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Assessment of Unit Scale: An Innovative Counselling Tool for Assessing the Relationships of Couples Facing Infertility

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ASSESSMENT OF UNITY SCALE:

AN INNOVATIVE COUNSELLING TOOL FOR ASSESSING THE RELATIONSHIPS OF COUPLES FACING INFERTILITY

by

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THESIS

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CHAPTER 1

Introduction

Infertility is generally defined as the inability to conceive a child after one year of unprotected sex (Monga, Alexandrescu, Katz, Stein & Ganiats, 2004) leaving a couple involuntarily childless (Monach, 1993). Various studies indicate that infertility affects 10 percent of all couples (Monga et al., 2004), that 40 percent of infertile individuals experience emotional distress (Morrow, Thoreson & Penney, 1995), and that one in five childless relationships end in divorce (Humphrey, 1969). In addition, infertility also has a daunting impact on the human experience, affecting individuals and couples in many ways, including the following:

- The most deep-seated ideas that couples have about their masculinity and femininity are challenged, their biological potential is put at risk, and the assumptions that structure their lives collapse (Becker, 1997; Greil, 1991; Monga et al., 2004).
- Infertility impacts couples' relationships, causing a loss of connectedness and polarization that leads to feelings of isolation, helplessness, and depression in extreme cases (Becker, 1997; Monach, 1993; Monga et al., 2004).
- Infertile couples can feel stigmatized in social circles, and within their extended family the presence of infertility threatens the generational continuity of that family (Becker, 1997).

In Canada, federal legislation, the *Assisted Human Reproduction Act* (Bill C-6) is being considered that will mandate counselling for infertile couples seeking fertility treatment. This is an encouraging development, but there is still much work to be done to

address the needs of infertile couples which could be better served in two respects. Firstly, with specialized training, counsellors will become more enlightened about the particular issues that many infertile couples face. To date, there has been no formal training for counsellors who work in the area of infertility. With more education, counsellors will be able to help their clients to make informed decisions about the emotional risks and benefits of their infertility testing and treatments. The issues and concerns for couples who are going through treatments such as in vitro fertilization, and who are using third party options, for example egg and sperm donation and surrogacy, are complex and complicated. Couples with infertility could benefit by having properly trained counsellors available to help them to make informed decisions about their testing and treatment. Secondly, in an effort to help couples to cope better with infertility, empirical measurements of the partners' relationships with each other could be developed. Based on the results of the couples' assessments, counsellors could then develop specific coping strategies for their clients.

As a woman who has experienced infertility, and a seasoned infertility counsellor, I consider the subject of informed consent to be paramount. Couples need to understand the ramifications of their decisions when they opt to undergo fertility treatments. While doctors will discuss with their patients the medical risks of their infertility treatment, those risks are generally short-term. The emotional risks to the patients, however, may be long-term. Those emotional risks may include the stigma and isolation of being infertile, cultural and social expectations, and couples' expectations of each other that may be misaligned. Because of my experiences with infertility, and my decision to become an infertility counsellor, I want to help couples to keep their relationships with each other healthy and intact, and to cope well with their infertility.

This study is a follow-on to my undergraduate thesis (Zatylny, 2006) in which I attempted to understand why some relationships survive infertility and others do not. In that earlier study, I developed a taxonomy of relationship characteristics, or descriptors, which showed that a couple's "degree of unity" most aptly explains why some relationships are able to survive infertility. "Unity" is defined as "the quality of being one in spirit, sentiment, purpose" (Webster's New World Dictionary, 1970, p. 1553). My research suggests that it is this oneness in spirit that fundamentally enables some couples to stay together despite their infertility. The couples who coped with the stresses of infertility the most successfully were the ones who displayed the most oneness in spirit embodied in the term "degree of unity." For more information about the taxonomy of relationship attributes that comprise degree of unity, refer to Appendix IV.

The degree of unity can be measured on a continuum. Successful relationships are characterized by a preponderance of "Solidarity" characteristics, or descriptors found at one end of the continuum. Solidarity is defined as "complete unity, as of opinion, purpose, interest, feeling" (Webster's New World Dictionary, 1970, p. 1355). The term characterizes those couples who dealt with their infertility most successfully. Unsuccessful relationships are characterized by a preponderance of "Individualism" characteristics, or descriptors, which are located at the opposite end of the continuum. Individualism is defined as "leading one's life in one's own way without conforming to previous patterns; the doctrine that self-interest is the proper goal of all human action; egoism" (Webster's New World Dictionary, 1970, p. 717). This term characterized those couples who dealt with their infertility least successfully.

In this study, I will develop a questionnaire, the Assessment of Unity Scale (see Appendix V), which quantitatively measures the degree of unity that is present in a relationship. I will then test the convergent validity of the assessment by comparing the assessment scores with my clinical assessment of the interviews I conduct with those couples.

Clinical assessment takes into account the life stories and the meaning that people attribute to their experiences (Jordan & Franklin, 2003). Borden (1992) suggests that people organize their experiences by the stories, or narratives, by which they associate meaning. Polkinghorne (1988) states that by linking events in a narrative way, people explain to themselves, and come to understand how and why events connect.

In general, many researchers agree that the rich data on the factors underlying relationship functioning can be obtained from couples' narratives (e.g., Huston, Surra, Fitzgerald & Cate, 1981; Reissman, 1990; Veroff, Sutherland, Chadiha & Ortega, 1993). Several researchers have promoted the use of couples' relationship stories, or narratives, as a research methodology because story-telling tends to reveal insights about partners' authentic experience of the relationship (Gergen & Gergen, 1987; Polkinghorne, 1988; Veroff et al., 1993). In my interviews, I will invite the couples to describe their stories and to reveal their authentic life experiences. I will present these stories as profiles, and I will use them to investigate the degree of unity in the context of the infertile couples' relationships, and to present evidence of the categories of unity: Solidarity and Individualism.

I will assess the couples' degree of unity by asking the partners a set of questions which deal with the Solidarity-Individualism themes. These themes include the importance of having children, the couples' relationships with family and friends; the couples' challenges

with infertility; any social and cultural pressures; and their coping styles (see Appendix VI). The following question guides this study: *Is there a correspondence in the assessment of degree of unity between the quantitative Assessment of Unity Scale and a qualitative clinical assessment?*

This study is premised on the belief that the Assessment of Unity Scale is a clinical tool that social workers will be able to use to improve the quality of counselling services for infertile couples because it will help them by matching the supports provided more directly to the couple's needs as part of a comprehensive counselling program. In this regard, it follows in the tradition of other assessment scales such as Olson's Family Adaptability and Cohesion Evaluation Scales (FACES) (Olson, Bell, & Portner, 1980, 1982; Olson, Portner, & Lavee, 1985).

More specifically, the Assessment of Unity Scale will assist social workers in developing counselling strategies that would be based on the couples' degree of unity: the degree to which they report that Solidarity and Individualism characteristics, or descriptors, are present or absent in their relationships. As reported in my undergraduate thesis, these characteristics, or descriptors, identify the strengths and weaknesses that affect a couple's ability to cope successfully with their infertility, and they provide a snapshot of the current state of the couple's relationship. Using the results of the measurement tool, an infertility counsellor could then devise an individual counselling program for the infertile couple that would encourage the Solidarity characteristics, or descriptors, and that would address the Individualism characteristics, or descriptors. The goal of the counselling program would be to help couples cope successfully with their infertility, and thereby prevent the breakup of their relationships.

CHAPTER 2

Literature Review

The infertility literature touches on many issues: basic explanations of reproduction, the medical breakthroughs in infertility, the ethical dilemmas posed by those breakthroughs, coping with infertility, the nature of counselling for infertile couples and the factors which promote greater satisfaction in couples' relationships. This review discusses the literature under four broad areas: medical, ethical, and social perspectives of infertility; psychological implications and coping strategies; counselling and psychometric instruments; and concepts of coupleness.

Medical, Ethical, and Social Perspectives

Infertility has always existed, and societies throughout history have looked for solutions to infertility. Leiblum (1997) provides an historical perspective on the customs and practices drawn on to deal with infertility. For example, in biblical times, major patriarchs such as Abraham, Isaac, and Jacob took second wives or concubines to provide them with the children their infertile wives could not produce. Ancient Hindu cultures believed that women who passed through a hole in a tree would improve their fertility. Early Egyptian and Arabic societies relied on good-luck pendants and amulets to improve fertility, while other ancient cultures looked to astrology, numerology, and the waxing and waning of the moon to tell them the best days of the month for conception. By the seventh century B.C., medical schools started to develop, but treatments for infertility remained more magical than medical. Infertile women were instructed to eat the eye of a hyena garnished with licorice and dill to conceive within three days. Alternatively, they

could pull two hairs from the tail of a she-ass while being mounted, and knot the hairs together during sexual intercourse to conceive. It was not until the eighteenth century that several scientific discoveries aided the medical understanding of fertility. Taken together, these discoveries showed that sperm was produced by the testes, and that sperm was essential to conception because it fertilized the ovum which then underwent segmentation to eventually produce a child.

In the last twenty years, the scientific understanding of infertility has increased exponentially, and technological innovations have skyrocketed. Today, infertile couples can chose from a proliferation of medical options: in vitro fertilization (IVF), intrauterine insemination (IUI), gamete intrafallopian transfer (GIFT), zygote intrafallopian transfer (ZIFT), subzonal insemination (SUZI), intracytoplasmic sperm injection (ICSI), and others. As revolutionary as these medical advances are, and as hopeful as they might be to infertile couples, they raise serious ethical and social issues, they do not alleviate the significant emotional and psychological toll that infertility exacts on couples, and forty percent of the couples that use these technologies do not conceive (Leiblum, 1997). Assisted reproductive technologies (ARTs) – such as IVF, IUI, GIFT, ZIFT, SUZI, and ICSI, among others – provide hope to millions of couples suffering from infertility, but they also raise many ethical issues for infertile couples and for the professionals who treat them. According to Leiblum (1997), these issues include, but are not limited to, questions about the criteria used to admit couples into infertility treatment programs, the parental rights of surrogates versus donors versus recipients, and the confidentiality, privacy, and disclosure rules that govern infertility treatments. In Canada, these issues were explored from 1989 to 1993 by the Royal Commission on New Reproductive Technologies

(Canadian Royal Commission on New Reproductive Technologies, 1993), and they are now being addressed by the *Assisted Human Reproduction Act*, Bill C-6, and by Assisted Human Reproduction Canada (AHRC), established in 2006 to administer and enforce the *Assisted Human Reproduction Act*.

Embryo donation illustrates many of the questions raised by the use of ARTs. Thousands of frozen embryos are available for donations, there are many couples that are eager to receive them, and yet the use of frozen embryos is fraught with difficulties. Leiblum (1997) provides a quote from an attorney specializing in infertility issues that addresses some of these difficulties:

> Embryos have been lost, misplaced, and sometimes given to the wrong couples. Disputes between couples, and between couples and programs over "their embryos" have occurred. Some programs face the question of disposal of embryos when contact with the couples has not occurred for many years. (p. 4)

Beyond these difficulties, embryo donation raises a number of other ethical questions that can be applied to a variety of ARTs: Should embryo donation be treated as an adoption or a gamete donation?; Should the children who result from those donations meet their siblings, and what would be the long term consequences if they met or did not meet?

Leiblum (1997) and others (Stephenson, 1987; Marrs, 1997) also raise questions of disclosure that must be dealt with when embryos, sperm, and ovum are donated for use in ARTs: How much information should be divulged about donors and recipients, and to whom should it be divulged?; Should children be told that they are the product of a donation? In the past, infertility specialists have recommended that the origins remain secret, but more recently the trend has been toward disclosure. Mental health experts

have taken the lead in this direction, and Leiblum notes that nearly all single individuals and lesbian couples now opt for openness about the circumstances of conception.

The use of ARTs in the conception and delivery of a child can also cause problems that are not necessarily anticipated by infertile couples that are initially eager to conceive. Leiblum (1997), Salzer (1991), and Stephenson (1987) describe the significant financial costs associated with ARTs, and how they can increase dramatically when treatments cover several years. The resulting tension between the financial burden and the strong desire to have a child can, in turn, add to the stress that an infertile couple is already undergoing. Estimates vary, but a single IVF treatment in Canada costs about $10,000. In Ontario, the cost of IVF treatment is only covered by OHIP if both fallopian tubes are blocked. Some couples may have insurance coverage through their employers for various drugs, but failing any personal employee benefit coverage, couples must bear the financial burden themselves.

Added to these costs are the direct medical risks and the indirect psychological effects associated with the use of ARTs. According to Leiblum (1997), the direct medical risks include ovarian hyperstimulation syndrome which can be a life-threatening complication, the psychiatric effects on mood and cognition from the drugs that induce ovulation, the possibility of multiple pregnancy, and premature births. Studies cited by Leiblum suggest that up to 20% of pregnancies resulting from ARTs are multiple, in contrast to one or two percent in the general population. In a number of these multiple births, the babies are born underweight. This results in staggeringly high financial costs to the parents and society at large for their neonatal care to ensure their survival, and for their long term rearing.

The indirect psychological effects, such as fear, anxiety, and stress, can be caused by the many intrusions that the use of ARTs entails: the painful injections, the constant scheduling and monitoring of sexual intercourse, lost time from work, the disruption of professional and personal activities, and the ever-present possibility of disappointment. Leiblum (1997) also suggests that health professionals, in their zeal to achieve pregnancy in an infertile couple, can sometimes compound the psychological effects of fertility treatments by not arranging for adequate counselling or education about the potential stresses associated with those treatments. In this light, the role of infertility counsellors becomes essential, not only for the assessment and evaluation of potential recipients of ARTs, but also in the ongoing education of and consultation with infertile couples. Interestingly, the other books surveyed in this literature review that discuss the use of ARTs – Stephenson (1987), Salzer (1991), and Glazer & Cooper (1988) – only describe the potential benefits, but do not mention the direct risks or indirect complications.

Much of the literature described thus far assumes that infertility is a pathological condition that must be treated medically. Greil (1991), however, makes the argument that infertility is also a social construct, and that it has become medicalized in much the same way that problems in living, such as relational problems with spouses or employers, have been classified as potential psychiatric disorders. Greil (1991) distinguishes between infertility as a medically diagnosed physiological characteristic of individuals, which he calls "reproductive impairment" (p. 6), and infertility as a socially constructed reality experienced by infertile couples.

Greil (1991) contends that the way in which a couple experiences infertility depends on the ideological and social structure of the society in which they live. The

ideological and social structure of a couple's society encompasses the functions of marriage and family, the role expectations for men and women, the social value of children, and the importance of blood relationships. These social and ideological constructs, in turn, influence the way couples define their infertility, and how they resolve their infertility crisis. The decisions that couples make to seek medical treatment, undergo diagnostic tests, explore the various ARTs available to them, stop medical treatment, or pursue adoption are not medical decisions at all. Rather, these decisions are the result of a dynamic, socially conditioned process through which couples, first, come to define their infertility as being a problem, and, secondly, seek a remedy to correct the problem. In a society with different ideological constructs, an infertile couple might not view their inability to have children as a problem at all, and would not feel compelled to search for a solution. Moreover, Greil suggests that infertility need not necessarily be viewed as a pathological condition. It can be viewed as an absence of a desired condition. And if infertility is the absence of a desirable condition, one simple solution to the problem, theoretically at least, is to stop desiring the condition.

Greil (1991) suggests further that couples turn to medical specialists to correct their problem of infertility because more and more aspects of our lives are defined as medical problems with medical solutions. In medical terms, an infertile couple with no pathological condition is still considered infertile; such a couple is described not as being normal, but as having "idiopathic" infertility (p. 47). Because infertility is considered a medical problem – because it has been medicalized – infertile couples have turned to the medical profession for a solution. According to Leiblum (1997), of the estimated 5.3 million couples in the United States who are considered infertile, 2.3 to 3 million seek

infertility treatments each year. This demand for treatments is responsible for the growth of infertility clinics from five in 1982 to 315 in 1995.

Psychological Implications and Coping Strategies

The psychological implications of infertility are significant and manifold. Becker (1997) states that infertility not only engenders a wide range of emotions – anger, guilt, sadness, isolation, loneliness, frustration, and remorse – but it is, with few exceptions, one of the most threatening human experiences. Couples experiencing infertility face challenges to their unspoken assumptions about marriage and family, and to their very identities as men and women. Any differences they might have in their expectations toward procreation and childrearing are highlighted and amplified by the experience of infertility. Any questions they might have about gender roles are similarly exacerbated by the experience of infertility.

Becker (1997) suggests that reproduction is a basic expectation that most people have about themselves. It is embedded in their identity, and people generally take it for granted that they can produce children. Indeed, for most of human history, couples came together to reproduce. The cultural and biological imperative to propagate the species was rarely questioned until the advent of the Pill. At that point, attitudes about having children began to change. Couples could decide when to have children, and in a minority of cases they even opted to be childless. Despite this new found reproductive freedom, the fundamental assumptions about fertility have remained constant. The discovery that a couple is infertile becomes a threat to their identity. The most deep-seated ideas they have about their masculinity and femininity are challenged, their biological potential is threatened, and the assumptions that structure their lives collapse.

Becker (1997) and Greil (1991) discuss the effect of infertility on gender identity. For women, whose identities are often tied to their reproductive functions, infertility leads to feelings of failure even though they might be successful in other areas of their lives, such are their careers. These feelings of failure, in turn, lead to a variety of psychological effects: they lose their focus; they start to feel inane, and lethargic; they question the purpose of their lives; and they start to question the very meaning of life. For men, who often equate virility with potency, infertility is seen as an attack on their sexual adequacy. And for those men who expect to live on in their children, infertility is seen as an attack on their immortality. This is particularly true in those cases where the cause of a couple's infertility lays with the man. That sense of inadequacy results in feelings of anger, helplessness, resignation, emasculation, and even depression. Men often resolve their feelings about infertility, but it can be a lengthy process that involves rethinking their identity in relation to the prevailing cultural norms about masculinity.

All of these feelings inevitably impact a couple's relationship. Monga et al. (2004), Becker (1997), Greil (1991), and Leiblum (1997) document the effect of infertility on relationships. The strain on relationships usually begins quietly. Initially, couples reassure each other that it is just a matter of time before they become pregnant. But as time passes and pregnancy is not achieved, a number of problems develop. The sense of connectedness that they once felt starts to fade, and polarization sets in that leads to feelings of isolation. With ongoing invasive treatments for infertility, many couples report feelings of helplessness as if they no longer have any control over their destiny. In some cases, feelings of guilt also take hold. Couples begin to examine their past behavior to determine a cause for their infertility. Premarital sexual activity, a history of abortion,

and venereal disease are sometimes used by couples to explain their infertility. In other cases, infertility fuels anger, and couples find themselves fighting more often than they did before the infertility. In many cases, the sexual relationship of infertile couples suffers. What had once been a shared act of love is now imbued with layers of meaning centered around the inability to conceive. In extreme cases, where repeated treatments for infertility do not produce a pregnancy, the pervasive feelings of failure lead to depression in one or both members of the couple.

Beyond their own relationship, infertile couples also face challenges when they interact with the outside world. Becker (1997) and others (Stephenson, 1987; Salzer, 1991; Greil, 1991; Leiblum, 1997) describe the sensitivity that infertile couples develop toward discussions about such topics as fertility, motherhood, fatherhood, and sexuality. These are all cultural symbols for what men and women do at a certain point in their lives, and couples that cannot participate in these activities start to feel different from everyone else. In many cases, infertile couples begin to feel stigmatized, especially if their infertility becomes known in their social circles, and they often try to avoid situations where discussions related to these cultural symbols might arise.

These feelings of difference and stigma often also encompass a couple's interactions with their extended family. Becker (1997) suggests that a close-knit family backed by several generations of history is an ideal toward which many couples aspire. As couples begin their own families, they perpetuate the chain between themselves and past generations, and they extend the bond between their families and the next generation. The presence of infertility in a couple's life threatens that generational continuity, and can break the connection between the past and the future. In this context,

faced with the pressure of maintaining the connecting link between generations, couples often have difficulty telling their families about their infertility because they view themselves as being responsible for breaking that connecting link. Other couples delay telling their families about their infertility because they anticipate a lack of support or understanding, especially if their relationship with their family is distant or difficult in the first place. As a result, infertile couples can end up feeling left out of their family circle in much the same way they feel left out of their social circle.

And yet, despite the enormity of the challenges that infertility imposes on couples, the research by Becker (1997) and Monach (1993) indicates that in the majority of cases infertility does not destroy relationships. Once couples understand the overall scope and implications of their problem, they can try strategies that might help them cope with their infertility. Levin et al. (1997) suggest that couples with the least amount of marital stress during infertility adopted task-oriented coping strategies as opposed to high emotion-oriented coping. Task-oriented coping strategies attempt to manage or alter a particular problem, while emotion-oriented coping attempts to regulate the emotional response to the problem. In the case of infertile couples, task-oriented coping involves acknowledging the problem, and then actively seeking treatment for it.

Apart from academic studies, the literature is filled with self-help books that suggest a wide variety of coping strategies. For example, Salzer (1991) lists a number of activities that couples can attempt to survive the crisis of infertility, such as taking control of their emotions, redefining or broadening their goals to combat burnout, and engaging in regular leisure activities. Similarly, Daniluk (2001) recommends that couples reframe the issue of infertility so that it becomes the couple's issue; communicate effectively by

putting boundaries on fertility discussions and trying to speak honestly about each other's feelings; and nurture sexual interest in each other by keeping doctors out of the bedroom.

Becker (1997) describes a coping strategy that couples can try called "seeking unity":

> When a couple reaches the point where they can identify infertility as a mutual enemy, rather than as a fault lurking in one of them, they become united in their efforts...Once a couple has this, they have an unshakeable bond...that will see them through anything. A bond that will add depth and breadth to their relationship. (p. 157)

Becker (1997) describes the path to unity as being, in many cases, long and difficult. Individuals seldom identify problems in the same way, and they do not proceed to a resolution of the problem in a synchronized manner. To achieve unity as a couple, individuals must first come to terms with their own feelings about their infertility, and they must address all the issues about identity and gender roles discussed earlier. Secondly, couples must look at their life together, and address the issues that infertility raises in that context. This second dynamic includes a couple's internal relationship as well as their relationship with their extended families. Becker maintains that to effectively seek unity, couples not only need to seek unity with each other, but they need to address the issues that infertility raises within their family system.

Couples start down the path to unity by reaching what Becker (1997) describes as the turning point in their battle with infertility. The turning point comes when one member of the couple stops the drift toward polarization that occurs in many relationships undergoing infertility by acknowledging that infertility is their mutual problem. At that point, many couples in Becker's research described how they began to reach out to each other from their individual isolation, and started to work together again.

They began to reconnect emotionally, and they started to rebuild the bond that once existed between them.

The conclusion of a couple's battle with infertility, and the resolution of their infertility crisis, depend on the outcome of their infertility treatments. If they successfully achieve a pregnancy, Daniluk (2001) describes the emotions that couples face, including surprise, fear, and anxiety. Anxiety can be especially strong in couples that were infertile because of their knowledge of the struggle they went through to achieve their pregnancy, and of how difficult it might be to become pregnant again if their pregnancy fails.

For those couples that are unsuccessful in achieving pregnancy, Daniluk (2001) and others (Becker, 1997; Monach, 1993) describe the phases that couples go through to resolve their infertility crisis. The resolution phase can take months or even years to complete, and can have subtle variations because each couple is different. The first step is to decide that it is time to let go, that it is time to stop trying to have a biological child. Couples decide to stop for a number reasons, including financial, medical, emotional, and intrapersonal. In many ways, this is the most difficult decision to reach, and it engenders its own set of emotions: relief that the quest for pregnancy is finally over; anger at themselves and their doctors because they were not able to achieve their objective despite months or even years of trying; and grief over the loss of their unborn children.

Grief is the most important and difficult part of ending the quest for pregnancy because it involves the final acceptance that a couple will not have a biological child. Other parenting options might still be possible, but they do not replace one's own child. To move on to those other options, a couple must first accept that they are an infertile couple, and that they will see themselves as such for the rest of their lives. Once they

acknowledge that reality, a couple can assess how they changed personally as a result of their experience, review what they learned about themselves from their infertility, and begin the process of reintegration. This process involves taking all the changes that occurred, and assembling them into their daily lives both as individuals and as a couple (Zatylny, 2006).

Counselling and Psychometric Instruments

The role of a counsellor in evaluating and screening people with infertility is relatively new, having evolved over the past 15 to 20 years (Klock, 1999). According to Klock, the counsellor evaluates emotional distress, and provides an environment for facilitating decision-making, for discussing ethical and cultural issues related to treatment and education, and for following up for emotional issues when treatment results in pregnancy and especially when it does not. The counsellor also screens individuals to ensure that they are not at elevated emotional or psychological risks for the infertility treatment which they are undertaking.

Most infertile couples enter counselling to obtain symptom relief, to develop better coping mechanisms, to obtain assistance with decision-making, or to deal with issues of loss (Applegarth, 1999). Zatylny (2006) and others (Daniluk, 2001; Becker, 1997) suggest that couples that have difficulty coping with the effects of infertility and who undertake some form of counselling to help them cope have better medical and psychosocial outcomes than couples that do not undertake counselling. Zatylny (2006) and others (Daniluk, 2001; Newton, 1999) also suggest that couples counselling is beneficial, no matter which partner has received the diagnosis of infertility. Moreover, couples that view infertility as their shared diagnosis rather than as an individual

partner's diagnosis are more likely to support each other, to work through their issues of grief and loss, and to make decisions that will benefit both partners (Zatylny, 2006).

Klock (1999) describes a counselling process that begins with a psychological assessment which is designed to gather information about an individual's personal history and current level of emotional functioning. Newton (1999) maintains that the assessment can gather information in two ways: a clinical interview and psychological testing. In a clinical interview, specific questions are asked to obtain information about the individual's history, and to ascertain their perception of the current problem leading to the psychological consultation. Klock (1999) suggests that the interview is also essential for assessing mental status and general interpersonal style. However, some clinical interviews are not standardized, and they are subject to the biases of the interviewer. Psychological tests, on the other hand, are used when a counsellor wants to gather information about individuals in a standardized manner, and then compares their responses to a pre-established norm.

Until a few years ago, there were no psychometric instruments that could help counsellors to identify or assess areas of distress in the relationships of infertile couples. The instruments that were available were not designed for couples with infertility, and they measured other areas of couples' relationships such as marital adjustment or satisfaction with the relationship rather than distress related to infertility. As a result, counsellors relied primarily on their clinical judgment when assessing their clients (Klock, 1999).

The literature suggests, however, that the use of clinical judgment has its problems, including biases of interviewers, non-standardized approaches to interviews,

and inconsistent results. Ryan, Barbera, and Sackett (1990) found that different assessors who interviewed the same job applicants provided significantly different assessments of the applicants' overall abilities. Ivey, Scheel, and Jankowski (1999) show that therapists who work with couples and families have very few practical resources to enhance their evaluative and clinical decision-making skills. And Olness, Ulatowska, Carpenter, Williams-Hubbard, and Dykes (2005) found that the quality of personal narratives that described traumatic events varied widely and showed inconsistency in a sampling of 71 narratives.

The literature discusses several psychometric instruments that might be considered to assist the relationship of couples coping with infertility, including the following:

- The Dyadic Adjustment Scale, which is designed to measure marital adjustment or similar dyadic relationships, is comprised of 32 items. It has an alpha reliability of .90, a test-retest reliability of .96, and when it was compared with the Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959), it showed a correlation of construct validity of .86 (Spanier, 1976). While this scale is one of the most widely used measures of couples' interaction, there is confusion about whether it measures marital adjustment or marital quality (Trost, 1985). Spanier and Cole (1976) do not define the criteria for marital adjustment nor for marital quality. In addition, the participants in the study were white American couples, and therefore their scores may not be representative of diverse populations (Trost, 1985).

- The Relationship Assessment Scale is designed to measure global couple relationship satisfaction, which is defined as

> how well the partner meets one's needs, how well the relationship compares to others, regrets about the relationship, how well one's expectations have been met, love for partner and problems in the relationship. (Hendrick, Dicke & Hendrick, 1998, p. 138)

  The Relationship Assessment Scale is a seven-item test that has an alpha reliability of .86 and a test-retest reliability of .85. The scale has criterion validity: it correlates .88 with the Dyadic Adjustment Scale (Hendrick, 1988).

- The Personal Assessment of Intimacy in Relationships (PAIR) is designed to measure intimacy, which is operationally defined as "a process and an experience which is the outcome of the disclosure of intimate topics and sharing of intimate experiences" (Schaefer & Olson, 1981, p. 51). The PAIR inventory, which is a 36-item instrument, measures five types of intimacy, including emotional, social sexual, intellectual and recreational intimacy. The subscale ranges in reliability from .70 to .75. It is significantly correlated with the Waring Intimacy Questionnaire (.77) (Hanes & Waring, 1979).

- The Sexual Communication Inventory is a series of 30 items that is designed to measure sexual communication. Its reliability and validity have not yet been assessed (Bienvenu, 1980).

- The PREPARE/ENRICH (Olson, 1996) is a series of four inventories with 165 items in each inventory that are designed to measure overall marital satisfaction. The tests comprise 12 content areas, four personality scores, and four scales focusing on family-of-origin issues. The instrument has an internal consistency reliability range of .73 to .90, and test-retest reliability scores of .80 to .86.

PREPARE, for premarital couples, demonstrates predictive validity by predicting with 80 to 85% accuracy which couples will divorce. ENRICH, for married couples, also demonstrates predictive validity by predicting with 90% accuracy which couples are happy and non-clinical and which couples are unhappy and clinical. (Fowers & Olson, 1986; Olson, 1999)

- The Family Adaptability and Cohesion Scale, FACES-III (Olson, 1986, 1991), is a 20-item inventory that measures cohesion and adaptability/flexibility - two dimensions of Olson's Circumplex Family Model which is designed to understand marital and family functioning. The hypothesis of this model is that balanced couple and family systems tend to be more functional compared with unbalanced systems. The internal consistency and test-retest reliability of FACES-III is .80, and the instrument demonstrates face validity (Olson, 1991).

Researchers have recently begun to investigate and develop measurement tools for infertile couples. Jordan and Revenson (1999) used a meta-analysis of eight studies to review the empirical evidence of gender differences in couples coping with infertility. They found that the studies used a standardized coping measure: the Ways of Coping Checklist – Revised (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986). This checklist uses two scales: a problem-focused coping scale and an emotional-focused coping scale. Both scales report a high internal consistency of .80, with a correlation of .45 between them, an alpha of .72, and a reliability coefficient of .63. Despite these respectable psychometric properties, the checklist was not designed specifically for infertility, and it did not take gender difference into account.

Lee, Sun, Chao and Chen (2000) attempted to improve on the Ways of Coping Checklist –Revised by developing the 15-item Coping Scale for Infertile Couples that would be sensitive to gender differences. Lee et al. identify four commonly used coping strategies: increasing space, regaining control, being the best, and sharing the burden. These strategies were based on Davis and Dearman's (1991) in-depth interview with infertile women, however, and not with infertile couples. The test-retest reliability of Lee's scale was .73, and content validity was established. A significant correlation with the Perceived Stress Scale (PSS), Infertility Questionnaire (IFQ), and Jalowiec Coping Scale provided evidence of concurrent validity. The correlations of the three measures and the CSIC scores ranged from .30 to .51. Though Lee et al. claim to have developed a scale that is sensitive to gender differences, the coping strategies used by men may not be reflected in their typology because no men participated in Davis and Dearman's interviews.

Glover, Hunter, Richard, Katz, and Abel (1999) developed the Fertility Adjustment Scale to measure "the extent to which individuals are able to process cognitively, emotionally, and behaviorally the possibilities of having and not having a child" (p. 624). This 12-statement questionnaire, which focuses primarily on the importance a couple places on having a child, has an internal consistency of .85 and a test-retest reliability of .88. Concurrent validity was assessed by correlating the Fertility Adjustment Scale's scores with the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983) scores. The correlation coefficient was significant at .88.

As discussed above, there are psychometric tests designed to measure various aspects of a couple's relationship, including marital adjustment, relationship satisfaction,

intimacy, sexual communication, and marital cohesion. While some of these aspects may be similar to the concept of degree of unity, the tests are not designed for couples with infertility. Lee et al. (2000) developed a coping scale for infertile couples, but the authors did not take into consideration the coping mechanisms used by men. The scale developed by Glover et al. (1999) was limited in that it only considered how people "psychologically adjusted" to infertility. Currently, there are no psychometric tests that measure for infertile couples' ability to cope with infertility, and none that assess how a couple is processing the possibility of not having a child. Recently, however, in a qualitative study, Zatylny (2006) identified 26 characteristics, or descriptors of a couple's relationship that could be used to predict their ability to cope successfully with infertility.

Coupleness, Degree of Unity, and Related Concepts

There is little mention in the literature about the concept of unity in a couple's relationship, but the few studies that have considered this concept confirm its importance. Agnew, Van Lange, Rusbult and Langston (1998) suggest that a commitment to a romantic relationship is associated with cognitive interdependence, which consists of the following: a greater perceived unity of self and with one's partner; a greater spontaneous plural pronoun usage, such as the use of "we" and "us", rather than "I" or "me"; and a greater reported relationship centrality. Monarch (2004) discusses various dimensions of couple identity which enhance relationship satisfaction and stability. The author defines couple identity as "the degree to which partners think of their relationship as one unit rather than as two separate individuals" (pp. 15-16). These dimensions include valence of unity, uniqueness of relationship, locus of control of relationship development, confidence in team strength, and degree of unity. Monarch suggests that couple identity is

a process by which spouses shift from seeing themselves as distinct individuals to seeing their marital relationship as its own entity. Agnew et al. (1998) suggest that couple identity is reflected by the extent to which the partners described themselves as part of the unit, using plural pronouns such as "we", "us", "our", and "ours." The authors suggest that greater couple identity is demonstrated by more frequent use of plural pronouns, and is associated with greater marital satisfaction. The authors maintain that couples tend to lose sight of their couple identity during times of adversity. Cordova (2000) suggests that couple's teamwork, or their sense of being a team, is related to greater marital and individual functioning.

The literature discusses, in a limited way, two concepts that are related to unity: cohesion and solidarity. Pretorius (1997) defines "dyadic quality" as the quality of a relationship between two partners that is dependent on the level of dyadic cohesion, which includes "dyadic consensus, dyadic satisfaction, and dyadic adjustment, as well as the way in which the couple deals with conflict" (p. 171). Kilbourne, Howell and England (1990) developed a theoretical model to measure marital solidarity that was based on four items: how well the respondent thinks his or her spouse understands him or her, how well the respondent understands his or her spouse, the amount of time the spouses spend together in companionate activities, and the reported marital satisfaction. These items were found to be a unidimensional indicator of marital solidarity that held constant across time, gender, and life cycle stage.

The literature also discusses the concept of resiliency among couples that are faced with various challenges. These challenges include: economic pressures (Conger, Rueter, & Elder, 1999; Rand, Martha, & Glen, 1999); being in lesbian relationships

(Fassinger & Arseneau, 2007; Connolly, 2006; Green, 2004); inhibited sexual desire (McCarthy, Ginsberg, & Fucito, 2006); being in an unmarried relationship (Hohmann-Marriott, 2005); and retirement (Phillips, 2005).

Another challenge that couples face, which is discussed in the literature, is cancer. It is interesting to consider the factors that lead to greater resiliency among couples that face cancer. These factors include the following: making meaning of cancer by creating a narrative to foster a sense of "we-ness", which allows couples to redefine the self and the couple identity (McCarthy, 2005); creating social support and making connections with others (Guilish, 2002); and defining the experience as "our problem", and creating a meaning structure that provides direction for the couples' coping styles (Skerrett, 2003). These factors that enable couples to become more resilient when facing cancer are similar to the factors suggested by Zatylny (2006) in her study about relationship descriptors that enable couples to have successful relationships when facing infertility. Successful relationships, those that enable a couple to cope successfully with their infertility, possess a preponderance of "Solidarity" descriptors which exemplify a sense of unity in opinion, purpose, interest, and feeling. These Solidarity descriptors include: the ability to maintain relationship stability; complementary coping strategies; the desire to foster social solidarity; and the ability to maintain a balanced identity. On the other hand, unsuccessful relationships, those that prevent couples from coping successfully with their infertility, possess a preponderance of "Individualism" descriptors which exemplify a sense of self-interest and egoism. These Individualism descriptors include: relationship polarization; incongruent coping styles; social isolation; and identity disruption.

Addressing the Gaps in the Literature

The literature review shows that many couples have trouble coping with infertility, but it does not show how a counsellor can assess the ways in which the couples are coping with that situation. At present, there are no specific quantitative assessments for infertile couples which can identify areas of strength and weakness in their relationships, and which can be used in conjunction with an interview. Infertility counsellors rely primarily on their subjective evaluation of couples during an interview, and draw on their knowledge of generic coping skills to support couples through infertility. The existing assessments for couples measure various aspects of their relationship, but none assesses the degree of unity in relation to infertility.

Since the literature does not discuss any specific quantitative assessments which might assist counsellors in working with infertile couples to assess the degree of unity, this study proposes to build upon my earlier research, and to develop a quantitative scale to assess unity within the relationship of couples that are faced with the challenges of infertility. Accordingly, in this study, I will explore the similarities and differences in the insights that the researcher gains in using a quantitative measure and a clinical assessment to assess the degree of unity in the relationship of couples facing infertility. In addition, I will explore whether there is a correspondence in the assessment of degree of unity between the quantitative Assessment of Unity Scale and a qualitative clinical assessment.

CHAPTER 3

Methodology

Research Questions

The purpose of this study is to explore whether a quantitative assessment instrument could be used in identifying areas of strength and of challenge/stress in the relationships of couples facing infertility. The most common approach now used by infertility counsellors is an interview.

In this study, I will explore the similarities and differences in the insights that the researcher gains using a quantitative measure and a clinical assessment to assess degree of unity in the relationship of couples experiencing infertility.

In an effort to assess unity within the relationships of infertile couples, this study asks the following general question: Is there a correspondence in the assessment of degree of unity between the quantitative Assessment of Unity Scale and a qualitative clinical assessment? Correspondence is defined as "agreement with something else" (Webster's New World Dictionary, 1970, p. 319). The study also asks two more specific questions. Firstly, what similarities and differences are there in the insights that the researcher gains from Assessment of Unity Scale and from a clinical assessment? Secondly, what are the differences in how men and women are affected by and cope with infertility?

This study is a follow-on to my previous work in which I used a grounded theory methodology to generate theory about relationship descriptors of infertile couples who remained together and couples who separated. The findings of that study suggest that the success or failure of relationships can be defined by "degree of unity", and can be measured on a continuum. Successful relationships are characterized by a preponderance of

"Solidarity" attributes found at one end of the continuum. These attributes enable a couple to cope successfully with their infertility. They include: the ability to maintain relationship stability; complementary coping strategies; the desire to foster social solidarity; and the ability to maintain a balanced identity. Unsuccessful relationships are characterized by a preponderance of "Individualism" attributes found at the other end of the continuum. These attributes prevent couples from coping successfully with their infertility. They include: relationship polarization; incongruent coping styles; social isolation; and identity disruption. These eight descriptors associated with Solidarity and Individualism can be defined by 26 other relationship characteristics, or descriptors. These 26 descriptors found in couples' relationships include the following:

Solidarity Descriptors	**Individualism Descriptors**
1: United against a common enemy	15: Estrangement and isolation from one's partner
2: Open communication	16: Neglect
3: Preserving normalcy	17: Self-blame
4: Empathy	18: Blame
5: Types of coping styles	19: Inability to reach out
6: Counseling	20: Marked differences in hopefulness
7: Faith	21: Detachment from pre-infertility external relationships
8: Solution-focused problem-solving	22: Being infertile in a fertile world
9: Being a couple as an established family	23: Difference of support
10: Turning to others	24: Feeling defective
11: Keeping the relationship vital	25: Together but apart
12: Rejecting the stigma of infertility	26: Trying to regain control
13: Partners are more than just spouses	
14: Differentiating one's self from one's partner	

In this study, I wish to use the 26 relationship descriptors (see F1 to F26 in Appendix IV) that were determined from my earlier study to develop an Assessment of Unity Scale (see Appendix V) in order to assess the presence or absence of these relationship attributes. The degree of their presence or absence will enable me to assess unity within the relationship

of couples who are faced with the challenges of infertility. This current study has three fundamental research goals: to develop a quantitative assessment instrument to measure the degree of unity among infertile couples; to explore the similarities and differences in the insights that the researcher gains in using a quantitative measure and a clinical assessment to assess the degree of unity in the relationships of couples facing infertility; and to tell the stories of six couples in such a way that illustrates how their relationships are affected by infertility.

To achieve these goals, the research methodology used will be a mixed methods approach involving both quantitative and qualitative means to collect and analyze the data. The methodology will use quantitative means to collect and analyze the scores on Assessment of Unity Scale, and it will use qualitative means to collect and analyze data from interviews with the participants about the degree of unity in their relationship.

This chapter describes the attributes of mixed methods research that make it an appropriate research methodology for this study, the attributes of the heuristic paradigm that enable the researcher to inductively generate understanding from the data, the specific application of the heuristic paradigm to this study, the characteristics of the participants in the study, and the study procedure.

Mixed Methods Research

Creswell and Plano Clark (2007) define mixed methods research as a philosophical assumption "that guides the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process" (p. 5). Denzin and Lincoln (2000) suggest that quantitative research is markedly different from qualitative research with its search for objective truths using deductive, empirical

methodologies. Quantitative research methodologies presume a stable unchanging reality, they start from a stated premise, and they attempt to operate within a value-free framework that transcends opinion or bias. Moreover, these quantitative methodologies privilege controlled samples over the direct examination of everyday life, and they value an objective inferential stance toward the data over the subjective relativism of qualitative researchers. Qualitative research, on the other hand, is a set of interpretive activities, and it includes various methodological practices. For example, it draws upon and uses the methods of interviews, psychoanalysis, cultural studies, survey research, and participant observation, among others. Despite this multidisciplinary approach to method, qualitative research is nonetheless "committed to the naturalist perspective, and to the interpretive understanding of human experience" (p. 7).

Quantitative and qualitative data can be collected as part of the assessment process for different purposes. Jordan and Franklin (1995) suggest that quantitative data is important for the following reasons: First, the standardized assessment of clients' problems with quantitative measures "improves treatment by increasing the probability that clients' problems are defined accurately" (p. 39). Second, the collection of empirical measurements can contribute to clinical research. Third, collecting quantitative measures "provides a basis for practice evaluation and accountability" (p. 39). Fourth, knowledge and skill in measurement helps to increase "the repertoire of skills available to practitioners and broadens their assessments and outcome evaluations with clients" (p. 39).

Qualitative data is important to clinical practice for several reasons. First, "social workers rely on the conversations and interactions between the client and themselves to understand the client's problems" (Jordan & Franklin, 1995, p. 97). Second, it permits social

workers to understand their client's realities and perspectives. Third, it can be used to better understand a phenomenon about which little is yet known (Strauss & Corbin, 1990).

Mixed methods research is used when little research is available about a phenomena (Cresswell & Plano Clark, 2007). In this case, little is known about how to assess the degree of unity in a couple relationship. In addition, mixed methods research has the following characteristics that make it a suitable choice for this study. First, it provides a better understanding of a research problem by converging numeric trends from quantitative data, such as surveys, and specific details from qualitative data, such as interviews (Cresswell & Plano Clark, 2007). Second, it identifies variables or constructs, such as the degree of unity, which may be measured through the use of existing instruments or through the development of new ones. Third, it conveys the needs of individuals who are marginalized or underrepresented, such as people with infertility (Jordan & Franklin, 1995).

Mixed methods research is an appropriate research methodology for the subject of this study for three reasons. First, it brings together the strengths of the quantitative and qualitative approaches, and it offsets the weaknesses of those two approaches. Creswell and Plano Clark (2007) suggest that while quantitative research may be limited in understanding the context or setting in which participants talk, in taking into account the voices of the participants, and in recognizing the participation of the researcher, qualitative research can make up for these weaknesses. Qualitative data acknowledges and embraces the complexity of infertility and its manifold effects on the lives of the participants; it emphasizes the direct, interactive examination of the participants' lives to yield rich, personal, and varying descriptions of the experience of infertility; it enables the researcher to not just describe the observed phenomena, but to generate psychological insights about, and search for meaning in

the participants' infertility experiences; and it provides a place for the researcher's personal history with, and knowledge of infertility in both the design of the study and the interpretation of its findings. While qualitative research may be limited by the biases and personal interpretations of the researcher, and by the difficulty of generalizing findings to a large group because of the smaller number of participants studies, quantitative research can offset these weaknesses.

Second, mixed methods research provides a better understanding of a phenomena about which little is known. The phenonema of unity has been studied only in a limited way by using qualitative research (Zatylny, 2006; Becker, 1997). Further study to understand the nature of unity would benefit from mixed method research, especially given the purpose of this research project.

Third, mixed methods research allows for the Assessment of Unity scale to be developed and tested using quantitative and qualitative methods. This study attempts to determine whether there is correspondence in the assessment of degree of unity between the quantitative Assessment of Unity Scale and a qualitative clinical assessment. Jordan and Franklin (1995) support the use of a mixed methods approach:

> the use of multiple methods is necessary to improve the reliability and validity of clinical information. In particular, qualitative methods add to the detail and thick description of a case assessment and may enhance the clinician's understanding of the context and process in which problems occur. (p. 98)

The Triangulation Design

This study uses a specific type of mixed methodology called a "triangulation design", the purpose of which is "to obtain different but complementary data on the same topic" (Morse, 1991, p. 122) in order to best understand the research problem. The triangulation

design is used when the researcher wants to directly compare the quantitative statistical results with the qualitative findings. Because I will be exploring the convergent validity of the Assessment of Unity Scale by determining whether there is a correspondence between the quantitative scores and the qualitative scores of the clinical assessment, the triangulation design is appropriate for this study.

A variant of the triangulation design is the convergence model (Creswell, 1999). This study is modeled on this particular design. The convergent model is the traditional model of a mixed methods triangulation design in which the researcher collects and analyzes quantitative and qualitative data separately on the same phenomena, e.g., the degree of unity. The results are then converged, or compared. The purpose of this model is to end up with a valid and well-substantiated conclusion about a single phenomena, in this case an understanding of the similarities and the differences in what we learn about the degree of unity in a couple's relationship when we assess them using a narrative approach, and using a quantitative measure.

Interviews as an Assessment Instrument

For many years, counsellors have relied on the interview as an important assessment tool (Vacc & Juhnke, 1997). This is especially true of infertility counsellors who have not had the benefit of specialized psychometric instruments. Polkinghorne (2005) suggests that the purpose of an assessment interview is "to provide alternative perspectives on the experience under study" (p. 143). New aspects which emerge during an interview enrich and add to the collection of data, and require the researcher to investigate those aspects further.

Vacc (1982, 1991) advocates that an assessment interview can be a model of practice where counsellors use a scientific approach in their work. Structured interviews use such an

approach when they apply scientific principles such as pre-established questions and scoring procedures (Vacc & Juhnke, 1997). Structured clinical interviews define what is asked and how it is asked. Bradburn (1982) suggests the following when developing a structured interview as an assessment instrument:

- Ensuring a brief, and clear standardized introduction
- Using short, clear questions, not compound questions
- Avoiding technical jargon
- Avoiding negatively phrased items eliciting a positive response
- Obtaining peer evaluations of the experimental protocol

Several types of validity can be tested when assessing interviews, including content validity (Gutterman et al., 1987) and discriminant validity (Paget, 1984). Concurrent validity could be tested if there was an "established" measure of a phenomena (Vacc & Juhnke, 1997).

Structured interviews are valuable assessment instruments for several reasons: First, they are more flexible than pen-and-paper assessments because they allow the counsellor to examine unclear responses. Second, the counsellor is able to establish a rapport with the client that is less likely to occur with a pen-and-paper assessment. Third, people who are distressed or confused, and people whose first language in not English, or who have literacy challenges are better able to communicate with a counsellor during interviews than when they are completing questionnaires. Fourth, structured interviews allow the counsellor to observe the clients' nonverbal reactions. Fifth, clients may have a better opportunity to express any concerns during structured interviews than during pen-and-paper assessments. (Vacc & Juhnke, 1997; Polkinghorne, 2005). Vacc and Juhnke (1997) maintain that

structured interviews can help counsellors to "organize their clinical judgment, thereby improving diagnostic precision" (p. 479).

In contrast to structured interviews in which a planned, or standardized set of questions are posed to the participants, semi-structured interviews are more flexible. They enable the interviewer to ask new questions as well as standardized questions. Kahn and Cannell (1957) suggest that a semi-structured interview is a conversation with a purpose. There are several benefits to conducting semi-structured interviews. Firstly, the new questions may be asked as a way of encouraging participants to share additional information, or to elaborate or clarify their responses(Anastas & MacDonald, 1994). In this study, the detail and depth of the information which may be gathered from semi-structured interviews with the participant couples about their relationships, and about how they cope with infertility may help to increase the validity of the descriptors and of the degree of unity construct. Secondly, new questions, or re-worded questions may also be asked when discussing sensititve issues such as infertility. The interviewer may be able to tailor or personalize the questions in delicate or in other appropriate ways depending on the participant. Thirdly, new questions on similar themes may be asked when the interviewer detects some resistence to a previously-asked standardized question.

There are, however, several disadvantages to semi-structured interviews. Firstly, because new questions may be asked spontaneously to one participant, those same questions may not necessarily be asked, or may not be asked in the same way to another participant. As a result, any information that is new, different, inconsistent, or variable from participant to participant may skew the results of the study and may jeopardize the reliability of the study. Secondly, the depth of the information may be difficult to analyze. It may be challenging for

the interviewer or the researcher to know what information is relevant. Thirdly, interviewer bias may result from the interviewer's inability to be impartial, or from the interviewer influencing the participant's responses. For example, the use of probes, or follow-up questions used to encourage the participant to elaborate on ambiguous or incomplete information may lead to interviewer bias by potentially introducing new ideas that may then become part of the participant's subsequent answer (Shaughnessy and Zechmeister, 1990). Additionally, if the interviewer is affected by the participant's emotions and the interviewer is not able to remain impartial, then interviewer bias may also occur.

Benefits of Quantitative Assessment Instruments

Jordan and Franklin (1995) suggest several possible benefits of collecting quantitative measures on clients' thoughts and behaviours as part of the assessment process. Firstly, the authors suggest that the objective assessment of clients' problems with quantitative measures improves treatment by increasing the probability that those problems are accurately defined. The Assessment of Unity Scale will be given to couples at the beginning of a counselling session, and it will be used to provide an objective snapshot of the problem areas in the couples' relationships. The Scale will be considered to be the first-step in the assessment of the couples' relationships. During the second step, the counsellor will then discuss and expand on the couples' results on the Scale by conducting a more subjective, intuitive interview with them. Secondly, the authors suggest that collecting quantitative research expands on clinical research. While research to-date has identified concepts similar to the degree of unity – concepts such as marital satisfaction and cohesion – and while there are assessments for those concepts, there are no quantitative assessments that have been developed to measure the degree of unity in couples with infertility. The Assessment of

Unity Scale expands on clinical research by measuring this concept in these couples. Thirdly, Jordan and Franklin state that collecting quantitative measures on client behaviours "provides a basis for practice evaluation and accountability" (p. 39). The Assessment of Unity Scale will enhance the interview used in counselling by providing an objective assessment evaluation of the areas of strength and of challenge/stress in the relationships of couples facing infertility. Fourthly, the authors state that the quantitative measurement serves as a tool which can be used as part of a counsellor's repertoire of skills in assessment of clients. Traditionally, counsellors who assess the problem areas in the relationships of infertile couples have used the interviews. The Assessment of Unity Scale will be used as a standardized assessment and supplement to the interview, and it will be useful for both novice and seasoned counsellors.

Heuristic Paradigm

Guba and Lincoln (2005) state that the way that the researcher views the world will influence the way the researcher conducts his or her research. This worldview, or paradigm, contains a set of assumptions or beliefs that guide the researcher's inquiries. Heuristic is defined as "helping to discover or learn … to find solutions or answers" (Webster's New World Dictionary, 1970, p. 659). The heuristic paradigm is a metatheory of research that starts from a belief that there are no privileged realities or ways of knowing, and therefore there is no way to include all relevant information in data gathering and analysis. Consequently, the heuristic paradigm incorporates different theories, methodologies, data, and data-gathering techniques, rather than a single, preferred methodology.

Anastas and MacDonald (1994) refer to the heuristic paradigm as realistic fallibilism, and they suggest that we cannot know reality either directly or completely. Therefore,

knowledge is only partially understood, and it is limited in its generalizability. There will always be some error (or theory-induced bias) in the researcher's observations, interpretations, and conclusions. Theories and methods of research will not be infallible, and, as a result, they may be wrong. Therefore, our knowledge about reality is fallible.

The heuristic paradigm brings together the traditions of the positivist and naturalist paradigms which contrast in several ways. The positivist belief is that reality is fixed and knowable, and that knowledge, which is generated through the logical analysis of empirical and scientific experiments, is deductive. The positivist paradigm underlies quantitative methods of research. On the other hand, the naturalist belief is that reality is multiple and constructed, and that knowledge is endogenic and inductive: it is constructed from the individual who tries to make sense of his/her world. The naturalist paradigm underlies qualitative methods of research (Westhues, Cadell, Karabanow, Maxwell & Sanchez, 1999). The heuristic paradigm supports a realist view of reality which is fixed and emergent, and suggests that "although an objective reality exists, we can only appreciate part of this reality because our understanding of it depends upon our cultural and historical context" (Westhues et al., 1999, p. 140). The logic of this research is therefore both deductive and inductive.

The purpose of research, according to the heuristic paradigm, is to describe and understand the properties of a specific phenomena, such as degree of unity, and how those properties might react or vary in an open system. An open system is considered to be the real world where it is not possible to hold constant all relevant conditions, as it is in a laboratory setting of a closed system (Westhues et al., 1999). The research process is seen, in the heuristic tradition, to be both independent, and interactive between the researcher and the participant.

Application of the Heuristic Paradigm to this Study

This study applies the principles of the heuristic paradigm in a number of ways. The first principle of the heuristic paradigm is that the researcher adopts different methodologies rather than a single, preferred methodology. This study uses a mixed methods approach involving both quantitative and qualitative data and analysis.

The second principle of the heuristic paradigm is that the researcher is limited in his or her ability to understand the reality of the participant. I believe that it is possible for me to only partially understand the reality of a couple's relationship because of the limitations of my own cultural and historical context. My personal experience with infertility prompts my research interest, it informs the underlying themes of my earlier study, it aids my review of the literature about infertility, it guides my development of the interview questions, it manifests itself during my empathetic interaction with the study participants during their interviews, and it is the point of departure for my analysis of the study data. While I can appreciate the experiences of the participant couples, I see them through the eyes of my social location, as a white, middle-aged, middle-class, Canadian and Jewish woman.

The third principle of the heuristic paradigm is that the purpose of research is to understand the properties of a particular phenomena within an open system. The purpose of my study is to develop a scale to assess the degree of unity within the relationships of diverse couples who face the challenges of infertility, and to begin to assess the validity of the scale. It is my hope that this study will demonstrate that the Assessment of Unity Scale will prove as useful as a clinical assessment by an experienced infertility counsellor in assessing a couple's degree of unity.

The fourth principle of the heuristic paradigm that is applied to this study is the independent and interactive involvement of the researcher. In this study, the relationship between myself and the couple is independent since the use of the Assessment of Unity Scale is an empirical and quantitative measure of a couple's relationship which will be completed by the couple. However, my involvement will also be interactive during the interviews I conduct with the participants.

Procedure

This section describes the manner in which I undertook this study. Specifically, it describes how I developed the Assessment of Unity Scale, how I found the participants, the sampling technique I used, and how I collected and analyzed the data.

Development of the Assessment of Unity Scale

The Assessment of Unity Scale (see Appendix V) is based on the taxonomy of the 26 relationship characteristics, or descriptors which were identified in my earlier study (Zatylny, 2006) (see F1 to F26 in Appendix IV). For each of the 26 descriptors, I designed a statement to assess the extent to which each participant agreed or disagreed with it. In order to capture the essence of each descriptor, I reviewed my earlier study and familiarized myself with the quotes from the interviews with the couples, and the underlying meaning the couples gave to the 26 descriptors. I also reviewed my observations of the couples which I had written during and after my interviews with them.

The order of the statements on the scale followed the order of the original 26 relationship descriptors in the typology I created. Statements 1 to 14 were based on the Solidarity descriptors S1 to S14 (see Appendix IV), and statements 15 to 26 were based on the Individualism descriptors S15 to S26 (see Appendix IV). The statements on the scale

were ordered in this manner so that they maintained an organized, logical flow of descriptors that are similar to one another. Clustering together the items on the same theme helped to organize and focus the thoughts of the participants, and to avoid any confusion as they completed the Scale (Patten, 1998).

I then followed several of the scale development procedures suggested by DeVellis (1999). First, I ensured that the language of the statements was clear, concise, and was written for an appropriate reading level. I did this by confirming the Scale's clarity and ease of comprehension with several social workers and primary school teachers. Because the participants were responding to statements based on similar descriptors, the participants may have had a tendency to automatically respond "agree" to questions rather than "disagree". This is a type of bias called a "response set" (Anastas & MacDonald, 1994). In order to minimize the effects of a response set, I altered the phrasing of the statements so that the statements did not appear too similar in concept. Second, I selected the Scale of measurement: a four-point Likert scale. I chose to use a four-point scale rather than a higher point scale because a four-point scale is more successful than a higher point scale in its discriminability - that is, in its ability to discriminate between the degrees of the participants' perceptions of an item (Devlin, Dong, & Brown, 1993). A four-point scale can also reduce social desirability bias because this type of scale is a forced-choice scale in which there is no neutral point (DeVellis, 1991). The participants are forced to decide whether they lean more towards the "agree" or "disagree" end of the Scale for each item: the participants cannot make a neutral response and consequently, they are less able to respond in a socially acceptable or desirable manner. Third, once I had developed the Scale, I invited several experts - social workers who are infertility counsellors - to comment on it. This procedure

helped to ensure that the Scale had face validity, and "looked like" it measured what it is supposed to measure (Anastas, 1988), i.e. unity. The social workers suggested that I might improve on several items by clarifying the language which I used. For example, some items were confusing because they asked double-barreled questions which combined two or more issues. These items were re-written to reflect greater clarity to ask about a single issue.

Search for Participants

I searched for a sample of six infertile couples by advertising for volunteers to participate in a study about infertility in five infertility clinics in Toronto and Hamilton whose clients live in rural and urban areas in Ontario (see Appendix III, Recruitment Flyer). My search for participants also involved requests made to my own circle of physicians, gynecologists, and infertility specialists in Ontario asking that they invite patients who might be interested in participating in my study to contact me. Once a couple contacted me, I sent them an Information Letter about their participation in this research project and a Consent to Participate Form (see Appendices I and II).

Sampling Technique

My research study involved a non-probability purposive sample of consenting participants. Newman (1997) suggests that purposive sampling uses the judgment of an expert in "selecting cases with a specific purpose in mind" (p. 206). The expert in this study is the researcher who will use purposive sampling "to select members of a difficult-to-reach, specialized population" (p. 206), such as infertile couples, in order to learn about their experience (Polkinghorne, 2005). This is an appropriate sampling technique for this study because infertile couples are a hard-to-find target population.

My inclusion criteria for sampling included heterosexual couples with infertility who do not already have children. Couples who were married, living together, separated, or divorced could participate. The type of infertility with which these couples might be diagnosed was not an inclusion criterion. It might be male factor, female factor, contributing factors from both partners, or no identified cause. Couples of all ages, races and ethnic origins could participate because infertility affects people indiscriminately, though the cultural meaning of the experience may vary. The ages of the couples were likely to range from 30 to 45. Their profession and economic status were not inclusion criteria.

Data Collection

Once the couple agreed to participate, I sent them two copies of the Assessment of Unity Scale. Each partner completed his/her own copy of each assessment, and the couple returned the assessments to me. I followed up with those couples that did not return their assessments to me. Once I received the assessments, I dated them but I did not look at them. I waited to enter the quantitative data in SPSS and to analyze the data until the qualitative interviews were completed.

1. Protection of the participants.

In order to protect the participants, I ensured that their voluntary agreement to participate in my study was informed. I asked them to read the Information Letter (Appendix I) and read and sign a Consent Form (see Appendix II). The consent form outlined the nature of my research study, the length of time they needed to complete the study, the steps which I took to protect their confidentiality, their right to have all of their questions answered, and the contact information for my research supervisor.

The steps that I took to ensure the confidentiality of the participants included the following: their research records would be kept confidential, and their names would not be identified in any publication or discussion. The questionnaires would be maintained in a locked filing cabinet in my office. Only myself and my supervisor would have access to the questionnaires.

2. Securing the data.

The objective of this study is to explore the similarities and differences in the insights gained by using the Assessment of Unity Scale and my clinical judgment of the couple. I am hoping to show that the results of the Assessment of Unity Scale are consistent with my judgment of the couple. If that is the case, then it will be determined that the Assessment of Unity Scale has indications of convergent validity (Neuman, 1997).

3. Assessment of Unity Scale.

The Assessment of Unity Scale is a quantitative measure of the degree of unity in a couple's relationship. I assessed each partner to identify where they were along the two end points of the Solidarity-Individualism continuum of unity. Using a four-point Likert scale, with ratings from 0 to 3, the responses to each item ranged from Strongly Disagree (0), to Disagree (1), to Agree (2), to Strongly Agree (3). The possible range in scores is from 0 to 78. Couples completed the Assessment of Unity Scale before I interviewed them. I did not analyze the data until after my interview with them. This was to prevent any bias on my part about where the couple might be on the Solidarity-Individualism continuum when I met with them at the interview stage.

4. Clinical judgment of the couple's interview.

The purpose of the interview with the participant couple was to make a determination of the couple's degree of unity. The interview was designed to be structured, with a set of previously formulated set of questions. However, because additional information unrelated to the questions emerged as the couple's narrative unfolded, the interview became semi-structured.

I collected the data on the couple by using a narrative method, an interview, to shed light on a particular clinical entity requiring reflection (Jordan & Franklin, 2003). In order to reflect on the degree of unity of a couple's relationship, I gathered a variety of information typically used to formulate a profile of the couple. This information included social histories, life histories, and my own observations about the couple, and it provided thick descriptions and insights about the nature of the couple's relationship (Jordan & Franklin, 2003).

The profile of the couple began with a tape-recorded interview of the two partners during which I specifically asked them open-ended questions which dealt with the Solidarity-Individualism themes. These themes included:

- the importance of having children
- their relationships with family and friends
- their challenges with infertility
- any social and cultural pressures
- their coping styles

The interview was conducted in the following way:

- Once the couple returned their Assessment of Unity Scales to me, I contacted them by phone to arrange a face to face interview to be conducted in their home. I reviewed

the contents of the Consent to Participate Form with them at this time, and had the partners sign the Form (Appendix II).

- At the beginning of each interview, there was a period of familiarization. I briefly told the couple about my interest in learning from their stories. I began the interview by asking them when they started trying to have children.
- During the interview, I asked them questions about their relationship with each other and their experience with infertility.
- At the end of the interview, I asked the couple to rate the success of their relationship on a scale of 0 to 10. I defined success as how well they have coped with the stresses that infertility has imposed on their relationships. Zero indicates that they have coped the least successfully, and 10 indicates that they have coped the most successfully.
- I then asked whether the couple had anything further to add that might be important or useful for me to know. I told them that if they had any further questions, or any further information that they wanted to convey, they could contact me by phone or email.

During the interview, I also wrote down my observations and impressions of the two partners and included their reactions to each other or to the questions. Following the interview, I transcribed the interview, and included any further observations of the couple. The transcription of the interview and my observations formed the basis of my clinical judgment of the couple.

Data Analysis

The data analysis was completed in the following way. First, I analyzed couples' qualitative narratives and ascertained my clinical judgment of their degree of unity. Second, I analyzed the quantitative scores of each partner's Assessment of Unity Scale. Third, I explored whether my clinical judgment of the interviews corresponded with the assessment of the Scale. By deciding my clinical judgment of the couples at the beginning of the analysis, I avoided any bias that might influence the assessment by not knowing the results of their Assessment of Unity scores beforehand.

This form of data analysis, known as typology development, involves the analysis of one form of data which produces a typology, or substantive categories, which is then used as a framework to be applied in analyzing another form of data (Caracelli & Greene, 1993). This study used a variety of typology development, known as corroboration, which is appropriate for a mixed method triangulation design. The qualitative results of the clinical assessments were used in a triangulation framework to corroborate the quantitative typology generated by the Assessment of Unity Scale.

The data to be analyzed first, my interviews with the couples, was made using immersion/crystallization analysis in order to identify relevant patterns and themes (Jordan & Franklin, 1993). Immersion/crystallization is an appropriate form of analysis for this study because it comes from the heuristic paradigm that emphasizes self-reflection in research.

I formulated my clinical judgment of the couples' degree of unity in the following manner. First, I read all of my case notes: the transcribed text of the interviews, along with my notes on my observations of the couples and the partners' interactions with one another, on any additional information which the couples discussed with me, and on my overall

impression of the couples – all with the intent of empathically immersing myself in the material until an intuitive insight/interpretation or crystallization of the text emerged. Second, I interpreted the case notes through reflection, inner searching, and intuition. Third, the continuous empathic immersion with my case notes and the crystallization was repeated until my interpretation – my judgment - of the couples' degree of unity was made.

I expected that there were four possible outcomes of my clinical judgment of the couples' degree of unity:

1. Agreement on Solidarity (high score)
2. Agreement on Individualism (low score)
3. Mixed scores, with one partner scoring on Solidarity and the other partner scoring on Individualism
4. Mixed scores, with one partner scoring on Individualism and the other partner scoring on Solidarity.

My judgment had a range of 1 to 3. I divided the range into 3 categories of scores: A low score of 1 would indicate more Individual descriptors, while a midrange score of 2 would indicate a mix of Individualism and Solidarity descriptors, and a score of 3 would indicate more Solidarity descriptors.

The assessment of the couple's degree of unity will comprise the range of the two partners' degree of unity. For example, if both partners scored 1 (more Individualism descriptors), then the couple would have a low degree of unity. If one partner scored 2 (a mix of Individualism and Solidarity descriptors), and the other partner scored 3 (more Solidarity descriptors), then the couple would have a mid-range-to-high degree of unity.

The data to be analyzed second, the scores on the Assessment of Unity Scale, were made using SPSS. The same four possible outcomes of the couples' scored responses on the Assessment of Unity Scale were expected:

1. Agreement on Solidarity (high scores)
2. Agreement on Individualism (low scores)
3. Mixed scores, with one partner scoring on Solidarity and the other partner scoring on Individualism
4. Mixed scores, with one partner scoring on Individualism and the other partner scoring on Solidarity.

I designed the wording of the statements on the Scale so that all responses of "Agree" (worth 2 points) or "Strongly Agree" (worth 3 points) indicated greater Solidarity. Responses of "Disagree" (worth 1 point) or "Strongly Disagree" (worth zero points) indicated greater Individualism. In other words, I wanted the partners with greater Solidarity descriptors to respond "Agree" or "Strongly Agree", and I wanted the partners with greater Individualism descriptors to respond with "Disagree" or "Strongly Disagree". For example, consider the following two statements from the scale:

1. Statement 1 reads: "My partner and I are united in facing infertility together." If a partner responded with "Strongly Agree", the partner received a high score (3 points), and the response indicated that the partner had an element of Solidarity. However, if a partner responded with "Strongly Disagree", that partner received a low score (zero points), and the response indicated that the partner had an element of Individualism.

2. Statement 18 reads: "Neither my partner nor I blame the other for the infertility." If a partner responded with "Strongly Agree", the partner received a high score (3 points), and

the response indicated that the partner had an element of Solidarity. However, if a partner responded with "Strongly Disagree", that partner received a low score (zero points), and the response indicated that the partner had an element of Individualism.

The Assessment of Unity Scale has a range of 0 to 78. I divided the range of 78 into 3 amounts to indicating three categories of scores: In the first category, low scores of 0 to 19 were defined as indicating more Individualism descriptors. In the second category, mid-range scores of 20 to 58 were defined as indicating a mix of Individualism and Solidarity descriptors. The range of scores in this category is larger because the participants could have two versions of mixed scores. In the first version, one partner could score high in Individualism and the other partner could score low in Solidarity. In the second version, one partner could score high in Solidarity and the other partner could score low in Individualism. Finally, in the third category, scores of 59 to 78 were defined as indicating more Solidarity descriptors.

The assessment of the couple's degree of unity will comprise the range of the two partners' degree of unity. For example, if one partner scored 15, and the other partner scored 18 (more Individualism descriptors), then the couple would have a low degree of unity. If one partner scored 52 (a mix of Individualism and Solidarity descriptors), and the other partner scored 70 (more Solidarity descriptors), then the couple would have a mid-to-high degree of unity.

The scores of both partners were considered and analyzed to see whether there was convergence in the assessment provided by the quantitative and qualitative forms of assessment. Convergence in the assessments would be indicated if categorization on the

Assessment of Unity Scale was the same as the categorization (of the couple's relationship) by the interview.

The following table indicates the relationship between the scores of my clinical judgment of the partners and the partners' scores on the Assessment of Unity Scale.

	Clinical Judgment (range: 1 to 3)	**Assessment of Unity Scale (range: 0 to 78)**
More Individualism	1	0 to 19
Mid-range (mix of Individualism and Solidarity)	2	20 to 58
More Solidarity	3	59 to 78

If there was a correspondence between the two sets of data, then it was likely to be one of three types of correspondence:

1. **Unanimous correspondence**, which indicated agreement between the overall scores for both partners in the clinical judgment and the Scale, and agreement between all eight attributes in the clinical judgment and the Scale.
2. **General correspondence**, which indicated agreement between the overall scores for both partners in the clinical judgment and the Scale, but disagreement on at least one attribute in the clinical judgment and the Scale.
3. **Partial correspondence**, which indicated agreement between the overall score for only one partner in the clinical judgment and the Scale, and disagreement on at least one attribute in the clinical judgment and the Scale.

A correspondence between the two sets of data would indicate that the Assessment of Unity Scale would have an element of convergent validity. If there was no correspondence, then there may be a problem with what the questions in the Assessment of Unity Scale are measuring, or a problem with what is captured through my clinical judgment, or perhaps a

problem with both of these possibilities. It should be noted that a couple's degree of unity is the range of both partners' scores on my clinical judgment and on the Assessment of Unity Scale. For the purposes of this study, "correspondence" refers to the agreement between **a couple's** scores on the Scale and my clinical judgment of that couple. If one partner showed correspondence and the other partner did not, then there would be partial correspondence. Partial correspondence would not factor into the convergent validity of the Assessment of Unity Scale. However, partial correspondence could be explored in a future study.

CHAPTER 4

Findings

Introduction

This chapter discusses the findings of the study, the purpose of which was to explore whether there is a correspondence between two sets of data. The first set of data is qualitative, and is comprised of my clinical judgment of the couples' degree of unity which was based on my interviews with the couples. The second set of data is quantitative, and is comprised of the couples' scores on a self-report instrument, the Assessment of Unity Scale, which was developed to assess the degree of unity in couple relationships. I will present the findings of the data from each of the six participating couples in the following sections in this chapter:

- **Profile:** This section provides a short profile of each couple, including their demographic information, when the couple began trying to have a child, the nature of the couple's infertility, and the treatment, if any, which the couple has chosen to undertake.
- **Analysis of the interview:** The analysis of the couple's narrative examines the presence or absence of eight relationship attributes which are found on the degree of unity continuum. The eight relationship attributes are: **relationship stability, complementary coping strategies, fostering social solidarity, balanced identity, relationship polarization, incongruent coping styles,** and **social isolation**. (These relationship attributes, and their relationship to degree of unity, are described more fully in Appendix IV.) These attributes are also reflected in

the Assessment of Unity Scale, and they form the basis of the 26 statements in the Scale.

Four of the eight attributes represent Solidarity. Each attribute consists of several descriptors. The following are the four Solidarity attributes with their descriptors:

- **Relationship stability:** Couples whose relationships were secure before they experienced infertility, and who continue to work on ensuring stability, may be more likely to have balanced and secure connections with their partners. This may enable them to confront and work through the many challenges of infertility. The four descriptors that comprise relationship stability are: **United against a common enemy, Open communication, Preserving normalcy,** and **Empathy.**
- **Complementary coping strategies:** Partners' coping mechanisms need not be the same, but if they are mutually respectful and supportive, they may add to the success of their relationship. The four descriptors that comprise complementary coping strategies are: **Types of coping style, Counselling, Faith,** and **Solution-focused problem-solving.**
- **Fostering social solidarity:** Social solidarity, an attribute that also may contribute to the success of couples' relationships, is the couple's ability to feel connected with the outside world. The three descriptors that comprise fostering social solidarity are: **Being a couple as an established family, Turning to others,** and **Keeping the relationship vital.**

- **Balanced identity:** Where couples are able to maintain a balanced identity, they can integrate their infertility into their identity, and not define or label themselves solely as "infertile." The three descriptors that comprised balanced identity are: **Rejecting the stigma of infertility, Partners are more than just spouses,** and **Differentiating one's self from one's partner.**

A clinical judgment of **High Solidarity** results when all the descriptors for each attribute are present. A clinical judgment of **Mid-range Solidarity** results when at least one descriptor for each attribute is present. A clinical judgment of **Low Solidarity** results when all of the descriptors for each attribute are absent.

The other four attributes represent Individualism. Each attribute consists of several descriptors. The following are the four Individualism attributes with their descriptors:

- **Relationship polarization:** If there was some lack of stability in a relationship before the couple experienced infertility, the infertility may highlight those differences between the partners, sometimes create new differences, and often polarize the relationship. Relationship polarization may contribute to relationship distress. The three descriptors that comprise relationship polarization are: **Estrangement and isolation from one's partner, Neglect,** and **Self-blame.**
- **Incongruent coping styles:** When partners cannot manage the stresses of infertility in a harmonious way, their relationships may be less successful.

The three descriptors that comprise incongruent coping styles are: **Blame, Inability to reach out,** and **Marked differences in hopefulness.**

- **Social isolation:** When partners' relationships with their friends and family are conflicted, strained, or distant, couples' relationships may be less successful. The three descriptors that comprise social isolation are: **Detachment from pre-infertility external relationships, Being infertile in a fertile world,** and **Difference of support.**
- **Identity disruption:** When partners and couples undergo a breakdown in their identity during their period of infertility, their relationships may sometimes be adversely affected. The three descriptors that comprise identity disruption are: **Feeling defective, Together but apart,** and **Trying to regain control.**

A clinical judgment of **High Individualism** results when all the descriptors for each attribute are present. A clinical judgment of **Mid-range Individualism** results when at least one descriptor for each attribute is present. A clinical judgment of **Low Individualism** results when all of the descriptors for each attribute are absent.

- **Overall clinical judgment**. Based upon my analysis of the interview, I will then present my overall clinical judgment of the couple's degree of unity. My judgment was based on the following:
  - The couple's responses to my open-ended questions which deal with the Solidarity-Individualism attributes (see Appendix VI)
  - My observations and impressions of the partners

- The partners' reactions to each other or to the questions

I used immersion/crystallization analysis as discussed in Chapter 3 to empathically immerse myself in the material until an intuitive insight/interpretation or crystallization of the data emerged. Once I determined my clinical judgment for each of the eight attributes, as described above, I then assigned a score of 1 to 3 which I believe reflected each partner's degree of unity. A low score of 1 indicates more Individualism descriptors, and a low degree of unity. A mid-range score of 2 indicates a mix of Individualism and Solidarity descriptors, and a mid-range degree of unity. A high score of 3 indicates more Solidarity descriptors, and a high degree of unity.

The assessment of the couple's degree of unity will comprise the range of the two partners' degree of unity. For example, if both partners scored 1 (more Individualism descriptors), then the couple would have a low degree of unity. If one partner scored 2 (a mix of Individualism and Solidarity descriptors), and the other partner scored 3 (more Solidarity descriptors), then the couple would have a mid-to-high degree of unity.

- **Analysis of the Assessment of Unity Scale.** Each of the 26 statements on the Scale are based on the taxonomy of the 26 relationship descriptors generated from my first study (see Appendix IV). Statements 1 to 14 are based on the Solidarity descriptors F1 to F14 which comprise the four overarching Solidarity attributes discussed above. Statements 15 to 26 are based on the Individualism descriptors F15 to F26 which comprise the four overarching Individualism attributes also discussed above. The scores on the Assessment of Unity Scale range from 0 to 78.

Higher scores of 59 to 78 indicate more Solidarity (S) descriptors and a greater degree of unity. Mid-range scores of 20 to 58 indicate a mix of Solidarity and Individualism descriptors, and a mixed degree of unity. Lower scores of 0 to 19 indicate more Individualism (I) descriptors, and a lower degree of unity.

The assessment of the couple's degree of unity will comprise the range of the two partners' degree of unity. For example, if one partner scored 15, and the other partner scored 18 (more Individualism descriptors), then the couple would have a low degree of unity. If one partner scored 52 (a mix of Individualism and Solidarity descriptors), and the other partner scored 70 (more Solidarity descriptors), then the couple would have a mid-to-high degree of unity.

- **Correspondence between Clinical Judgment and the Assessment of Unity Scale.** I examined my clinical judgment of the interviews and the scores on the Scale to determine whether there was a correspondence between the two assessments. If there was a correspondence, then it was likely to be one of three types of correspondence:

  1. Unanimous correspondence, which indicated agreement between the overall scores for both partners in the clinical judgment and the Scale, and agreement between all eight attributes in the clinical judgment and the Scale.
  2. General correspondence, which indicated agreement between the overall scores for both partners in the clinical judgment and the Scale, but disagreement on at least one attribute in the clinical judgment and the Scale.

3. Partial correspondence, which indicated agreement between the overall score for only one partner in the clinical judgment and the Scale, and disagreement on at least one attribute in the clinical judgment and the Scale.

A table which shows the correspondence between my clinical judgment and the partners' scores on Assessment of Unity Scale is presented at the end of this chapter. The table is discussed in more detail in Chapter 5.

Profile of Participating Couple 1 (PC 1)

Diane, 43, and Don, 34, have been married for six years. They are a Caucasian couple from Halifax, and both are school teachers. The couple began trying to have a child when they got married. After one year of marriage, Diane developed thyroid cancer, underwent surgery, and took cancer treatment medication for a year. After the medication had finished, the couple tried again to have a child. However, Diane was recently diagnosed with having poor egg quality due to her advanced age. The couple have had two unsuccessful rounds of IVF, and they are now contemplating using egg donation. Don, who admitted to being more determined than Diane to have a child, said that he would also consider adoption if the egg donation was not successful.

> "Generally, Don and I are really good together, and we're each other's best friend. But I worry that I may not be enough for Don if we can't have a child together."

Analysis of the Interview

1. Relationship stability: The couple said that since the beginning of their relationship, they have remained emotionally and physically connected. They viewed infertility as an unfortunate experience that happened to both of them as a couple. While they continued to feel united during this period of infertility, they admitted that they worried about the

future of their marriage if Don did not have a child. Despite this concern, the couple said that they did not make infertility the entire focus in their lives. They enjoyed shared activities and they maintained a large degree of normalcy in their lives. The couple appeared mutually empathetic, and each partner was able to speak openly and candidly about their feelings, thoughts, and needs. *My clinical judgment: Both partners had a high degree of relationship stability because they were* ***united against a common enemy, preserved normalcy in their relationship, were empathetic towards one another****, and* ***maintained open communication.***

2. Complementary coping strategies: The couple agreed that they sometimes had difficulty being supportive of one another. Don required more support from Diane than she required from him, and sometimes this caused her to feel overwhelmed by his neediness. Don said that he was skeptical about seeking counselling to help him with his infertility and relationship concerns, although Diane felt that they would benefit with counselling. Don also was skeptical about his faith, although Diane found comfort in her religious beliefs which had helped her to cope with cancer. When Don was faced with difficult situations, he was more emotional than Diane, and he found it difficult to be solution-focused. On the other-hand, Diane was more analytical and she coped by using solution-focused strategies. Don's inability to focus on the facts, and the couple's less supportive types of coping styles results in increased marital distress for both partners. *My clinical judgment: Diane had a mid-range degree of complementary coping strategies because she was able to find comfort in her* ***faith****, she was willing to go for* ***counselling****, she was able to be* ***solution-focused****, but she was* ***overwhelmed and distressed by the differences between her and her husband's types of coping styles****. Don had a low*

degree of complementary coping strategies because he was ***skeptical about his faith and about going for counselling****, he was* ***unable to be solution-focused****, and he was* ***distressed by the differences between his and his wife's types of coping styles****.*

3. Fostering social solidarity: Diane and Don said that they considered one another to be family, and that they continued to nurture one another. In the interview, they were verbally and physically affectionate towards one another. Outside of their marriage, Diane turned to her friends and family for support. However, Don was more private, and he preferred not to disclose his feelings and thoughts to others. While both partners took time to enjoy various facets of their life, Diane was more involved with personal and social activities, and she attempted to "make life more exciting" for both partners. Don admitted that he sometimes felt his relationship with Diane "was in a rut." *My clinical judgment: Diane fostered a high degree of social solidarity* ***because she considered herself and Don to be an established family, she turned to others for support,*** *and* ***she kept her relationship with Don vital****. Don fostered a mid-range degree of social solidarity because while* ***he considered himself and Diane to be an established family, he did not turn to others for support,*** *and* ***he found it difficult to keep his relationship with Diane vital.***

4. Balanced identity: Diane and Don saw themselves having several roles in life apart from being spouses, which included being siblings and professionals. They said that because their families and friends were empathetic towards them, they did not feel stigmatized by their infertility. The couple admitted that generally they did not sublimate each other's emotions. *My clinical judgment: Both partners had a high degree of balanced identity because* ***they rejected the stigma of infertility, they considered***

themselves to be more than just partners, *and* ***each partner was able to differentiate himself or herself from the other partner.***

5. Relationship polarization: Despite the couple's general ability to maintain emotional independence, they occasionally felt isolated from each other. This occurred when Diane felt overwhelmed by Don's fear of not having children. Feeling overwhelmed caused Diane to emotionally withdraw from Don, which in turn caused him to emotionally withdraw from her. The couple stated that while they made efforts not to neglect one another, sometimes they did neglect each other. Diane did not hold herself responsible for the infertility. *My clinical judgment: Diane and Don had a mid-range degree of relationship polarization because* ***both partners sometimes felt isolated from each other and they felt neglected by the other.. However, neither Diane nor Don showed evidence of self-blame.***

6. Incongruent coping styles: Diane and Don agreed that neither one blamed the other for their infertility diagnosis. The couple said that they could seek support from others if they had difficulties coping. They indicated that they were equally hopeful about having a child. *My clinical judgment: The couple had a low degree of incongruent coping styles because* ***the partners did not blame each other, they were willing to reach out to others,*** *and* ***there were not marked differences in hopefulness.***

7. Social isolation: Diane and Don said that they both had close relationships with their families and friends before their infertility. However, Don currently felt different from others who had children. Diane did not feel this same difference. Both partners agreed that they received similar emotional support from their friends and family members. *My clinical judgment: Don had a mid-range degree of social isolation because while* ***he did***

not feel detached from his pre-infertility external relationships, *and* ***he did not feel that he received a difference in the support from others, he did consider himself to be infertile in a fertile world.*** *Diane had a low degree of social isolation because* ***she did not feel detached from her pre-infertility external relationships, she did not consider herself to be infertile in a fertile world, nor did she feel that she received a difference in support from others.***

8. Identity disruption: Diane and Don said that their infertility diagnosis did not alter their sense of self-worth. Diane did not feel that her body was defective, though she said that she could no longer take her body for granted. Both partners said that they have remained close while working through their infertility, and that they tried to rely on their more positive coping mechanisms which worked for them during other challenging times of their lives. *My clinical judgment: The couple had a low degree of identity disruption because they* ***did not feel defective, nor did they feel together but apart. In addition, they tried to regain control*** *over their infertility.*

Overall Clinical Judgment

The overall results of my clinical judgment are shown in the following table:

Solidarity Attributes	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Diane: Mid-range; Don: Low S
3. Fostering social solidarity	Diane: High S; Don: Mid-range S
4. Balanced identity	Both partners: High S
Individualism Attributes	
5. Relationship polarization	Both partners: Mid-range I
6. Incongruent coping styles	Both partners: Low I
7. Social isolation	Diane: Low I; Don: Mid-range I
8. Identity disruption	Both partners: Low I

As shown in the table above, as a couple Diane and Don displayed more Solidarity (S) attributes (relationship stability, balanced identity, little difficulty with an

incongruent coping style, and little identity disruption) than Individualism (I) attributes (low to mid-range complementary coping strategies). The couple had a mid-range degree of relationship polarization. Individually, Diane ranked higher than Don in Solidarity by fostering social solidarity, and by experiencing less social isolation. I believe that as a couple, Diane had a high degree of unity, and that Don had a mid-range degree of unity. Therefore, my clinical judgment ranked Diane with a score of 3 (out of 3), and Don with a score of 2 (out of 3).

Analysis of Assessment of Unity Scale

The overall results of the Assessment of Unity Scale are shown in the table below:

Solidarity Attributes	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Diane: High S; Don: Mid-range S
3. Fostering social solidarity	Diane: High S; Don: Mid-range S
4. Balanced identity	Both partners: High S
Individualism Attributes	
5. Relationship polarization	Diane: Low I; Don: Mid-range I
6. Incongruent coping styles	Both partners: Low I
7. Social isolation	Diane: Low I; Don: Mid-range I
8. Identity disruption	Both partners: Low I

The table indicating Diane and Don's specific scores on their Assessment of Unity Scale can be found in Appendix V. Overall, Diane had a high Solidarity score of 68, and a high degree of unity, and Don had a mid-range score of 55, and a mid-range degree of unity. The results indicate that as a couple, Diane and Don ranked high in Solidarity on the following attributes: relationship stability, balanced identity, incongruent coping styles, and identity disruption. Diane had higher Solidarity scores than Don on all other attributes.

Correspondence between Clinical Judgment and Assessment of Unity Scale

There is general correspondence, or agreement, between my clinical judgment of the couple as determined by their interview, and their scores on the Assessment of Unity Scale. The results of the interview and of the Scale both indicate that Diane had a high degree of unity, and that Don had a mid-range degree of unity. In addition, there was almost unanimous correspondence between my clinical judgment of the couple's individual attributes and the Scale scores on those attributes. The table below presents the attributes on which there is no correspondence, as well as the specific differences in the results of the two assessments of those attributes.

Attribute	**Clinical Judgment**	**Assessment of Unity Scale**
2. Complementary coping strategies	Diane: Mid-range Solidarity; Don: Low Solidarity	Diane: High Solidarity Don: Mid-range Solidarity
5. Relationship polarization	Both partners: Mid-range Individualism	Diane: Low Individualism Don: Mid-range Individualism

Profile of Participating Couple 2 (PC 2)

Susan, 42, and Derrick, 39 have been married for two years. Susan is Chinese, originally from Beijing, and is Buddist. She came to Canada 11 years ago and is an accountant. Derrick is Australian, Caucasian and an agnostic. He came to Canada seven years ago, and is a mining company executive. They began trying to have a child when they were first married. They received a diagnosis three months ago of having poor egg quality due to Susan's age. They were going to try their first cycle of IVF within a month of our interview. The couple indicated that they would try fertility treatments for a year, and if those treatments were unsuccessful, then they might consider adoption.

"We waited to find the right person before we married each other. A child would enhance our relationship, but if we didn't have one, then it wouldn't take away the joy we already have."

Analysis of the Interview

1. Relationship stability: Susan and Derrick appeared to be a relaxed and affectionate couple. They said that since they first met, they have remained emotionally connected, and they were able to communicate easily with each other. Because they married later in life, they did not assume that they would be able to have children. Although they would like to have a child, the couple admitted that they have a "wonderful and exciting" life, and if they weren't able to have a child, "that would be OK." Derrick said that "we're just taking it [the fertility treatments] as it comes – one day at a time." *My clinical judgment: The couple had a high degree of relationship stability because they were* ***united against a common enemy, they preserved normalcy in their relationship, they were empathetic towards one another,*** *and* ***they maintained open communication.***

2. Complementary coping strategies: Susan and Derrick told me that they were a practical couple. When faced with problems, they both focused on the solutions rather than on the emotions. While Susan sometimes became upset when she got her period following a month of infertility treatments, she said that she was easily consoled by Derrick. Her religious faith was also a comfort to her. Derrick said that he considered Susan to be his "rock". Faith was not important to Derrick. The couple said that they were open to counselling if they felt it were necessary. *My clinical judgment: The couple had a high degree of complementary coping styles because they were* ***comfortable with their differences in coping styles*** *(for example, their faith),* ***they were willing to go for counselling,*** *and* ***they were solution-focused in the problem solving strategies.***

3. Fostering social solidarity: Susan and Derrick considered themselves to be a closely-knit family. While they had an active social life, they said that they were private people who were reluctant to confide in others, or to turn to others for support. "We manage things well ourselves, so we don't need to talk with others about this", Susan said. She added that she did not want to worry her family by telling them about the infertility. Derrick explained that it was not the "manly thing to do – discussing this kind of thing with my mates. But I'm OK with that". The couple said that they enjoyed many activities and adventures together and individually. *My clinical judgment: The couple had a high degree of social solidarity because* ***they saw themselves as a established family, and they ensured that they kept their relationship vital. Turning to others for support was not important to this couple.***

4. Balanced identity: Susan and Derrick indicated that they enjoyed many facets of their lives, including their careers, families, and friends. They suggested that they did not feel any stigma attached to infertility because only recently had they desired to have a child, and they had not shared this desire with anyone. Susan said that she was happy for her friends and family members who had children, and she could compartmentalize her own wishes to conceive. Susan and Derrick admitted that they were able to compartmentalize their feelings such that each partner was able to nurture the other one without taking on that partner's negative emotions. *My clinical judgment: The couple had a high degree of balanced identity because* ***they rejected the stigma of infertility, they considered each other to be more than spouses, and each partner was able to differentiate himself or herself from the other partner.***

5. Relationship polarization: The partners appeared to be comfortable and relaxed with each other. They said that even with the ups and downs of trying to conceive, they had remained connected. They confirmed that they did not neglect each other, adding that the well-being of their relationship was more important than "dwelling on the disappointment of not yet being able to have a child." However, Susan said that she sometimes blamed herself for the infertility because of her advanced age. She wished that she were younger. Nevertheless, she qualified this thought by stating that Derrick was "the love of her life", and that she never wanted to have a child with anyone else. *My clinical judgment: The couple had a low degree of relationship polarization because* ***they did not feel estranged nor isolated from each other, they did not experience neglect by each other,*** *nor* ***did they show evidence of self-blame.***

6. Incongruent coping styles: Although Susan felt some responsibility for the infertility, neither partner blamed the other for their diagnosis of infertility. Susan and Derrick agreed that although they were private people, they would be able to reach out to someone "neutral, like a counsellor" if they had difficulties coping with the infertility. They also indicated that there were not marked differences in their hopefulness for a positive outcome, and these differences did not result in marital conflicts. Susan and Derrick agreed that if they did not have a child, they would make attempts to ensure that their relationship would not suffer. *My clinical judgment: The couple had a low degree of incongruent coping styles because* ***they did not blame each other*** *for the infertility,* ***they were able to reach out to others, and there were not marked differences in their hopefulness.***

7. Social isolation: Susan and Derrick differed in their attachments to their relationships before the infertility. However, neither partner felt detached from those relationships as a result of the infertility. Susan was generally reserved and private with her friends, and she did not have close attachments with them. Derrick said that he had an outgoing and sociable personality, and that he had close attachments with his family and friends. Neither partner felt "different" from people who were able to have children. The couple said that because they did not disclose their infertility - a decision with which they were comfortable - they received no emotional support from others. *My clinical judgment: The couple had a low degree of social isolation* ***because they did not feel detached from pre-infertility external relationship, they did not feel infertile in a fertile world, and they did not feel a difference in the support they received from others.***

8. Identity disruption: The couple said that they were able to compartmentalize their experiences with infertility so that those experiences did not intrude significantly into their day-to-day lives. They said that they were devoted to one another. *My clinical judgment: The couple had a low degree of identity disruption because* ***they did not feel defective, they did not feel together but apart, and they tried to regain control*** *over their infertility.*

Overall Clinical Judgment

The overall results of my clinical judgment are shown in the following table:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: High S
3. Fostering social solidarity	Both partners: High S
4. Balanced identity	Both partners: High S

Individualism Attributes:	
5. Relationship polarization	Both partners: Low I
6. Incongruent coping styles	Both partners: Low I
7. Social isolation	Both partners: Low I
8. Identity disruption	Both partners: Low I

As shown in the table, as a couple and individually Susan and Derrick ranked high in Solidarity (S) on all attributes. While the partners had different personality styles, those styles were complementary. The couple's relationship with each other appeared strong and not adversely affected by infertility. I believe that as a couple, both partners had a high degree of unity. Therefore, my clinical judgment ranked Susan and Derrick with a score of 3 (out of 3).

Analysis of Assessment of Unity Scale

The overall results of the Assessment of Unity Scale are shown in the following table:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Susan: High S; Derrick: Mid S
3. Fostering social solidarity	Both partners: High S
4. Balanced identity	Both partners: High S
Individualism Attributes:	
5. Relationship polarization	Both partners: Low I
6. Incongruent coping styles	Both partners: Low I
7. Social isolation	Susan: Mid I; Derrick: Low I
8. Identity disruption	Both partners: Low I

The table indicating Susan and Derrick's specific scores on their Assessment of Unity Scale can be found in Appendix V. Overall, both partners had a high Unity score of 70, indicating that they had a high degree of unity. The results show that as a couple, Susan and Derrick ranked high in Solidarity on most attributes. Individually, Susan ranked higher than Derrick on complementary coping strategies and on social isolation.

Correspondence between Clinical Judgment and Assessment of Unity Scale

There is general correspondence, or agreement, between my clinical judgment of the couple as determined by their interview, and their scores on the Assessment of Unity Scale. The results of the interview and of the Scale both indicate that Susan and Derrick have a high degree of unity. In addition, there is almost unanimous correspondence between my clinical judgment of the couple's individual attributes and the Scale scores on those attributes. The table below presents the attributes on which there is no correspondence, as well as the specific differences in the results of the two assessments of those attributes.

Attribute	**Clinical Judgment**	**Assessment of Unity Scale**
2. Complementary coping strategies	Both partners: High Solidarity	Susan: High Solidarity; Derrick: Mid-range Solidarity
7. Social isolation	Both partners: Low Individualism	Susan: Mid-range Individualism; Derrick: Low Individualism

Profile of Participating Couple 3 (PC 3)

Asma, 34, and Naeem, 38 have been married for three years. They are both Muslim. Asma is from Denmark, and she came to Canada three years ago. Naeem is from Pakistan, and he came to Canada 12 years ago. Asma is divorced and has two children from that previous marriage: a girl, 10, and a boy, 13. The couple live with Asma's two children and Naeem's widowed mother who is chronically ill, and who is the dominant female in the home. Asma said bitterly that "Heaven rests at the feet of his [Naeem's] mother." Asma looks after her children and her mother-in-law. Naeem is the manager of an employment agency. The couple have been trying to have a child together since they were first married. They received a diagnosis of male factor infertility due to low sperm

motility. The couple will begin a cycle of IVF in the next few months using Naeem's sperm. Asma would consider using sperm donation if Naeem's sperm were not viable, but Naeem is uncertain how he feels about this option.

> "Even though I accept Asma's children as my own, they aren't mine. And in my culture, if a man can't have his own children, then he's not really a man."

Analysis of the Interview

1. Relationship stability: Asma and Naeem spoke candidly about their desire and the cultural necessity for them to have a child together. The couple confirmed they could talk together openly about their thoughts and feelings. Each partner felt emotionally supported by the other. However, Asma said that sometimes it was difficult to ask for Naeem's support because he had many work-related and family responsibilities. Naaem said that he was "still shaken" by his infertility diagnosis. He found it difficult to maintain a balance in his life because he was "considerably preoccupied" by the infertility. *My clinical judgment: Asma had a high degree of relationship stability because* ***she felt united with her husband against a common enemy, she preserved normalcy in her relationship and she was empathetic towards Naeem,*** *and* ***she maintained open communication with Naeem.*** *Naeem had a mid-range degree of relationship stability because while* ***he felt united with Asma against a common enemy,*** *and* ***he maintained open communication with his wife,*** *and* ***he was empathetic towards her, Naeem was unable to preserve normalcy in his relationship with Asma.***

2. Complementary coping strategies: Asma and Naeem agreed that they found it difficult to keep perspective on their lives when working through challenges such as infertility. They were often "emotionally overwrought," at the same time, and this caused

each partner to "emotionally spiral" so that they could not support each other. In addition, they found it difficult to find solutions to their problems. The couple thought that counselling might be helpful to them in this regard. Their faith was important to them. *My clinical judgment: The couple had a mid-range degree of complementary coping strategies because* ***while they thought counselling would be helpful, and their faith was comforting to each of them, sometimes their coping styles were not complementary,*** *and* ***they were unable to engage in solution-focused problem solving.***

3. Fostering social solidarity: The couple considered each other as family. Asma was able to confide in her many friends and family more than Naeem, who had only one male friend, "a non-Muslim" who he turned to for support. He said that he found it difficult to confide in others, especially his Muslim friends because he felt "weird" in being infertile. The couple said that they wished that they had more time to spend together – time that was mostly spent caring for other family members. Asma was worried about Naeem's health and increased stress level. *My clinical judgment: The couple had a mid-range ability to foster social solidarity because* ***while they considered each other as family, they found it difficult to keep their relationship vital. Although Asma was able to turn to others for support, Naeem had difficulty in turning to others for support.***

4. Balanced identity: The issue of stigma was a complicated one for this couple. The partners initially said that they felt no particular stigma attached to their diagnosis of infertility. However, Naeem then added that he and Asma felt pressure by his mother to give her a "real grandchild" as his mother did not consider Asma's two children to be her grandchildren. Asma added that because she was a divorced woman with children, her mother-in-law viewed her as "damaged goods". Both partners felt that it was difficult to

be different from others who could have a child together. The partners said that they were often affected by each other's sadness, and that this caused each one greater despair. Because the couple were involved with many other people, the partners saw themselves as being more than just each other's spouses. This involvement with others helped to give them a greater positive perspective, and it "maintained our equilibrium." *My clinical judgment: The couple had a mid-range degree of balanced identity because* ***while they considered themselves to be more than just spouses, each partner found it difficult to differentiate himself or herself from the other partner,*** *and* ***to reject the stigma of infertility.***

5. Relationship polarization: The couple said that they do not feel isolated from each other. Their challenge was that they did not spend enough "down time" together when they did not think about the infertility. Naaem held himself personally responsible for the infertility. *My clinical judgment: The couple had a mid-range degree of relationship polarization because* ***while each partner does not feel estranged or isolated from the other partner, they sometimes neglected each other. In addition Naeem shows evidence of self-blame for the infertility.***

6. Incongruent coping styles: Though Naeem felt that he was responsible for the infertility, Asma did not blame him for the infertility. Asma said that she would be willing to go for counselling because it could help them to cope better. However, Naeem said that he would feel embarrassed about talking with a counsellor, and that he would likely not go for counselling. The couple admitted that they both felt equally hopeful about having a child. *My clinical judgment: Asma had a low degree of incongruent coping style because* ***she does not blame Naeem for the infertility, she is able to reach***

out to others for support, and there were no marked differences between her and Naeem's hopefulness in having a child. *Naeem had a mid-range incongruent coping style because* ***while there were no marked differences between his and Asma's hopefulness in having a child, Naeem was not able to reach out to others.***

7. Social isolation: The couple admitted that prior to their experiences with infertility, they both had close relationships with their friends and family. Naeem currently enjoyed socializing with other people who had children, however, Asma felt some strain by being in the company of people with children. The couple agreed that Asma received more support from friends and family members than Naeem. However, Naeem felt sufficiently supported by his one good friend. *My clinical judgment: The couple had a mid-range degree of social isolation because* ***while the partners did not feel detached from pre-infertility external relationships, nor did they feel that the differences in the support that the partners received from others affected them adversely, the couple did feel infertile in a fertile world.***

8. Identity disruption: Naeem felt responsible for the infertility. Although he was surprised that his body has let him down, he still felt "strong and masculine." The couple agreed that they had remained emotionally connected during the period of infertility. Asma said that they reacted to the infertility as they had reacted to other challenges which they faced in their lives: with mutual compassion and understanding. However, Naeem disagreed. He said that they usually reacted to challenges in a logical and practical manner, however since receiving the diagnosis of infertility, they were both much more emotionally out of control. *My clinical judgment: Asma had a low degree of identity disruption because* ***she did not feel defective because of the infertility, she did not feel***

together but emotionally apart from Naeem, and she tried in a positive way to regain control. *Naeem had a mid-range degree of identity disruption because* ***while he did not feel together but emotionally apart from Asma, he did feel physically defective, and he felt that he was not successful in regaining control.***

Overall Clinical Judgment

The overall results of my clinical judgment are shown in the following table:

Solidarity Attributes:	
1. Relationship stability	Asma: High S; Naeen: Mid-range S
2. Complementary coping strategies	Both partners: Mid-range S
3. Fostering social solidarity	Both partners: Mid-range S
4. Balanced identity	Both partners: Mid-range S
Individualism Attributes:	
5. Relationship polarization	Both partners: Mid-range I
6. Incongruent coping styles	Asma: Low I; Naeem: Mid-range I
7. Social isolation	Both partners: Mid-range I
8. Identity disruption	Asma: Low I ; Naeem: Mid-range I

As shown in the table, as a couple Asma and Naeem displayed a mix of both Solidarity (S) and Individualism (I) on five of the eight attributes: complementary coping strategies, fostering social solidarity, balanced identity; relationship polarization, and social isolation. Asma ranked higher than Naeem on relationship solidarity, and lower than Naeem on incongruent coping styles and identity disruption. I believe that Asma had a high degree of unity, and that Naeem had a mid-range degree of unity. Therefore, my clinical judgment ranked Asma with a score of 3 (out of 3), and Naeem with a score of 2 (out of 3).

Analysis of Assessment of Unity Scale

The overall results of the Assessment of Unity Scale are shown in the table below:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: Mid-range S
3. Fostering social solidarity	Asma: High S; Naeen: Mid-range S
4. Balanced identity	Asma: High S; Naeen: Mid-range S
Individualism Attributes:	
5. Relationship polarization	Both partners: Mid-range I
6. Incongruent coping styles	Asma: Low I; Naeem: Mid-range I
7. Social isolation	Both partners: Mid-range I
8. Identity disruption	Asma: Low I ; Naeem: Mid-range I

The table indicating Asma and Naeem's specific scores on their Assessment of Unity Scale can be found in Appendix V. Overall, Asma had a high Solidarity score of 61, and a high degree of unity, and Naeem had a mid-range score of 49, and a mid-range degree of unity. The results indicate that as a couple, Asma and Naeem ranked high in Solidarity only on relationship stability, and they scored in the mid-range of Solidarity in complementary coping strategies, relationship polarization and social isolation. Asma ranked higher than Naeem in fostering social solidarity and balanced identity, and lower than Naeem in incongruent coping styles and identity disruption.

Correspondence between Clinical Judgment and Assessment of Unity Scale

There is general correspondence, or agreement, between my clinical judgment of the couple as determined by their interview, and their scores on the Assessment of Unity Scale. The results of the interview and of the Scale both indicate that Asma had a high degree of unity, and that Naeem had a mid-range degree of unity. There is correspondence between my clinical judgment of the couple's individual attributes and the Scale scores on five attributes. The table below presents the three attributes on which there is no correspondence, as well as the specific differences in the results of the two assessments of those attributes.

Attribute	Clinical Judgment	Assessment of Unity Scale
1. Relationship stability	Asma: High Solidarity Naeen: Mid-range Solidarity	Both partners: High Solidarity
3. Fostering social solidarity	Both partners: Mid-range Solidarity	Asma: High Solidarity Naeen: Mid-range Solidarity
4. Balanced identity	Both partners: Mid-range Solidarity	Asma: High Solidarity Naeen: Mid-range Solidarity

Profile of Participating Couple 4 (PC 4)

Jaqui, 31, is from Guyana, and she came to Canada at age 6. Jorlin, 34, is a Canadian whose parents are from Barbados. They have been married for 10 years. Jaqui is a payroll executive, and Jorlin is a technical support worker. Until their experiences with infertility, the couple were practising Catholics. However, their infertility has affected their beliefs and they now do not practise their faith. The couple began trying to have a child four years ago, and they have had two miscarriages, and a perinatal loss of twins at six months. At present, they are undergoing medical testing to determine the nature of Jaqui's recurrent losses, which they and their doctor want to determine before the couple proceed with any specific treatment. The couple do not have a substantiated infertility diagnosis.

> "We love each other, and we'll never leave each other. But it's just that we want more than just the two of us. The sadness we feel because we can't have a child is overwhelming. It takes over the whole day."

Analysis of the Interview

1. Relationship stability: Jaqui and Jorlin are a warm and soft-spoken couple who appeared gentle with each other. Both partners said that they had been emotionally affected by their experiences with infertility, and that they cannot remember when their

lives were normal, or will ever be normal again. They told me that while they were "consumed" with grief over their losses, "we're two peas in a pod, and we're in this together". *My clinical judgment: Despite their profound sadness, I believe that this couple had a high degree of relationship stability they were* ***united against a common enemy, preserved normalcy in their relationship, were empathetic towards one another,*** *and* ***maintained open communication.***

2. Complementary coping strategies: The couple had coping styles which sometimes were not complementary. While Jaqui spent considerable time sleeping, and isolating herself from her support system, Jorlin coped by watching television and by isolating himself from his support system. Jaqui said that she depends on Jorlin's strength to motivate her out of her "profound despair". Jorlin admitted that sometimes he coped by sublimating his own needs, by coming to Jaqui's rescue, and by being her protector. At his insistence, they sometimes went for walks or to the gym together. Jaqui and Jorlin admitted that they had lost their faith in God, and that they have stopped going to church. The couple were both seeing a counsellor to help them cope with the infertility. The partners agreed that counselling was helpful to them. When faced with challenging situations, they said they were practical people who usually solved their problems using reason and logic. *My clinical judgment: The couple had a mid-range degree of complementary coping strategies because* ***while the couple is going for counselling and they used solution-focused problem-solving, they had lost their faith that was once important to them, and their coping styles were not always harmonious.***

3. Fostering social solidarity: Jaqui and Jorlin considered each other to be family, whether they had a child or not. Jaqui said that she rarely turned to her family and friends

for support, and Jorlin said that he had confided only in his grandmother, but that she had died a year ago. Although the couple admitted that thinking about the infertility preoccupied most of their time, they still managed at times to laugh and to enjoy some intimate moments together. *My clinical judgment: The couple had a mid-range degree of fostering social solidarity because* ***while they considered each other as an established family and they managed to keep their relationship vital, they rarely turned to others for support.***

4. Balanced identity: Unlike Jorlin, Jaqui felt stigmatized by being unable to have a child Jaqui believed that her greatest roles in life were to be a wife and mother. If she was unable to fulfill those roles, then she said that she would be worthless. Jorlin considered himself to have many roles in life as well as being a husband. Both partners admitted to being strongly affected by each other's emotions, especially Jaqui who said that she was even more emotional than Jorlin. *My clinical judgment: Jaqui had a low degree of balanced identity because* ***she was unable to reject the stigma of infertility, she saw herself only as Jorlin's spouse, and she was unable to differentiate her emotions*** *from Jorlin's. Jorlin had a mid-range degree of balanced identity because he was able to* ***reject the stigma of infertility, and he saw himself as more than just Jaqui's spouse. However, he had difficulty differentiating his emotions*** *from Jacqui's.*

5. Relationship polarization: The couple confirmed that despite their challenges with infertility, they were still able to focus on other parts of their lives. They said that the candor and compassion they showed to each other in our interview was representative of how they generally behaved. Jaqui saw herself as being responsible for the infertility, and that she found it difficult to forgive herself for the losses she and Jorlin had suffered. *My*

clinical judgment: Jaqui had a mid-range degree of relationship polarization because ***while she did not feel estranged or isolated from Jorlin, nor neglected by Jorlin, she did experience self-blame*** *for the infertility. Jorlin had a low degree of relationship polarization because* ***he did not feel estranged or isolated from Jacqui, or neglected by Jaqui, nor did he experience any self-blame*** *for the infertility.*

6. Incongruent coping styles: Although Jaqui held herself solely responsible for the infertility, Jorlin did not blame his wife. The couple decided to seek counselling because Jaqui's beliefs were taking an emotional toll on their relationship. In addition, Jorlin found it frustrating that because he was generally more hopeful than Jaqui about having a child, he felt pressure to consistently bolster her more negative moods, and to "get her to think positively". *My clinical judgment: The couple had mid-range incongruent coping styles because* ***while they had an ability to reach out and to go for counselling and they did not blame each other for the infertility, there were marked differences in their hopefulness about having a child.***

7. Social isolation: Prior to going through infertility, Jaqui had close relationships with her friends and family, however Jorlin did not have close familial relationships. The couple currently felt isolated from their friends and family members, especially from the ones who had children. Jaqui and Jorlin agreed that the disparity in the amount of support that they received from others caused the couple emotional upset. The couple said that their friends were more inclined to support Jaqui, but that they rarely enquired about Jorlin's welfare. *My clinical judgment: Jaqui had a mid-range degree of social isolation because* ***while she did not experience detachment from her pre-infertility external relationships, she felt infertile in a fertile world*** *and* ***she experienced emotional distress***

due to differences of support from others. *Jorlin had a high degree of social isolation because* ***he experienced detachment from his pre-infertility external relationships, he felt infertile in a fertile world,*** *and* ***he experienced emotional distress due to differences of support from others.***

8. Identity disruption: Jaqui not only held herself responsible for the infertility, but she also felt that her body was defective. Jorlin said that since he received the infertility diagnosis, he felt physically defective "out of sorts", but he could not elaborate further on what that meant for him. Despite not feeling good about themselves physically, the couple confirmed that they had remained emotionally connected. They said that they had reacted towards their diagnosis with their same personal sense of optimism and pessimism as they reacted towards other challenging events in their lives. *My clinical judgment: The couple had a mid-range degree of identity disruption because* ***while they both felt physically defective, they did not feel together but apart, and they tried to regain control over their infertility.***

Overall Clinical Judgment

The overall results of my clinical judgment are shown in the following table:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: Mid-range S
3. Fostering social solidarity	Both partners: Mid-range S
4. Balanced identity	Jaqui: Low S; Jorlin: Mid-range S
Individualism Attributes:	
5. Relationship polarization	Jaqui: Mid-range I: Jorlin: Low I
6. Incongruent coping styles	Both partners: Mid-range I
7. Social isolation	Jaqui: Mid-range I: Jorlin: High I
8. Identity disruption	Both partners: Mid-range I

As shown in the table above, as a couple Jaqui and Jorlin scored high in Solidarity (S) only in relationship stability. The partners scored in the mid-range between Solidarity

(S) and Individualism (I) on most of the other attributes. Jaqui scored lower on balanced identity and higher on relationship polarization than Jorlin. Jorlin scored higher on experiencing social isolation than Jaqui. I believe that as a couple, Jaqui and Jorlin had a mid-range degree of unity. Therefore, my clinical judgment ranked both partners with a score of 2 (out of 3).

Analysis of Assessment of Unity Scale

The overall results of the Assessment of Unity Scale are shown in the table below:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: Mid-range S
3. Fostering social solidarity	Both partners: Mid-range S
4. Balanced identity	Jaqui: Low S; Jorlin: Mid-range S
Individualism Attributes:	
5. Relationship polarization	Jaqui: Mid-range I: Jorlin: Low I
6. Incongruent coping styles	Both partners: Mid-range I
7. Social isolation	Jaqui: Mid-range I: Jorlin: High I
8. Identity disruption	Both partners: Mid-range I

The table indicating Jaqui and Jorlin's specific scores on their Assessment of Unity Scale can be found in Appendix V. Overall, both partners had mid-range scores: Jaqui scored 42 and Jorlin scored 49, indicating that they had a mid-range degree of unity. The results show that as a couple, Jaqui and Jorlin ranked high in Solidarity only in relationship stability. As a couple, they scored in the mid-range of Solidarity in complementary coping strategies, fostering social solidarity, incongruent coping styles, and identity disruption. Jaqui ranked lower than Jorlin in balanced identity, and higher than Jorlin in relationship polarization. Jorlin ranked higher than Jaqui in social isolation.

Correspondence Between Clinical Judgment and Assessment of Unity Scale

There is unanimous correspondence, or agreement, between my clinical judgment of the couple as determined by their interview, and their scores on the Assessment of

Unity Scale. The results of the interview and of the Scale both indicate that Jaqui and Jorlin had a mid-range degree of unity. There is also correspondence between my clinical judgment of the couple's individual attributes and the Scale scores on all eight attributes.

Profile of Participating Couple 5 (PC 5)

Jennifer, 35, and David, 36, are a Caucasian and Jewish couple. They have been married for seven years. Jennifer is a nurse, and David is a computer programmer. The couple began trying to have a child three years ago, and they have had one miscarriage. Jennnifer and David received a diagnosis of unexplained infertility. However, their doctor suspects that the scaring on Jennifer's fallopian tubes, which was caused by endometriosis, is a consideration in their diagnosis. At present, the couple are considering adoption.

"I think that we're a pretty tight couple. But if we hadn't gone for counselling earlier in our relationship, we'd be in a mess right now with this infertility. Since counselling, we pay attention to the warning signs when one if us is having difficulty, and we make it a point to nurture and take care of each other."

Analysis of the Interview

1. Relationship stability: Jennifer and David were an affectionate couple who appeared relaxed with, and empathetic towards one another. They said that they went for marital counselling for six months, and this helped them to cope with the infertility. As a result of the counselling, the couple said that they had learned to communicate better, and to understand that infertility was something that had happened to both of them. Jennifer said that she and David made sure to keep a balance in their lives by enjoying other parts of their lives. *My clinical judgment: The couple had a high degree of relationship stability they were* ***united against a common enemy, they preserved normalcy in their***

relationship, they were empathetic towards one another, *and* ***they maintained open communication.***

2. Complementary coping strategies: The couple said that they were best friends who tag-teamed, so that each partner was able to help out the other one during difficult moments. They agreed that "we always try to be there for each other." Jennifer said that they found their previous counselling sessions to be helpful because it taught them to focus on increasing their problem-solving skills. If they needed to go again for counselling, they would not hesitate to go. The couple indicated that they found their religion helped them to cope with the infertility. *My clinical judgment: The couple had a high degree of complementary coping strategies because they were similar in* ***their types of coping styles, they valued counselling, their faith was helpful,*** *and* ***they were solution-focused in the problem solving strategies.***

3. Fostering social solidarity: Jennifer and David considered each other to be family. The couple said that they were able to turn to a large network of helpful friends and family members for support during difficult times. The partners also confirmed that they enjoy many aspects of their lives together, including exercising, traveling, and socializing. *My clinical judgment: The couple had a high degree of social solidarity because* ***they saw themselves as an established family, they turned to others for support,*** *and* ***they kept their relationship vital.***

4. Balanced identity: Although the couple admitted that at times they felt sad, angry, and disappointed because they had not been able to have a child, neither partner felt any stigma attached to the infertility. They had active professional and personal lives, and they did not view themselves as solely being each other's partner. The couple said that

they had learned through counselling to maintain some emotional distance from each other's negative moods which in the past had caused considerable conflict between them. *My clinical judgment: The couple had a high degree of balanced identity because* ***they rejected the stigma of infertility, they considered each other to be more than spouses,*** *and* ***they were able to differentiate themselves from each other.***

5. Relationship polarization: The couple said that they made time most evenings to talk with each other about the day's events, and at least once a week they went out on "a date." David said that "life would be really dull if all we did was cry over not being able to have our own biological child." Neither partner felt responsible for the infertility. In fact, Jennifer said that they tried to view the infertility as an "opportunity to adopt a child who we will love as our own." *My clinical judgment: The couple had a low degree of relationship polarization because* ***they did not feel estranged nor isolated from each other, they did not experience neglect by each other,*** *and* ***they did not show evidence of self-blame.***

6. Incongruent coping styles: Neither partner blamed the other for the infertility. As indicated above, the couple said that they would be willing to talk with friends about their challenges with infertility. David said that he might return for counselling because sometimes he felt guilty when he could not be as hopeful or optimistic about a positive outcome as Jennifer. *My clinical judgment: The couple had a low degree of incongruent coping styles isolation because* ***they did not blame each other*** *for the infertility,* ***they were able to reach out to others,*** *and* ***there were not marked differences in their hopefulness.***

7. Social isolation: Jennifer and David said that before the infertility, and since their diagnosis, both partners had mostly close relationships with their friends and family. Since their infertility diagnosis, both partners agreed that they were equally supported by their loved ones. Jennifer and David did not feel isolated from people who were able to have their own children. *My clinical judgment: The couple had a low degree of social isolation because* ***they did not feel detached from pre-infertility external relationships, they did not feel infertile in a fertile world,*** *and* ***they did not feel a difference in the support from others.***

8. Identity disruption: Jennifer and David said that they did not feel that their bodies were defective. They disclosed that they both enjoy a healthy and active sex life together. The couple re-affirmed that they have generally remained emotionally connected, especially since they went to see a therapist. *My clinical judgment: The couple had a low degree of identity disruption because* ***they did not feel defective, they did not feel together but apart,*** *and* ***they tried to regain control*** *over their infertility.*

Overall Clinical Judgment

The overall results of my clinical judgment are shown in the following table:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: High S
3. Fostering social solidarity	Both partners: High S
4. Balanced identity	Both partners: High S
Individualism Attributes:	
5. Relationship polarization	Both partners: Low I
6. Incongruent coping styles	Both partners: Low I
7. Social isolation	Both partners: Low I
8. Identity disruption	Both partners: Low I

As shown in the table above, as a couple and individually Jennifer and David ranked high in Solidarity (S) on all attributes. The couple indicated that before they went

for marital counselling, their relationship was much less harmonious than it is at the present time. Though it is clear that the couple were troubled by several issues related to infertility, they said that "at least now we're on the same page." The couple's relationship with each other appeared strong and united. I believe that as a couple, both partners had a high degree of unity. Therefore, my clinical judgment ranked both Jennifer and David with a score of 3 (out of 3).

Analysis of Assessment of Unity Scale

The overall results of the Assessment of Unity Scale are shown in the table below:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: High S
3. Fostering social solidarity	Both partners: High S
4. Balanced identity	Both partners: High S
Individualism Attributes:	
5. Relationship polarization	Both partners: Low I
6. Incongruent coping style	Both partners: Low I
7. Social isolation	Both partners: Low I
8. Identity disruption	Both partners: Low I

The table indicating Jennifer and David's specific scores on their Assessment of Unity Scale can be found in Appendix V. Overall, both partners had high Solidarity scores: Jennifer scored 72 and David scored 67, indicating that they had a high degree of unity. The results also indicate that as a couple, Jennifer and David ranked high in Solidarity on all attributes.

Correspondence between Clinical Judgment and Assessment of Unity Scale

There is unanimous correspondence, or agreement, between my clinical judgment of the couple as determined by their interview, and their scores on the Assessment of Unity Scale. The results of the interview and the Scale both indicate that Jennifer and

David both had a high degree of unity. There is also correspondence between my clinical judgment of the couple's individual attributes and the Scale scores on all eight attributes.

Profile of Participating Couple 6 (PC 6)

Julie, 31, and Rick, 40, are a Black couple from Jamaica. Julie came to Canada 17 years ago, and Rick came to Canada 20 years ago. They have been married for three years. Julie is a medical secretary, and Rick is a mechanic. They are practising Baptists. The couple began trying to have a child three years ago, and they have had two miscarriages. Rick was reluctant to go for infertility testing, and only two months ago did consult with a specialist who determined that he has male factor infertility due to a low sperm count. Rick will undergo further testing.

"The big problem with us is that it took me so long to go for testing. I know that Julie is mad about that. She's right to be mad. I wasted a lot of time. But man – you don't want to admit this kind of thing [having a diagnosis of infertility]. It's a blow to your manhood."

Analysis of the Interview

1. Relationship stability: Julie and Rick were a reserved and soft-spoken couple. They appeared to listen carefully to each other, and they frequently checked out their thoughts and responses with each other. When Julie became upset during the interview, Rick showed empathy by comforting his wife. They spoke candidly about the difficulties in their relationship as a result of their miscarriages and their infertility diagnosis. Despite their difficulties, they said that they were committed to working them through together, and to balancing their challenges with other positive parts of their lives. *My clinical judgment: The couple had a high degree of relationship stability because they were*

united against a common enemy, they preserved normalcy in their relationship, they were empathetic towards one another, *and* ***they maintained open communication.***

2. Complementary coping strategies: The couple had coping styles which were complementary: they agreed that they were mutually supportive, that they would go for counselling if they felt it were necessary, that their faith was very important, and that they were practical people who solved their problems by focusing on the facts rather than on the emotions. *My clinical judgment: The couple had a high degree of complementary coping strategies because they were similar in* ***their types of coping styles, they valued counselling, their faith was helpful,*** *and* ***they were solution-focused in the problem solving strategies.***

3. Fostering social solidarity: Julie and Rick considered each other their best friend. The couple explained to me that because they were private people, they disclosed very little to their family or friends. While Julie said that she wished that she could confide in others, Rick said that it wasn't important for him to turn to others for support. Rick added that in his Jamaican culture, there was a stigma attached to male infertility, so even if he felt that he needed more support, he would not feel comfortable asking for it. Julie admitted that she was unhappy that she and Rick were not able to enjoy much time together because of Rick's heavy work schedule. Rick was surprised with this comment, saying that he thought they spent "lots of time" together enjoying their life and their own relationship. *My clinical judgment: Rick was able to foster a high degree of social solidarity because* ***he considered his relationship with Julie to be an established family, he felt that he was keeping his relationship with her vital, he felt it unimportant to turn to others for support.*** *Julie was able to foster a mid-range degree of social solidarity because* ***she***

considered her relationship with Rick to be an established family, she did not turn to others for support, however she had difficulty keeping her relationship with Rick vital.

4. Balanced identity: Julie and Rick said that despite not having children, and despite the beliefs of others in their community about the couple's infertility, they consider themselves to be valuable members of society. Both partners said that they had a strong self-image which included more than just being each other's partner. The couple admitted that they're able to distance themselves from each other's thoughts and emotions. *My clinical judgment: The couple had a high degree of balanced identity because* ***they rejected the stigma of infertility, they considered each other to be more than spouses,*** *and* ***they were able to differentiate themselves from each other.***

5. Relationship polarization: Julie and Rick said that they cared about each other and that despite their diagnosis, they did not feel estranged from each other. However, Julie sometimes felt neglected by Rick because of his demanding work schedule, and because "he always watches television." On the other hand, Rick did not feel neglected by Julie. Both partners felt personally responsible for the infertility. Julie blamed herself for the miscarriages and Rick blamed himself for the diagnosis. *My clinical judgment: The couple had a mid-range degree of relationship polarization because* ***while they did not feel estranged or isolated from each other, Julie sometimes felt neglected by Rick,*** *and* ***both partners experienced self-blame for the infertility.***

6. Incongruent coping styles: Julie admitted that she blamed Rick for "wasting" more than two years to undergo infertility testing. Rick, however, did not blame Julie for the miscarriages. The couple differed on the subject of whether conflict arose when one partner felt more hopeful than the other partner about having a child. Julie said that she

got "pissed off" with Rick's general optimism. Rick did not believe that there was a conflict between them in this regard. The couple agreed that they would seek counselling if they felt it were necessary. *My clinical judgment: Julie had a mid-range degree of incongruent coping style because* ***while she would be able to reach out for counselling, she blamed Rick for contributing to the infertility,*** *and* ***she found problematic their marked differences in hopefulness.*** *Rick had a low degree of incongruent coping style because* ***he would be able to reach out for counselling, he did not blame Julie for the infertility,*** *and* ***he did not find problematic their marked differences in hopefulness.***

7. Social isolation: Prior to going through infertility, Julie and Rick did not have close relationships with her friends and family. However, Rick did have numerous close relationships. Although Julie did not feel resentful of friends and family members who had children, Rick said that he often felt "extremely" resentful of these people, to the point where he did not want to socialize with parents and their children. The couple said that the difference in the amount of support that they received from others was emotionally difficult for them. People tended to support Julie because they knew that she had miscarriages. Rick received little support from others because he found it difficult to disclose the infertility to anyone, except to his best friend. *My clinical judgment: Julie had a mid-range degree of social isolation because* ***while Julie did not feel infertile in a fertile world, she did feel detached from her pre-infertility external relationships,*** *and* ***the difference in the support she received caused her additional grief.*** *Rick had a high degree of social isolation* ***because he felt detached from his pre-infertilty external relationships, he felt infertile in a fertile world,*** *and* ***the difference in the support he received caused him additional sadness.***

8. Identity disruption: Although Julie and Rick held themselves responsible for the infertility, both partners felt positive about their bodies. The couple also felt positive about having remained emotionally connected during the period of infertility. However, the partners disagreed about the difference in how they reacted to the infertility compared with other challenges which they faced in their lives. Julie said her reactions to the infertility were similar to her reactions to other difficult situations. On the other hand, Rick said that his reactions to the infertility were very different from his reactions to other difficult situations which he has faced. His reactions to infertility are a source of conflict within his relationship with Julie. *My clinical judgment: Julie had a low degree of identity disruption because* ***she did not feel physically defective, she did not feel together but apart,*** *and* ***she tried to regain control of her life with the infertility****. Rick had a mid-range degree of identity disruption because* ***while he did not feel physically defective*** *and* ***he did not feel together but apart, he found it difficult to regain control of his life with the infertility.***

Overall Clinical Judgment

The overall results of my clinical judgment are shown in the following table:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: High S
3. Fostering social solidarity	Julie: Mid-range S; Rick: High S
4. Balanced identity	Both partners: High S
Individualism Attributes:	
5. Relationship polarization	Both partners: Mid-range I
6. Incongruent coping styles	Julie: Mid-range I: Rick: Low I
7. Social isolation	Julie: Mid-range I: Rick: High I
8. Identity disruption	Julie: Low I: Rick: Mid-range I

As shown in the table above, as a couple Julie and Rick scored high in Solidarity (S) on three attributes: relationship stability, complementary coping strategies, and

balanced identity. As a couple, they also displayed a mid-range degree of relationship polarization. Julie scored lower than Rick in fostering social solidarity, social isolation, and identity disruption. However, she scored higher than Rick in incongruent coping styles. I believe that Julie and Rick had a mid-range degree of unity. Therefore, my clinical judgment ranked both partners with a score of 2 (out of 3).

Analysis of Assessment of Unity Scale

The overall results of the Assessment of Unity Scale are shown in the table below:

Solidarity Attributes:	
1. Relationship stability	Both partners: High S
2. Complementary coping strategies	Both partners: High S
3. Fostering social solidarity	Julie: Mid S; Rick: High S
4. Balanced identity	Both partners: High S
Individualism Attributes:	
5. Relationship polarization	Both partners: Mid-range I
6. Incongruent coping styles	Julie: Mid-range I: Rick: Low I
7. Social isolation	Julie: Mid-range I: Rick: High I
8. Identity disruption	Julie: Low I: Rick: Mid-range I

The table indicating Julie and Rick's specific scores on their Assessment of Unity Scale can be found in Appendix V. Overall, Julie scored 59 - just inside the Solidarity range, which indicates that she had a high degree of unity. Rick had a mid-range score of 51, which indicates that he had a mid-range degree of unity. The results show that as a couple, Julie and Rick ranked high in Solidarity on relationship stability, complementary coping strategies, and balanced identity. Julie ranked lower than Rick on fostering social solidarity, social isolation, and identity disruption, and she ranked higher than Rick on incongruent coping styles.

Correspondence between Clinical Judgment and Assessment of Unity Scale

There is partial correspondence, or agreement, between my clinical judgment of the couple as determined by their interview, and their scores on the Assessment of Unity

Scale. Partial correspondence indicates that there is agreement between the overall score for only one partner, in this case Rick, in the clinical judgment and the Scale, and disagreement on at least one attribute in the clinical judgment and the Scale. The table below presents the attribute on which there is no correspondence, as well as the specific differences in the results of the two assessments of that attribute.

The results of the interview indicate that Julie and Rick both had a mid-range degree of unity. However, the results of the Scale indicate that while Rick had a mid-range degree of unity, Julie had a high degree of unity. Julie's score on the Scale was 59, which indicated that she scored just within the high degree of unity, or Solidarity, range of 59 to 78.

Attribute	**Clinical Judgment**	**Assessment of Unity Scale**
3. Fostering social solidarity	Julie: Low Solidarity Rick: High Solidarity	Julie: Mid Solidarity Rick: High Solidarity

Summary of the Findings

The following table summarizes the results of the correspondence between the two assessments.

Couple	**Correspondence**	**Attribute(s) showing no correspondence**
Couple 1 (PC 1)	General	Complementary coping strategies; Relationship polarization
Couple 2 (PC 2)	General	Complementary coping strategies; Social isolation
Couple 3 (PC 3)	General	Relationship stability; Fostering social solidarity; Balanced identity
Couple 4 (PC 4)	Unanimous	
Couple 5 (PC 5)	Unanimous	
Couple 6 (PC 6)	Partial	Fostering social solidarity

The table indicates that there was correspondence between my clinical judgment and the scores on the Assessment of Unity Scale. Two couples (PC 4 and PC 5) showed **unanimous correspondence**, indicating that there was agreement between the overall scores for both partners in the clinical judgment and the Scale, and agreement between all eight attributes in the clinical judgment and the Scale. Three couples (PC 1, PC 2, and PC 3) showed **general correspondence,** indicating that there was agreement between the overall scores for both partners in the clinical judgment and the Scale, but disagreement on at least one attribute in the clinical judgment and the Scale. One couple (PC 6), showed **partial correspondence**, indicating that there was agreement between the overall score for only one partner in the clinical judgment and the Scale, and disagreement on at least one attribute in the clinical judgment and the Scale.

CHAPTER 5

Discussion

The purpose of this study was to explore whether a quantitative assessment instrument could be used in identifying areas of strength and of challenge/stress in the relationships of couples facing infertility. A mixed methods design was used to generate insights into the subject of a study about which little is known by using both standardized quantitative methods of research, and qualitative interviews with participants in order to understand their problems. The concept explored was the degree of unity in a couple's relationship, a concept about which little is known. By converging numeric trends from quantitative data, in this case the Assessment of Unity Scale, and details from qualitative data, in this case interviews, it was possible to more fully understand the degree of unity in couples' relationships in relation to the challenge of infertility that they shared. A secondary purpose of the study was the development of the Assessment of Unity Scale, and the assessment of the convergent validity of the Scale by comparing the couples' scores with my clinical judgment of the couples' degree of unity.

This chapter builds on the findings of the two sets of data that were collected using the Assessment of Unity Scale and the interviews with the couples in a number of ways. First, the chapter examines the uniqueness of each set of data. Secondly, the chapter discusses the correspondence between results of the Assessment of Unity Scale and the interviews. Thirdly, the chapter considers the gender differences on the two methods of data collection noted in the findings. Fourthly, the chapter discusses the limitations of this study. Finally, I propose ways to extend the findings of this study in a

future study, and I suggest how to apply the findings in counselling sessions for infertile and fertile couples.

Distinctiveness of the Quantitative and Qualitative Data

The information that was captured by using two sets of data – the quantitative data from the Assessment of Unity Scale, and the qualitative data derived from the interviews with the participating couples - was distinct. The first set of data, the information derived from the Assessment of Unity Scales, provided a standardized, but limited snapshot of many facets of the couples' lives. The degree of unity score was based on the responses of both partners to the questions.

The second set of data, the interviews with the couples, allowed for interaction between myself and the couples. Through candid discussions with the couples and through my consistent clarification of their narratives, I was able to obtain a rich understanding of how infertility had affected them individually and as a couple. The interviews enabled me to ascertain the degree of unity in their relationships in three respects. Firstly, the interviews allowed me to gather some insights into the nature of the couples' relationships, along with their strengths and vulnerabilities. Sometimes, I was amazed by the couples' openness and willingness to disclose private details of their lives. Other times, I was astounded by their raw emotions, including their anger towards each other, and their compassion for each other. For example, the female partner in Participating Couple 3 admitted "I knew that when I married into his family that it would be trouble for me. Although I don't have the [infertility] diagnosis, his [her husband's] family still blames me for us not having children." Secondly, the interviews enabled me to verify with the couples the nature of their relationships with their families and friends,

and the effects of their culture on their experiences with infertility. The male partner in Participating Couple 6 stated "I'd be a laughing stock if my Jamaican bros [brothers] knew that I couldn't have kids. They'd wonder what kind of man I am." Thirdly, the interviews permitted me the opportunity to observe the couples' verbal and non-verbal interactions with each other. At times, the partners were so forthcoming that they disclosed information that they had not shared with the other partner. The female partner in Participating Couple 4 admitted in the interview "there were times when I felt so bad that I thought about killing myself. I didn't want to leave Jorlin [her husband] but I felt desperate. Sometimes I still think about it, but I know that I couldn't do it."

Together, the quantitative and qualitative data provided distinct ways of understanding the degree of unity in couples' relationships. I was interested in exploring whether there was correspondence between the scores of the standardized Assessment of Unity Scale and the scores of the more intuitive interviews because it is expected that a clinical assessment of all couples choosing to use reproductive technologies will soon be required. If the conclusions about the couple relationship using the quantitative assessment are similar to those generated by a seasoned fertility counsellor doing a clinical assessment, the Scale may be useful for the many counsellors across Canada who only occasionally assess couples facing infertility.

Correspondence Between the Assessments and the Interviews

As stated in Chapter 4, I believe that there were four possible outcomes of my clinical judgment of the couples' degree of unity and the couples' scored responses on the Assessment of Unity Scale:

1. Agreement on Solidarity (high scores)

2. Agreement on Individualism (low scores)
3. One partner scoring on Solidarity and the other partner scoring on Individualism (mixed scores)
4. One partner scoring on Individualism and the other partner scoring on Solidarity (mixed scores)

If there was a correspondence between these two sets of data, then the Assessment of Unity Scale would have an element of convergent validity.

The following table summarizes the results of the two assessments.

Couple	**Partner**	**CJ**	**AUS**	**Correspondence**	**Attribute(s) showing no correspondence**
PC1	Female Male	S S-I	S S-I	Y Y (General)	Complementary coping strategies; Relationship polarization
PC2	Female Male	S S	S S	Y Y (General)	Complementary coping strategies; Social isolation
PC3	Female Male	S S-1	S S-1	Y Y (General)	Relationship stability; Fostering social solidarity; Balanced identity
PC4	Female Male	S-1 S-1	S-1 S-1	Y Y (Unanimous)	
PC5	Female Male	S S	S S	Y Y (Unanimous)	
PC6	Female Male	S-1 S-1	S S-1	N Y (Partial)	Fostering social solidarity

The table above presents the results of my clinical judgment (CJ) of the interview with each of the six participating couples (PC1 to PC6), and the results of the couples'

scored responses on their Assessment of Unity Scale (AUS). The results of both of these assessments show where the couples and the individual partners scored along the continuum of the degree of unity. Partners who had a high degree of unity had more Solidarity (S) descriptors. Partners who had a low degree of unity had more Individualism (I) descriptors. Partners who had a mid-range degree of unity had a mix of both Solidarity and Individualism (S-I) descriptors, sometimes with the female scoring higher on Solidarity and sometimes with the male scoring higher. The table also shows whether there is general correspondence, or agreement (Y = yes; N = no) between the results of the partners' degree of unity as determined in the two assessments. Even if there was general correspondence between the two assessments, there may have been specific attributes on which there was no correspondence. The table also shows those non-corresponding attributes.

The table above indicates the following five key findings:

1. There was unanimous correspondence between the Overall Scores, and among the attributes scores of the two assessments in the case of two couples (PC4 and PC5).
2. There was general correspondence between the Overall Scores of the two assessments in the case of three couples (PC1, PC2, and PC3).
3. There was partial correspondence between the Overall Scores of the two assessments in the case of one couple (PC 6).
4. As discussed in Chapter 3, the scores of both partners were considered and analyzed to see whether there was convergence in the assessment provided by the quantitative and qualitative forms of assessment. Convergence in the assessments

would be indicated if categorization on the Assessment of Unity Scale was the same as the categorization (of the couple's relationship) by the interview. The findings of this study suggest that there was correspondence between the Assessment of Unity Scale and my clinical judgment with five of the six couples. The sixth couple had only partial correspondence: one partner showed correspondence and the other partner did not. As discussed in Chapter 3, for the purposes of this study, "correspondence" refers to the agreement between the **couple's** scores on the Scale and my clinical judgment of that couple. It does not refer to the agreement between the individual partner's scores and my clinical judgment of the partner. Partial correspondence would not factor into the convergent validity of the Assessment of Unity Scale. In this particular study, and given the limitations of this study, convergent validity suggests that the Assessment of Unity Scale has convergent validity of 83.3% (which accounts for the correspondence of five of the six couples). In other words, 83.3% of the time there would be an element of correspondence in the couples' scores, and the conclusion reached with the Assessment of Unity Scale will correspond to clinical judgment. A study with a larger sample would identify whether there is further support for this conclusion.

5. There was convergent validity on between 75% and 92% of the 26 items on the Assessment of Unity Scale. Again, a study with a larger sample would determine whether this conclusion can be further substantiated.

The results of the couples' scores were somewhat different from my initial expectations of those scores. I did not anticipate the complexity of the couples'

relationships. I was, perhaps, less focused on the intricacies and subtleties of the individual partner's thoughts, emotions and behaviours and more focused on the couples' relationships which I believed to be more extreme in terms of their degree of unity.

The differences between the couples' scores and my expectations are as follows. Firstly, I had expected that there would be some agreement on the couples' high scores or low scores. That is, both partners would score high in Solidarity, or both partners would score high in Individualism. This result occurred only in two couples (PC2, and PC5) who both scored high on Solidarity. However, no couples scored high on Individualism. Secondly, I had expected that the couples' mixed scores (that is, where the partners had different scores) would either be where one partner scored high on Solidarity and the other partner scored high on Individualism. I did not expect that a mixed score would include mid-range scores (that is, a score mid-range between Solidarity and Individualism), which occurred in four of the six couples (PC1, 3, 4, and 6). Thirdly, while I had expected that the partners might score at opposite ends of the continuum (for example, one partner scoring high on Individualism and the other partner scoring low on Individualism), this result did not occur. The results of the study indicate that either the couples agreed on their responses, as did PC2 and PC5, or that those couples with mixed scores had responses that were in the mid-range of Solidarity and Individualism. The results of the four remaining couples with mixed results (PC1, PC3, PC4, and PC6) indicate that while one partner was high on Solidarity, the other partner had a mid-range score of Solidarity and Individualism attributes.

Despite the high convergent validity of the Scale, and the fact that the partners' results were not as extreme as I had predicted, there is an important consideration to note.

While it might be gratifying to think that there was considerable agreement between the Scale and my clinical judgment, there was significant variation in the agreement between those two assessments in three of the six couples (PC1, PC2, and PC3). In particular, there was a discrepancy in the partners' scores on the following attributes: complimentary coping strategies, social isolation, fostering social solidarity, and balanced identity. In the majority of cases, the scores on these five attributes were higher on the Assessment of Unity Scale than on my clinical judgment. There may be several reasons to explain the higher scores on the Scale. Firstly, there may have been an element of social desirability on the part of the partners. Those partners may have wanted to appear more socially attractive, and therefore they may have intentionally rated themselves higher than how I rated them. Secondly, the rating scales used on both assessments may not have been harmonious. That is, the mid-range category on the Scale was larger than the mid-range category of my clinical judgment. As discussed in the Chapter 3, the mid-range Scale scores in this category is larger because the participants could have two versions of mixed scores: either one partner could score high in Individualism and the other partner could score low in Solidarity; or one partner could score high in Solidarity and the other partner could score low in Individualism. Thirdly, there may have been changes in the clients' thoughts and emotions between the time when they completed the Scale and when they were interviewed. These changes in thoughts and emotions may have affected the participants' scores.

It is interesting to note that the lone couple (PC 6) whose two assessments scores did not correspond showed disagreement only on one attribute: fostering social solidarity. It might be tempting to think that differences on several attributes may have resulted in a

lack of correspondence between the two sets of data. However, I believe that the lack of correspondence in this couple's scores was due to the cut-off, i.e., the ranges of scores for Solidarity (59 to 78) and for Mid-range (20 to 58) on the Assessment of Unity Scale. In this couple's case, the female partner's Assessment of Unity Scale rating (Solidarity) was different than my clinical judgment (mid-range) because her self-report results scored just within the higher range on the Scale (which began at 59). It is important to acknowledge once again that the Assessment of Unity Scale is on a continuum, and that the Scale serves as a snapshot of the individual's and the couple's degree of unity. Therefore, a score such as this participant's that is just within a particular range, in this case Solidarity, needs to be considered more generally by where it is along the degree of unity continuum – at the low end of the Solidarity range and at the high end of the Mid-range.

Gender Differences

There are a myriad of ways to understand the differences in how men and women are affected by and cope with infertility. For the purposes of this study, I have chosen to explore those differences by considering the gender-related infertility diagnoses of the participants.

The couples who participated in this study are representative of the general population who receive a diagnosis of infertility: in one-third of the cases, the infertility is attributed to women, one-third is attributed to men, and one-third of cases are unexplained (Becker, 1997). Of the six participating couples, two couples had female factor infertility (PC1 and PC2), two couples had male factor infertility (PC3 and PC6), two couples had unexplained infertility (PC4 and PC5).

Results and Discussion of the Partners' Scores

Result 1.

The female partners who received an infertility diagnosis (PC1 and PC2) had a higher degree of unity than the male partners with infertility. These females scored higher on Solidarity and lower on Individualism.

Discussion of result 1.

The scores of the female partners who have a diagnosis of infertility in this study are not universally representative of women who have a diagnosis of infertility: not all women facing infertility have a high degree of unity. Many women who receive a diagnosis of infertility often react with feelings of failure, which can cause them to lose their focus; start to feel inane, and lethargic; question the purpose of their lives; and start to question the very meaning of life (Becker, 1997; Greil, 1991). The two women with infertility in this study may have had a high degree of unity because they reacted to the infertility in the same way that they had reacted to other challenges in their lives before the infertility: both women attempted to take control over their personal situation. One woman had cancer (PC1), and the other woman (PC2) had moved by herself from China to Canada, knowing neither the English language nor any other person in Canada.

Result 2.

The male partners who received an infertility diagnosis (PC3 and PC6) scored higher than females with infertility on the Individualism descriptors. The males experienced more social isolation and identity disruption. In particular, these males were more likely to blame themselves for the infertility than were females with infertility; they were more likely to receive less support than females with infertility; and they were more

likely to react differently to other challenges they had faced in their lives. With regards to Solidarity scores, one male partner scored lower than his partner on Solidarity (PC3), and the other male partner slightly higher on Solidarity than his female partner (PC6), indicating that there was variation in the range of the male partners' Solidarity scores.

Discussion of result 2.

The scores of the male participants with infertility are consistent with reactions of the general population of males with infertility. Men who receive a diagnosis of infertility often react to it as attack on their immortality. That sense of inadequacy can result in feelings of anger, helplessness, isolation, resignation, and even depression. Men often resolve their feelings about infertility, but it can be a lengthy process that involves rethinking their identity in relation to the prevailing cultural norms about masculinity. As well, men often find it difficult to discuss their feelings openly with others, including with their partners. The reactions of the male participants with a diagnosis of infertility in this study who scored high in Individualism are consistent with the reactions of the men with infertility in the general population (Daniluk, 2001). These male participants (PC3 and PC6) had a high degree of relationship polarization, social isolation, and identity disruption. These reactions may have been caused by the men's sense of responsibility for the diagnosis, by their reluctance to share their feelings with their partner or to disclose the infertility for cultural reasons, or by their conflicted views of masculinity in light of their infertility diagnosis.

Result 3.

The scores of the partners who received an unexplained diagnosis (PC4 and PC5) showed variable results, and they showed no gender differences. The partners of one

couple (PC4) had a mid-range degree of unity resulting from both partners scoring high in Solidarity on many attributes, but also scoring high in Individualism on other attributes. The partners of the other couple (PC5) had a high degree of unity, and they had scores high in Solidarity and low in Individualism.

Discussion of result 3.

The scores of the partners with unexplained infertility are consistent with reactions of the general population who have unexplained infertility – there is variability and there are no gender differences. Both male and female partners who receive an unexplained diagnosis of infertility may have a more difficult time coping, or they may have an easier time coping than partners who have an explained diagnosis (Daniluk, 2001). These two different reactions are understandable. Firstly, as human beings we strive to understand the causes of important events in our lives. When those events such as infertility cannot be explained, we may feel responsible for them; we may question our identity or we may feel different from others; or we may isolate ourselves from others. These reactions are consistent with the thoughts, feelings and scores of both partners in PC4. Secondly, not having an explanation for infertility may "level the playing field" for some partners. If neither partner has been "singled out" by receiving an infertility diagnosis, the partners may often act united in facing the infertility together. This was the reaction of both partners in PC5, who disclosed to me that they sought counselling to help them cope better with the infertility.

Limitations of the Study

As with many research studies, this research program has several limitations.

Firstly, the small sample size and the nonrepresentative sampling means that the findings cannot be generalized to all couples with infertility issues.

Secondly, using only one person to make the clinical judgments has the advantage of reducing variation in how the assessments are done, but it also has the disadvantage of not knowing how similar these judgments with respect to Unity, Solidarity, and Individualism would be to those of other counsellors.

Thirdly, the appropriateness of including one of the descriptors ("turning to others") in the Scale may be questionable. Based on my earlier study (Zatylny, 2006), I found that "turning to others" was an important characteristic, or descriptor, of "Fostering social solidarity," an attribute that may contribute to the success of couples' relationships. However, in this study, two of the six couples (PC2 and PC6) indicated that turning to others for support was not important to them. A future study with a larger sample size will be conducted in order to determine whether this descriptor can contribute to the success of relationships of couples experiencing infertility.

Fourthly, a few of the questions on the Assessment of Unity Scale showed little or no variation in the participants' scores. For example, all of the 12 participants scored "Strongly Agree" on Question 4: "I feel supported by my partner during difficult times." This question was worded to reflect the descriptor "empathy." While it is possible that all of the participants really felt this support by their partner, it is also possible that if this question were worded differently or perhaps worded in a more probing way to reflect

empathy, the participants' responses may have been more discriminating. In a future study, I will need to re-word questions like this one which results in little or no variation.

Fifthly, the Assessment of Unity Scale is still in the early stages of development, so further quantitative research needs to be done to assess whether the conceptualization of Unity in couple relationships as being composed of two independent subscales – Solidarity and Individualism – can be confirmed.

As discussed earlier in this chapter, the scores of the couples' Assessment of Unity Scale were higher on five of eight attributes than my clinical judgment of those attributes. There may be several reasons for this.

Firstly, the Scale was limited in that it did not include any questions which accounted for social desirability. Some of the couples may have answered more positively than accurately, wanting their relationships to appear more "unified" than they may have been.

Secondly, my clinical judgment may have been biased toward a less positive assessment of functioning than was actually the case. There were issues of counter transference which arose during the interviews and they may have influenced my judgment of some couples. For example, I realized that I became triggered by some of the discussions concerning complementary coping strategies (PC1) and fostering social solidarity (PC3 and PC6). While I sought supervision during my research for this study, I realize that I may not have sufficiently worked through these issues of counter transference. In addition, my questions during the interviews may have needed to be more probing, I may not have been insightful enough, or perhaps I could have asked different questions.

Thirdly, the emotions of the couples may have influenced my judgment. For example, the strong emotions of a male partner (PC3) who cried during the interview, and who said that he was "still shaken" and "considerably preoccupied" by his infertility diagnosis may have made me judge his relationship stability lower than he had reported on the Assessment of Unity Scale.

Fourthly, there may have been a problem with the semi-structured interviews which I conducted. That is, apart from the standardized questions that I asked all of the couple, the couples were free to disclose any additional information which they felt important to share with me. This additional information may have influenced my judgment of those couples. For example, a female partner (PC3) disclosed during the interview how deeply she was affected by the stigma of infertility and by her husband's despair. This additional information may have caused me to judge her balanced identity to be lower than she had reported on the Assessment of Unity Scale.

Fifthly, the scores of the couples' Assessment of Unity Scale may have been higher on five of eight attributes than my clinical judgment of those attributes because the Scale may not be accurately measuring the degree of unity. It may also be possible that the Scale is not measuring what I think that it is measuring - the degree of unity in couples' relationships.

Contributions to the Literature

A review of the literature suggests that while many couples have trouble coping with infertility, there are no ways in which a counsellor can systematically assess how the couples are coping with that situation. This study contributes to the literature by beginning the process of developing a quantitative assessment of infertile couples which

can identify the strengths and weaknesses in their relationships that can affect the couples' ability to cope with infertility. Those strengths and weaknesses may be determined by the presence or absence of the 26 descriptors which are described in the Findings chapter. This quantitative assessment, the Assessment of Unity Scale, will then be used in conjunction with the subjective interview between the counsellor and the couples as an assessment tool.

The Assessment of Unity Scale measures the degree of unity, a construct which is new to the literature. Although the literature discusses constructs which are similar to degree of unity, including cohesion (Pretorius, 1997), cognitive interdependence (Agnew, Van Lange, Rusbult and Langston, 1998), and couple identity (Monarch, 2004), the literature does not define the attributes of those constructs, nor does the literature provide quantitative assessments of those constructs.

This study specifically contributes to the literature in several ways. Firstly, it defines the 26 descriptors which comprise the degree of unity. Secondly, it develops an assessment tool to measure those descriptors. Thirdly, it explores the gender differences in relation to those attributes by considering the gender-related infertility diagnoses of the participants. Fourthly, it explores the similarities and differences in the insights that the researcher gained in using a quantitative measure and a clinical assessment to assess the degree of unity in the relationship of couples facing infertility.

Future Study

This study is part of a long-term, four-part research program whose purpose is to help couples to cope better with infertility. Part One involved my undergraduate thesis. For this thesis, I developed a taxonomy of relationship characteristics, or descriptors,

which showed that a couple's "degree of unity" most aptly explains why some relationships are able to survive infertility. The degree of unity can be measured on a continuum. Successful relationships possess a preponderance of "Solidarity" descriptors found at one end of the continuum. The term "Solidarity" is a term that describes those couples who dealt with their infertility most successfully in my earlier study. Unsuccessful relationships possess a preponderance of "Individualism" descriptors, which are located at the opposite end of the continuum. Individualism is a term that describes couples who dealt with their infertility least successfully.

In Part Two, which involves this Masters' thesis, I extended my undergraduate study to develop a questionnaire, the Assessment of Unity Scale (see Appendix V), which quantitatively measures the degree of unity that is present in a couple's relationship. I then assessed the convergent validity of the Scale by comparing the scores on the Scale with my clinical judgment of those couples who I interviewed.

In Part Three, the future study, I will assess the factor structure of the Scale. The primary objective of the future study will be to identify whether Solidarity and Individualism are two separate concepts that define the larger construct of degree of unity in the relationships of couples who experience infertility.

In Part Four, I will refine the Scale further. I will present the Scale to, and conduct interviews with a large population of couples with infertility. The primary objective of the future study will be to use the results of the Scale and my clinical judgment to establish a counselling program unique to each couple to help them to cope with infertility. This fourth study will use the Assessment of Unity Scale and an interview as pre-test measures to discern the degree of unity in a couple's relationship. The

Individualism and Solidarity descriptors will be identified and they will guide the counselling. A counselling program will be established for each couple, the goal of which will be to help preserve and enhance the couple's Solidarity descriptors, and to reduce their Individualism descriptors. At the conclusion of the counselling program, the couple will again complete the Assessment of Unity Scale and another interview as a post-test measure. The results of the pre-test and post-test Scales and clinical judgments will be compared to discern whether the counselling provided, which was identified by the pre-test, was indeed effective in shifting the couples' relationships to a higher degree of unity. With enough cases, I will be able to identify the counselling programs that are most effective in shifting relationships to higher degrees of unity, and to then publish those findings.

Implications for Practice

Infertile couples in Canada can seek medical treatment either at one of the 30 private clinics nation-wide or at a hospital fertility centre. But if those couples have emotional or relationship concerns, they do not have the same level of access to counselling services. At the present time, there is only one full-time counsellor working in a private fertility clinic in Canada, so couples who use private clinics have to find a private counsellor when they have emotional or relationship concerns. Typically, those private counsellors do not have formal training in infertility issues. Couples who seek treatment at hospital fertility clinics may choose to talk with hospital social workers, but, like private counsellors, those social workers typically have no formal training in infertility issues. Clearly, there is a need for infertility counsellors in Canada to help couples with their concerns, and to help them to make an informed decision about their

treatment choices. The literature on infertility issues also supports this assessment (Daniluk, 2002; Becker, 1997; Monga et al., 2004).

Due to the lack of formal training for counsellors who work with people experiencing infertility, a new counselling program was recently established by Sherry Dale (who is the only full-time counsellor working in a private clinic) and the Michener Institute in Toronto. This counselling program will begin in early 2009. Counsellors who have little experience with the issues that infertile couples face will be able to use the Assessment of Unity Scale to identify those issues. New counsellors will also be able to consult my findings about the most effective counselling programs for shifting relationships to higher degrees of unity so they can develop the most appropriate programs for the couples who they are counselling.

APPENDIX I

Letter to Participants

Dear Participant:

You have been asked to participate in a study to develop an assessment tool that will help couples cope effectively with infertility by understanding the nature of their relationships.

I am a Master student at Wilfrid Laurier University in the Faculty of Social Work. As part of the requirements for a Master's degree, I am conducting research in the area of the effect of infertility on couples. This study has been approved by the Research Ethics Board of Wilfrid Laurier University.

This study is conducted in two parts. Part One involves completing a questionnaire which will take approximately 15 minutes. I request that you return the questionnaire to me in the enclosed self-addressed stamped envelope. Part Two involves a face to face interview in your home or at a mutually agreeable location, which will last approximately one hour. The interview will involve questions regarding your experiences with infertility. Your privacy will be protected, and the data will be kept in a safe location. Every effort to protect your identity will be made in reporting the data. Further information with respect to the procedures regarding privacy is contained in the attached consent form.

Attached you will find a consent to participate form, which clearly outlines your rights as a participant. Please review it carefully before signing it. If you have any questions regarding this research, please contact the researcher at the number listed on the consent form. Dr. Anne Westhues, Research Advisor may also be contacted at the number listed on the consent form.

Thank you for your participation in this research.

Sincerely,

Reina Zatylny
Master's Candidate

APPENDIX II

Consent to Participate

I understand that I am being asked to participate in a research study that is being conducted by Reina Zatylny, supervised by Dr. Anne Westhues of the Faculty of Social Work at Wilfrid Laurier University. This study has been approved by the Research Ethics Board at Wilfrid Laurier University.

The purpose of this study is to develop an assessment tool that will help couples cope effectively with infertility by better understanding the nature of their relationships. The data collected in this research will be used to promote this understanding.

The following two procedures will be used: First, I will be asked to complete a questionnaire which will take approximately 15 minutes. I will return the questionnaire to the researcher. Second, my partner and I will then be asked to participate together in a face to face interview with the researcher. This interview will be tape recorded so that the researcher can transcribe the tape and analyze the data. The interview should last approximately one hour. After the interview, the researcher and I will talk briefly about how I felt about the interview.

A benefit which I may experience by participating in this research study is greater knowledge of my experience of infertility.

By participating in this questionnaire and interview, I may risk being upset by the questions and being made uncomfortable by the interview process. To help my partner and I deal with any potential upset or discomfort as a result of participating in this questionnaire and interview, my partner and I will be provided with a list of counsellors in our community.

I understand that my partner and I will be one of six couples who will participate in this study.

I understand that my participation is voluntary. I may refuse to participate in this study without penalty to me. I may also withdraw from this study at any time without penalty. I may choose not to answer any particular question asked on the questionnaire or by the researcher during the interview.

I understand that my research records will be kept confidential and that I will not be identified in any publication or discussion. The questionnaire and the transcribed data from my interview will be maintained in a locked filing cabinet in the researcher's office. I understand that my name will not be recorded on tapes or transcripts. I further understand that only the researcher and her supervisor will have access to my questionnaire and interview records. The tapes from my interview will either be erased, or at my request, given to me subsequent to the completion of the research study.

I understand that I can indicate at the end of this Consent Form whether I would like to receive feedback of the results of this study, and how the researcher may contact me. Feedback will

APPENDIX II (Cont'd)

Would you like to receive feedback on the results of this study? ☐ Yes ☐ No

If you would like to receive feedback, please indicate your contact information (fax number, phone, email, or by mail).

Fax Number:

Phone number:

Email:

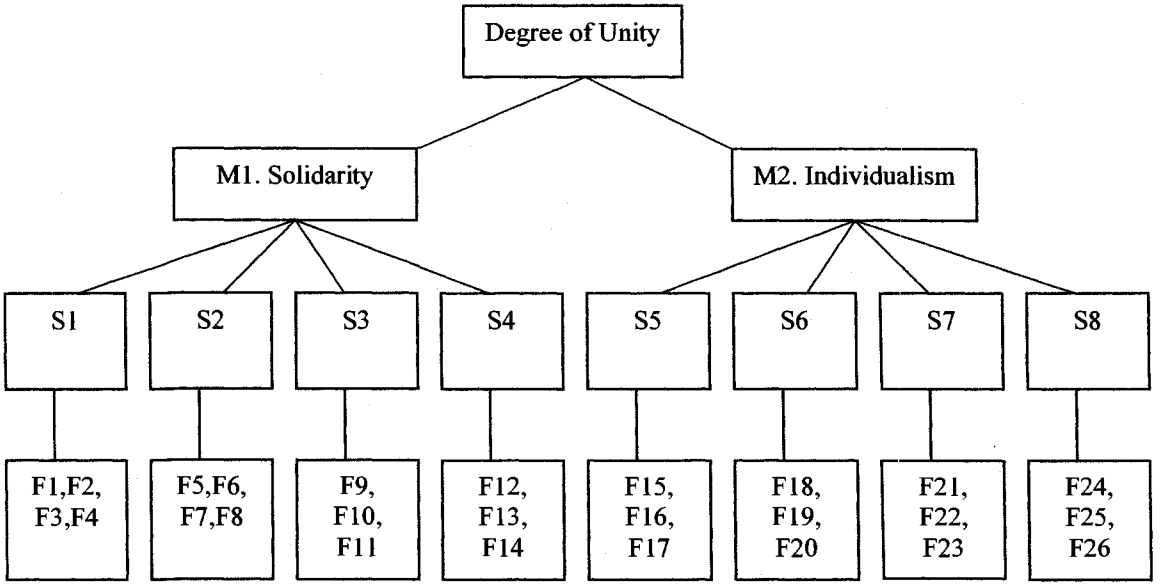
Address:

APPENDIX IV

The Degree of Unity

The Degree of Unity is comprised of a core category and three levels of categories which have a hierarchical relationship to one another. The higher level categories subsume the meanings of the lower level categories into higher levels of abstraction. The highest level or core category is **Degree of Unity**. Below the core category are two main categories: **Solidarity and Individualism**. Below the two main categories are **eight second level categories** (S1 to S8) which represent the relationship attributes that are more fully discussed in Chapter 4. The Assessment of Unity Scale questions shown in Appendix V are based on the **26 first level categories** (F1 to F26).

I developed the Degree of Unity and the lower level categories from the research that I undertook for my undergraduate thesis. That research is described in Zatylny, 2006.



Category Names

Core Category: Degree of Unity

Main Category 1: Solidarity
Main Category 2: Individualism

Second Level Categories:

S1: Maintaining relationship stability
S2: Complementary coping strategies

APPENDIX IV (Cont'd)

S3: Fostering social solidarity
S4: Balanced identity
S5: Relationship polarization
S6: Incongruent coping styles
S7: Social isolation
S8: Identity disruption

First Level Categories:

F1: United against a common enemy
F2: Open communication
F3: Preserving normalcy
F4: Empathy
F5: Types of coping styles
F6: Counseling
F7: Faith
F8: Solution-focused problem-solving
F9: Being a couple as an established family
F10: Turning to others
F11: Keeping the relationship vital
F12: Rejecting the stigma of infertility
F13: Partners are more than just spouses
F14: Differentiating one's self from one's partner
F15: Estrangement and isolation from one's partner
F16: Neglect
F17: Self-blame
F18: Blame
F19: Inability to reach out
F20: Marked differences in hopefulness
F21: Detachment from pre-infertility external relationships
F22: Being infertile in a fertile world
F23: Difference of support
F24: Feeling defective
F25: Together but apart
F26: Trying to regain control

APPENDIX V

Assessment of Unity Scale

Please rate how strongly you agree or disagree with each of the following statements by checking one of the responses next to the question.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. My partner and I are united in facing infertility together.	☐	☐	☐	☐
2. My partner and I can talk openly about our thoughts and feelings.	☐	☐	☐	☐
3. I can compartmentalize the issues about infertility and maintain a good balance in my life and in my relationship.	☐	☐	☐	☐
4. I feel supported by my partner during difficult times.	☐	☐	☐	☐
5. My partner and I support each other about the same emotionally.	☐	☐	☐	☐
6. Counselling may help me to cope better.	☐	☐	☐	☐
7. Faith and/or spirituality plays an important role in my life.	☐	☐	☐	☐
8. When faced with a difficult situation, I'm usually able to focus on the facts rather than on the emotions.	☐	☐	☐	☐
9. I think of my partner as my family.	☐	☐	☐	☐
10. I'm able to turn to trusted friends and/or family members for support when times get tough.	☐	☐	☐	☐
11. Even with the challenges of infertility, my partner and I take time to enjoy other parts of our life together.	☐	☐	☐	☐

	Strongly Disagree	Disagree	Agree	Strongly Agree
12. Even though I'm facing infertility, I feel that I'm worth as much as people who have children.	☐	☐	☐	☐
13. When I think about my personal identity, I consider myself to be more than a spouse or partner.	☐	☐	☐	☐
14. I'm able to maintain some emotional distance from my partner's moods.	☐	☐	☐	☐
15. Most of the time, my partner and I are able to keep the lines of communication open between us.	☐	☐	☐	☐
16. My partner and I make time together when we don't focus on infertility.	☐	☐	☐	☐
17. I don't hold myself personally responsible for the infertility.	☐	☐	☐	☐
18. Neither my partner nor I blame the other for the infertility.	☐	☐	☐	☐
19. My partner and I are willing to come for counselling.	☐	☐	☐	☐
20. My partner and I experience little conflict when one of us is feeling more hopeful about the infertility outcome than the other.	☐	☐	☐	☐
21. Prior to going through infertility, I had close relationships with friends and/or family members.	☐	☐	☐	☐
22. I don't feel separate from other people who are easily able to have children.	☐	☐	☐	☐

	Strongly Disagree	Disagree	Agree	Strongly Agree
23. My partner and I receive the same amount of support from our friends and family, no matter which one of us has received the diagnosis of infertility.	☐	☐	☐	☐
24. Even though I've received a diagnosis of infertility, I feel that my body is working well.	☐	☐	☐	☐
25. My partner and I have remained emotionally connected during the period of infertility.	☐	☐	☐	☐
26. My partner and I react to infertility in the same way that we react to other difficult situations.	☐	☐	☐	☐

APPENDIX VI

Interview Questions

The following is a list a questions for the infertile couples:

1. What is your ethnic or cultural background?

2. What is/was the nature of your infertility?

3. How old were you when you started trying to have a child?

4a. Can you tell me why having children is important to you?

4b. What would it mean to you if you don't have children?

5a. What was your relationship like with each other before you tried to have children?

5b. What was your relationship like with your extended family before you tried to have children?

5c. What was your relationship like with your friends who have children before you tried to have children of your own?

6a. What challenges did you face individually (including changes in feelings, self-esteem, etc.) during the infertility? How did you cope?

6b. What challenges did you face as a couple (including changes in feelings and behaviours towards one another) during the infertility? How did you cope?

6c. What types of social or cultural pressures did you face individually or as a couple during the infertility? How did you cope?

7a. What differences in your relationship with each other have you noticed since you've tried to have children?

7b. What differences in your relationship with your extended family have you noticed since you tried to have children?

7c. What differences in your relationship with friends who have children have you noticed since you tried to have children?

8a. What did you learn about yourself during the period of infertility?

8b. What did you learn about each other or about your relationship?

APPENDIX VI (Cont'd)

9. Why do you think you were able to stay together as a couple?

10. Are there any lasting good or bad effects on your relationship?

11. Do you have anything else you'd like to add?

APPENDIX VII

Tabular Results of the Couples' Responses to the Assessment of Unity Scale

NB: Please refer to Appendix V (The Assessment of Unity Scale) for specific scale questions.

The couples' responses to the Scale questions indicate the following:
0 = strongly disagree
1 = disagree
2 = agree
3 = strongly agree

Participating Couple 1: Diane and Derek

Solidarity Questions	**Female**	**Male**
1. Unity	3	3
2. Talk	3	2
3. Normalcy	2	2
4. Empathy	3	3
5. Coping	2	1
6. Counselling	3	2
7. Faith	3	2
8. Facts	2	1
9. Family	3	3
10. Support	2	1
11. Vitality	3	2
12. Stigma	3	3
13. Identity	3	3
14.Differentiation	2	2
Total	37	30

Individualism Questions	**Female**	**Male**
15. Isolation	2	1
16. Neglect	3	2
17. Responsibility	3	3
18. Blame	3	2
19. Reaching out	2	2
20. Hopefulness	2	3
21. Detachment	3	2
22. Separate	3	1
23. Support	2	2
24. Defective	3	2
25. Connected	3	3
26. Reaction	2	2
Total	31	25

Female Total	68
Male Total	55

APPENDIX VII (Cont'd)

NB: The couples' responses to the Scale questions indicate the following:

0 = strongly disagree
1 = disagree
2 = agree
3 = strongly agree

Participating Couple 2: Susan and Derrick

Solidarity Questions	**Female**	**Male**
1. Unity	3	3
2. Talk	3	3
3. Normalcy	3	3
4. Empathy	3	3
5. Coping	3	2
6. Counselling	3	2
7. Faith	2	0
8. Facts	3	3
9. Family	3	3
10. Support	3	3
11. Vitality	3	3
12. Stigma	3	3
13. Identity	3	3
14.Differentiation	3	2
Total	41	36

Individualism Questions	**Female**	**Male**
15. Isolation	3	2
16. Neglect	3	3
17. Responsibility	1	3
18. Blame	3	3
19. Reaching out	2	3
20. Hopefulness	2	3
21. Detachment	1	3
22. Separate	2	3
23. Support	3	2
24. Defective	3	3
25. Connected	3	3
26. Reaction	3	3
Total	29	34

Female Total	70
Male Total	70

APPENDIX VII (Cont'd)

NB: The couples' responses to the Scale questions indicate the following:

0 = strongly disagree
1 = disagree
2 = agree
3 = strongly agree

Participating Couple 3: Asma and Naeem

Solidarity Questions	**Female**	**Male**
1. United	3	3
2. Talk	3	2
3. Normalcy	2	1
4. Empathy	3	3
5. Coping	2	3
6. Counselling	2	2
7. Faith	3	2
8. Facts	1	1
9. Family	3	3
10. Support	3	2
11. Vitality	1	1
12. Stigma	3	2
13. Identity	3	2
14.Differentiation	2	2
Total	34	29

Individualism Questions	**Female**	**Male**
15. Isolation	2	2
16. Neglect	1	1
17. Responsibility	2	1
18. Blame	3	2
19. Reaching out	3	2
20. Hopefulness	2	2
21. Detachment	3	2
22. Separate	3	2
23. Support	0	1
24. Defective	3	2
25. Connected	2	2
26. Reaction	3	1
Total	27	20

Female Total	61
Male Total	49

APPENDIX VII (Cont'd)

NB: The couples' responses to the Scale questions indicate the following:

0 = strongly disagree
1 = disagree
2 = agree
3 = strongly agree

Participating Couple 4: Jackie and Jorlin

Solidarity Questions	**Female**	**Male**
1. United	3	3
2. Talk	2	3
3. Normalcy	1	2
4. Empathy	3	3
5. Coping	2	2
6. Counselling	2	2
7. Faith	0	1
8. Facts	2	2
9. Family	3	3
10. Support	0	1
11. Vitality	2	2
12. Stigma	0	1
13. Identity	1	3
14.Differentiation	1	2
Total	22	30

Individualism Questions	**Female**	**Male**
15. Isolation	3	3
16. Neglect	2	2
17. Responsibility	0	2
18. Blame	3	3
19. Reaching out	2	2
20. Hopefulness	1	0
21. Detachment	3	1
22. Separate	0	0
23. Support	1	0
24. Defective	0	1
25. Connected	3	3
26. Reaction	2	2
Total	20	19

Female Total	42
Male Total	49

APPENDIX VII (Cont'd)

NB: The couples' responses to the Scale questions indicate the following:

0 = strongly disagree
1 = disagree
2 = agree
3 = strongly agree

Participating Couple 5: Jennifer and David

Solidarity Questions	**Female**	**Male**
1. United	3	3
2. Talk	3	3
3. Normalcy	3	3
4. Empathy	3	3
5. Coping	3	3
6. Counselling	2	2
7. Faith	2	2
8. Facts	2	2
9. Family	3	3
10. Support	3	3
11. Vitality	3	3
12. Stigma	3	3
13. Identity	3	3
14.Differentiation	2	2
Total	38	38

Individualism Questions	**Female**	**Male**
15. Isolation	3	3
16. Neglect	3	3
17. Responsibility	2	2
18. Blame	3	3
19. Reaching out	3	3
20. Hopefulness	3	1
21. Detachment	3	3
22. Separate	3	1
23. Support	3	3
24. Defective	3	2
25. Connected	3	3
26. Reaction	2	2
Total	34	29

Female Total	72
Male Total	67

APPENDIX VII (Cont'd)

NB: The couples' responses to the Scale questions indicate the following:

0 = strongly disagree
1 = disagree
2 = agree
3 = strongly agree

Participating Couple 6: Julie and Richard

Solidarity Questions	**Female**	**Male**
1. United	2	3
2. Talk	3	2
3. Normalcy	3	2
4. Empathy	3	3
5. Coping	3	2
6. Counselling	3	3
7. Faith	3	3
8. Facts	3	3
9. Family	3	3
10. Support	1	1
11. Vitality	1	3
12. Stigma	3	3
13. Identity	3	3
14.Differentiation	1	2
Total	35	36

Individualism Questions	**Female**	**Male**
15. Isolation	3	2
16. Neglect	1	3
17. Responsibility	1	1
18. Blame	1	3
19. Reaching out	3	2
20. Hopefulness	1	2
21. Detachment	1	2
22. Separate	3	0
23. Support	1	0
24. Defective	3	3
25. Connected	3	3
26. Reaction	3	0
Total	24	21

Female Total	59
Male Total	51

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