disempowering and an unreal experience for SCIs, but all the protocols indicate a very strong positive influence by SCI sites on the participants. These sites are sources of strong and weak ties, sites from which medical, personal and sexual information can be drawn. Emotional support, intimacy, friendship and a general feeling of help and empowerment are also drawn from these cyber-communities. The benefits of online social connection to similar groups far outweigh the negative effects that CMC may have on people. In this respect, cyber-communities are a very valuable addition to the person's social phenomenal field for rehabilitative and continued supportive purposes.

Alternatives to the self-concept as an uninjured person can be explored in virtual reality, much in the same way as a simulation. Uninjured people's reactions may be tested with characteristics exhibited that the SCI cannot usually express in offline reality. The social self-concept can be expressed more freely in this environment than in a discriminatory one, and consequently the general self-concept may be positively affected as well. Participants have for example, increasingly exhibited self-

assertion and sociability. Secondary self-concepts, such as intellectual needs, have also been successfully pursued on the Net.

Different aspect of the Self can be tested in the online phenomenal field, where that social environment may appear considerably less conditional, due to the limits on contextual cues, the anonymity, disinhibition and depersonalisation. The physical self-concept as an important aspect of the general self-concept, usually a concept that is the source of frustration and low self-esteem, may become better integrated. As Cameron and Wayne illustrate, an injured physical Self, which is often a source of negative emotions and which often limits actualisation of the Self, can become unacceptable to the SCI. Yet, when sources of high self-esteem are successfully explored on the Net, the physical self-concept may stand a better chance of being fully integrated into the positively self-regarded self-concept. The person may thus find it easier to regard her/himself more unconditionally.

A critique may be that the injured person may never be fully able to integrate such positive experiences on the Net, because they are disembodied and therefore relatively inauthentic experiences. The participants in this study have however indicated that, adoption of these positive experiences into the self-concept can be possible and longer lasting, than just the period spent online. This may indicate that people are selective in their adoption of experiences into the self-concept. It seems that the SCIs in this study, more readily abandoned negative experiences online, but hung onto positive experiences. This can be compared to people's essential need for high self-esteem (Baron & Byrne, 1997). If their online experiences are positive, and they are left feeling good about themselves, they are likely to incorporate those experiences into the general self-concept and raise the general self-esteem. In this way, their sense of well-being is improved and they are more likely to deal adequately with stress (Baron & Byrne, 1997).

The wish to be treated as an equal in other spheres than the injured body may be achieved online. This is, however, often limited by a lack of complete acknowledgement of the injured body. What SCIs may want badly is to be accepted, completely, in their embodied form - a wish not easily fulfilled online. SCIs are therefore caught up in a paradox. The experience of this paradox is often heightened

by the increased self-awareness that occurs online (Joinson, 2001; Kiesler et al., 1984). When the person has few contextual cues to focus on in an interaction, the person has more time to focus inward. This is especially so when revealing information about the injured Self to online others. The more self-awareness occurs, the more the person is likely to experience the discrepancy between online and offline social situations, with offline situations usually taking preference. The SCI may increasingly realise that cyberspace may be virtual, superficial and only a reminder that the embodied Self does not get the same treatment that the disembodied represented Self does. This may deal a negative blow to the SCI's incorporation of positive experiences online. As dissonance theory suggests (Gergen, 1971), if the environments are experienced as vastly different, different behaviours cause low dissonance and are therefore not likely to initiate changes in self-conception. Cameron and Adam may be good examples. They both experienced the disembodied environment as superficial and virtual. They were also the ones who attached greater importance to their physical self-concepts. Consequently, they most likely experienced greater discrepancies between the embodied and disembodied phenomenal fields. These two participants are also the two who have derived the least from online interaction and cyber-communities.

There is a clear relationship between the physical and general self-concept, as indicated in Chapter 3. This discussion illustrates the entanglement of the physical self-concept with all other spheres of the self-concept. The physical self-concept and self-esteem can be affected by the manner that uninjured others treat the person's injuries. The levels of importance a person attaches to physical characteristics may undermine the general self-concept, when the physical self-concept is a source of low self-esteem. If, however the person heightens the presence of, or discovers other characteristics, which are sources of high self-esteem, then the physical self-concept may be displaced in importance. Refer to Alan's light bulb challenge and Vicki's emerging, latent sociable characteristics. Both participants indicated shifts in emphasis from their physical self-concepts to other secondary self-concepts. This would likely happen if the person had the need to conceive of her/himself as something other than an injured person.

7.3 Constriction of the self-concept

7.3.1 Constriction offline: Stigmatisation and isolation limit the phenomenal field

Stigmatisation can immediately be recognised as a major source of frustration and isolation for SCIs offline. The embodied condition of an SCI is the visible source of this stigmatisation. The limitations that this stigmatisation places on a person's social and personal development constrict the self-concept by limiting social experiences from which to draw personal characteristics. It is easy to understand the attraction that stigmatised groups have for the Internet and computer-mediated relations, as Mickelson (1997) and McKenna and Bargh's (1998) studies have also shown. Online the visible stigma is easily concealed and the SCI can interact with most people, without a constant shadow of the other's perceptions of, and reactions to, the bodily state hanging over the new relationship.

Stigmatisation limits SCIs in their sense of belonging to uninjured groups (McKenna & Bargh, 1998). These limits are often conditions of regard that the SCI with visible stigmatising characteristics cannot fully escape. To the uninjured, they may seem unattractive social partners. As we have seen, people often believe SCIs are mentally deficient. They do not like feeling nervous and uncomfortable around them and often ignore SCIs, when they are not outwardly prejudiced or condescending. Employment possibilities and fellow employees have also been shown to set limits on the person. Vicki's co-worker immediately objected to her, and Vicki was consequently fired. Peter feels his opportunities in business, for which he studied, have become severely limited. Social circles become restrictive for the SCI outside of their close social support Networks. Their social phenomenal field is particularly reduced and deficient in experiences that can be constructively internalised, to enhance the complexity of their self-concept.

The limits this ostracism and isolation have forced on the individual's sense of belonging, lead to a variety of negative effects on the SCIs, as their sense of belonging to a community of uninjured people disintegrates. People's sense of belonging has been shown to be important and is a primary source of a sense of

well-being (Duffy & Wong, 1996). The deprivation of this belonging leads to loneliness, depressed moods, and feelings of helplessness. Vicki's condition seems especially descriptive here. Frustration with others and the physical condition, anger, sadness, embarrassment, discomfort, self-consciousness and lowered self-esteem are all negative feelings occurring in the protocols as a result of stigmatisation.

Reviewing the sense of belonging, we are reminded that certain processes tie the self-concept to the phenomenal field. Assuming the sense of belonging is such a process, it follows that restriction of it leads to restriction of the experience of the phenomenal field. The collective self-concept is battered by the loss of belonging to a group and so is the social self-concept. Membership of a stigmatising group becomes increasingly threatening to the self-concept and the person can increasingly not identify characteristics within her/himself that compare to the group's. To identify with a group that prejudices against you, is to prejudice against yourself.

It is no wonder that many SCIs have opted for self-imposed isolation, to protect the Self from this assault. Yet with isolation comes a withered phenomenal field. The self-concept looses experiences from which to develop and self-esteem may plummet. Not only is actualisation stunted in an unreceptive conditional environment, but movement towards a more complex and integrated self-concept is hampered as well. The possibility of this conditional regard being internalised cannot be denied, as the SCI may perceive her/himself as unacceptable in uninjured circles. Peter, for example, notes that he keeps his head down amongst the able-bodied, and tries to conclude his business as quickly as possible. SCIs may come to view the physical Self as a source of personal frustration and lowered self-esteem. The physical self-concept, in such a conditional, stigmatising environment, becomes unacceptable in the general self-concept and is a source of low self-esteem. Consequently, the SCI may find it very difficult to integrate the physical self-concept effectively with the general self-concept and may experience differentiation. This self-concept differentiation does not lead to growth and refinement, but more towards a state of fragmentation. It is only when the person is able to fully accept this aspect of the Self that greater complexity occurs in the self-concept.

The SCIs' lack of physical mobility and greater dependence on others can also isolate them offline. This isolation hampers them from contacting others, who are similar to them, and with whom they could build effective social support Networks, face-to-face. These Networks could be sources of strong emotional ties, where similar feelings and experiences can be shared and emotional support can be had.

Most of the participants indicated a wish to meet people met online, offline. This is indicative of a need to establish embodied rapport and trust (Dreyfus, 2001). This need can however rarely be fulfilled as they experience isolation, once again, this time as South Africans. Alan, Vicky, Peter and Adam particularly indicated that they experience frustration, trying to meet significant online others face-to-face, because they are geographically isolated from the majority of people they meet online. All the participants also indicated limited resources in South Africa, which may, if these resources were available, could have facilitated their independence and interactions. Judging from the participants' needs to meet online people, the SCIs seem to want that hurdle of offline contact overcome. In this way authentic, unconditional acceptance may be tested and they may achieve experiences truer to acceptance of their embodied condition.

As was argued in Chapter 3, the self-concept and the phenomenal field are undeniably linked. When the phenomenal field is restricted, the self-concept becomes restricted. This restriction comes in the form of interference in the actualisation tendency and the integrated, complex self-concept. Yet, offline experiences with strangers are not the only sources of constriction. CMC and cyber-others may also limit the experience of the phenomenal field and therefore the experience of the Self.

7.3.2 Constriction online: Pervasive mistrust and the superficiality of interactions

Mistrust of other Net users indicated by many participants and the depersonalised nature of interaction, do not truly seem to promote the development of authentic relationships. Intimacy and trust can be established; yet there are indications of undercurrents to the protocols, which indicate superficiality and inauthenticity.

Embedded in the protocols are indications that online relationships are far less gratifying than offline relationships. These indications are:

a. The represented Self

The fluid nature of an unaccountable, disembodied virtual identity may limit all the different experiences incorporated online. The person may hold her/himself less accountable for behaviour online, because s/he experiences her/himself as represented. Consequently, behaviour online may be experienced as superficial and the need to reduce dissonance when experimenting with alternatives is nearly absent. The participants who perceived the online environment as similar to offline reality, experienced greater degrees of behavioural change. When their online behaviours deviated from their offline behaviours, and their online behaviours were more beneficial, they often experienced high degrees of dissonance. In such cases, they frequently adjusted their behaviour offline. This situation occurred when their self-representations did not vary greatly from their self-presentations. Alan and Vicky are perhaps the best examples of this. Vicki experienced high degrees of dissonance and therefore changed her behaviour, where Alan's behaviour only seemed to strengthen his offline behaviours and attitudes, because the way he represented himself online was very similar to his usual offline self-presentation.

The ease with which representations can be assumed and abandoned, may lead to different levels of self-concept differentiation. The participants who experienced their online interactions as distinctly separate from their other interactions, like Cameron, Adam and possibly Wayne, experienced little integration of their experiences online with their general self-concept. Yet the participants, most notably Alan and Vicki, who actively experience online interactions closer to authenticity, have movements in their self-concepts towards complexity and integration. They are also the participants indicating the highest levels of self-esteem and motivation in their protocols.

Adam, who experiences a high level of separation between on- and offline living, also experiences levels of disorientation and surreality, moving between the different environments. His words: 'Sometimes I forget who I really am,' may refer to the depersonalisation that everyone experiences, but may also reflect a level of self-

concept differentiation, as he neglects to integrate his periods online with offline experiences.

b. Superficiality of the communication

The level of communication online, particularly in IRC, has occasionally been referred to as childish and stupid (see for example Alan and Adam). This may be a direct reflection of people's approach to interactions that they know may very well not last long. Consequently the SCIs have experienced conversation that seems fickle and temporary, which is frustrating. The SCIs online have access to a larger variety of social contacts, but that contact is not to the depth that they would like it to be. Their intellectual needs are often not met in many cyber-communities, particularly in IRC environments, and consequently their actualisation tendencies are frustrated. They cannot realise their full potential in such superficial conversations, and in this sense cannot realise the full abilities that they know they could manifest in a social group - if they where given the chance to speak up. In this way their social self-concepts are still undermined in social situations. Instead of stigmatisation limiting them, online fickleness limits them.

c. Limits of the technology

The mediating technology is unfortunately the superficial prelude to all online relationships. The limits of contextual cues and the embodied distance maintained between communicators make it very difficult for people to meet each other in authentic relevant relationships. They cannot present themselves as complete people and may experience frustration with the limits of CMC technology and the represented self, as Adam and Peter illustrate. When people compare their relationships online with those offline, they may easily become disillusioned with online relationships and forfeit the possibilities of greater authentic interaction online, as Kraut et al. (1998) also indicated. This is not necessarily bad, because authentic offline interaction is far richer and rewarding, as the participants in the present study have all indicated. Online interaction seems best when the SCI is struggling with negative affect and needs to communicate with similar people, or anonymously with

uninjured people, at times when self-esteem is low or authentic offline company is lacking.

The reduced levels of accountability, through depersonalisation and distanciation, make online relationships seem more difficult to maintain. Although self-disclosure is rife, these relationships, as discussed in Chapter 2, do develop slower and are more vulnerable compared to offline ones. When accountability does not feature in a relationship, the authenticity of it can become questionable to the participant, and disillusionment may follow, as it has with Peter. The moment he discovered an authentic, intimate offline friend, he realised how ineffectual online ties actually are in providing for all his intimate and emotional needs. Adam also indicates that online relationships just do not offer what he needs from people. The superficial online environment makes it exceedingly difficult for people to relate to each other on different levels. Consequently, enrichment of the self-concept through these interactions is hampered, as everything is perceived through a veil of artificiality. Nevertheless, some participants have shown that such enrichment is possible online.

Some participants have managed to creatively blend their on- and offline lives. Alan and Vicki are examples; they experienced richer and greater levels of authentic relationships online. Why do they experience online living more vividly than others do? They seem to separate between on- and offline living less than others and they may spend their regular time online in a socially much more constructive way than others. Their closer conception of online experiences to offline experiences may make the online environment more real and authentic. Their phenomenal fields are accordingly more heterogeneous. Regular interaction, but more importantly, their attitudes to CMC may consolidate their online experiences, their social self-concepts online and their general existence online.

d. The limited effects of CMC and cyber-interactions on participants

We must keep in mind that the majority of SCIs' interactions still fall outside of cyberspace. Consequently, these offline influences may be significantly more powerful for an injured person, trying to re-establish embodied contact with others, especially when that embodied state was so extremely affected. The offline social

phenomenal field may therefore be an extremely dominating force in the person's self-concept, where online environments, though helpful, are experienced as of lesser value compared to the offline environment.

When CMC is experienced as threatening or unimportant, particularly when a deep mistrust of anonymous others exists, then a superficial interpretation of CMC is hardly surprising. Cameron and Adam's mistrust and preference for face-to-face communication respectively, are indicative of approaches to online interactions, which are not conducive to internalisation of experiences. Those prejudices protect them from negative experiences online, but also close them off from beneficial experiences. They only perceive certain information and do not have the range of experiences of the phenomenal field available to them that Alan and Vicki for example do.

The various ways in which the Net is experienced as frivolous can limit the ties that people develop online. The ties that some of the participants in this study developed online, seemed mostly weak. All of them use the Net to enlarge their informational circles concerning their interests and their injury, but few of them successfully develop intimate relationships, even with similar others. These online sources are vague, working relationships based on information exchange and networking, i.e. weak social ties (Wellman, 1997). This corresponds to Kraut et al.'s (1998) arguments, but it cannot be ignored that many of these weak ties can develop into strong ties, as will be discussed later. This should come as no surprise, since offline intimate relationships develop much in the same fashion.

7.4 Expansion

The stigmatising elements discussed above, impede the positive development of the SCIs' self-concepts. These elements do also feature in online relationships. This study has however, gathered strong evidence that the Net provides the SCIs with opportunities to expand their social phenomenal fields and their self-concepts. Their phenomenal fields are expanded by the increase of people they can interact with without stigma. SCIs can also contact far more people in groups online than offline, where their restricted mobility often forces them to make compromises. This is

especially true for quadriplegics who suffer more severe injuries and more restrictions. Their self-concepts may develop in new ways as they can experiment with different aspects of themselves in a social framework that is quite permitting of representational testing.

The greater access to information, to many different opinions and others' life experiences online, may enlarge the phenomenal field immensely. This is particularly true when the SCI's phenomenal field is quite limited, as in Vicki's case. Stranded in a rural area, where similar others may be nearly absent, her future prospects of social interaction and empowerment may have been limited. The information that is available on sites and through online social Networks, such as cyber-communities, can empower a SCI who is learning to cope with her/his injury, and trying to come to terms with her/his new self-concept and social position. SCIs' feelings of helplessness may be dramatically reduced as they access medical and psychological information, and they learn from others what their likely experiences will be in coming months and situations. Steadily the SCIs can move toward greater actualisation of their needs and therefore experience a greater sense of meaning of their lives.

The self-concept obviously benefits from an enlarged phenomenal field. As the person successfully integrates a larger repertoire of behaviours and experiences, s/he can cope better with life's stresses and a larger variety of situations. The self-concept becomes increasingly complex and self-esteem may significantly rise in the general self-concept, as the person meets different situations with increasing success, using concepts drawn from a more elaborate phenomenal field. The complex self-concept develops when experiences are well integrated from the phenomenal field, and shifts in the self-concept may occur on an evaluative level. The experiences that Cameron, Vicki, Peter and Alan refer to, to a greater or lesser extent, are indicative of some changes occurring.

The self-concept does not only move toward complexity, due to an expanded phenomenal field. SCIs can also affect the self-concept personally, by exercising different aspects of the self-concept, which are sometimes more latent than overt, as Vicki has suggested. By testing these different characteristics, they add new behaviours to their repertoires of coping strategies for different situations. They may

discover, and raise awareness of, previously latent aspects in themselves, which then provide them with more self-esteem. The seemingly greater unconditional environment online, in which experimentation can be carried out with fewer eyebrows raised, has positively influenced some participants' developing self-concepts.

Vicki's examples are paramount in this discussion. She illustrates that she discovered aspects of herself that where previously hidden. They only started playing a larger role, as she discovered that they where important sources of self-esteem, when they were successfully exhibited in interactions with others. Her flirtatious and social nature only surfaced in an environment that was not conditional and discriminatory. She could exhibit these behaviours free of the limits of stigmatisation. She was also able to manifest more assertiveness offline, after assertiveness had been tested in online social encounters and when she obtained more information and emotional support online, which led to increased self-confidence. A greater sense of well-being and coping seems to be a central aspect of the expansion of the self-concept, and participants have experienced expansion on different levels.

The exposure to more social groups and individuals online provides the SCIs with more opportunities to develop strong and weak ties in groups and communities. Since cyber-communities are largely based on shared interests, the person is likely to make contact with more similar people online. All the participants in this study had established contact with other injured people, but the similarities need not end there. The anonymous nature of the Net allows the SCIs to expose themselves to people with whom they share similar interests such as hobbies and technical needs. Where embodied stigmatisation previously may have limited such interaction, as the participants suggested when revealing their isolation, the SCIs can circumvent those initial negative reactions. In this way they can make contact with a variety of people on a primary level of shared interest, rather than fulfilling the primary role of an injured person.

The depersonalised, disinhibitive and increased self-disclosing nature of Net interaction, together with the establishment of shared interests early in the relationship, may easily lead to the SCI's interpretation of CMC as more unconditionally accepting. The experiences of the participants illustrated in Chapter

6, under Equalisation, are indicative of this. The decrease in the SCIs' feelings of isolation, through greater exposure to others online, seems to increase the perception of unconditional regard in cyber-community groups. Consequently, they experience a greater sense of in-group belonging, whether the cyber-community is composed of uninjured people or not. In these groups, the person is more likely to experience greater self-acceptance, as Cameron, Peter and Vicki have indicated.

In online and offline injured groups the SCI may find a group that is more accepting, but also a group of people with whom more accurate social comparisons and self-appraisals can be made. The SCI will be able to compare her/his unique challenges with those of others in similar situations, instead of comparing to uninjured people whose experiences are different to theirs. In these groups for the injured, the SCI is likely to find emotional support from people whose input may seem more authentic, since they went through similar trials and tribulations. It is therefore no surprise that Alan and Vicki have developed stronger emotional ties with the people they met online than the other participants did.

These cyber-communities are easier to make contact with, and a larger concentration of injured people are present in these forums because they just need to log on, they do not need to commute far distances to meet each other. It may be significantly easier to make close friends online because of the absence of embodied limitations to the establishment of an online community for the injured. The significant depth of the relationships that Alan and Vicki illustrate leaves no doubt in the researcher's mind that intimacy, trust and authentic relationships can be developed online. It is not argued here that the SCI will develop all her/his relationships online. All the participants have indicated the greater importance of offline, authentic relationships. Yet, when these relationships are not altogether possible, the SCIs seem to make a genuine commitment to developing their online relationships as fully as possible.

The limits of offline interaction, particularly the geographic isolation of SCI's, the preferred forums, such as night clubs and cocktail parties, for uninjured people's communal interactions, and the stigmatisation by uninjured others, make online relationship development nearly a necessity. Often this need is temporary, as when friendships offline are scarce at a particular moment. Take Peter's example; his use

of CMC decreased when a good offline friendship was established. Adam has a vibrant social life offline and therefore does not necessarily need to look for it online. Vicki is isolated and consequently makes greater use of CMC. Alan is very active online and therefore finds it easier to commit to relationships there. The demands of the SCI's environment will determine whether s/he will fill the gaps in her/his social circles by participating in cyber-communities, or whether s/he will enjoy offline social interaction.

The establishment of social contacts online and the birth of a sense of belonging online, breed a new source of independence in the SCI. Their feelings of helplessness decrease as they empower themselves with information and social support. Kraut et al. (1998) may have been right about the greater prevalence of weak social ties online, but this should not be seen as negatively as they first espoused. They were worried that people are replacing strong social ties with weak ones. This is not the case. Firstly, strong emotional ties are born out of necessity online, and secondly the weak ties online can be a valuable empowering source for SCIs. For example, information about their injury and their lawful rights is easily drawn from online weak social ties, as Vicki indicated. It must not be forgotten that many of our strong emotional ties begin with weak ties.

People with whom the SCIs have weak social ties are sources of greater medical, technical, business and shared interest knowledge, but they are also people with whom language and social skills can be practised. They are sources of different opinions and alternative life-style options. These are all things that the SCIs can integrate, changing their outlooks on life and creating better coping strategies for stress. Vicki has definitely indicated an improvement in her sense of well-being, where Alan, Peter, Wayne, Adam and Cameron have all indicated that they make use of information gathered online. Different aspects of the self-concept can also be represented in social communications and greater self-awareness and self-acceptance may spring from social interactions with strangers online.

The emphasis of other aspects in the self-concept as sources of self-esteem, may counter-balance the effect that the physical self-concept has on the SCI. Offline interaction, characterised by discrimination, can easily make the physical Self a

source of negative self-esteem, since other people often react negatively to the physical body. These reactions may or may not be internalised. But in online interactions, the focus falls on other characteristics and the person adjusts her/his self-concept, do deal with the different roles accordingly. Consequently, the focus shifts away from the physical self-concept as awareness of other aspects is allowed to develop. To resolve dissonance, the person may then adopt these newer ways of seeing the Self and accordingly adjust her/his general self-concept as it applies in offline relationships as well. Evidence for this exists in the greater self-acceptance experienced by Cameron and the greater assertiveness exhibited by Vicki.

Changes seem to occur on many different levels to varying degrees in the participants, due to their internalisation of new discoveries once they went online. When enough support and acceptance have been experienced online, and when self-awareness has allowed the person to see her/himself differently, then the person may feel strong enough to steadily withdraw from online living and pursue new relationships offline, as Peter has done. In a way, the Net may be a refuge for people that find it difficult to cope with the harsh realities of offline living, for people whose self-esteem has suffered. Yet, when enough small successes have been achieved and these have been integrated well, then the person may feel ready to face the embodied world again.

7.5 Representation

Since CMC induces a perception of anonymity and depersonalisation, the person may feel less accountable for her/his presentation and can manifest different behaviours, which can be divergent from offline expectations. The reduced accountability that the SCIs may feel toward their social phenomenal field may reduce the accountability they feel toward themselves, to continue manifesting characteristics, which were exhibited and experienced positively online. In general, people prefer not to appear hypocritical and untrustworthy (Gergen, 1971). Consequently, when they do experience dissonance, they will often change their behaviour. Yet when that accountability for behaviour is lacking, due to depersonalisation and anonymity, dissonance is weak and behaviour is not likely to change. Cameron, Adam and Wayne all feel very depersonalised and unaccountable

to others online. This is also reflected by the negligible impact that cyber-communities and other Net users have had on them.

The authenticity of online relationships can be improved, judging by the differences between participants, by increasing the level of interaction online with people virtually proximate to the person, and with whom the person is more likely to develop a strong social tie. Increased authenticity will most likely lead to greater levels of accountability felt towards those with whom an intimate relationship is shared. The participants who are very active online and very involved with others (e.g. Vicki and Alan), showed greater feelings of accountability. When accountability binds a person to her/his behaviour in a social context, s/he may be less inclined to change her/his behaviour, since the person would appear hypocritical or changeable and not dependable. Consequently the person, who is held accountable, may also experience greater dissonance when exhibiting conflicting behaviour. Vicki and Alan may have felt greater dissonance between their online and offline behaviour. But since Alan makes a point of representing as closely as possible to his offline Self, it seems only Vicki manifested high dissonance and therefore behavioural changes, as discrepancies started appearing between her on- and offline behaviour.

The possibility of finally meeting offline may also enhance the authentic relationship online, since people would then attempt to represent themselves closer to their presented Self. Many of the participants indicated that they would like to meet people met online, face-to-face. In this way, embodied contact would verify or refute the genuine nature of the relationship and the identity of the other Net user, and sincere trust would deepen the relationship. Online inauthenticity seems more closely related to maintaining a differentiation between the virtual aspects of the self-concept and the offline self-concept.

Relating to uninjured others online, as a represented uninjured person, may have advantages as well, as Vicky has shown. This may however be risky business. The person may experience again, or for the first time, what it is like to be treated as uninjured by others. The many negative preconceptions by others fall away, as they imagine you to be more similar to them. The SCI may again feel part of the group; have a sense of belonging to a group, which usually ignores her/him.

Omission of the physical self-concept in represented interaction is a difficult paradox for SCIs to resolve. On the one hand, they would like to maintain an equalised interaction, but on the other hand, the concealment of the physical self- concept in such an interaction makes the person all the more aware that, the interaction is perhaps only continuing, because they are hiding their physical attributes. The representing SCI thus makes the decision to enjoy the relationship without reference to their injury, or to reveal it and risk rejection. Yet, if the revelation is accepted, then the relationship can deepen, become more authentic and come closer to an embodied intimate relationship. The commitment that embodied relationships have, is discussed fully by McLeod et al. (1997), who showed that people attached more significance to a minority, risking embodied and offline accountability, than a minority who risked very little in anonymous cyberspace.

7.6 Equalisation

Equalisation features as a large part of the experience of expansion, since it is the largely equal treatment online, which the person seeks, when isolated in a discriminatory social world offline. When the other is anonymous, we are more likely to assume they are more like us (Gergen, 1971; Wallace, 1999). Consequently, we are more likely to treat her/him as an equal. For the SCIs this is an important point, since offline they are treated unequal and very different, based solely on their appearance. Online equalisation is not necessarily about equality, but it occurs by the replacement of many social norms and cues embedded in embodiment, with new ones, which can equalise communication and social standing. The participants for example, indicated that characteristics such as humour, intelligent conversation and competent gaming skills, can amongst other aspects, become new prerequisites for increased social engagement. These findings are similar to Baym's (1995) and Bechar-Israeli's (1996), who have also indicated the importance of humour and wit in promoting social attractiveness online.

The person experiences a different and expanded phenomenal field and therefore different ways of self-conception. Equal treatment allows the person to explore larger social Networks. The various experiences of power such as Peter's, Cameron's and Adam's, when interacting with uninjured people online, serve to increase their status

in other ways, than just the online omission of an injured body as a source of inequality.

Alan refers to this when he describes people, who come to expect things from him, as if he was not actually injured. This can happen when the SCIs do not make a point of mentioning an injury in an online conversation. These expectations often cannot be fulfilled, due to the embodied situation. Therefore the different conditions of regard, which are central to the experience of equalisation, may become sources of further frustration. This need not necessarily be so, because the person is still relatively free to abandon the interaction. If, however, the person has a need to form strong relationships online, this may become a critical issue, which needs to be dealt with.

Online equalisation is not as authentic as offline equal treatment. All the participants indicated this, by either saying it outright, or by indicating they would prefer to meet people face-to-face at some stage. Offline equal treatment has a certain underlying accountability; where online the treatment may be severed at any time and is always suspended, until offline equal treatment has also occurred. The shadow of offline acceptance always looms over relationships first formed on the Net. For this reason, it seems that most participants have a need to make offline contact.

The perception of greater equal treatment online or greater positive treatment based on other characteristics than the injury influences the social self-concept and affects self-esteem. If the SCIs feel they are treated more equally, they may feel more acceptable to others and the group, their feelings of acceptance, belonging and self-regard may increase and in the end they will more likely have a greater experience of well-being. If these virtual experiences are integrated into the general self-concept, and the person feels that s/he is equal to others, as Vicki has done, then equality may become a genuine pursuit. But if the experience is not integrated in this way, the person may continue to find it difficult to adjust to her/his physical self-concept and may continue to adopt the conditions of regard by uninjured others, incorporating their negative views of the injury, into the self.

7.7 Sense of belonging

The feelings of belonging espoused by the participants were generally weaker than what was anticipated. This may have been for different reasons. The participants may have focussed more on their personal experiences in this study, because these were more important to them. The discussion regarding their experiences may have had more value for them, than their feelings of belonging to a cyber-community. Secondly, the researcher's questions may not have focussed the discussion adequately on their feelings of belonging. Thirdly, in this researcher's opinion, the term cyber-community is still very diffuse. The fact that many participants believed cyber-communities to be synonymous to cyber-environment such as IRC or a mailing list, illustrates that there exists a general feeling of something communal happening online, yet few of them are sure how to grasp the concept tightly.

The general and social self-concepts were however affected by interactions with individuals and groups online. Participants spoke of their feelings of assertiveness, power, equality and intimacies online, suggesting that the social self-concept does come into play. However the collective self-concept hardly came into play, except during the discussion of ostracism by the uninjured groups. When specifically pressed for their experiences of cyber-communities, the participants offered diffuse answers, with perhaps the exception of Peter, who had a greater experience of belonging to a cyber-group as an administrator. This may mean that a collective virtual self-concept ranks very low on the scale of awareness, since it is not a great source of positive or negative self-esteem in the general self-concept.

The limitations that South Africans face in their connection to the information highway may be a big reason for them not developing intense feelings of belonging online. Their resources are limited and the communication technology is still comparatively expensive. South Africans are not able to spend as much time online and may not be as technologically advanced in their pursuit of online interaction. Consequently, online cyber-communities are not experienced with the same vividness and intensity as, for example, Suler (1999a) and Rheingold (1993) have indicated. Again the greatest determinant of an authentic online cyber-community is the level of interaction and representation a person can manifest. As Bechar-Israeli (1996)

pointed out, a large amount of energy must be invested in maintaining your online identity and therefore your online manifestation as a group member.

7.8 Loss of control

The experience of loosing control can lead to a loss of self-esteem, as the person feels more helpless. Extreme use of the Net can isolate people from embodied authentic relationships as Kraut et al. (1998) argued and continue a downward spiral, as the person looks for more relationships online, which are more superficial than offline ones.

People using the Net excessively are in danger of skewing their experience of the phenomenal field, since they may start focussing more and more on the represented and disembodied information and relationships available online, as Alan, Peter, Vicki and Adam have done at times. The fragmented nature of the cyberspace environment and the limited contextual cues online may, in extreme cases, lead to a differentiated self-concept. Adam finds it difficult at times to integrate his online activities and represented identities, as he often feels confused and estranged from the person he usually presents as. This seems indicative of self-concept differentiation. Vicki points out that she has no one offline to keep her rooted, consequently her use of the Internet sometimes becomes excessive. In this way, she at times struggles to maintain an integrated, balanced approach to the two dimensions of her phenomenal field. The two fields do not, at times, exist in harmony and this may also lead to some differentiation. Others may find the incredible access to any kind of information alluring, and spend more time chasing down information that they find fanciful, but which is not necessarily personally relevant. Alan, for example, struggles to keep control of his love for information. This may be indicative of a differentiation in the Self, as the person saturates her/himself with all kinds of information and perhaps struggles to integrate it, since it is not always personally relevant, or necessary, as coping strategies.

7.9 Conclusion

A variety of recurrent and entwined themes were discussed, themes that are essential to the experiences of SCIs in their cyberspace environments. There exists a complex relationship between the SCIs' experiences online and offline, which ultimately affects their social relationships and self-concepts.

Chapter 8

Conclusion

8.1 Summary of important findings

Qualitative research principles were successfully applied to online research and interviews. It seems that participants can be effectively recruited online, particularly when a trusted source such as an administrator of a site is enlisted. Trust can be established between participants and researchers, even when embodied contact is lacking, but the possibility of offline contact exists. In this study, stability was hardly threatened by participant dropouts, indicating that self-selected, actively interested participants recruited online can be as valuable sources of information, as offline participants.

The examination of SCIs' online experiences indicates rich possibilities in the future of cyberpsychology. New experiences, behaviours and dynamics in people's relationships are surfacing when they are communicating online. The research's results confirm the possibilities that extensive online interactions may have significant effects on the way we see ourselves and consequently, on how we continue to behave.

SCIs who are isolated, or experience isolation and loneliness due to their injuries, have shown that online, they can escape stunted social interaction. It was shown that to communicate is to be in reflexive contact with the phenomenal field. The self-concept develops from our contact with the phenomenal field and continues to develop in constant contact with it. Communication and the people around us are therefore paramount in our continued development as healthily functioning individuals. It is, amongst other things, conducive to the development of a sense of belonging and a sense of control, when the phenomenal field is also affected by our input. Offline, it often happens that both these experiences of well–being are denied the SCIs, due to isolation and loneliness caused by ostracism, which is either imposed by others or self-imposed, when the Self needs to be protected from others' negative regard, or when the Self is negatively self-regarded. When the SCIs lack in

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social support, they suffer from a variety of experiences including depression, anger, sorrow, loneliness, poor self-esteem and confidence, isolation and helplessness.

At such lows, and the SCIs have indicated that the social aspect of CMC was found most useful at such lows, CMC and the accompanied anonymity, are comforting. The perceived increases in unconditional acceptance, due to the depersonalised, faceless nature of CMC, is accompanied by changes in self-awareness and self-disclosure, which often help SCIs to deal with difficult issues in their situations and their rehabilitation. Online, they are able to contact people that share their condition much easier than offline, thus building support Networks of people who can offer them valuable support based on personal experiences. They can also access others who hold important information on their injuries, but also on other interests. They can also mingle with uninjured others, relatively safe from stigmatisation. The online environment may be disembodied and superficial compared to offline contexts, and the SCIs are very clear that it cannot remotely replace authentic embodied relationships; but the depersonalised, distant environment does offer a reprieve from the sometimes harsh intensities of offline living. Online, SCIs can regain some self-confidence and self-esteem when battered by the stresses of being an injured person in social situations offline.

Online, the embodied state may be conveniently omitted, yet if it is discovered, uninjured others' reactions tend to be filtered by CMC and depersonalisation and appear less severe, if they are stigmatising reactions at all. Omitting the physical Self online, allows the SCIs to develop relationships with the uninjured on levels that are difficult to access, if the uninjured person is overly concerned with the injury. Consequently, the SCIs can experience social interactions that are more positive, since the person can enjoy conversation entailing different skills and experiences. They can actualise more secondary self-concepts in the social phenomenal field than when treated in a discriminatory way. Their social Networks expand and they have greater access to social support online. In this way self-esteem can increase, so can self-confidence, and the person may become more accepting of her/his physical self-concept, as s/he realises that the potential for relationships still exist beyond ostracism and isolation.

Yet limitations exist to this expansion of the individual communicating online. These limitations - limited contextual cues and embodied contact, perhaps being the most important of them - continue to urge SCI Net users to pursue offline relationships. The truth seems to be that CMC is, after all is said and done, still experienced as largely inauthentic and disembodied, superficial and incomplete. The full person is not realised online, especially when the injury remains concealed. To the SCI it is important to be accepted as the whole person s/he is and this is seemingly impossible, even if the injury is successfully revealed, online. The findings in this study lean heavily towards the arguments that thinkers like Dreyfus (2001) promote - that embodiment is essential to authentic human relationships. SCIs, people for whom it is difficult to escape awareness of their physical body, show the importance of embodied contact in lasting relationships. To most of the SCIs, it is important to meet in person and to confirm acceptance of the injured person. Only in this way can the SCI be sure, or trust, that the other accepts her/him for who s/he is.

Authentic trust, deep, emotional and embodied commitment seem to remain essential conditions for truly *human* contact. The more authentic the contact is, the more likely discrepant behaviour and others' influences are incorporated into the self-concept. Under these conditions, it seems the changes on a contextual level may have longer-lasting effects in the general self-concept, than when the relationships, which influence the self-concept, are experienced as superficial and temporary. This means that CMC can be, and perhaps should only be, complimentary in nature to embodied contact. Ideally it facilitates continued contact when embodied relationships are difficult to come by or fall short of an individual's needs.

8.2 Limitations of the study

The study included only six participants. Credibility is therefore challenged. Three factors however, indicate that credibility is sustained even when the participant group was so small. Firstly, the findings in this study logically correspond to other work done on cyberspace behaviour and people's needs to belong. Parallels can particularly be drawn between this study and that of McKenna and Bargh (1998). Although this study dealt with a group of people who had unconcealable stigmas, the

present study's group nevertheless experienced much the same situations, reactions and behaviours online as those in the above study. The participants often sought help online, but also preferred offline help for similar reasons as those in the McKenna and Bargh (1998) study. In this way, the research community sustains credibility. Secondly, the participants' protocols provided overlapping information, confirming many underlying experiences, which consequently provide internal stability and credibility. Thirdly, the participants largely accepted and confirmed the researcher's findings when opinions were elicited in feedback and debriefing sessions.

However, to extend the explorative nature of this research, it would be wise to expand the number of participants. The group was very limited, although South African SCIs, who are regularly online for social purposes, may be a small group of people. The select nature of the group may have prevented the researcher picking up subtle differences in individual experiences that may have been comparable and more visible in a larger group. The participant group was largely male and from a specific age group (25-38 years of age), a group with its own developmental preoccupations. The findings in this study may only reflect the particular concerns of this group. The number of male participants may reflect the findings of the GVU (1998) that men dominate the Net as a masculine field of interest. The ease with which the men in this study disclosed personal information may reflect Mickelson's (1997) findings that men found it easier to talk about difficulties anonymously. The age group may be significant, particularly where they pay more attention to social needs than what older groups might. Younger groups, with younger people perhaps having a greater affinity to the technology, may indicate different experiences online, especially adolescents who actively seek out social groups in which they can define themselves as individuals.

The relationship between time spent online and increased intimacy could unfortunately not be discussed, since increased time spent online does not necessarily reflect quality social experiences and close social ties. This is important to explore, when rehabilitative efforts for SCIs increasingly include them going online. Understanding the link between regular interaction and close social bonds will better

enable SCIs to get the most out of their online relationships, without necessarily compromising important offline authentic social networks.

The exclusive use of e-mail as a means to collect information excluded other cyber-environments, in which additional information might have been harvested. IRC is also a viable cyber-environment in which information can be collected. The greater spontaneity of synchronous interactions cannot be denied and more contextual cues may be revealed that validate what a participant is telling. The possibility of a group study also exists, particularly in synchronous environments. Such research should be able to yield more information about in-group relationships and the actual behaviours of people online. The primary objective of this study was the description of individual's experiences, but in the future, these experiences may be described in greater detail, when the researcher has direct access to SCIs' online behaviours, relationships and contexts.

The resources that participants have to expend on online interactions may also greatly affect how much a person interacts online and consequently how intimate s/he may get with online others. There are many causal factors, which have not been addressed in this explorative work, factors that may become important as causal or explanatory work become more important in cyberpsychological research.

The participants' reasons for participating in this work need also be considered. Although it has been shown that the Net dampens the need for social desirability (Richman et al., 1999), personal reasons for influencing the research in certain ways may be numerous. Participants may have their own motives for finding positive justifications for using the Net. A loss of control by participants over their use of the Net raises the concern for cyber-addiction and positive results for the use of CMC may justify a range of negative behaviours. Many peoples' utopian or dystopian sentiments toward the technology may also influence their experiences and responses, as they try to convince others of their beliefs about what the Net means to us. The future of the Net in human society has become a political issue and sentiments may run deep about what should and should not be revealed about the possibilities of a mediating technology, which may erode offline, traditional forms of communication.

The researcher's attempt to extract in-depth knowledge from participants about the extent of identity play was experienced by some participants as overwhelming. One participant commented: 'with respect to the "Aliases or False Personas", it was an idea put to my mind by yourself. You tended to focus on it at one point in the questionnaire, which is possibly where the spark was kindled in my mind.' The researcher's enquiries led to different areas being emphasised and participants may have found it difficult, without contextual cues, to interpret how important the researcher felt the theme was. The researcher, after further discussions with the participants, moderated his interpretations based on the assumptions of identities online. Instead he focussed more on the exploration of different aspects, which seemed to be more in line with what the participants tried to illustrate. This indicates the difficulties of communicating and interpreting subtle differences online, and also indicates the influence of the researcher's presumptions in data collection. This was however corrected as best possible through post-data collection interviews and de-briefings.

The true influence of the Net on such behaviours as increased self-awareness, self-disclosure, deception and decreased social desirability is difficult to fathom, and researchers must view studies, such as this one, with a critical eye. The field is in its infancy and researchers will explore many paths. Some of these paths may lead into fruitless and misleading directions, as they have done in the past, and some may result in clearer scientific discourse.

8.3 Recommendations

Larger participant groups are needed in future to increase the credibility of cyberspace research. Research where participants are introduced to the technology for the first time may enable researchers to make more causal inferences from the information that they collect and consequently the effects of CMC and cyber-communities may be more closely observed and collected.

The possibilities for empowering countless other stigmatised groups, using CMC, cannot be ignored. Groups who have been limited in the past from developing social

support Networks with people unlike them now have the opportunity to finally test those waters with much less risk and discomfort using the Net. In this way, they may gain momentum in their confidence to assert themselves successfully in groups where they may have previously felt helpless and unimportant. These groups may also collect information they would find beneficial in their development and recovery. The rehabilitative prospects offered by the unique online experience and the associated different behaviours such as increased self-disclosure and self-awareness cannot be denied.

With proper techniques installed to safeguard people against the addictive nature of the Net and the disruptive possibilities of deception, strategies may be implemented by a variety of social scientists to facilitate the growth and quality of life of stigmatised groups in day-to-day offline reality. Already online therapy groups are flourishing, because a helping hand, whether it is a complete stranger's or not, can be found online almost at any time of day, ensuring some form of crisis intervention is accessible. Connecting people with similar experiences in beneficial and proven ways, may lead us into a new age of empowerment online and ultimately, if those experiences were strong and beneficial enough, offline. Rehabilitation and interdependence may be established at faster rates when the Net is effectively used as a complimentary strategy to offline aid, to help people cope effectively with difficult situations.

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Appendix 1

Questionnaire

Department of Psychology University of Pretoria

Student: Richard Kunzmann
Supervisor: Prof. J.B. Schoeman

Questionnaire

INFORMATION

I am conducting research on how spinal cord injured persons (SCIs) see themselves as cyber community participants. There are many names for cyber-communities, e.g. discussion groups and forums on the Internet, virtual communities or online communities.

People have many ideas about themselves. This study focuses on how you **experience** yourself as a cyber community member and how those experiences have **affected** you.

This questionnaire is the first part of our discussions. It will take you approximately 40 minutes to complete. Please read the questions carefully before answering them. There are no right or wrong answers. I am interested in your honest opinions and experiences. Some questions will give you an *either/or* option. Please mark the appropriate box with an **X**. Other questions are open for you to write the relevant information. Consider your answer and try to offer some recent examples. Your detailed contributions will be appreciated. If something is unclear to you, or if you would like to elaborate on something, you have written, then please do not hesitate to contact me at:
Caesar@pixie.co.za

Personal Information

1.Age in years:

2.Gender: [ ] Male [ ] Female

3.Marital Status: [ ] Single [ ] Married

[ ] Divorced [ ] other

4.What is the highest qualification that you have earned?

Information related to your injury

5. Are you a:

[ ] Quadriplegic or [ ] Paraplegic?

6. Did you [ ] acquire it, or is it a [ ] congenital injury?

7. How many years have you lived with your injury?

8. Describe to me in detail the difficulties you experience in communicating with others because of your injury:

9. How have you learnt to cope with your injury?:

10. What are the things that make you feel like a person of worth?:

11. What has made you feel worthless in the past?:

12. What evokes a sense of achievement in you?:

13. In what ways do you feel you have failed?:

14. Tell me about your good qualities:

15. What are your bad characteristics?:

16. What would you change about yourself?:

17. Describe to me how, in your opinion, most people react to you as a person in a wheelchair.

18. How do those reactions make you feel?

<u>Your time on the Internet and participating in cyber-communities</u>

19. In how many cyber-communities are you active?:

20. In which cyber-communities do you participate?:

[ ] Mailing lists
[ ] IRC
[ ] MUDs or MOOs
[ ] News groups or bulletin boards
[ ] Graphic communities
[ ] Other: Please specify:

21. From the above types of cyber-communities; which do you like the most?:

22.Why do you like them the most?:

23. Which do you like the least?:

24. Why do you like them the least?:

25. If the cyber-community is asynchronous and functions with postings, how often a week to you post messages?:

26. If the cyber-community is synchronous in communication, how often do you post a message per hour?:

27. Do you prefer to lurk in a cyber-community?:

[ ] Yes **[ ] No**

28. Many of us first lurk to see what a community is like before we decide to interact with the other users. What qualities in a cyber-community do you look for, before you decide to join in and interact with the group?:

29. Have you ever actively decided to leave a group?:

[ ] Yes **[ ] No**

30. If *Yes*, what made you decide to leave the group?

31. How does it make you feel socialising with people over the Net?:

32. Have you met people on the Net that you would consider your friends?:

[ ] Yes [ ] No

33. If you said *Yes*, why would you consider them your friends?:

34. Have you ever asked your Net friends to meet you face-to-face?:

[ ] Yes [ ] No

35. If you said *No*, why didn't you ever make the effort?:

36. If you said *Yes*, did you actually get to meet any of them face-to-face?

[ ] Yes [ ] No

37. If you said *Yes*, what was it like to meet them face-to-face?:

38. We often use the Internet to stay in touch with face-to-face friends, friends we met in real life first. How many of your Net friends were friends of yours before you met them on the Internet? (Please give a comparative answer, for example '*6 out of ten*.')

39. Do you use handles/ nicknames/ pseudonyms when surfing the Net?

[ ] Yes [ ] No

40. If you said yes, tell me why you use pseudonyms:

41. Optional: If you use pseudonyms, would you please list some pseudonyms you have used in the past:

42. Besides the nicknames that many of us use, we often create identities or personas when we interact on the Internet. Have you ever created an identity on the Net?

[ ] Yes [ ] No

43. If you said *yes*, please describe the identity you liked the most:

44. Why did you like that identity the most?:

45. Describe the identity you liked the least:

46. Why didn't you like that character?:

47. Do you ever tell people on the Net that you have a severe injury?:

[ ] Yes [ ] No

48.If you do, under what circumstances do you tell them?:

49. On the occasions that you did tell people on the Net about your injury, how did they react?:

50. How did their reactions make you feel?

51. When you first join a new cyber-community, what feelings go through you as you meet the other participants?

52. How do those feelings compare with meeting people face-to-face for the first time?

Experiencing the people in our communities

53. How do you experience the differences between cyber- social groups and face-to-face social groups?:

54. Compare cyber-communities with other things, especially other social groups in your life. How important are your cyber-communities to you?

55. What positive influences have cyber-communities had on your life?:

56. What were the negative influences of cyber-communities in your life?:

57. How have these influences affected you as a person?:

Thank you very much for filling in this questionnaire. Would you kindly email it to me as soon as possible at caesar@pixie.co.za. I will then get back to you as soon as possible to discuss the questionnaire with you. Your continued help would be very much appreciated and you can be rest assured that your continued input will be used and you will frequently be consulted, to gain the best possible insight into your experiences.

Appendix 2

Consent form and general information

General Information regarding the research study:
"The self-concept of spinal cord injured people: The role of frequent Internet communication within cyber-communities."

Researcher: Richard Kunzmann
Tel: +27 082 341 2525
caesar.@pixie.co.za
Supervisor: Prof. J.B. Schoeman
Tel: 012 420 2305
University of Pretoria

This is a study on how spinal cord injured people experience themselves when participating in online or virtual/cyber/Internet communities. The research should allow us to better understand the way cyber-communities affect us. The information collected, should point out ways to improve cyber-communities. Research results may indicate possible methods in which cyber-communities may be used for personal growth and empowerment.

The data will be used to complete an MA Psych. degree including a dissertation and any other publication. Included in this consent form are questions to determine whether you are suitable for this research. Please answer these honestly. Once you have completed the form, please send it to my email address. If you have any questions before you consent to this study, please mail those to the same address.

According to the information you will have sent me, I will decide on inviting you to participate in the research. If you are chosen, you will receive a questionnaire by email. Besides basic information, I will ask you to tell me more about your history on the Internet and your involvement in online communities.

Consent form

Please sign this consent form by providing your real name and email address. Also, answer the questions at the end of the form. Then send it to: caesar@pixie.co.za.

I agree to participate in this study. My participation is voluntary and I understand the purpose and nature of this study. I grant permission for the data to be used for degree purposes and any other publication.

If I am chosen for the study, I will complete the initial questionnaire sent to me. I will also join the mailing list, which will be circulated once a week. I understand that confidentiality will be maintained at all times and that any identifiable information may be disguised or removed, if I so wish. I understand that I may leave the study at any time, provided I let the researcher know of my intent. I commit myself to respecting and keeping in confidence the personal information shared on the mailing list. Lastly I realise that all the information shared on the mailing list will be saved as data by the researcher for use in this study.

Questions:

How many hours a week do you spend using the Internet?:

Do you participate in any cyber-communities?:

[ ] Yes [ ] No

In hours, tell me how often a week you spend your time on the Internet socially interacting on cyber-communities/ Internet discussion forums/virtual communities/ online communities?:

Name: **email address: (home)**

Date: **(work)**

Appendix 3

Brief biographical introduction by researcher to research subjects

Well everyone, you know something about me and you'll be telling me a whole lot more about you, so I figured I should share some more.

I am a psychology student in my 5th Year, completing an academic masters in psychology. I am an able-bodied person who met a very special friend in my first year. He is a paraplegic. At first, I was quite uneasy about getting to know him, but nowadays I hardly notice any distinctions. I've learnt to use his wheelchair quite well over the years and we've had a great lot of fun competing in tricks. I have a great admiration for him.

I started toying with the idea of doing a thesis about an unusual topic, something that intrigued me and demanded some creative input, instead of the usual drab research. At about the same time I felt I should become a bit more computer literate. All of a sudden WHOLA!!! I came up with this idea. I felt I was killing three birds with one stone. 1) I'd learn more about disability and my friend's condition, 2) I would learn to use a computer more effectively and 3) I could earn a degree in a field that wasn't the usual run of things.

Here I am. I am far from the end of these three goals, but at least this is a start. I hope we can all learn together and shape something meaningful from our experiences. It's all a bit daunting, but at least it's exciting. Although you will be doing most of the typing and bearing of the heart, I will always come back to you with what I'm thinking so that we can truly shape an accurate picture of your experiences.

Yours sincerely,
Richard