

PREGNANCY LOSS: DISENFRANCHISED GRIEF AND OTHER PSYCHOLOGICAL  
REACTIONS

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It is widely acknowledged in the literature that grief is most intense when it is experienced by parents whose children have died. However, as recently as 20 years ago, mothers whose children died at birth or before the pregnancy had reached full term were often dismissed as merely medical patients, and their psychological reactions were not considered or acknowledged by professionals, their friends, or their families. More recently fields such as psychology have recognized that women who have experienced pregnancy loss have complex psychological reactions to their loss. The present study examined the patterns of grief of women who have had a pregnancy end in spontaneous abortion or stillbirth and the ways in which these women gave meaning to their experiences. Participants were asked to complete several measures including the Perinatal Grief Scale (PGS), the Hogan Grief reaction Checklist (HGRC), the Perceived Social Support Scale (PSS), and the Inventory of Social Support (ISS). The participants also wrote a narrative account of their loss experience. These narratives were content analyzed to delineate common themes. The findings indicated several important factors which may be useful in understanding and assisting in post-loss adjustment.

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## INTRODUCTION

The topics of grief and bereavement have been discussed at length in the literatures of such fields as psychology, philosophy, and medicine. The present paper will begin with a discussion of some of the prominent psychological theories of grief. The more specific topic of the loss of a biological child will then be addressed. Then, issues surrounding the loss of an unborn or recently born child will be examined. Finally, a study will be described that presents the nature of 49 mothers' grief reactions to pregnancy loss.

### Historical Perspectives on Grief

Sigmund Freud (1917/1959) conceptualized mourning as a psychological wound that most people were capable of working through on their own. Freud referred to "mourning" as the typical grief reaction to the loss of a loved one. He posited that external interference with the mourning process was not likely to be helpful and might even be harmful. When an individual could not successfully negotiate the mourning process, Freud considered that individual to be melancholic. Freud proposed that the mourning process involved freeing oneself from attachments to the dead person, releasing oneself from inhibitions about becoming a separate being from the dead person, and resolving conflicts of ambivalence over the lost love relationship. These tasks are accomplished over time, but Freud did not set any expectations about the specific duration involved in grief (Freud, 1917/1959).

Lindemann (1944) expanded upon some of Freud's ideas. Lindemann defined acute grief as a specific psychological syndrome with a clear onset and definite symptoms. Grief reactions may be delayed, exaggerated, or distorted. Lindemann asserted that somatic symptoms can include tightness in the throat, choking, shortness of breath, sighing, emptiness in the abdomen, lack of muscular power, and tension. Other outward signs and symptoms of grief that Lindemann

identified include preoccupation with the image of the deceased, feelings of guilt, hostile reactions, and the loss of usual patterns of conduct. One characteristic thought to be common among individuals with pathological grief is the assumption of characteristics of the deceased individual (Lindemann, 1944). Just as Freud proposed the tasks associated with the “mourning process” (Freud 1917/1959), Lindemann referred to tasks of “grief work.” These tasks include emancipation from the bondage to the deceased, readjustment to the environment, and the ability to form new relationships. Grief work can be delayed if an individual feels responsible for caring for others. Further, grief reactions may re-emerge long after the death has occurred when circumstances surrounding the death are recalled. The type and severity of grief reactions was thought to be related to the individual’s premorbid personality. Further, an individual’s relationship with the deceased individual can greatly impact the grief reaction (Lindemann, 1944).

Bowlby (1969) conceptualized loss as the absence of proximity to and communication with an object with which the individual experiencing loss has some attachment. Without attachment there should be no loss and, hence, no grief over the loss. However, when there is an attachment formed, the survivor of a loss must find a means of expending the energy of the attachment in the absence of the object (Bowlby, 1969).

Parkes (1972) expanded on Bowlby’s ideas. Parkes pointed out that although grief was thought to have a known etiology, specific symptoms, and a predictable course, it had been neglected up to that point in the psychiatric literature. Parkes also added two concepts to Bowlby’s conceptualizations of grief. First, an individual’s coping with grief is complicated by the stigma of society. As people become uncomfortable and anxious around a newly bereaved individual, that individual’s social support is likely to diminish. Second, Parkes points out that

the bereaved individual, in addition to his/her grief, is now deprived of the psychological benefits that were previously provided by the deceased individual (Parkes, 1972).

The works of Freud, Lindemann, Bowlby, and Parkes are widely acknowledged in the literature as classic papers on grief. However, these works present a conception of grief that relies on a medical model. Grief is seen as something that happens to an individual. The grief can be exacerbated or prolonged by the presence of any number of circumstances. Finally, grief is conceptualized as something that the individual will survive, endure, or from which he/she will recover. The final product of grief is purported to be the same individual just as he/she was prior to the loss that evoked the grief reaction (Engel, 1961). More recent work in the field has endeavored to show that this model of grief is lacking.

Worden (2002) proposed a model of grief involving four tasks which must be accomplished for successful coping. The tasks that Worden identified include accepting the reality of the loss, experiencing the pain of grief, adjusting to the environment from which the deceased person is missing, and withdrawing from the relationship with the deceased and reinvesting that energy in a new relationship (Worden, 2002).

Worden's conceptualization of grief diverges in a significant way from previous models of grief. He incorporates the concept of change and adjustment. Previous models have implied that the bereaved individual returns to his/her psychological status prior to the loss. Worden's model introduces the idea that the individual may be changed in some way by the loss (Worden, 2002).

#### Application of Worden's Model to the Loss of a Child

In order to examine the nature of grief due to the loss of a child, it may be helpful to conceptualize such losses in terms of Worden's model. Worden's first two tasks of grief involve

accepting that a loss has occurred and experiencing the pain that the loss evokes. These would be the points in the model where grief reactions such as denial, crying, and yearning for the lost person or object would be incorporated. However, Worden's model goes on to propose that there is a psychological adjustment that takes place as the individual learns to adapt to the loss and to reinvest energy, previously devoted to the lost person or object, in a new relationship or activity (Worden, 2002). Including these elements of change in the bereaved individual makes Worden's model useful for examining grief reactions, given that recent literature has recognized personal change as part of the bereavement process (Gamino, Sewell, & Easterling, 2000).

Worden's first proposed task is accepting the reality of the loss (Worden, 2002). Accepting the reality of any death is difficult; however, accepting the loss of a child is particularly difficult. The death of a child seems to violate the very laws of nature. Parents may feel that they have failed in their fundamental roles as parents and may feel that they should have been able to prevent the death. Parents are accustomed to feeling that they can control the events in their children's lives; when a child dies, that sense of control is taken away from the parents (Rando, 1986).

Worden's second task is experiencing the pain of the loss (Worden, 2002). Experiencing the pain of grief is difficult in most situations; however, the pain that parents experience following the loss of a child seems to be the most intense and long-lasting type of grief (Gamino et al., 2000). The death of a child is the most traumatic loss of a family member (Clayton, 1980). Experiencing the pain of grief is complicated by the reactions of society to the bereaved parents. Many people avoid bereaved parents because they are horrified by the idea that they too could lose a child to death. As the social support network is withdrawn, bereaved parents are left

without adequate sources of reality testing, nurturance, and compassion, further complicating the grief process (Rando, 1986).

Worden's third proposed task is adjusting to the environment following a loss (Worden, 2002). Adjusting to the environment from which the deceased person is missing is particularly difficult for parents. If the loss is of an only child, parents must completely redefine their roles as adults. If there are surviving siblings, parents must adjust to the absence of the deceased child while continuing to function in their parental roles for the other children (Rando, 1986).

Another area of difficulty for parents in Worden's model is the withdrawal of energy from the parent-child relationship and the reinvestment of that energy into another relationship (Worden, 2002). One reason that this is so difficult is that parents are asked to let go of a child, who is an extension of themselves psychologically and physically. Further, the parental role tends to involve actively doing things for the child; whereas, relationships with other individuals may involve more passive interactions. The bereaved individual must learn to have a new kind of relationship with the deceased individual. If the deceased individual is a peer or a parent, the bereaved individual may find comfort in thinking of things the deceased might have said or ways in which the deceased individual might have reacted in certain situations. However, it is more difficult to imagine doing things for another individual (e.g., taking care of a child) when that individual is no longer there to receive the action (Rando, 1986).

In order to truly reinvest energy once used in a relationship with a child, the logical thing would be to invest that energy into a relationship with another child. However, in the case of a bereaved parent, reinvesting energy given to a now deceased child in a different child may be problematic. Such a direct reinvestment may threaten the identity of the new child. The integrity of the parents' relationship with the new child may also be jeopardized. In theory it is often

assumed that parents should have a unique and distinct relationship with each of their children. Reinvesting love for one child in a new or surviving sibling of the deceased child would mean that the relationship the parents have with the new or surviving sibling consists partially of the love and energy that they originally had for the child who is now deceased. Hence, the new or surviving child would have a relationship with his/her parents that is not unique and separate from the parents' relationship with the deceased child. The reinvestment of parents' emotions following the death of a child may be partly directed toward other people. However, in healthy bereavement, there is also likely to be investment of emotion in new goals and activities (Rando, 1986).

#### Grief and Pregnancy Loss

The death of a living child has been regarded as a highly significant loss for almost any parent. However, the loss of an unborn or recently born child has come to be seen as a potentially significant loss only in the past 30 years (Toedter, Lasker, & Alhadeff, 1988). In particular, there is a new level of understanding of the psychological ramifications for women whose pregnancies result in spontaneous abortion or stillbirth (Covington, 1999). Before 1970, there had been no discussion in the English language literature of parental grief reactions to pregnancy loss (Kennell, Slyter, & Klaus, 1970). As recently as 1987, an article in Psychology Today pointed out the seemingly novel idea that the loss of an unborn child may be experienced similarly to the loss of any loved one (Cole, 1987). Reed (1984) asserted that couples who experience involuntary pregnancy loss may grieve (Reed, 1984). Research has also shown that couples could benefit psychologically from seeing their children who have died at, or just after, birth (Stringham, Riley, & Ross, 1982; Tadmor, 1986). When a child is stillborn, the experience of seeing, touching, and holding the baby allows parents to associate their grief with a tangible person

(Stringham et al., 1982). The recency with which such concepts have appeared in the literature highlights the need for more knowledge, public awareness, and education on this topic (Covington, 1999).

### Disenfranchised Grief

“Disenfranchised grief” is a term that refers to grief that, for some reason, is not socially acknowledged or publicly sanctioned. Doka (2002) wrote that for grief to be considered disenfranchised, one of three situations usually exists.

First, the relationship of the disenfranchised griever to the decedent may not be recognized. Our society has created unspoken rules about grieving. If a given relationship does not meet these implied criteria for the right to grieve, the surviving member of the relationship may experience the disenfranchisement of his/her grief. Examples of unrecognized relationships include coworkers, teacher and student, friends, homosexual partners, past lovers, former spouses, and roommates in nursing homes, just to name a few. These relationships are outside the traditional American family and are often not acknowledged as significant enough or worthy of a substantial grief reaction in the event of the death of one member of the relationship (Doka, 2002).

Second, individuals may be regarded as incapable of experiencing grief. The most common instance of this phenomenon occurs with mentally disabled individuals. Because of their cognitive impairments, people around them often assume that they do not understand what has happened or that the death of someone close will not affect them the same way that more cognitively-able individuals are affected. The very old and very young are often disenfranchised for similar reasons (Doka, 2002).

Third, the loss itself may not be recognized or socially acknowledged as significant. Parents who give their children up for adoption or whose children die before or just after birth are often not acknowledged as needing to mourn these losses. Also, foster parents who have foster children removed from their homes often experience grief reactions. Other losses such as brain death of a family member or severe personality changes in a family member due to an organic brain syndrome are often experienced by the family as a psychosocial death, even though the individual is still biologically alive. Grief reactions in such situations are often ignored or minimized by healthcare professionals and other friends and family members (Doka, 2002).

The death of an unborn or recently born child falls into Doka's first and third broad categories of disenfranchised grief situations. Often the relationship between parents and child is not recognized if the child dies prior to birth. In addition, there are no explicit or implicit social rules for the way in which unborn or recently born children are to be mourned. Further, there are no social rules regarding how friends and family members should respond to such a loss. The lack of social norms regarding a pregnancy loss situation leaves the parents, siblings, and other members of the social network vulnerable to the psychological complications of disenfranchised grief (Doka, 2002).

#### Disenfranchised Grief Following Pregnancy Loss

There are several factors that lead to the disenfranchisement of grief that is experienced after pregnancy loss. It has been shown that parents' grief reactions to perinatal loss are intensified by their perception that their grief is not understood by others (Smith & Borgers, 1988). Rajan and Oakley (1993) concluded that women have a need for the lost fetus to be recognized as a person. Such recognition would then allow for the legitimization of their mourning. These women are likely to become isolated if they possess negative attitudes about

death. Their isolation may also be supported by the absence of culturally sanctioned death rituals (i.e. funerals or memorial services).

In a meta-analysis of empirical studies of pathological grief following pregnancy loss, Janssen, Cuisinier, and Hoogduin (1996) identified four subtypes of pathological grief following pregnancy loss that have been given attention in the literature. These include chronic, delayed, masked, and exaggerated grief. They reported that approximately 20% of prospective mothers have difficulty accepting the loss, even after two years have passed. It is fairly common for women to report psychological and/or somatic complaints as well as behavioral changes during the first six months following the loss. However, 10-15% of the women studied developed a psychiatric disorder within the first two years following the loss. After two years, women rarely sought psychiatric help. The meta-analysis included losses at all stages of pregnancy, and the results were not differentiated according to gestational age of the fetus (Janssen et al., 1996).

#### The Perinatal Grief Scale (PGS)

It is clear that the experience of pregnancy loss has psychological impact on survivors. Further, the experience of pregnancy loss is unique from other situations in which parents have lost a child to death. Therefore, the Perinatal Grief Scale (PGS; Toedter et al., 1988) has been developed to measure grief reactions and factors influencing the resolution of grief of men and women who have experienced pregnancy loss. The measure was initially validated using a sample of women who had lost children through spontaneous abortion ( $n = 63$ ), ectopic pregnancy ( $n = 18$ ), fetal death ( $n = 39$ ), or perinatal death ( $n = 18$ ). The mean gestational age at the time of loss was 16.5 weeks (Toedter et al., 1988). The PGS is described here in detail to give context to the following empirical findings.

The PGS consists of three internally consistent subscales: Despair ( $\alpha = .87$ ), Difficulty Coping ( $\alpha = .93$ ), and Active Grief ( $\alpha = .95$ ). Several variables were found to be predictive of the level of success with which individuals would resolve their grief. High PGS scores indicate good adjustment. Low PGS scores indicate poor adjustment – possibly high grief. Lower PGS scores were associated with poorer physical health of the mother prior to the loss, poorer quality of the marital relationship, greater gestational age of the fetus, and the presence of mental health problems prior to the loss (Toedter et al., 1988).

Hunfeld, Wladimiroff, Passchier, and Venema van Uden (1993) investigated the validity of the PGS using a sample of 46 Dutch women. The participants were in their third trimester and had recently learned that their fetuses had fatal anomalies. Scores on the PGS were correlated with the Impact of Events Scale. Individuals who had low scores on the PGS also received diagnoses of psychological instability. The authors concluded that the PGS was a good measure of psychological instability resultant from pregnancy loss (Hunfeld, et al. 1993). However, to date there is no empirical evidence that correlates scores on the PGS with other objective measures of grief.

#### Empirical Findings Regarding Grief after Pregnancy Loss

Using the PGS, Lasker and Toedter (1991) evaluated 138 women who had experienced a perinatal loss and 56 of their male partners. The fetuses were lost through spontaneous abortion ( $n = 63$ ), ectopic pregnancy ( $n = 18$ ), fetal death ( $n = 39$ ), or perinatal death ( $n = 18$ ), and the mean gestational age was 16.5 weeks. They found that low scores on the Difficulty Coping and Despair subscales of the PGS were the best predictors of an individual's total long-term grief. Individuals with the highest levels of active grief soon after a perinatal loss tended to be females who had lost more advanced pregnancies, and who were unhappy in their relationships with their

male partners. Long-term active grief was linked to the individual's overall coping resources. If an individual had limited coping resources, he/she was more likely to have prolonged active grief (Lasker & Toedter, 1991).

Janssen, Cuisinier, De Graauw, and Hoogduin (1997) conducted a longitudinal study of 227 women whose pregnancies ended in spontaneous abortion within the first trimester. They found that there were several risk factors that were helpful in predicting the intensity of mothers' grief reactions following the termination of their pregnancies. These included the absence of living children, and having a neurotic personality (Janssen et al., 1997). Several findings of previous research were supported in Janssen et al. (1997). For example, prior professional mental health treatment (Hunfeld, Wladimiroff, Verhage, & Passchier, 1995), feelings of inadequacy on the part of the mother (Hunfeld, Wladimiroff, & Passchier, 1997; Hunfeld et al., 1995), and the length of the pregnancy (Goldbach, Dunn, Toedter, & Lasker, 1991) were found to be positive predictors of intense grief reactions following pregnancy loss. Janssen et al. (1997) replicated these findings.

The partners of women who have miscarried or given stillbirth have also been studied. Puddifoot and Johnson (1999) reported that men whose unborn children died prior to the third trimester of pregnancy, scored similarly to their female partners on the PGS following pregnancy loss. However, males were less likely than women to display active grief immediately following the loss (Puddifoot & Johnson, 1999). Rather, men are more likely than women to experience delayed grief reactions to this type of loss (Janssen et al., 1996). Men were more likely than their partners to score highly on Despair and Difficulty Coping (Puddifoot, & Johnson, 1999). It has also been reported that men who had viewed ultrasound scans of their unborn children demonstrated a more intense grief reaction than did those men who had not viewed ultrasound

scans. The grief reactions of the male participants were found to be more intense as the duration of the pregnancy prior to the loss increased (Puddifoot & Johnson, 1999; Johnson & Puddifoot, 1996). Also, men who were better able to mentally visualize their unborn children were likely to have a more intense grief reaction than those who were not (Johnson & Puddifoot, 1998).

The PGS has been shown to correlate with the Impact of Events Scale. Further, Women with low PGS scores are more likely to receive a diagnosis of psychological instability (Hunfeld et al., 1993). The PGS can provide data for a particular point in time regarding reactions to pregnancy loss. However, more qualitative methods of data collection could be useful for investigating the psychological processes of change occurring in women over time following the experience of pregnancy loss.

#### Giving Meaning to Pregnancy Loss

As the construct of grief evolves, theorists and clinicians in the field are coming to embrace the notion that the person changes and adjusts to cope with loss experiences. As this process occurs, the individual must incorporate the loss experience into his/her self narrative. The individual must redefine his/her role and the role of the lost loved one. This is a very individualized process. An excellent way to gain insight into the meaning-making process is to ask individuals to write about their experience (Niemeyer, 2000). By examining these narratives in relation to the amount of time that has passed since the loss experience and other psychological characteristics (such as PGS indices and other measures of grief), researchers can gain some understanding of characteristics in narratives that can indicate a healthy and productive meaning-making process (Niemeyer, 2000).

## Hypotheses and Research Questions

In order to investigate the roles of grief, perceived social support, and meaning-making in regards to pregnancy loss, the following hypotheses and research questions were investigated.

RQ1: Is the PGS measuring grief or some other psychological characteristic of women who have experienced pregnancy loss?

H1: There will be a negative correlation between total scores on the PGS and the sum of the distress-related subscale scores on the Hogan Grief Reaction Checklist.

It has been shown that the PGS can reliably and validly measure psychological instability after pregnancy loss (Hunfeld, et al., 1993). However, there are no data showing that scores on the PGS are specifically reflective of the grief construct as it is currently conceptualized in the literature. If this psychological instability is due to a grief reaction, scores on the PGS should be low, reflecting poor adjustment. High scores on the PGS reflect high levels of adjustment. PGS scores should correlate in a negative direction with scores on a more general measure of grief (the HGRC). Only five of the six subscales on the HGRC will be included in the analysis of this hypothesis because the Personal Growth subscale is not designed to assess distress (Hogan, Greenfield, & Schmidt, 2001). Furthermore, the PGS does not incorporate personal growth in its domain.

RQ2: Is the Inventory of Social Support measuring social support adequately?

H2: Scores on the PSS and the ISS will be positively correlated.

The ISS was empirically developed to measure social support following a loss. The ISS was developed with a population of adolescent and adult mourners. If the ISS is measuring a narrow subsection of the social support construct measured by the PSS, these scores should be positively correlated.

RQ3: Is the level of social support that the participants perceive related to their levels of grief?

H3a: The scores on the distress-related subscales of the HGRC and the PSS will be negatively correlated.

It is widely acknowledged in the literature that women who experience pregnancy loss tend also to experience a lack of social support following the loss (Rando, 1986). Further, a lack of social support can exacerbate grief-related psychological symptoms. If this is true, it would follow that scores on the distress-related subscales of the HGRC and PSS would be negatively correlated.

H3b: There will be a positive correlation between the Difficulty Coping Subscale of the PGS and the PSS.

H3c: There will be a positive correlation between the Despair Subscale of the PGS and the PSS. A key element in the disenfranchisement of grief is a lack of social support (Doka, 2002). If the construct of disenfranchised grief can be legitimately applied to the situation of pregnancy loss, there should be a negative relationship between the Difficulty Coping and Despair Subscales of the PGS and scores on the PSS.

RQ4: How do the participants' experiences of their pregnancy loss change over time?

RQ5: How are descriptions of experiences of pregnancy loss related to self-reported grief symptomatology?

H4a: As time passes following the pregnancy loss experience, narrative accounts of the loss will include fewer references to active grief.

RQ6: As participants adjust to the loss of their child/children, in what ways do they feel that they change as people?

RQ7: What signifies to mourners that they are “better?”

## METHODS

### Participants

A power analysis was carried out to determine the necessary number of participants for this study. It was determined that 64 participants would have been ideal. However, after eighteen months of data collection, forty-nine participants had been recruited. Without reasonable prospects of recruiting additional participants, data collection was terminated, and the data analysis process was initiated.

Participants in this study were adult English-speaking females. These women experienced pregnancy loss via spontaneous abortion ( $n = 22$ ), ectopic pregnancy ( $n = 1$ ), stillbirth ( $n = 17$ ), or neonatal death ( $n = 7$ ). Two participants did not provide enough information for the nature of the pregnancy loss to be determined.

In order to obtain participants for this project, information on the project was circulated to several support groups and other community resources (See Appendix A). The details of these efforts will be described below. If an individual became interested in participating in the project, she/he contacted the investigator via email or telephone to express interest. A mailing address was obtained, and the protocol was sent to the individual. This process was not followed in one case. In this instance, the primary investigator was invited to attend a support group meeting. Several members of the group took the protocol to complete. Given the nature of the encounter, no contact information was gathered from these potential participants.

The recruiting efforts for this project began in November 2000. First, a local support group called MEND (Mommies Enduring Neonatal Death) was contacted. Their coordinator agreed to post the flier for the project in their bimonthly newsletter. She also agreed to send it out to their member email list.

During the Spring of 2001, the first mailing was made. 36 packets were mailed to 25 mothers, 10 fathers, and 1 grandmother. Of these, 21 (58%) of the protocols were completed. Four of the protocols were from fathers, and one was from a grandmother. Of the 25 mothers, 16 (64%) completed the protocol.

In May of 2001, with the help of the UNT Public Relations Office, a press release regarding the project was issued. Also during May 2001, the primary investigator was interviewed for one of KNTU's radio shows.

A second mailing was done in the Summer of 2001; 29 protocols were sent to 28 mothers and one father. Of these, 20 (69%) protocols were completed. All 20 were from mothers, which means that 71% of the mothers contacted returned the protocols.

In the fall of 2001, recruiting efforts were continued by contacting several local obstetricians and gynecological clinics. Two of these facilities agreed to distribute the flier for the project to relevant patients. The other facilities contacted were uninterested in becoming involved with the project.

The third mailing was sent in March 2002; six new potential participants, four mothers and two fathers, were sent protocols. Of these, three (50%) were returned. These were all from mothers, which means that 75% of the mothers contacted returned the protocol.

Also in March 2002, previously contacted participants, who had not returned the complete protocol were contacted again. Several more protocols were completed. These more recently completed protocols are reflected in the numbers previously reported in this document.

The fourth mailing was done in April 2002. The support group named The Empty Cradle was located. The group had disbanded, but two of the former leaders of the group were willing to

complete protocols and distribute the flier to others they thought might be interested in participating. Neither of these women, nor one woman's husband returned the protocols.

Also included in the fourth mailing were two potential participants made known to the primary investigator through personal contacts. One of these women returned the protocol.

Finally, the primary investigator was invited to attend a meeting of the Healing Matters support group at the Medical Center of Plano. The primary investigator made a brief presentation of the project to the group members in attendance. A total of 19 protocols were taken from this meeting. Of these, completed protocols of eight mothers were returned.

In total, 76 protocols were sent to potential participants. Of these, there were 61 mothers (80%), 14 fathers (18%), and one grandmother (2%). A total of 41 mothers (68% of mothers), four fathers (29% of fathers), and one grandmother (100% of grandmothers) completed protocols. Additionally, of the 19 protocols distributed at the Healing Matters meeting, eight mothers returned protocols. A total of 49 mothers returned viable protocols. Because the number of fathers and grandmothers was limited, and because the hypotheses of the present study focused on mothers, only data from mothers were analyzed.

## Instruments

### Hogan Grief Reaction Checklist

The Hogan Grief Reaction Checklist (HGRC; Hogan et al., 2001) is an empirically developed instrument consisting of 61 statements (Appendix B). Individuals are asked to rate each statement according to how well the statements describe him/her. The HGRC utilizes a five-point Likert-type scale (Hogan et al., 2001).

The HGRC consists of six subscales that measure different aspects of grief reactions. These include Despair, Panic Behavior, Blame and Anger, Detachment, Disorganization, and

Personal Growth. Each item on the HGRC only contributes to one subscale, so there is no overlap of subscales. All six subscales were determined to have good internal consistency and test-retest reliability (Hogan et al., 2001).

The HGRC was also compared to commonly used measures of grief including the Texas Revised Inventory of Grief and the Grief Experiences Inventory. The HGRC was found to correlate moderately with these measures, which has led the developers of the HGRC and other researchers to conclude that the HGRC has good convergent validity with the GEI (Gamino, et al., 2000; Hogan et al., 2001) and the TRIG (Hogan et al., 2001).

#### Perinatal Grief Scale

Participants also completed the Perinatal Grief Scale (PGS; Toedter et al., 1988; Appendix C). This measure has been determined to validly assess psychological instability following a perinatal loss (Hunfeld et al., 1993). The PGS consists of three factors including Despair, Difficulty Coping, and Active Grief. Each of the 33 items on the PGS contributes to only one subscale, so there is no overlap of subscales (Toedter, et al., 1988). The PGS was used to determine the level of psychological instability of the participants, specifically in reference to pregnancy loss (Hunfeld et al, 1993).

#### Perceived Social Support Scale

The Perceived Social Support Scale (PSS; Procidano & Heller, 1983; Appendix D) consists of two subscales, the PSS-Family (PSS-FA) and the PSS-Friends (PSS-FR). The PSS has been empirically determined to measure individuals' perceived social support from friends and family. Each subscale contains 20 declarative statements. Participants are asked to determine if each statement is true for them. Response choices for each item include "Yes," "No," and "Don't Know." Each subscale contains only one factor and has been shown to be internally

consistent (PSS-FR  $\alpha = .88$  and PSS-FA  $\alpha = .90$ ; Procidano & Heller, 1983). The two subscales appear to be measuring related but separate constructs.

Procidano and Heller (1983) published three validation studies using a sample of 222 undergraduate college students. PSS-FA scores are more stable over time than PSS-FR scores. These results indicate that support that can be expected from families is more consistent over time than is support from friends. Both PSS-FR and PSS-FA scores were found to be inversely related to levels of symptomatology. Also, PSS-FR scores and PSS-FA scores were positively related to the presence of positive intangible characteristics of relationships. PSS-FR and PSS-FA were both found to be positively related to social competence, and PSS-FR was found to be inversely related to measures of a lack of self confidence (Procidano & Heller, 1983).

#### Inventory of Social Support

The Inventory of Social Support (ISS; N. S. Hogan, personal communication with C. E. Clower, October 26, 2000) is a five-item objective measure of an individual's perceptions of his/her own social support following a loss (Appendix E). The ISS was developed empirically. Items were generated based on the responses of adolescents and adults when they were asked what was helpful during their time of grief. A five-point Likert-type scale is employed. The ISS has been shown to be internally consistent ( $\alpha = .76$ ; N. S. Hogan, personal communication with C. E. Clower, March 13, 2001). Scores on the ISS have been found to correlate positively with the Personal Growth Subscale of the HGRC and negatively with the other five subscales of the HGRC (N. S. Hogan, personal communication with C. E. Clower, October 26, 2000).

#### Index of Core Spiritual Experiences-Revised

The Index of Core Spiritual Experiences-Revised (INSPIRIT; Appendix F; Kass, Friedman, Leserman, Zuttermeister, & Benson, 1991) was administered to all participants. The

INSPIRIT has been shown to reflect an individual's intrinsic spirituality. This measure has been shown to be reliable ( $\alpha = .90$ ), and concurrent validity has been demonstrated (Kass et al., 1991). Because many of the participants were recruited through an organization with religious affiliations, INSPIRIT scores will be used as a covariant when necessary to minimize biases in data analysis. However, no hypotheses in this study involve the INSPIRIT, so its use in this project will be limited.

#### Demographic Questionnaire.

Each participant completed a brief demographic questionnaire (Appendix G). Basic information was queried regarding the nature of the pregnancy loss (e.g., length of pregnancy prior to loss, cause of the fetal or neonatal death, etc).

#### Narrative Accounts of Pregnancy Loss

Participants were asked to answer several open-ended questions regarding their pregnancy loss experience (Appendix H). No further direction was given to them in an effort to allow the participants to write whatever came to mind.

#### Procedures

The participants in this study contacted the primary researcher to indicate their interest in participating. Participants were then sent a packet including consent forms and all other instruments. Once the packet was completed, participants returned the study materials to the primary researcher.

Instruments were sent to the participants in a uniform order. The open-ended questions were placed at the end of each packet, so that any carry-over effects that occur were systematic across protocols. The researcher was not able to control participants choosing to respond to the protocols out of order.

## Informed Consent

All participants gave their informed consent to participate in this study. Each participant signed the informed consent form sent to them in the study packet (Appendix I). Participants had the opportunity to contact the investigator should any questions have arisen. Participants were also advised that they could have withdrawn from the study at any time without prejudice.

Each participant was assigned a participant number. When the study packets were returned, the investigator verified that all testing materials were labeled with the participant number. This precluded the need for any personally identifying information on any test materials. Hence, the identity of the participants remained confidential. The master list that linked participants' names to their identification numbers was kept in a locked filing cabinet at the University of North Texas.

It was possible that participants could have experience some psychological discomfort during, or resultant from, their participation in this study. All participants were given written information about resources for psychological services so that they could contact appropriate mental health professionals for support if they found themselves experiencing psychological distress following their participation in this study (Appendix J).

## RESULTS

### Sample Characteristics

Descriptive statistics on the demographic variables of the sample were computed. A total of 49 women participated in the study. The average age of the participants was 31.7 years, ranging from 20 to 51 years with a standard deviation of 5.95 years,  $n = 47$ . Regarding their ethnic background, 43 women reported their ethnicity as Caucasian, 2 as Asian, and 1 as Hispanic. In terms of their religious affiliation, 29 (59%) women reported their religious affiliation as Christian, 11 (19%) as Catholic, 2 (4%) as Protestant Christian, and 1 (2%) as a religion of Eastern origin.

The participants were also asked several questions regarding their pregnancy loss experience. On average these women had experienced 1.23 pregnancy losses. The highest number of losses reported was 3,  $sd = .56$ ,  $n = 47$ . The length of the pregnancies which participants discussed in this study averaged 24.79 weeks, ranging from 3 to 40 weeks,  $sd = 12.50$ ,  $n = 47$ . On average, the index loss occurred 33.43 months ago, anywhere from 2 to 161 months ago,  $sd = 34.56$ ,  $n = 47$ . Of the 49 participants, 33 report having other living children. Two participants did not return the demographic questionnaire.

#### Hypothesis #1

H<sub>1</sub>: There will be a negative correlation between total scores on the PGS and the sum of the distress-related subscale scores on the HGRC.

A Pearson Product Moment Correlation was calculated to determine the relation between the total score on the PGS and the sum of the distress-related subscales on the HGRC. A total of the subscale scores on the HGRC, excluding the Personal Growth subscale, should yield an

overall index of grief (Gamino et al., 2000). Items should not be over-represented because all subscales on the HGRC and the PGS are mutually exclusive.

It is important to note that as scores on the HGRC increase, they are reflective of higher levels of distress. However, lower scores on the PGS are indicative of higher levels of distress. Therefore, if these two instruments are directly related, the correlation will be strong and negative due to the inverse nature of the scaling.

A strong and negative relation was found between the total score on the PGS and the distress-related subscales of the HGRC,  $r = -.87$ ,  $p < .001$ ,  $n = 42$ . These results support the above stated hypothesis.

Intercorrelations among the subscales of the PGS and HGRC were examined in order to better understand the similarities and differences between the constructs being measured by these two instruments. The intercorrelations of the subscales of the PGS ranged from .70 to .76. All of these intercorrelations were significant at the  $p < .001$  level. The intercorrelations of the distress-related subscales of the HGRC ranged from .44 to .68. All of these correlations were significant at the,  $p < .003$  level.

Intercorrelations were then calculated among the PGS subscales and the distress-related subscales of the HGRC. These subscales were moderately to strongly negatively related, with coefficients ranging from -.49 to -.78,  $p < .001$ . The correlation matrix illustrating these results can be found in Table 1 (Appendix L).

### Hypothesis #2

H2: Scores on the PSS and the ISS will be positively correlated.

A Pearson Product Moment Correlation was calculated to determine the relation between the total score on the PSS,  $\alpha = .95$ , and the ISS,  $\alpha = .88$ . A moderate relation was found

between these two measures of social support,  $r = .52$ ,  $p < .001$ ,  $n = 46$ . These results offer some support for the above stated hypothesis.

Intercorrelations among the subscales of the PSS and the total score on the ISS were examined in order to better understand the similarities and differences between the constructs being measured by these two instruments. Moderate relations were found between the ISS and the Family Subscale of the PSS,  $r = .42$ ,  $p < .004$ ,  $n = 46$ ; and the ISS and the Friends Subscale of the PSS,  $r = .48$ ,  $p < .001$ ,  $n = 47$ . Although all of these ISS-to-PSS relations are statistically significant, they are somewhat weaker than would be expected given the measures are both intended to measure social support (they share only 17-26% of common variance, depending on the particular correlation).

### Hypothesis #3

H3a: The scores on the distress-related subscales of the HGRC and the PSS will be negatively correlated.

A Pearson Product Moment Correlation was calculated to determine the relation between the sum of the distress-related subscales of the HGRC and the total score on the PSS. These two indices were not found to be significantly related, although there is a tendency toward a negative relationship,  $r = -.21$ ,  $p < .17$ ,  $n = 44$ . These results do not support the above stated hypothesis.

Intercorrelations were run among the distress-related subscales of the HGRC and the subscales of the PSS. These relations were not significant, and they all indicated a slight negative relational tendency, ranging from  $-.25$  to  $.08$ . One exception to this pattern was a minimal, yet significant, negative relation between the Friends Subscale of the PSS and the Blame and Anger Subscale of the HGRC,  $r = -.31$ ,  $p < .04$ ,  $n = 46$ . The correlation matrix illustrating these results is presented in Table 2 (Appendix L).

H3b: There will be a positive correlation between the Difficulty Coping Subscale of the PGS and the PSS.

A Pearson Product Moment Correlation was calculated to determine the relation between the Difficulty Coping Subscale of the PGS and the total score of the PSS. The relation was found to be non-significant,  $r = .12$ ,  $p < .42$ ,  $n = 45$ .

Further correlations were calculated to determine if the relations were similar between the Difficulty Coping Subscale of the PGS and the subscales of the PSS. Similar relations were found between the Difficulty Coping Subscale of the PGS and the Family Subscale of the PSS,  $r = .09$ ,  $p < .57$ ,  $n = 45$ ; and the Difficulty Coping Subscale of the PGS and the Friends Subscale of the PSS,  $r = .13$ ,  $p < .39$ ,  $n = 46$ . These results do not support the above stated hypothesis.

H3c: There will be a positive correlation between the Despair Subscale of the PGS and the PSS.

A Pearson Product Moment Correlation was calculated to determine the relation between the Despair Subscale of the PGS and the total score on the PSS. A moderate positive relation was found between the Despair Subscale of the PGS and the total score on the PSS,  $r = .43$ ,  $p < .003$ ,  $n = 45$ . Similar relations were found between the Despair Subscale of the PGS and the subscales of the PSS. For the Despair Subscale of the PGS and the Family Subscale of the PSS,  $r = .44$ ,  $p < .002$ ,  $n = 45$ ; and the Friends Subscale of the PSS,  $r = .31$ ,  $p < .04$ ,  $n = 46$ . These results support the above stated hypothesis.

### Content Analysis

Responses to the open-ended questions administered in this study were analyzed using content analysis. For each question, the responses were typed with all identifying information removed. Next, the researcher read each response making note of all distinct topics mentioned (e.g., mad at God, crying often, new perspective on life). Once this was done for all responses,

the researcher and a research assistant then identified content categories present in the responses. For example, phrases such as “crying a lot,” “sad every day,” and “often feel like I am going to cry” were collapsed into a content category called “sadness.” Each content category has been operationally defined (Appendix K; Williams, Gamino, Sewell, Easterling, & Stirman, 1998).

The responses were next coded by three independent raters. The raters were graduate students in clinical psychology who were trained by the researcher. The raters coded each variable for the presence or absence of each content category. Some variables were also coded for frequency. Variables were retained that occurred in at least 25% of the responses and where there was at least 80% agreement among the raters. The variables which were retained are noted with an asterisk (\*) in Appendix K. As they are mentioned in the text, their label will be noted in the text. Variables can be located using this label in Appendix K.

#### Hypothesis #4

H4a: As time passes following the pregnancy loss experience, narrative accounts of the loss will include fewer references to active grief.

The narratives used to test this hypothesis were the participants’ responses to the prompt, “Describe your experience of pregnancy loss.” As the participants’ narrative accounts of their pregnancy loss experiences were content analyzed, no theme emerged that was specifically related to the concept of active grief as it is presented on the PGS. However, three separate themes involving emotional reactions were retained from these narratives. These included EMOTIONAL REACTIONS – SAD/HARD/DEVASTATED (1G8), EMOTIONAL REACTIONS – SHOCK/NUMB (1G9), and EMOTIONAL REACTIONS – ANXIETY (1G16). Each of these variables was coded for frequency within the response. A Pearson Product Moment Correlation was calculated to determine the relation between the occurrence of these

three themes and time since the loss, which is measured in months. None of these three correlations approached significance. The relation between time since the loss and the three emotional reaction themes was; SAD/HARD/DEVASTATED,  $r = .15$ ,  $p < .35$ ,  $n = 43$ ; SHOCK/NUMB,  $r = .01$ ,  $p < .95$ ,  $n = 43$ ; and ANXIETY,  $r = .09$ ,  $p < .55$ ,  $n = 43$ .

Because the frequencies of references to the three emotional reaction themes were not normally distributed, the variables were dichotomized to reflect presence versus absence. A one-way ANOVA was then carried out using the time since the loss in months as the dependant variable. Again, none of the three emotional reaction themes yielded significant results. In all cases the results did not approach significance; SAD/HARD/DEVASTATED,  $F = .20$ ,  $p < .66$ ,  $d = .14$ ,  $n = 43$ ; SHOCK/NUMB,  $F = .05$ ,  $p < .83$ ,  $d = .07$ ,  $n = 43$ ; and ANXIETY,  $F = .62$ ,  $p < .44$ ,  $d = .26$ ,  $n = 43$ . These results do not support the above stated hypothesis.

H4b: As time passes since the pregnancy loss, references to personal meaning of the loss will increase in the narrative accounts of the loss.

The content analysis of the narrative accounts of pregnancy loss did not yield any theme approaching the concept of “personal meaning.” Because this theme was hypothesized but did not come to fruition, this hypothesis was untestable.

Supplementary analyses were conducted regarding the hypothesized relations. These analyses involved reanalyzing the hypotheses utilizing the time since the loss as a covariate. This was done to determine whether the amount of time that had passed since the loss was accounting for a significant portion of the variance, thus functioning as a confounding variable. In conducting these analyses, two outliers were removed. These two outliers experienced their losses much further back in time than the rest of the sample. The effect of reanalyzing the data in this manner produced negligible changes in the findings. Some of the weaker relations were

attenuated such that they were no longer statistically significant, but the actual differences in the effect sizes were miniscule. This occurred in two cases: the relation between the Friends Subscale of the PSS and the Blame and Anger Subscale of the HGRC, and between the Friends Subscale of the PSS and the Despair Subscale of the PGS. These statistical changes appear to be due to a reduction in the power produced by losing degrees of freedom from the analyses (by adding the covariate and eliminating the two outliers).

### Exploratory Analyses

Given the exploratory nature of the open-ended questions included in this study, several exploratory analyses were conducted. First, one-way ANOVAs were carried out using the presence or absence of each content category as the independent variable. Scores on the HGRC and PGS were used as dependent variables in separate analyses.

A series of one-way ANOVAs were conducted to determine whether there were differences in participants' total scores on the PGS when themes that emerged during the content analysis were present or absent. The total score on the PGS was used as the dependent variable. Separate ANOVAs were conducted using each theme from the content analysis as the independent variable. There were two levels of the independent variable, present and absent. Four of these 25 ANOVAs yielded significant results.

First, a content theme emerged of READING/EDUCATION (2M) in response to the prompt, "What, if anything, helped you cope with your pregnancy loss experience?" Participants who discussed reading materials related to or becoming educated about their situations had significantly higher PGS scores;  $\bar{m} = 123.29$ ,  $\underline{sd} = 17.11$ ,  $\underline{n} = 14$ , than those participants who did not make mention of this theme;  $\bar{m} = 109.07$ ,  $\underline{sd} = 22.57$ ,  $\underline{n} = 29$ ;  $\underline{F} = 4.33$ ,  $\underline{p} < .05$ ,  $\underline{d} = .68$ ,  $\underline{n} = 43$ .

Second, a content theme of TALKING (5R) emerged in response to the prompt, “Do you feel you have ‘adjusted to/resolved/worked through/recovered from’ the pregnancy loss experience? If so, please explain what went into your recovery process and how you were able to recover. If not, please explain what you still need to do in your recovery process.” Participants who discussed talking with other people as part of their recovery process had higher PGS scores;  $\underline{m} = 125.42$ ,  $\underline{sd} = 19.78$ ,  $\underline{n} = 12$ , than those who did not discuss this concept;  $\underline{m} = 109.16$ ,  $\underline{sd} = 21.12$ ,  $\underline{n} = 31$ ;  $\underline{F} = 5.30$ ,  $\underline{p} < .03$ ,  $\underline{d} = .78$ ,  $\underline{n} = 43$ .

Third, a content theme of PHYSICAL HEALTH DURING PREGNANCY - SUPERLATIVELY POSITIVE (6D2) emerged in response to the prompt, “Describe your physical health at the time of your pregnancy loss.” Participants who discussed their health as being especially good during their pregnancy had significantly higher PGS scores;  $\underline{m} = 121.50$ ,  $\underline{sd} = 21.63$ ,  $\underline{n} = 16$ , than those who did not discuss their health in this manner;  $\underline{m} = 107.04$ ,  $\underline{sd} = 20.49$ ,  $\underline{n} = 23$ ;  $\underline{F} = 4.49$ ,  $\underline{p} < .05$ ,  $\underline{d} = .69$ ,  $\underline{n} = 39$ .

Fourth, a content theme of FAMILY – LIVING CHILDREN (7A5) emerged in response to the prompt, “Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word ‘family’.” Participants who discussed their other living children had significantly higher PGS scores;  $\underline{m} = 122.12$ ,  $\underline{sd} = 18.88$ ,  $\underline{n} = 17$ , than those who did not discuss their other living children;  $\underline{m} = 106.48$ ,  $\underline{sd} = 21.50$ ,  $\underline{n} = 23$ ;  $\underline{F} = 5.72$ ,  $\underline{p} < .02$ ,  $\underline{d} = .77$ ,  $\underline{n} = 40$ .

Another series of one-way ANOVAs was conducted as described above using the sum of the distress-related subscales from the HGRC as the dependent variable. Again, each content theme that emerged from the participants’ narratives was used as an independent variable with two levels, presence and absence. two of these 25 ANOVAs yielded significant results.

A content theme of WORLD VIEW - APPRECIATING LIFE (4M1) emerged in response to the prompt, “Describe any ways in which you feel you have changed as a result of your experience of pregnancy loss.” Participants who reported a new-found sense of appreciating life had significantly lower scores on the distress-related subscales of the HGRC;  $\underline{m} = 85.65$ ,  $\underline{sd} = 21.74$ ,  $\underline{n} = 17$ , than those who did not discuss this concept;  $\underline{m} = 106.78$ ,  $\underline{sd} = 36.46$ ,  $\underline{n} = 27$ ;  $\underline{F} = 4.17$ ,  $\underline{p} < .05$ ,  $\underline{d} = .63$ ,  $\underline{n} = 44$ .

A content theme of FAMILY – LIVING CHILDREN (7A5) emerged in response to the prompt, “Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word ‘family’.” Participants who discussed their other living children had significantly lower scores on the distress-related subscales of the HGRC;  $\underline{m} = 83.11$ ,  $\underline{sd} = 24.67$ ,  $\underline{n} = 18$ , than those who did not discuss other living children;  $\underline{m} = 109.63$ ,  $\underline{sd} = 34.41$ ,  $\underline{n} = 24$ ;  $\underline{F} = 7.70$ ,  $\underline{p} < .01$ ,  $\underline{d} = .87$ ,  $\underline{n} = 42$ .

Some of the content themes were mentioned multiple times in some narratives. As a result, some themes were coded for frequency in addition to a dichotomous coding of presence versus absence. Therefore, some of the content categories lent themselves to correlational analysis with scores on the PGS and the HGRC. Separate Pearson Product Moment Correlations were carried out between each of these content categories and scores on the PGS and HGRC. These analyses yielded one out of eight significant result regarding the total score on the PGS and none out of eight regarding the sum of the distress-related subscales of the HGRC.

A content theme of EMOTIONAL REACTIONS - ANXIETY (4Z5) emerged in response to the prompt, “Describe any ways in which you feel you have changed as a result of your experience of pregnancy loss.” There was a significant and inverse relation between the frequency of statements regarding anxiety in the narratives and the total score on the PGS;  $\underline{r} = -$

.38,  $p < .01$ ,  $n = 43$ . Because the distribution of EMOTIONAL REACTIONS/ANXIETY was somewhat skewed, the variable was dichotomized into presence versus absence. A one-way ANOVA was then conducted using EMOTIONAL REACTIONS/ANXIETY as the independent variable and PGS scores as the dependent variable. Participants who discussed anxiety in their narratives had significantly lower PGS scores;  $\underline{m} = 105.13$ ,  $\underline{sd} = 19.18$ ,  $\underline{n} = 16$ , than those who did not;  $\underline{m} = 118.78$ ,  $\underline{sd} = 22.00$ ,  $\underline{n} = 27$ ;  $F = 4.24$ ,  $p < .05$ ,  $d = .65$ ,  $n = 43$ .

Exploratory analyses were also conducted regarding the relations between the PGS and HGRC and other variables of clinical interest including the length of the index loss pregnancy, time since the loss, the number of losses the participant has experienced, religious affiliation, ethnic background, the number of surviving children, and current age. For categorical demographic variables, separate one-way ANOVAs were conducted using the PGS scores and the sum of the distress-related subscales of the HGRC as dependent variables. None of these four analyses yielded significant results. For demographic variables that provided continuous data, separate Pearson Product Moment Correlations were calculated to determine each variable's relation with the PGS and the sum of the distress-related subscales of the HGRC. These analyses yielded three out of 10 significant findings.

Both the PGS and the sum of the distress-related subscales on the HGRC were found to be significantly related to the amount of time (in months) that had passed since the index loss. PGS scores were positively related to time since the loss;  $r = .38$ ,  $p = .01$ ,  $n = 44$ . The sum of the distress-related subscales of the HGRC was inversely related to the amount of time since the occurrence of the index loss;  $r = -.30$ ,  $p < .05$ ,  $n = 45$ . These analyses were recalculated without the two participants whose index losses occurred much further back in time than the rest of the

sample. Without these two outliers, the relations between the amount of time since the loss and both grief measures no longer exists.

The sum of the distress-related subscales of the HGRC was found to be significantly negatively related to the participants' number of surviving children;  $r = -.34$ ,  $p = .02$   $n = 45$ . Further, the Personal Growth subscale of the HGRC was found to be positively related to the participants' number of surviving children;  $r = .39$ ,  $p = .01$   $n = 47$ .

In addition to the above analyses, exploratory analyses were conducted regarding the two social support measures. A series of one-way ANOVAs was conducted to determine whether there were differences in participants' total scores on the PSS and the ISS when themes that emerged during the content analysis were present or absent. The total scores on the PSS and ISS were used as the dependent variables. Separate ANOVAs were conducted using each theme from the content analysis as the independent variable. There were two levels of each independent variable, present and absent. Three of these 50 ANOVAs yielded significant results.

A content theme of WORLD VIEW - APPRECIATING LIFE (4M1) emerged in response to the prompt, "Describe any ways in which you feel you have changed as a result of your experience of pregnancy loss." Participants who discussed a new-found sense of an appreciation for life had significantly higher scores on the PSS;  $m = 32.06$ ,  $sd = 8.19$ ,  $n = 17$ , than those who did not;  $m = 25.54$ ,  $sd = 11.31$ ,  $n = 28$ ;  $F = 4.27$ ,  $p < .05$ ,  $d = .64$ ,  $n = 47$ .

A content theme of FAMILY – SPOUSE/SIGNIFICANT OTHER (7A2) emerged in response to the prompt, "Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word 'family'." Participants who discussed their spouses or significant others had significantly higher scores on

the PSS;  $\underline{m} = 31.13$ ,  $\underline{sd} = 8.83$ ,  $\underline{n} = 31$ , then those who did not discuss their spouses or significant others;  $\underline{m} = 21.40$ ,  $\underline{sd} = 14.18$ ,  $\underline{n} = 10$ ;  $\underline{F} = 5.42$ ,  $\underline{p} < .03$ ,  $\underline{d} = 1.23$ ,  $\underline{n} = 41$ .

A content theme of FAMILY – LIVING CHILDREN (7A5) emerged in response to the prompt, “Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word ‘family’.” Participants who discussed their other living children had significantly higher scores on the PSS;  $\underline{m} = 31.94$ ,  $\underline{sd} = 6.76$ ,  $\underline{n} = 17$ , than those who did not discuss their other living children;  $\underline{m} = 25.36$ ,  $\underline{sd} = 12.17$ ,  $\underline{n} = 25$ ;  $\underline{F} = 4.09$ ,  $\underline{p} < .05$ ,  $\underline{d} = .64$ ,  $\underline{n} = 42$ .

As previously described, correlational analyses were conducted to examine the relations between the two social support measures and those content themes which were coded for frequency in addition to presence or absence. Separate sets of correlations were calculated for the PSS and ISS. One of these sixteen analyses yielded significant results.

A content theme of EMOTIONAL REACTIONS - SAD/HARD/DEVISTATED (5D4) emerged in response to the prompt, “Do you feel you have ‘adjusted to/resolved/worked through/recovered from’ the pregnancy loss experience? If so, please explain what went into your recovery process and how you were able to recover. If not, please explain what you still need to do in your recovery process.” A positive relation was found between the number of times participants discussed feelings of sadness and participants’ total scores on the ISS;  $\underline{r} = .34$ ,  $\underline{p} < .02$ ,  $\underline{n} = 46$ . Because the distribution of EMOTIONAL REACTIONS – SAD/HARD/DEVISTATED was skewed, the variable was dichotomized, and a one-way ANOVA was conducted using the total score on the ISS as the dependent variable and EMOTIONAL REACTIONS – SAD/HARD/DEVASTATED as the independent variable. Participants who discussed feelings of sadness had significantly higher scores on the ISS;  $\underline{m} =$

21.22,  $sd = 3.77$ ,  $n = 27$ ; than those who did not;  $m = 18.11$ ,  $sd = 4.32$ ,  $n = 19$ ;  $F = 6.77$ ,  $p = .01$ ,  $d = .40$ ,  $n = 46$ .

Exploratory analyses were also conducted regarding the relations between the PSS and the ISS and other variables of clinical interest including the length of the index pregnancy loss, time since the loss, the number of losses the participant has experienced, religious affiliation, ethnic background, the number of surviving children, and current age. For categorical demographic variables, separate one-way ANOVAs were conducted using the PSS scores and the ISS scores as dependent variables. None of these four analyses yielded significant results. For demographic variables that provided continuous data, separate Pearson Product Moment Correlations were conducted to determine each variable's relation with the PSS and the ISS. These analyses yielded three out of 10 significant findings.

Both the PSS and the ISS were found to be significantly related to the participants' current age. A positive relation was found between total scores on the PSS and current age of the participant;  $r = .32$ ,  $p = .03$ ,  $n = 46$ . Additionally, a positive relation was found between total scores on the ISS and the current age of the participant;  $r = .30$ ,  $p = .04$ ,  $n = 47$ . The PSS was found to be significantly related to the participants' number of surviving children;  $r = .30$ ,  $p = .04$ ,  $n = 46$ .

Separate regression analyses were conducted in an attempt to predict scores on the HGRC and the PGS. Possible predictor variables included content categories established and retained through the content analysis, participant's age, length of the index pregnancy loss, time since the loss, number of total losses, the PSS total score, the ISS total score, and the score on the INSPIRIT. Using a stepwise regression analysis, three variables were found to be helpful in predicting PGS scores. These include READING/EDUCATION (2M),  $b = .40$ , PHYSICAL

HEALTH DURING PREGNANCY – SUPERLATIVELY POSITIVE (6D2),  $b = .43$ , and the total score on the INSPIRIT,  $b = .32$ . The combination of these three variables accounted for 37% of the variance in PGS scores,  $F = 7.53$ ,  $p < .01$ ,  $n = 35$ . The model associated with this regression analysis is illustrated in Table 3 (Appendix L).

Also using a stepwise regression analysis, the sum of the distress-related subscales of the HGRC was examined. The same pool of variables was considered. Four variables were retained in the final equation including WORLD VIEW – APPRECIATING LIFE (4M1),  $b = -.49$ , the number of pregnancy losses,  $b = -.31$ , MEMORIAL GESTURES AND RITUALS – NAME (1J1),  $b = -.50$ , and DESCRIPTION OF CHILD’S LIFE/DEATH/FAMILY’S TIME WITH CHILD – INTERACTION WITH BABY (1D4),  $b = .46$ . These four variables together accounted for 49% of the variance in the sum of the distress-related subscales of the HGRC,  $F = 9.17$ ,  $p < .001$ ,  $n = 35$ . The model associated with this regression analysis is illustrated in Table 4 (Appendix L).

## DISCUSSION

The 49 women who participated in this study are a fairly homogeneous group in many ways. With few exceptions, they are a group of Caucasian women who subscribe to some form of a Christian faith. They all experienced some form of pregnancy loss, and several have experienced more than one loss.

As predicted, a strong and negative relation was found between the total score on the PGS and the distress-related subscales of the HGRC. It appears that these two instruments share a great deal of variance and are possibly measuring similar constructs although they are presented differently. The PGS is presented in the literature as a measure of adjustment with lower scores reflecting poor adjustment and therefore the persistence of grief (Toedter & Lasker, 1988). The HGRC is presented as a measure of grief, which is thought to be more statistically sound than previously developed grief measures (Hogan et al., 2001). Regardless of their presentation, participants' scores on the PGS and the HGRC are highly related. If the HGRC can be presumed to be a sound measure of the grief construct (Gamino et al., 2000; Hogan et al., 2001), then it follows that the PGS is also evaluating a similar construct with similar precision, at least among mothers grieving the loss of an unborn child. Similarly, if the PGS can be presumed to be a valid measure of grief, the construct validity of the HGRC is bolstered by the findings in the current study.

These results strengthen the case for using the PGS as a measure of grief among this clinical group. Future studies may seek to use the PGS to delineate subtypes of grief based on severity or pathological grief reactions (Janssen et al., 1996). It may be possible to develop cut scores which are indicative of certain types of treatment planning needs. Additionally, it may be

possible to develop guidelines for conceptualizing individual clients based on the profile of the subscale scores.

Intercorrelations among the subscales of the PGS and HGRC were examined in order to better understand the similarities and differences between the constructs being measured by these two instruments. The intercorrelations of the subscales within both instruments were all moderate or strong. Additionally, when correlations were examined across the instruments, the relations were moderately negative, which is what would be expected given the inverse nature of the scaling previously described. It appears that all subscales are related within each of these instruments and between these instruments in a manner which supports the validity of both instruments.

It was predicted that scores on the PSS and the ISS would be positively correlated. Only moderate relations were found between these two measures of social support. This finding indicates that these two measures are likely measuring some of the same content. However, they do not appear to be eliciting identical information. One possible reason for this is that the ISS only contains five items. It is possible that if it were expanded, the relation between scores on these measures would be increased. However, the modest proportion of variance shared by these two scales warrants caution in interpreting their results; this is particularly true for the ISS given the paucity of published reports of its use.

Intercorrelations among the subscales of the PSS and the total score on the ISS were examined in order to better understand the similarities and differences between the constructs being measured by these two instruments. Moderate relations were found between the ISS and both subscales of the PSS. However, neither of these relations was as strong as the relation between the ISS and the total score on the PSS. This indicates that the information being elicited

by the ISS is more similar to the information elicited by the PSS as a whole than it is to either the Family or Friends Subscale of the PSS.

It was predicted that the scores on the distress-related subscales of the HGRC and the PSS would be negatively correlated. These two indices were not found to be significantly related. The theoretical basis for this hypothesis was that social support, as measured by the PSS, would facilitate the lessening of symptoms and psychological experiences of grief, as measured by the distress-related subscales of the HGRC. These findings do not support this position.

One possible explanation of these results is that the constructs measured by the HGRC are not, in fact, influenced by the presence or absence of the perception of social support for a given individual. Another possibility is that some specific aspects of grief are influenced by perceived social support, but the effect was lost when the subscales of the HGRC were combined.

Intercorrelations were run among the distress-related subscales of the HGRC and the subscales of the PSS. These relations were, for the most part, not significant and thus consistent with the findings using the overall HGRC. There was one exception to this pattern. There was a negative relation between the Friends Subscale of the PSS and the Blame and Anger Subscale of the HGRC. The most obvious explanation of this finding is that individuals who experience support from persons they consider to be friends experience fewer feelings of blame and anger toward external entities in their lives regarding their pregnancy loss experience. However, other explanations are possible. Perhaps the presence of support from friends allows for such feelings to be more freely expressed and worked through early in the mourning process. If this were the case, it could further be possible that other aspects of grief, as measured by the HGRC, are not as directly influenced by the ability of individuals to express them to supportive friends.

Another question that arises regarding this finding is the absence of a similar relation between the perceived support of family members and lower scores on the Blame and Anger Subscale of the HGRC. It is possible that support of family members is expected or taken for granted by individuals who experience pregnancy loss. Particularly with disenfranchised losses, support of family is more likely than support from friends (Doka, 2002). It would follow then that support from friends, particularly if it were unexpected or viewed as unusual or especially meaningful, could have some effect on the ways in which people process their feelings of blame and anger.

Finally, it is possible that persons who experience higher levels of social support from friends have fewer tendencies toward blame and anger that exist prior to experiencing pregnancy loss. Perhaps there are qualities about individuals who experience higher levels of perceived social support from friends that correlate to a tendency to be able to introspect regarding feelings such as sadness, hopelessness, and despair, and allow for less externalization of these kinds of feelings. It could be this process of externalizing painful internal states that is being measured by the Blame and Anger Subscale of the HGRC.

If a significant amount of social support is perceived from friends by a person experiencing a pregnancy loss, there may be a lessened experience of feelings of blame and anger. In working with individuals experiencing pregnancy loss, an evaluation of the amount of support being received from friends may be clinically useful. Also, it may be helpful for individuals experiencing pregnancy loss to seek out friends who will be supportive and to utilize such supports as they negotiate and adjust to the loss.

It was further hypothesized that there would be a positive correlation between the Difficulty Coping Subscale of the PGS and the PSS. The relation was found to be non-

significant. This finding indicates that aspects of a grief reaction that suggest difficulty coping with the grief are not influenced by or related to levels of perceived social support.

It is possible that the components that contribute to the Difficulty Coping Subscale are internal traits, rather than states, and are not affected by external variables, such as social support.

Further analyses revealed that similar relations were found between the Difficulty Coping Subscale of the PGS and the subscales of the PSS. This indicates that there is not a different relation between the perceived support of friends and family when examining the factors of the Difficulty Coping Subscale. Perceived social support, in general, and more specifically from friends or family, does not appear to be related to a given individual's difficulty coping.

When assessing individuals who have experienced pregnancy loss, the strength and scope of the social support network may not be indicative of the degree to which that individual will struggle in coping with the loss. Although social support may be important in the grieving process for some, even persons with substantial support may exhibit grief reactions within the realm of the Difficulty Coping Subscale. These reactions may be influenced, for better or worse, by other factors, but perceived social support does not appear to be such a factor.

Similarly, it was hypothesized that there would be a positive correlation between the Despair Subscale of the PGS and the PSS. A moderate positive relation was found between the Despair Subscale of the PGS and the total score on the PSS. These results indicate that components of grief that contribute to the Despair Subscale are at least somewhat influenced by the perception of social support. As perceived social support increases, the experience of thoughts and feelings consistent with despair appear to decrease.

Similar relations were found between the Despair Subscale of the PGS and the subscales of the PSS. The finding was somewhat stronger in regards to the Friends Subscale of the PSS than it was for the Family Subscale of the PSS; however, both were significant. Although the perceived support of both friends and family appear to be important in decreasing the experience of despair for individuals who have experienced pregnancy loss, it may be that the perceived support of friends has a slightly greater effect. This interpretation is consistent with the finding discussed above involving the perceived support of friends influencing the level of Blame and Anger reported on the HGRC, whereas the perceived support of family was not related to the same measure.

The most obvious interpretation of these results would be that those individuals who experience greater amounts of support from friends are better able to work through thoughts and feelings associated with the construct of despair. Such individuals may have more opportunities to share and process their feelings. Additionally, their friends may be more accepting of their feelings and may give greater validity to their loss (Doka, 2002).

Another possible interpretation of this finding is that individuals who perceive higher levels of support from their friends may have greater emotional resources, in general, to draw upon when confronted with a significant loss. There may be a greater dispersal of such an individual's dependency needs. As they seek to channel the energy they were giving to the relationship with the unborn child, they encounter many outlets and opportunities to express feelings of love and nurturance (Worden, 2002).

Finally, it is possible that there are traits more commonly found in persons who experience higher levels of social support that serve as protective factors against feelings of despair. These traits may be separate from the ability to perceive social support, but may also

contribute to a tendency to establish and utilize meaningful friendships. If such traits are a factor, they may be similar traits that facilitate the working through of feelings of blame and anger as discussed previously.

As individuals experiencing pregnancy loss seek professional assistance and guidance, it may be important for clinicians to assess the social support network. This finding would suggest that assessing the individual's perceived support from friends would be especially important. Clinicians could encourage their clients to develop their social support network. Effective means of doing this could involve attending support groups or formal group therapy. Another avenue could involve maximizing the support available from family and friends. The clinician could work with the client on expressing emotional needs. In extreme cases, the therapist could also facilitate sessions with the family or a select group of friends. If a substantial and consistent group of supportive friends is in place, individuals experiencing pregnancy loss may be less prone to extreme feelings of despair, which could lead to depression and self-destructive tendencies. These individuals will be better able to draw on supports in working through the grief process.

It was hypothesized that active grief processes would be less in those who had experienced their loss longer ago. The narratives used to test this hypothesis were the participants' responses to the question, "Describe your experience of pregnancy loss." As the participants' narrative accounts of their pregnancy loss experiences were content analyzed, no theme emerged that was specifically related to the concept of active grief as it is presented on the PGS. Participants did not tend to discuss "symptoms" of grief in ways that are similar to more clinical descriptions of the grief phenomenon.

However, three separate themes involving emotional reactions were retained from these narratives. These included EMOTIONAL REACTIONS – SAD/HARD/DEVASTATED (1G8), EMOTIONAL REACTIONS – SHOCK/NUMB (1G9), and EMOTIONAL REACTIONS - ANXIETY (1G16) (Appendix K). None of these themes were shown to be related to the amount of time that had passed since the pregnancy loss experience.

It is possible that such emotional reactions as the ones listed above do not change over time after a loss. While their manifestations and the influence they have on an individual's behavior may change, the psychological experience may remain constant. It is also possible that these feelings do change, but the factors which influence the change are not related to time. Another possibility is that the prompts used in this study did not effectively elicit the emotional experiences of the participants or that the participants were unwilling or unable to share their emotional experiences through this medium.

If emotional reactions to a pregnancy loss truly do not change systematically over time, the implications are great. First, the expectation that such changes “should” occur may be unrealistic. Such expectations fit nicely with a medical model of grief, which conceptualizes grief reactions as problems or difficulties to be worked through. Following this working through or healing process, the medical model would predict an individual to return to their premorbid state (Engel, 1961).

The current findings are not consistent with this construct. Regardless of an individual's level of functioning or adjustment as time passes, there does not appear to be a predictable or systematic change in these three aspects of emotional reactions. It is possible that if these losses have been disenfranchised, women may tend to discuss their emotional reactions long after the loss in an effort to self-legitimize the loss (Doka, 2002). As adjustment occurs over time, factors

other than the psychological experience of emotions must be examined in order to quantify this adjustment phenomenon.

As clinicians work with women who have experienced pregnancy loss, it may be important to keep this finding in mind. As time passes following the loss, women's expressions of their emotional reactions to the loss may not diminish. It appears that this may not be a sign of a lack of coping ability or adjustment. Although this may seem counterintuitive, these findings suggest that clinicians and academicians working in the area of grief should look to other factors such as an individual's functional level in various life domains, attitudes toward and appreciation of life, whether the child is remembered positively, and whether the individual takes an active approach toward the bereavement process as signs of adjustment and coping (Gamino et al., 2000). Also, if an expectation is communicated to these women that their emotional reactions to a loss "should" be diminishing, the loss may be inadvertently disenfranchised via a clinical assumption which, based on the current findings, may be unfounded (Doka, 2002).

It was further hypothesized that as time passes since the pregnancy loss, references to personal meaning of the loss would increase in the narrative accounts of the loss. The content analysis of the narrative accounts of pregnancy loss did not yield any theme approaching the concept of "personal meaning." Discussions of participants' experiences of pregnancy loss tended to include concepts regarding the logistics and process of the loss. More existential or intellectualized presentations of these experiences were rare. However, many narratives were quite complete and many participants appeared quite willing to share their experiences. It is very possible that if a prompt were fashioned to specifically elicit personal meaning, such responses could be obtained.

### Exploratory Findings

A content theme of READING/EDUCATION (2M) emerged in response to the prompt, “What, if anything, helped you cope with your pregnancy loss experience?” Participants who discussed reading materials related to or becoming educated about their situations had significantly higher PGS scores than those participants who did not make mention of this theme. Participants who engaged in activities such as reading books, magazines, and web sites regarding miscarriage and pregnancy loss demonstrated higher levels of adjustment as measured by the PGS. One possible explanation for this finding is that making use of such resources facilitates adjustment. Learning about reasons for the loss and the frequency with which such losses occur may allow some women to feel less alone and to begin to accept their own losses. Another possible explanation of this finding is that people who are likely to show better adjustment are also more likely to seek out reading materials and to become self-educated regarding their experience. One possible trait that facilitates both adjustment and the tendency to become educated may be a tendency to use intellectualization as a defense against painful experiences. Many of the items on the PGS elicit information regarding behaviors, thoughts, and feelings that are associated with intense emotional experiences. Those individuals who are more likely to intellectualize their experiences would be less likely to report such intense emotions. Further, such individuals would be more likely than others to cope with a difficult situation by acquiring knowledge.

Finally, it is possible that persons who obtain reading materials, on their own or from others, may feel more enfranchised. The very idea that pregnancy loss is a topic to warrant becoming educated is a very enfranchising stance. Also, if such materials were provided by supportive friends, in particular, this act of support could facilitate a more general process of adjustment and expression of the individual’s experience.

Regardless of the mechanism, it appears to be helpful for women to have access to educational materials regarding pregnancy loss. First, many people find comfort in understanding what is happening to their own bodies and emotions. Second, the very act of providing such materials can function as a means of legitimizing and enfranchising the loss (Doka, 2002). Finally, as women become educated, the opportunity for them to seek out preventative medical treatment or further support from others who have been through similar situations is presented.

A content theme of TALKING (5R) emerged in response to the prompt, “Do you feel you have ‘adjusted to/resolved/worked through/recovered from’ the pregnancy loss experience? If so, please explain what went into your recovery process and how you were able to recover. If not, please explain what you still need to do in your recovery process.” Participants who discussed talking with other people as part of their recovery process had higher PGS scores than those who did not. This finding speaks more directly to the notion of support and enfranchisement of the loss facilitating adjustment and increases in functioning. Women who talk with other people, whether it is in support groups, to friends, to family, or to others also showed higher levels of adjustment on the PGS. The most straightforward interpretation is that talking to other people facilitates adjustment and the working through of the difficulties associated with a loss (Doka, 2002).

Another possibility is that individuals who are more likely to discuss painful feelings and experiences are also more likely to display higher levels of adjustment to experiences such as pregnancy loss. These individuals may also be more open to receiving support from others, which can be helpful in coping with grief.

Regardless of the mechanism, women who experience pregnancy loss appear to find talking about the loss to be helpful. Clinicians can encourage women to attend support groups or psychotherapy. However, many women reported that simply being able to talk about their experiences with friends, their spouses, and other family members was very helpful. They also discussed feeling that talking about the loss was acceptable and not upsetting to other people in their lives. These feelings support the notion that when the loss was enfranchised enough to be an acceptable topic of conversation, women appear to demonstrate better adjustment to the loss (Doka, 2002).

A content theme of PHYSICAL HEALTH DURING PREGNANCY - SUPERLATIVELY POSITIVE (6D2) emerged in response to the prompt, “Describe your physical health at the time of your pregnancy loss.” Participants who discussed their health as being especially good during their pregnancy had significantly higher PGS scores than those who did not discuss their health in this manner.

It is possible that persons who have, or experience having, especially good physical health also tend to have better mental health and more abundant psychological resources. If this were the case, it would follow that those women who report especially good health during pregnancy might be more likely to cope with the loss of a child more adaptively. However, this explanation of these results seems unlikely.

Women who reported their health as being particularly good during their pregnancies also tended to report behaviors that promoted such good health. It is possible that these women experienced a sense of having done all they could to support their unborn child physically. If this is an accurate representation of these women’s experiences, it could be that when the pregnancy failed, these women were left with fewer questions such as, “What else could I have done?” or

“What could I have done differently?” These women are confident in the knowledge that their physical health and treatment of their bodies was optimum to support the development of a healthy child. Although there could still be many questions and opportunities for self-doubt, this key issue for many women appears to be muted for this group of women. Eliminating the issue of compromised, or even mediocre, physical health may facilitate adjustment to the loss. There is one less area of contention for these women to face (Rando, 1986).

When working with women who have experienced pregnancy loss, it may be helpful to reinforce the notion that the loss is simply not due to anything the woman did or did not do. If the latter interpretation of the relation between self-reported excellent health and better adjustment is correct, adjustment will be improved as women are able to lessen self-blame. Further, the questioning of women who have experienced pregnancy loss regarding certain harmful health practices or the absence of positive ones may be particularly harmful following pregnancy loss. Although such issues may be worthy of discussion prior to future pregnancies, they may complicate the grieving process and should be approached with great care.

Fourth, a content theme of FAMILY – LIVING CHILDREN (7A5) emerged in response to the prompt, “Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word ‘family’.” Participants who discussed their other living children had significantly higher PGS scores than those who did not discuss their other living children

As higher scores on the PGS indicate better adjustment, it appears that participants who include their living children as members of their families are reporting better adjustment following pregnancy loss. It is possible that women who have other children, whether prior to or following a pregnancy loss, are better able to cope with the loss. Although they have had an

unsuccessful pregnancy, they have had the opportunity to fulfill the role of “mother” (Rando, 1986).

If the presence of other living children is a protective factor in the grief process, it can be an important factor to consider clinically. Women who present for treatment with issues surrounding bereavement regarding a pregnancy loss may have a more positive prognosis if they have living children.

A content theme of WORLD VIEW - APPRECIATING LIFE (4M1) emerged in response to the prompt, “Describe any ways in which you feel you have changed as a result of your experience of pregnancy loss.” Participants who reported a new-found sense of appreciating life had significantly lower scores on the distress-related subscales of the HGRC. This finding is particularly interesting in terms of answering questions surrounding the adaptive process following a loss.

Following a loss, people must make adjustments, both emotionally and physically. Energy previously directed toward the lost individual must be redirected, and the survivor’s relationship with the lost person must be reconceptualized (Worden, 2002). This adjustment process has been difficult to measure. It appears that one important variable in this process of adjustment may be a revised approach to appreciating life. People who discuss this concept in their narratives may be choosing to focus on what is positive in their lives, even the “little things.”

The etiology of this perspective is unclear. One possibility is that these individuals tended to be more positive prior to their loss experience. Another possibility is that through receiving support and validation, they were able to move through their grief and allow themselves to reincorporate more positive emotions and experiences into their lives.

Clinically, this concept is difficult. Clients who move toward a place of noticing and appreciating what is positive in their lives may have a better prognosis than those who do not. However, encouraging this line of thinking could be misconstrued as an invalidation of the person's loss. Likely, the most appropriate course would be for clinicians to encourage this type of perspective with the client leading the way.

A content theme of FAMILY – LIVING CHILDREN (7A5) emerged in response to the prompt, “Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word ‘family’.” Participants who discussed their other living children had significantly lower scores on the distress-related subscales of the HGRC than those who did not discuss their other living children.

Additionally, the sum of the distress-related subscales of the HGRC was found to be significantly negatively related to the participants' number of surviving children. Further, the Personal Growth subscale of the HGRC was found to be positively related to the participants' number of surviving children.

As discussed previously, a similar relation was found with the PGS. Again, on the HGRC, women who report other living children report less grief than those who do not discuss other living children. The data are congruent whether this variable appears in response to the open-ended prompt regarding the family or as it was reported on the demographic questionnaire. These women may be better able to work through their grief with an understanding that they are capable of having children. If medical issues contributed to the pregnancy loss, it is possible that women who have successfully bourn children in the past or since the loss are better able to attribute the loss to circumstances outside their own bodies.

In addition a content theme of EMOTIONAL REACTIONS - ANXIETY (4Z5) emerged in response to the prompt, “Describe any ways in which you feel you have changed as a result of your experience of pregnancy loss.” There was a significant and inverse relation between the frequency of statements regarding anxiety in the narratives and the total score on the PGS. Because the distribution of EMOTIONAL REACTIONS – SAD/HARD/DEVISTATED was somewhat skewed, the variable was dichotomized into presence vs absence. A one-way ANOVA was then conducted using EMOTIONAL REACTIONS – SAD/HARD/DEVISTATED as the independent variable and PGS scores as the dependent variable. Participants who discussed anxiety in their narratives had significantly lower PGS scores than those who did not. That is, participants who discuss feelings of anxiety displayed more aspects of grief than those who did not. Given that some symptoms related to anxiety appear on the PGS, this finding is not surprising. However, this finding does indicate that, at least to some extent, participants may be reporting in narrative form similar information to what is being elicited in the more formal questionnaire.

If this content theme is truly reflective of people feeling more anxious since the loss, this finding may have important implications both in research and clinically. In terms of research, increased anxiety may be predictive of poorer adjustment during the grief process. Also, increased anxiety may be a risk factor for subsequent complicated bereavement (Janssen et al., 1996). Clinically, there may be a point at which increased anxiety should become a primary focus of treatment. It is common for feelings of anxiety to be present soon after a loss. However, there may be a point at which the anxiety may need to be treated in order to facilitate coping and adjustment. This issue must be approached with caution. As long as the grief process is proceeding, it may be in the ultimate best interest of the client to facilitate the expression and

exploration of anxiety. Only when it is clearly excessively disruptive would interventions aimed specifically at reducing anxiety (e.g., anxiolytic medications or desensitization techniques) be indicated.

Both the PGS and the sum of the distress-related subscales on the HGRC were found to be significantly related to the amount of time that had passed since the index loss. PGS scores were positively related to time since the loss, and the sum of the distress-related subscales of the HGRC was inversely related to the amount of time since the occurrence of the index loss. However, when two outliers were removed from the analysis, the effect lessened dramatically. The results were nonsignificant, and the amount of time since the index loss accounted for less than 4% of the variance for either measure. The two outliers who were removed had losses considerably longer ago than the rest of the sample.

Initially, this finding follows that of traditional literature on grief with the notion that, with time, there is some sort of adjustment to losses, lessening the symptoms of grief. However, the relation demonstrated here is moderate at best. Although the passage of time allows for the possibility of increasing adjustment and decreasing the experience of grief symptoms, the passage of time alone is certainly not a strong determinant of a person's movement through loss experiences. Thus, time does not necessarily heal all wounds as has frequently been professed in our culture. Those who study grief and counsel the bereaved have been aware of this for some time. The passage of time is a necessary, but not sufficient, condition for successful adaptation following a troubling loss.

A content theme of WORLD VIEW - APPRECIATING LIFE (4M1) emerged in response to the prompt, "Describe any ways in which you feel you have changed as a result of

your experience of pregnancy loss.” Participants who discussed a new-found sense of an appreciation for life had significantly higher scores on the PSS than those who did not.

There are multiple possible interpretations of this finding. First, it is possible that social support functions as a catalyst for individuals who experience pregnancy loss to reorient their approach to their world. Individuals who feel supported are able to find new ways of appreciating life despite their loss.

Also, a willingness to appreciate life in the face of negative experiences may be attractive to others. People in the social networks of individuals who experience loss may be more willing to support them or willing to give additional support in response to the bereaved individual’s positive approach to the situation.

Finally, individuals who perceive greater amounts of social support and who find new ways to appreciate life may possess some other, as yet unidentified characteristic that differentiates them from individuals who do not make mention of finding a new way to appreciate life and experience less support. Given the relation between these two variables, further research must elucidate the causal direction and/or other factors that might account for the relation.

In terms of further research, the perspective of appreciating life following a loss may be an important construct to consider as a possible protective or recovery factor. This approach implies a kind of optimism, which may be vital to successful adaptation to a loss.

Clinically, encouraging this perspective in bereaved individuals may be helpful. Rather than being overly concerned that such thinking is an indication of some kind of denial, it may be especially helpful to validate an individual’s sense that there are still positive things in life. It may be even more important therapeutically to convey to the bereaved individual that it is

allowable to experience positive things and to enjoy them following a loss. Many people struggle with guilt regarding enjoying life following significant losses, particularly of children (Rando, 1986).

A content theme of FAMILY – SPOUSE/SIGNIFICANT OTHER (7A2) emerged in response to the prompt, “Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word ‘family’.”

Participants who discussed their spouses or significant others had significantly higher scores on the PSS than those who did not discuss their spouses or significant others. Additionally, a content theme of FAMILY – LIVING CHILDREN (7A5) emerged in response to the same prompt. Participants who discussed their other living children had significantly higher scores on the PSS than those who did not discuss their other living children. Further, the PSS was found to be significantly positively related to the participants’ number of surviving children.

It appears that participants’ perceive increased levels of social support who report the support of a spouse or significant other and the presence of living children. It is not surprising that the presence of family members related to increased perceptions of social support. However, it is noteworthy that other first-degree relatives such as parents and siblings, which were content themes in the coding manual, were not significantly related to perceived social support. It may be that women who experience pregnancy loss benefit from support from people in their lives who view them in the roles of “woman” and “mother.” While support in general appears to be helpful as people work through grief, having the roles of “woman” and “mother” validated in the situation of pregnancy loss may be a key element to the adaptation to the loss of an unborn child.

As previously described, correlational analyses were conducted to examine the relations between the two social support measures and content themes. Separate sets of correlations were calculated for the PSS and ISS. One of these 10 analyses yielded significant results.

A content theme of EMOTIONAL REACTIONS - SAD/HARD/DEVISTATED (5D4) emerged in response to the prompt, “Do you feel you have ‘adjusted to/resolved/worked through/recovered from’ the pregnancy loss experience? If so, please explain what went into your recovery process and how you were able to recover. If not, please explain what you still need to do in your recovery process.” A positive relation was found between the number of times participants wrote about feelings of sadness and participants’ total scores on the ISS. Because the distribution of EMOTIONAL REACTIONS – SAD/HARD/DEVISTATED was skewed, the variable was dichotomized, and a one-way ANOVA was conducted using the total score on the ISS as the dependent variable and EMOTIONAL REACTIONS – SAD/HARD/DEVISTATED as the independent variable. Participants who wrote about feelings of sadness had significantly higher scores on the ISS than those who did not.

Again a question that must be asked involves the order in which the circumstances being measured by these two variables occurred. It is possible that some individuals experienced more sadness than others because they were feeling unsupported, isolated, or misunderstood. These individuals may have felt especially disenfranchised in terms of their loss (Doka, 2002). It is also possible that some individuals are not as proficient as others at making use of or recognizing social support, even when it is present. These individuals may experience more feelings of sadness than individuals who are able to recognize and utilize their social networks.

However, this finding could also be accounted for by the relative ease or difficulty perceived by the potential supporter as involved in providing social support. It may be that

potential supporters find it difficult to be helpful to those who need it most: bereaved persons experiencing and expressing extreme sadness. It is possible that members of the bereaved person's social network may be reluctant or sparing in their offerings of support if they perceive the grieving individual to be especially saddened or devastated. Particularly related to the loss of a child, some people withdraw their support of grieving parents due to their own anxiety regarding the possibility that the same thing could happen to them (Parkes, 1972).

Finally, there may be something about the way that individuals who report more feelings of sadness and devastation are expressing their feelings and needs that can influence their social networks. If pregnancy losses tend to be disenfranchised, and if persons who tend to report feelings of sadness and devastation are also more withdrawn or less able to share their needs, members of the social network may not be as likely to recognize the need for support. In these situations, the social network may be unresponsive or less responsive than it might otherwise be if the individual were expressing other feelings.

As clinicians work with individuals who have experienced pregnancy losses, they should be aware that those individuals who focus on their feelings of sadness may be receiving limited social support. Indeed, the support they are receiving may be less than they have come to expect from their social networks. It will be especially important to validate these feelings and to assist these individuals in expressing their emotional needs in ways that are likely to maximize support from friends and family.

Both the ISS and PSS were found to be significantly related to the participants' current age. A positive relation was found between total scores on the PSS and current age of the participant. Additionally, a positive relation was found between total scores on the ISS and the current age of the participant.

In interpreting these findings, it is important to note that no significant relations were found between the time since the loss and either of the measures of social support. Therefore, although it may be tempting to view these positive relations between age and social support as being related to how long ago the loss occurred, such an interpretation assumes findings not demonstrated in the current sample.

One possible interpretation of this finding involves the concept of maturity. As people age into their 30s and 40s, it is possible that, as a group, they perceive more support from friends and family. People in this age group may be better able to perceive support when it is provided by their friends and family. Also as people age, their relationships with family members tend to move toward mutuality, particularly with parents, grandparents, and other older adults, even when the relationships were more vertical during childhood.

Also, people tend to establish and maintain friendships with other people of fairly similar ages. It is possible that as cohorts get older, they become more supportive of pregnancy loss experiences. This phenomenon may be influenced by members of the social network having more children of their own as the cohort ages. As people become parents themselves, they may be better able to grasp and empathize with peers who lose children through pregnancy loss.

In working with individuals who have experienced pregnancy loss, it may be especially important to investigate the social support available to younger women. These findings indicate that older women are more likely to receive greater amounts of social support. However, younger women may be somewhat deprived in this area. In some cases, it may even be helpful to educate the client and members of the social network as to the significance, legitimacy, and expected grief reaction associated with pregnancy losses.

Separate regression analyses were conducted in an attempt to predict scores on the HGRC and the PGS. Possible predictor variables included content categories established and retained through the content analysis, participant's age, length of the index pregnancy loss, time since the loss, number of total losses, the PSS total score, the ISS total score, and the score on the INSPIRIT.

Using a stepwise regression analysis, three variables were found to be helpful in predicting PGS scores. These include READING/EDUCATION (2M), PHYSICAL HEALTH DURING PREGNANCY – SUPERLATIVELY POSITIVE (6D2), and the total score on the INSPIRIT. The combination of these three variables accounted for 37% of the variance of PGS scores.

Based on this model, the participants in the sample who would demonstrate the highest levels of adjustment, as per their PGS scores, would have a particular profile. They would have obtained education regarding their pregnancy loss experience. They would report especially positive health during their pregnancy and at the time of the loss. Finally, they would report higher levels of intrinsic spirituality.

Conversely, participants in this sample who would demonstrate the least adjustment and higher levels of grief would also have a certain profile. They would not have become educated regarding their pregnancy loss experience. They would not have reported especially good health during their pregnancies, although their health still could have been average. Finally, they would have lower levels of current intrinsic spirituality. Of these three factors, two appear to serve as protective factors regarding grief following pregnancy loss. Those individuals who take very good care of themselves physically during pregnancy loss appear to adjust better following the loss. Also, those people who include high levels of spirituality in their lives currently appear to

have adjusted better following pregnancy loss. The current study did not assess the timeframe of the onset of intrinsic spirituality, so it is impossible to know if these participants developed spirituality prior to or since the loss. In regards to physical health, this circumstance existed prior to and during the pregnancy (according to how the question was framed). In terms of intrinsic spirituality, if the level is low following a loss, exploring the role of spirituality in the client's life could be encouraged through therapy. However, using spirituality as an intervention is likely to be inappropriate unless it is initiated by the client.

On the other hand, the concept of educating people who have experienced pregnancy loss following the experience lends itself nicely to intervention. It appears that providing clients with education and reading materials regarding the nature, implications, and ramifications of pregnancy loss could be invaluable in facilitating adjustment to the loss. Such education could be done via support groups, books, magazines, pamphlets, and/or websites.

Also using a stepwise regression analysis, the sum of the distress-related subscales of the HGRC was examined. The same pool of variables was considered. Four variables were retained in the final equation including WORLD VIEW – APPRECIATING LIFE (4M1), the number of pregnancy losses, MEMORIAL GESTURES AND RITUALS – NAME (1J1), and DESCRIPTION OF CHILD'S LIFE/DEATH/FAMILY'S TIME WITH CHILD – INTERACTION WITH BABY (1D4). These four variables together accounted for 49% of the variance in the sum of the distress-related subscales of the HGRC.

Of the women in the sample, those reporting the highest levels of distress would have a particular profile. These women would not have reported an appreciation for life. They would have likely only had one pregnancy loss. They would not have named their lost children. Finally, they would have discussed their interactions with their child at length in the narrative. The

women in the sample demonstrating the least grief on the HGRC would also have a particular profile. These women would report an appreciation for their lives despite their loss. They would likely have had multiple pregnancy loss experiences. They would have named their lost children. Finally, they would discuss their interactions with their deceased children little or not at all in the narrative.

In terms of developing an appreciation for life following pregnancy loss, this appears to be a very individual process. Although it could be encouraged in therapy or support groups, it is a factor which can not be manufactured for an individual. Also, initiating such a process may appear to be invalidating if not done with great care.

The number of pregnancy losses experienced by a given individual appears to influence the amount of grief they experience. It is possible that as people have second and third losses, they reach a point at which they must find ways of coping in order to survive. It is not likely that the grief is less. Rather, it is likely that the grief reaction is compounded and mobilizing adaptive resources. People must find ways of coping and decreasing their distress in order to move through their lives. It can be helpful for clinicians to be aware that with multiple losses, the ultimate prognosis may be improved once the individual begins to find effective ways of coping with the grief. Of course, it is possible that some people experience far more grief for extended periods of time following a second or third loss. It is possible that such individuals were too distressed to participate in a study such as this one.

The finding regarding naming the lost child is especially significant for two reasons. First, giving a lost unborn child a name greatly increases the legitimacy and identity of the child. The mother then has a way of referring to the child, which can facilitate her creation of her

relationship with the child. The relationship must be established and understood before it can be reinvented, following the loss, in ways that facilitate adjustment (Worden, 2002).

Second, naming the child can be accomplished via therapeutic intervention for individuals who are struggling excessively with a pregnancy loss experience. Even if the child has been deceased for a long period of time, he/she can be named at any time. Clinicians could demonstrate great support for their clients in assisting with some type of ritual in which the client names the deceased child and begins to use that name to build an identity for the child. Once the identity and existence of the child becomes more solidified, the individual can then begin to explore how to incorporate the memory of this child into their lives in ways that do not exacerbate their distress.

#### Limitations of the Study

As with any research, this project had limitations and flaws which, if this project were to be replicated, should be improved or eliminated. Regarding the demographics of the sample, there were several characteristics which were less than ideal. A larger sample would have improved statistical power as well as representativeness. There were some statistical tests that may have been significant with a slightly larger sample. However, many important findings emerged even with a smaller than ideal sample.

Also, this sample was quite homogeneous regarding ethnic background and religious affiliation. On one hand, many of the findings can be said to be directly applicable to Caucasian Christian females. However, they might not generalize to other women.

A further complication of the sample composition are some selection factors, which may have influenced some of the findings. The women who participated in this study were recruited through support groups. They are women who sought out support, and, in some cases have

become active providers of support. One finding that appears to be influenced by these selection factors is the relationship between reported levels of grief and the number of losses the participant has experienced. The notion that women who had more pregnancy losses would experience less grief than women who have had fewer losses seems counterintuitive. It may be that women in this sample who have had multiple losses also tend to be advocates for pregnancy loss and active among this population in a caregiving role.

It would be quite interesting to compare the experiences of women from different ethnic backgrounds. It would be further interesting to compare the experiences of women with different perspectives on religion, including women for whom religion is not an important factor.

The difficulty in participant recruitment also may have curtailed the representativeness of the sample. Due to the nature of collecting data through the mail, several participants were lost simply because they did not return the protocol. Also, due to changes in the protocol during the study and due to a clerical error on the part of the primary investigator, multiple packets were sent to several of the early participants. Because of the multiple mailings, several participants only completed partial protocols.

#### Future Research

There were many findings from this project that are worthy of further investigation. However, the main motivation for this study was to investigate the nature of grief reactions following pregnancy loss. In particular, the aspect of the disenfranchisement of grief experienced by people who lose children via miscarriage, stillbirth, or neonatal death was of primary interest. The results of this study established that people who experienced pregnancy loss responded to two measures intended to measure grief in similar ways. Additionally, participants shared, through narratives, that the experience of pregnancy loss was very significant and an important

loss in their lives. However, the notion of disenfranchised grief implies a comparison of certain losses to other losses. It would be important to determine how the grief of individuals who experience pregnancy loss is similar to and different from the grief of other individuals who have lost children. There is an extensive literature regarding the nature and severity of grief experienced by parents who have lost children of all ages (Rando, 1986). In order to investigate this research question, participants who have lost children of all ages, including prior to birth, would be interviewed. They would be asked to complete the HGRC in order to evaluate the level of their grief-related distress. The Personal Growth Subscale of the HGRC can also be used as a measure of current adjustment. The amount of time since the loss could be used as a covariate in order to compare the levels of grief across participants. Once the variance of the sum of the distress-related subscales of the HGRC due to the amount of time since the loss has been accounted for, the sum of the distress-related subscales on the HGRC can be correlated with the age of the deceased child. Both variables could be construed as continuous so that a Pearson's Product Moment correlation could be utilized. However, if the data do not lend themselves to such analyses, the deceased children could be grouped by age in order to form a categorical variable, which could be used as the independent variable in a one-way ANOVA. The sum of the distress-related subscales on the HGRC would be used as the dependent variable.

It is likely that none of these statistical analyses would yield significant results. If this hypothesis were bourn out by the data, it would demonstrate quantitatively that the grief experienced by parents who lose children, regardless of their age, is similar.

If such a study were conducted, it would be helpful to include a large sample to ensure adequate power and representativeness. Other factors could be evaluated including social support, as measured by the PSS. If the levels of grief reported on the distress-related subscales

of the HGRC were similar regardless of the age of the deceased child, the level of perceived social support across the deceased children's ages could be examined. In theory, if the grief experienced by parents who lose children to pregnancy loss is truly disenfranchised, the level of perceived social support would be expected to be less than that experienced by parents of children who died well after birth.

Finally, participants could be asked, in interview form, about the variables which emerged in the present study as important regarding grief following a pregnancy loss. These variables could be further elaborated and explored. Ultimately, it would be helpful to establish a measure of adjustment to the death of a child and other losses. The early stages of such measurement development involve evaluating individuals who have the desired characteristic. In this case, the desired characteristic is having experienced the death of a child. As these losses continue to be explored and understood, the field will be better able to identify the variables that contribute to an adjustment to such losses. Such adjustment allows the individual to continue to honor the memory of the deceased child while finding ways to continue in their own lives such that they are not consumed and driven by their grief. The relationship with the deceased child must change, but it need not disappear, and life need not cease.

APPENDIX A  
RECRUITMENT ADVERTISEMENT

## **Will You Help?**

Your help is needed. Christen Clower, a graduate student in clinical psychology at the University of North Texas, is conducting a survey of people's reactions to the experience of pregnancy loss. She would like to contact mothers and fathers who have lost children due to ectopic pregnancy, miscarriage, stillbirth, or neonatal death.

If you would be willing to help Ms. Clower with this project, please contact her via correspondence, telephone, or email using the contact information below. She would then mail you a packet of information. This packet will include some materials for you to complete.

Ms. Clower is very excited about this project. She is hoping to gain a better understanding of the experience of pregnancy loss, so that she can share it with the psychological community. A better understanding of pregnancy loss will facilitate an increase in public awareness of pregnancy loss and public education on this topic. Additionally, Miss Clower intends for this project to lead to more appropriate services for families who experience pregnancy loss.

Christen Clower  
Department of Psychology  
P.O. Box 311280  
Denton, Texas 76203  
(940)206-5231  
[ceclower@gte.net](mailto:ceclower@gte.net)

APPENDIX B  
HOGAN GRIEF REACTION CHECKLIST

## Hogan Grief Reaction Checklist

(used with permission)

This questionnaire consists of a list of thoughts and feelings that you may have had since your child died. Please read each statement carefully, and choose the number that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement that best describes you. Please do not skip any items.

1 = Does not describe me at all
2 = Does not quite describe me
3 = Describes me fairly well
4 = Describes me well
5 = Describes me very well

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. My hopes are shattered.   | 1 | 2 | 3 | 4 | 5 |
| 2. I have learned to cope better with life.                                | 1 | 2 | 3 | 4 | 5 |
| 3. I have little control over my sadness.                                  | 1 | 2 | 3 | 4 | 5 |
| 4. I worry excessively.  | 1 | 2 | 3 | 4 | 5 |
| 5. I frequently feel bitter.   | 1 | 2 | 3 | 4 | 5 |
| 6. I feel like I am in shock.  | 1 | 2 | 3 | 4 | 5 |
| 7. Sometimes my heart beats faster than it normally does<br>for no reason. | 1 | 2 | 3 | 4 | 5 |
| 8. I am resentful.   | 1 | 2 | 3 | 4 | 5 |
| 9. I am preoccupied with feeling worthless.                                | 1 | 2 | 3 | 4 | 5 |
| 10. I feel as though I am a better person.                                 | 1 | 2 | 3 | 4 | 5 |
| 11. I believe I should have died and he or she should have lived.          | 1 | 2 | 3 | 4 | 5 |
| 12. I have a better outlook on life.                                       | 1 | 2 | 3 | 4 | 5 |

<p>1 = Does not describe me at all</p> <p>2 = Does not quite describe me</p> <p>3 = Describes me fairly well</p> <p>4 = Describes me well</p> <p>5 = Describes me very well</p>
---

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 13. I often have headaches.                                | 1 | 2 | 3 | 4 | 5 |
| 14. I feel a heaviness in my heart.                        | 1 | 2 | 3 | 4 | 5 |
| 15. I feel revengeful.                                     | 1 | 2 | 3 | 4 | 5 |
| 16. I have burning in my stomach.                          | 1 | 2 | 3 | 4 | 5 |
| 17. I want to die to be with him or her.                   | 1 | 2 | 3 | 4 | 5 |
| 18. I frequently have muscle tension.                      | 1 | 2 | 3 | 4 | 5 |
| 19. I have more compassion for others.                     | 1 | 2 | 3 | 4 | 5 |
| 20. I forget things easily, e.g. names, telephone numbers. | 1 | 2 | 3 | 4 | 5 |
| 21. I feel shaky.  | 1 | 2 | 3 | 4 | 5 |
| 22. I am confused about who I am.                          | 1 | 2 | 3 | 4 | 5 |
| 23. I have lost my confidence.                             | 1 | 2 | 3 | 4 | 5 |
| 24. I am stronger because of the grief I have experienced. | 1 | 2 | 3 | 4 | 5 |
| 25. I don't believe I will ever be happy again.            | 1 | 2 | 3 | 4 | 5 |
| 26. I have difficulty remembering things from the past.    | 1 | 2 | 3 | 4 | 5 |
| 27. I frequently feel frightened.                          | 1 | 2 | 3 | 4 | 5 |
| 28. I feel unable to cope.                                 | 1 | 2 | 3 | 4 | 5 |
| 29. I agonize over his or her death.                       | 1 | 2 | 3 | 4 | 5 |
| 30. I am a more forgiving person.                          | 1 | 2 | 3 | 4 | 5 |
| 31. I have panic attacks over nothing                      | 1 | 2 | 3 | 4 | 5 |

<p>1 = Does not describe me at all</p> <p>2 = Does not quite describe me</p> <p>3 = Describes me fairly well</p> <p>4 = Describes me well</p> <p>5 = Describes me very well</p>
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- 32. I have difficulty concentrating. 1 2 3 4 5
- 33. I feel like I am walking in my sleep. 1 2 3 4 5
- 34. I have shortness of breath. 1 2 3 4 5
- 35. I avoid tenderness. 1 2 3 4 5
- 36. I am more tolerant of myself. 1 2 3 4 5
- 37. I have hostile feelings. 1 2 3 4 5
- 38. I am experiencing periods of dizziness. 1 2 3 4 5
- 39. I have difficulty learning new things. 1 2 3 4 5
- 40. I have difficulty accepting the permanence of the death. 1 2 3 4 5
- 41. I am more tolerant of others. 1 2 3 4 5
- 42. I blame others. 1 2 3 4 5
- 43. I feel like I don't know myself. 1 2 3 4 5
- 44. I am frequently fatigued. 1 2 3 4 5
- 45. I have hope for the future. 1 2 3 4 5
- 46. I have difficulty with abstract thinking. 1 2 3 4 5
- 47. I feel hopeless. 1 2 3 4 5
- 48. I want to harm others. 1 2 3 4 5
- 49. I have difficulty remembering new information. 1 2 3 4 5
- 50. I feel sick more often. 1 2 3 4 5

1 = Does not describe me at all  
2 = Does not quite describe me  
3 = Describes me fairly well  
4 = Describes me well  
5 = Describes me very well

51. I reached a turning point where I began to let go of some of my grief. 1 2 3 4 5
52. I often have back pain. 1 2 3 4 5
53. I am afraid that I will lose control. 1 2 3 4 5
54. I feel detached from others. 1 2 3 4 5
55. I frequently cry. 1 2 3 4 5
56. I startle easily. 1 2 3 4 5
57. Tasks seem insurmountable. 1 2 3 4 5
58. I get angry often. 1 2 3 4 5
59. I ache with loneliness. 1 2 3 4 5
60. I am having more good days than bad. 1 2 3 4 5
61. I care more deeply for others. 1 2 3 4 5

APPENDIX C  
PERINATAL GRIEF SCALE  
33 ITEM SHORT VERSION

PERINATAL GRIEF SCALE

33 Item Short Version

(used with permission)

Lori J. Toedter, Ph.D., Moravian College

and

Judith N. Lasker, Ph.D., Lehigh University

PRESENT THOUGHTS AND FEELINGS ABOUT YOUR LOSS

Each of the items is a statement of thoughts and feelings which some people have concerning a loss such as yours. There are no right or wrong responses to these statements. For each item, circle the number which best indicated the extent to which you agree or disagree with it at the present time. If you are not certain, use the "neither" category. Please try to use this category only when you truly have no opinion.

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree Nor Disagree
4 = Agree
5 = Strongly Agree

- |   |           |
|---|-----------|
| 1. I feel depressed.                                | 1 2 3 4 5 |
| 2. I find it hard to get along with certain people. | 1 2 3 4 5 |
| 3. I feel empty inside.                             | 1 2 3 4 5 |

1 = Strongly Disagree  
2 = Disagree  
3 = Neither Agree Nor Disagree  
4 = Agree  
5 = Strongly Agree

- |  |           |
|--|-----------|
| 4. I can't keep up with my normal activities.                  | 1 2 3 4 5 |
| 5. I feel a need to talk about the baby.                       | 1 2 3 4 5 |
| 6. I am grieving for the baby.                                 | 1 2 3 4 5 |
| 7. I am frightened.  | 1 2 3 4 5 |
| 8. I have considered suicide since the loss.                   | 1 2 3 4 5 |
| 9. I take medicine for my nerves.                              | 1 2 3 4 5 |
| 10. I very much miss the baby.                                 | 1 2 3 4 5 |
| 11. I feel I have adjusted well to the loss.                   | 1 2 3 4 5 |
| 12. It is painful to recall memories of the loss.              | 1 2 3 4 5 |
| 13. I act upset when I think about the baby.                   | 1 2 3 4 5 |
| 14. I cry when I think about him/her.                          | 1 2 3 4 5 |
| 15. I feel guilty when I think about the baby.                 | 1 2 3 4 5 |
| 16. I feel physically ill when I think about the baby.         | 1 2 3 4 5 |
| 17. I feel unprotected in a dangerous world since he/she died. | 1 2 3 4 5 |
| 18. I try to laugh, but nothing seems funny anymore.           | 1 2 3 4 5 |
| 19. Time passes so slowly since the baby died.                 | 1 2 3 4 5 |
| 20. The best part of me died with the baby.                    | 1 2 3 4 5 |
| 21. I have let people down since the baby died.                | 1 2 3 4 5 |
| 22. I feel worthless since he/she died.                        | 1 2 3 4 5 |

<p>1 = Strongly Disagree</p> <p>2 = Disagree</p> <p>3 = Neither Agree Nor Disagree</p> <p>4 = Agree</p> <p>5 = Strongly Agree</p>
---

- 23. I blame myself for the baby's death. 1 2 3 4 5
- 24. I get cross at my friends and relatives more than I should. 1 2 3 4 5
- 25. Sometimes I feel like I need a professional counselor  
to help me get my life back together again. 1 2 3 4 5
- 26. I feel as though I'm just existing and not really living  
since he/she died.. 1 2 3 4 5
- 27. I feel so lonely since he/she died. 1 2 3 4 5
- 28. I feel somewhat apart and remote, even among friends. 1 2 3 4 5
- 29. It's safer not to love. 1 2 3 4 5
- 30. I find it difficult to make decisions since the baby died. 1 2 3 4 5
- 31. I worry about what my future will be like. 1 2 3 4 5
- 32. Being a bereaved parent means being a "Second Class Citizen". 1 2 3 4 5
- 33. It feels great to be alive. 1 2 3 4 5

APPENDIX D  
PERCEIVED SOCIAL SUPPORT SCALE

Perceived Social Support Scale

Mary E. Procidano and Kenneth Heller

(used with permission)

Family Subscale

The following statements refer to feelings and experiences that occur to most people at one time or another in their relationships with their families. For each statement there are three possible answers: Yes, No, Don't Know. Please circle the answer you choose for each item.

- |     |    |            |   |
|-----|----|------------|---|
| Yes | No | Don't Know | 1. My family gives me the moral support I need.   |
| Yes | No | Don't Know | 2. I get good ideas about how to do things or make things from my family.   |
| Yes | No | Don't Know | 3. Most other people are closer to their family than I am.  |
| Yes | No | Don't Know | 4. When I confide in the members of my family who are closest to me, I get the idea that it makes them uncomfortable. |
| Yes | No | Don't Know | 5. My family enjoys hearing about what I think.   |
| Yes | No | Don't Know | 6. Members of my family share many of my interests.   |
| Yes | No | Don't Know | 7. Certain members of my family come to me when they have problems or need advice.                                    |
| Yes | No | Don't Know | 8. I rely on my family for emotional support.   |
| Yes | No | Don't Know | 9. There is a member of my family I could go to if I were just feeling down, without feeling funny about it later.    |
| Yes | No | Don't Know | 10. My family and I are very open about what we think about things.   |

- Yes No Don't Know 11. My family is sensitive about my personal needs.
- Yes No Don't Know 12. Members of my family come to me for emotional support.
- Yes No Don't Know 13. Members of my family are good at helping me solve problems.
- Yes No Don't Know 14. I have a deep sharing relationship with a number of members of my family.
- Yes No Don't Know 15. Members of my family get good ideas about how to do things or make things from me.
- Yes No Don't Know 16. When I confide in members of my family, it makes me uncomfortable.
- Yes No Don't Know 17. Members of my family seek me out for companionship.
- Yes No Don't Know 18. I think that my family feels that I'm good at helping them solve problems.
- Yes No Don't Know 19. Other people's family relationships are more intimate than mine.
- Yes No Don't Know 20. I wish my family were much different.

#### Friends Subscale

The following statements refer to feelings and experiences that occur to most people at one time or another in their relationships with friends. For each statement there are three possible answers: Yes, No, Don't Know. Please circle the answer you choose for each item.

- |     |    |            |  |
|-----|----|------------|--|
| Yes | No | Don't Know | 1. My friends give me the moral support I need.  |
| Yes | No | Don't Know | 2. Most other people are closer to their friends than I am.  |
| Yes | No | Don't Know | 3. My friends enjoy hearing about what I think.  |
| Yes | No | Don't Know | 4. Certain friends come to me when they<br>have problems or need advice.                                 |
| Yes | No | Don't Know | 5. I rely on my friends for emotional support.   |
| Yes | No | Don't Know | 6. If I felt that one more of my friends were upset with<br>me, I'd just keep it to myself.              |
| Yes | No | Don't Know | 7. I feel that I'm on the fringe in my circle of friends.  |
| Yes | No | Don't Know | 8. There is a friend I could go to if I were just feeling<br>down, without feeling funny about it later. |
| Yes | No | Don't Know | 9. My friends and I are very open about what we think<br>about things.                                   |
| Yes | No | Don't Know | 10. My friends are sensitive to my personal needs.   |
| Yes | No | Don't Know | 11. My friends come to me for emotional support.   |
| Yes | No | Don't Know | 12. My friends are good at helping me solve problems.  |
| Yes | No | Don't Know | 13. I have a deep sharing relationship with a number of<br>friends.                                      |
| Yes | No | Don't Know | 14. My friends get good ideas about how to do things or<br>make things from me.                          |
| Yes | No | Don't Know | 15. When I confide in friends, it makes me feel<br>uncomfortable.  |
| Yes | No | Don't Know | 16. My friends seek me out for companionship.  |

Yes No Don't Know

17. I think that my friends feel that I'm good at helping them solve problems.

Yes No Don't Know

18. Other people's friend relationships are more intimate than mine.

Yes No Don't Know

19. I've recently gotten a good idea about how to do something from a friend.

Yes No Don't Know

20. I wish my friends were much different.

APPENDIX E  
INVENTORY OF SOCIAL SUPPORT

## INVENTORY OF SOCIAL SUPPORT

(used with permission)

Hogan, N. & Schmidt, L. 1999

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes the way you have been feeling during the past two weeks, including today. Please select the number that best describes YOU and put that number in the blank provided.

1 = Does not describe me at all

2 = Does not quite describe me

3 = Describes me fairly well

4 = Describes me well

5 = Describes me very well

- \_\_\_ 1. People take the time to listen to how I feel.
- \_\_\_ 2. I can express my feelings about my grief openly and honestly.
- \_\_\_ 3. It helps me to talk with someone who is nonjudgmental about how I grieve.
- \_\_\_ 4. There is at least one person I can talk to about my grief.
- \_\_\_ 5. I can get help for my grieving when I need it.

APPENDIX F

INDEX OF CORE SPIRITUAL EXPERIENCES-REVISED

## INDEX OF CORE SPIRITUAL EXPERIENCES-REVISED

(used with permission)

The following questions concern your spiritual or religious experiences and world -view. There are no right or wrong answers. For each question, circle the number of the answer that is most true for you.

1. How strongly spiritual or religious do you consider yourself to be?

1 = Strong

2 = Somewhat strong

3 = Not very strong

4 = Not at all

2. How often do you spend time on spiritual or religious practices?

1 = Several times per day to several times per week

2 = Once per week to several times per month

3 = Once per month to several times per year

4 = Once per year or less

3. How often have you felt close to a powerful spiritual force that seemed to lift you outside yourself?

1 = Never

2 = Once or twice

3 = Several times

4 = Often

People have many different definitions and images of "the spiritual core" or "Higher Power" that we often call God. Please use your definition or image when answering the following questions.

4. How close do you feel to God (the spiritual core)?

1 = Extremely close

2 = Somewhat close

3 = Not very close

4 = I don't believe in God/the spiritual core

5. Have you ever had an experience that has convinced you that God (the spiritual core) exists?

1 = No

2 = I don't know

3 = Maybe

4 = Yes

6. Indicate whether you agree or disagree with this statement--

"God (the spiritual core) dwells within you."

1 = Definitely disagree

2 = Tend to disagree

3 = Tend to agree

4 = Definitely agree

7. The following list describes spiritual experiences that some people have had. Please indicate if you have had any of these experiences and the extent to which each of them has contributed to your conviction that God (the spiritual core) exists.

1 = never had this experience

2 = had this experience and it did not strengthen conviction that God (spiritual core) may exist

3 = had this experience strengthened conviction that God (spiritual core) exists

4 = this experience convinced me that God (spiritual core) does exist

A. An experience of the presence or energy of God (the spiritual core)

1 2 3 4

B. An experience of the presence or energy, of a great spiritual figure (e.g. Jesus, Mary, Elijah, Buddha, Mohammed)

1 2 3 4

C. An overwhelming experience of love

1 2 3 4

D. An experience of profound inner peace

1 2 3 4

E. An experience of complete joy and ecstasy

1 2 3 4

F. A feeling of unity with the earth and all living beings

1 2 3 4

G. A healing of your body or mind (or witnessed such a healing)

1 2 3 4

H. A miraculous (or not normally occurring) event

1 2 3 4

I. Meeting or listening to a spiritual teacher or master

1 2 3 4

J. An experience of angels or guiding spirits

1 2 3 4

K. An experience of communication with someone who has died

1 2 3 4

L. An experience with near death or life after death

1 2 3 4

M. Other (specify)\_\_\_\_\_

1 2 3 4

8. How often do you attend church, worship services or other religious meetings?

1 = More than once a week

2 = Once a week

3 = Once a month

4 = Three or four times a year

5 = Once a year

6 = Never

9. How often do you spend time in private religious activities such as prayer, meditation, or Bible/scripture study?

1 = More than once a day

2 = Once a day

3 = Once a week

4 = Once a month

5 = A few times a year

6 = Once a year

7 = Never

APPENDIX G  
DEMOGRAPHIC QUESTIONNAIRE



Demographic Questionnaire

If you need additional space, please use the back of this sheet.

**Participant Information**

Participant Number: \_\_\_\_\_ Participant's Date of Birth: \_\_\_\_\_

Participant's Gender: \_\_\_\_\_ Participant's Marital Status: \_\_\_\_\_

Participant's Race/Ethnicity: \_\_\_\_\_

Participant's Religious Affiliation: \_\_\_\_\_

**Pregnancy Loss Information**

Length of Pregnancy	Date of Birth or Loss	Date of Death or Loss	Cause of Fetal or Infant Death
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Date of Birth	Date of Death	Other Children Gender	Any Health Problems
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APPENDIX H  
OPEN-ENDED QUESTIONS

## Open-Ended Questions

Please answer the questions on the next few pages in essay format. If you need additional space, feel free to use the back of the page or additional pages. If you have had more than one pregnancy loss experience, please answer these questions in terms of your most recent pregnancy loss experience. If some aspect of a previous pregnancy loss experience is especially important to you, and you feel you want to include it in answering these questions, please indicate when you are referring to a previous pregnancy loss.

NOTE: In the actual protocols, each open-ended question was on a separate page to allow space for the responses. However, in the interest of space, they have been condensed here.

- Describe your experience of pregnancy loss.
- What, if anything, helped you in coping with your experience of pregnancy loss?
- What, if anything, hindered your coping with your experience of pregnancy loss?
- Describe any ways in which you feel you have changed as a result of your experience of pregnancy loss.
- Do you feel you have “adjusted to/resolved/worked through/recovered from” the pregnancy loss experience? If so, please explain what went into your recovery process and how you were able to recover. If not, please explain what you still need to do in your recovery process.
- Please describe your physical health at the time of your pregnancy loss.
- Earlier in this questionnaire, you were asked some questions about your family. Please describe the people you included in your definition of the word family.

APPENDIX I  
INFORMED CONSENT FORM

UNIVERSITY OF NORTH TEXAS  
COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS  
RESEARCH CONSENT FORM

Subject Name: \_\_\_\_\_ Date: \_\_\_\_\_

Title of Study: Grief Reactions to Pregnancy Loss  
Principal Investigator: Christen E. Clower, M.S.  
Co-Investigators: Kenneth W. Sewell, Ph.D.

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the proposed procedures. It describes the procedures, benefits, risks, discomforts of the study. It also describes the alternative treatments that are available to you and your right to withdraw from the study at any time. It is important for you to understand that no guarantees or assurances can be made as to the results of the study.

**PURPOSE OF THE STUDY AND HOW LONG IT WILL LAST:**

The purpose of this study is to increase the level of understanding of the reactions of individuals who have experienced pregnancy loss. Your participation in this study will take between one hour forty-five minutes and two hours fifteen minutes.

**DESCRIPTION OF THE STUDY INCLUDING THE PROCEDURES TO BE USED:**

Your participation in this study will involve filling out a set of questionnaires and answering (in written form) a set of open-ended questions.

**DESCRIPTION OF PROCEDURES/ELEMENTS THAT MAY RESULT IN DISCOMFORT OR INCONVENIENCE:**

It is possible that responding to the questionnaires and open-ended questions in this study may evoke feelings of distress. It is not anticipated that these feelings will be greater than those feelings previously experienced in association with your pregnancy loss experience.

**DESCRIPTION OF THE PROCEDURES/ELEMENTS THAT ARE ASSOCIATED WITH FORESEEABLE RISKS:**

Only minimal risk of psychological discomfort is associated with participation in this study.

**BENEFITS TO THE SUBJECTS OR OTHERS:**

This study may benefit the subjects in that they may come to new insight or understanding of their pregnancy loss experience as a result of participating in this study. Additionally, the results of this study will contribute to the understanding of individuals' reactions to pregnancy loss. Increasing understanding of these experiences can help professionals to provide more appropriate services to those individuals experiencing pregnancy loss.

UNIVERSITY OF NORTH TEXAS  
COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS  
RESEARCH CONSENT FORM

Subject Name: \_\_\_\_\_ Date: \_\_\_\_\_

Title of Study: Grief Reactions to Pregnancy Loss  
Principal Investigator: Christen E. Clower, M.S.  
Co-Investigators: Kenneth W. Sewell, Ph.D.

**CONFIDENTIALITY OF RESEARCH RECORDS:** All study data will be kept securely locked in a filing cabinet in Terrill Hall at UNT in order to maintain subjects' confidentiality. Once each subject's data set is complete, the subject's name will be dissociated from his/her data set.

**REVIEW FOR PROTECTION OF PARTICIPANTS:** This research study has been reviewed and approved by the UNT Committee for the Protection of Human Subjects (940) 565-3940.

**RESEARCH SUBJECTS' RIGHTS:** I have read or have had read to me all of the above.

This study has been explained to me via this form and/or via other communication with the investigators. I have been told the risks or discomforts and possible benefits of the study. I have been told of other choices of treatment available to me.

I understand that I do not have to take part in this study, and my refusal to participate will involve no penalty or loss of rights to which I am entitled. I may withdraw at any time without penalty or loss of benefits to which I am entitled. The study personnel can stop my participation at any time if it appears to be harmful to me, if I fail to follow directions for participation in the study, if it is discovered that I do not meet the study requirements, or if the study is canceled.

In case there are problems or questions, I have been told I can call Christen E. Clower, M.S. or Kenneth W. Sewell, Ph.D. at telephone number (940)565-2671.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I have been given a copy of this consent form.

\_\_\_\_\_  
Subject's Signature

\_\_\_\_\_  
Date

UNIVERSITY OF NORTH TEXAS  
COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS  
RESEARCH CONSENT FORM

Subject Name: \_\_\_\_\_ Date: \_\_\_\_\_

For the Investigator or Designee:

I certify that I have reviewed the contents of this form with the person signing above, who, in my opinion, understood the explanation. I have explained the known benefits and risks of the research.

\_\_\_\_\_  
PRINCIPAL INVESTIGATOR'S SIGNATURE

\_\_\_\_\_  
DATE

APPENDIX J  
SOURCES OF SUPPORT

Dear (Participant's Name),

I would like to thank you for participating in the survey on pregnancy loss. I appreciate your willingness to share your experiences so that pregnancy loss might be better understood. If you feel that you are in need of additional support, one resource that is available nation-wide is Compassionate Friends. You may contact this support organization at :

Compassionate Friends

P.O. Box 3696

Oak Brook, IL 60522

Phone: (630)990-0010

Toll Free: (877)969-0010

Fax: (630)990-0246

Website: [www.compassionatefriends.org](http://www.compassionatefriends.org)

They have local chapters throughout the country. You could also check local listings for psychologists or counselors in your area. I hope that participating in this project has been a rewarding experience for you.

Sincerely,

Christen E. Clower, M.S.

APPENDIX K  
CODING MANUAL

## QUESTION #1: DESCRIBE

### Content Categories

ABSENCE=0

PRESENCE=1 or FREQUENCY where indicated

**A APPRECIATING LIFE**-This category includes references to a new appreciation for life, a desire to live life to its fullest, an awareness that life is short, not taking things for granted, living life with more fervor, being more appreciative of family, an awareness of the fragility of life, etc. This category should be coded for presence or absence.

**B AWARENESS THAT SOMETHING WAS “WRONG”**-This category includes references to the participant’s feeling that something was wrong, something was not right, things didn’t feel right, etc. This is an instinctive awareness, which may be associated with concepts of maternal instincts etc. This category should be coded for presence or absence.

**C CAUSE**-This category includes references by the participant to the cause of the loss. Each of the two following subcategories should be coded for presence or absence.

\*1 **KNOWN (1C1)**-This subcategory includes references to a known medical cause for the loss. The participant specifically mentions a cause.

2 **UNKNOWN**-This subcategory includes references to the idea that there is no known medical cause or explanation for the loss. The participant discusses the fact that the loss is unexplained or that the cause of the loss is not known.

**D DESCRIPTION OF CHILD’S LIFE/DEATH/FAMILY’S TIME WITH CHILD**-This category includes references to the time the family spent with the child from the birth event through the death or burial. Each of the following five subcategories should be coded for presence or absence.

\*1 **DESCRIPTION OF BABY (1D1)**-This subcategory includes any physical description of the child.

\*2 **DELIVERED (1D2)**-This subcategory includes references to the birth, which could be a stillbirth, of the child. These references often include times and dates.

\*3 **DIED (1D3)**-This subcategory includes references to the death or loss of the child. These references often include dates, times, or gestational age.

\*4 **INTERACTION WITH BABY (1D4)**-This subcategory includes references to time spent with the child, either while he/she lived or with the body following the death or stillbirth. Content may include holding the child, singing to the child, talking to the child, touching the child, hugging and kissing the child, etc.

\*5 **BABY MEDICAL (1D5)**-This subcategory includes references to medical issues regarding the baby. Content may include the child’s condition, references to the child’s medical care, medical treatments, surgery, symptoms, description of the child’s medical problems, etc.

**E DESCRIPTION OF PHYSICAL/MEDICAL/LOGISTICS OF LOSS**-This category includes references to the participant's physical and logistical experience of the loss event. Issues related to the child's medical situation following birth are not coded here. Each of the following three subcategories should be coded for presence or absence.

\*1 REFERENCES TO NORMAL/TYPICAL (1Z1)-This subcategory includes references to the normal course of pregnancy, typical physical symptoms of pregnancy, everything going well or fine, etc.

\*2 REFERENCES TO PROBLEMS/UNUSUAL SYMPTOMS (1Z2)-This subcategory includes references to difficulties with the pregnancy, physical symptoms indicating a problem, procedures related to physical symptoms and the loss event, etc.

\*3 STATEMENTS REGARDING PREGNANCY STATUS/HISTORY (1Z3)-This subcategory includes references to statements made regarding how many pregnancies the participant has had, which pregnancy this was, etc.

**F DREAMS OF FUTURE**-This category includes references to the lost potential future with the child. Content may include references to events that will not happen with the child, things the participant wanted to do with or for the child, hopes the participant had for the future, etc. This category should be coded for presence or absence.

**G EMOTIONAL REACTIONS**-This category includes references to emotional reactions associated with the loss including thoughts and feelings. Each of the following twenty subcategories should be coded for presence or absence. Additionally, if multiple symptoms are reported, the rating should reflect the number of distinct symptoms. For example, a participant who reports tears and hopelessness would receive a 2 for Sad/hard/devastated.

1 BLOCKING-This subcategory includes references to memory being fuzzy/blurry, feeling distanced from what was happening, etc.

2 DENIAL-This subcategory includes references to denial, irrational thoughts that the situation was not really happening, having hope that is clearly unfounded, an unwillingness to face the loss, refusing to cope with the loss, etc.

3 BLAME-This subcategory includes references to the assignment of blame for the loss.

4 LACK OF BLAME-This subcategory includes references to the idea that no person or entity is/was to blame for the loss.

5 HELPLESSNESS-This subcategory includes references to feeling helpless in the situation.

6 MISSING THE CHILD-This subcategory includes references to missing the child, wanting the child to be here physically, wanting to be close to the child physically, etc.

7 Confusion-This subcategory includes references to feelings of confusion, strangeness, oddness, etc.

\*8 SAD/HARD/DEVASTATED (1G8)-This subcategory includes references to depression, sadness, hopelessness, emptiness, the experience being hard/difficult, hurting, being devastated, behaviors commonly associated with sadness such as crying, etc.

\*9 SHOCK/NUMB (1G9)-This subcategory includes references to being in shock, feeling numb, disbelief, etc.

10 ANGER-This subcategory includes references to feelings of anger, frustration, irritation, etc., either abstractly or directed at a specific person or entity.

11 RELIEF AT MISCARRIAGE-This subcategory includes references to feelings of relief that the pregnancy has/had ended.

12 Excited/happy about pregnancy-This subcategory includes references to feeling excited, happy, looking forward to, etc. the pregnancy.

13 Thankful for/glad for support-This subcategory includes references to being thankful for support, being glad to have support, being grateful for support, etc.

14 RE-EXPERIENCING-This subcategory includes references to going over the events surrounding the loss, nightmares about the loss, reliving the loss, etc.

15 AVOIDANCE-This subcategory includes references to avoiding reminders of the child, avoiding becoming pregnant, reminders of the loss, other children, other pregnant women, items associated with pregnancy/birth/babies, etc.

\*16 ANXIETY (1G16)-This subcategory includes references to fear, worry, feeling anxious, panic attacks, physical symptoms commonly associated with an anxious pattern, etc.

17 GUILT/SHAME-This subcategory includes references to feelings of guilt, shame, self-blame, etc.

18 LOVE FOR CHILD-This subcategory includes references to feeling love for the child.

19 OVERWHELMED-This subcategory includes references to being overwhelmed by emotions.

20 RETURN OF HAPPINESS SINCE THE LOSS-This subcategory includes references to feeling happiness again, joy in living, being able to remember the happy aspects of the pregnancy/child, etc.

H INTERACTIONS WITH PROFESSIONALS-This category includes references to the participant's interactions with nurses, doctors, social workers, etc. during the loss event. If this category is present, the types of interactions that occurred should be coded for presence or absence as listed below. For example, a participant could have had a very positive experience with a nurse, and a neutral experience with a doctor while at the hospital. This participant would have a (1) for both POSITIVE and NEUTRAL below.

1 NEGATIVE/DISMISSIVE-This quality of interaction includes references to rude, dismissive, abrupt, unsupportive, etc. interactions with medical professionals.

2 POSITIVE/SUPPORTIVE-This quality of interactions includes references to supportive, helpful, etc. interactions with medical professionals.

\*3 NEUTRAL (1H3)-This quality of interaction includes references to typical interactions related to medical issues with no apparent positive or negative attributes.

I LACK OF PRACTICAL SUPPORT DURING LOSS EVENT-This category includes references to being alone, having difficulty locating family and friends, etc. at the time of the loss. This category should be coded for presence or absence.

J MEMORIAL GESTURES AND RITUALS-This category includes references to ways in which the participant acknowledged the child. Each of the following six subcategories should be coded for presence or absence.

\*1 NAME (1J1)-This subcategory includes references to naming the child. This subcategory may be coded as present if the child is referred to by name without an explicit statement that he/she was named.

2 REFERENCES TO GRAVE OR SEMETARY-This subcategory includes references to visiting the cemetery, decorating the grave, burying the child, making burial arrangements, having the child cremated, etc.

3 REFERENCES TO HAVING A FUNERAL-This subcategory includes references to having a funeral or memorial service for the lost child, making funeral arrangements, dealing with the funeral home, etc.

4 MAKING THE CHILD PART OF EVERYDAY LIFE-This subcategory includes references to incorporating the child into everyday life, comments in the abstract regarding remembering the child without specific gestures mentioned, etc.

5 WRITINGS-This subcategory includes references to the creation of a web site in memory or honor of the child, writing poetry, including a previously written story of his/her experience in response to this questionnaire, etc.

6 OTHER-This subcategory includes references to gestures made to honor the child other than those previously coded in this category.

K NEVER CONSIDERED MISCARRIAGE-This category includes references to the idea that the participant never thought the pregnancy would/could end in miscarriage, the participant was naïve regarding pregnancy, saw pregnancy as routine, etc. This category should be coded for presence or absence.

L OTHER STRESSORS-This category includes references to other stressful issues that complicate the grief process such as loss of a job, loss of spouse's/significant other's job, financial problems, work-related difficulties, other deaths or major illness in the social network, moving, etc. This category should be coded for presence or absence. Additionally, if multiple distinct stresses are mentioned, the number of stresses should be reflected in the rating.

M PARTICIPANT'S OTHER CHILDREN-This category includes references to the participant's other children. References to other pregnancy losses should not be coded here. Each of the following two subcategories should be coded for presence or absence.

1 PRIOR-This subcategory includes references to children born prior to the loss.

2 SUBSEQUENT-This subcategory includes references to children born following the loss and current pregnancies.

**N PREPARATION FOR CHILD**-This category includes references to proactive things done by the participant to prepare for the child. Each of the two following subcategories should be coded for presence or absence. In addition, if multiple examples or behaviors are mentioned, the number of concepts mentioned for each subcategory should be reflected in the ratings.

1 **LOGISTICAL**-This subcategory includes references to preparing the child's room, buying things for the child, having baby showers, etc.

2 **SELF-CARE**-This subcategory includes references to actively promoting good health through exercise, diet, vitamins, regular physical exams, avoiding harmful substances, preparing emotionally for parenthood, preparing physically for pregnancy, etc.

**O READING/EDUCATION**-This category includes references to reading books, articles, newsletters, on-line materials, becoming educated, etc. This category should be coded for presence or absence.

**P SPIRITUAL**-This category includes references to issues related to religion, spirituality, or other signs that the participant presents as personally meaningful. Each of the following seven subcategories should be coded for presence or absence.

1 **AFTERLIFE**-This subcategory includes references to heaven, the child living after death, seeing the child again, etc.

2 **PERSONAL RELATIONSHIP WITH A HIGHER POWER**-This subcategory includes references to a personal and active relationship with a higher power, intentional actions of a higher power, feeling that the higher power is purposely punishing the participant through the loss, etc.

3 **PHILOSOPHICAL BELIEFS REGARDING A HIGHER POWER**-This subcategory includes references to the participant's beliefs, faith, God's will, God's plan, belief in a higher power, feeling cursed, feeling blessed, reading scripture, etc.

4 **PRAYER**-This subcategory includes references to prayer, praying, the prayers of others, etc.

5 **RELIGIOUS RIGHTS**-This subcategory includes references to religious ceremonies or rituals such as baptism, making the sign of the cross, last rights, etc.

6 **SIGNS**-This subcategory includes references to events that the participant interprets as providing information or explanation regarding the loss. Such content may include dreams about the loss, events interpreted as messages from a higher power regarding the loss, etc.

7 **QUESTIONING FAITH**-This subcategory includes references to questioning one's faith, being unsure about one's beliefs, etc.

**\*Q STILL HAVING TO GO THROUGH LABOR (1Q)**-This category includes references to going through labor, the shock of still having to experience the pain of labor, going through the medical aspects of birth with no resulting baby, etc. This category should be coded for presence or absence.

**R SUPERLATIVE NATURE OF EXPERIENCE**-This category includes references to the idea that this experience was the hardest, worst, most difficult, always to be remembered, remembered in great detail, a defining experience in the participant's life, etc. This category should be coded for presence or absence.

**S SUPPORT**-This category includes references to receiving support from the following people or entities. Each of the following six subcategories should be coded for presence or absence.

1 **FAMILY**-This subcategory includes references to receiving support from family members other than a spouse or significant other.

2 **FRIENDS**-This subcategory includes references to receiving support from friends, who are not family members.

3 **MEDICAL PROFESSIONALS**-This subcategory includes references to supportive or helpful doctors, nurses, social workers, etc. Specific references to therapy or other mental health interventions should not be coded here.

4 **SPIRITUAL LEADER**-This subcategory includes references to receiving support from a priest, pastor, etc.

5 **SPOUSE/SIGNIFICANT OTHER**-This subcategory includes references to receiving support from a spouse or significant other.

6 **SUPPORT GROUPS**-This subcategory includes references to attending or associating with a formalized support group.

**T TIME**-This category includes references to time. Each of the two following subcategories should be coded for presence or absence.

1 **TIME STANDING STILL**-This subcategory includes references to the idea that time stopped, time stood still, life stopped, an inability to move forward, etc.

2 **TIME AS HEALER**-This subcategory includes references to things getting better with time, time serving to heal, etc.

**\*U TOLD CHILD NOT VIABLE (1U)**-This category includes references to specific memories of being told that the child was not viable, the child had died, there was no heartbeat, etc. This category should be coded for presence or absence.

**V DISENFRANCHISEMENT**-This category includes references to a lack of recognition, invalidation, or dismissive attitude on the part of others regarding the loss. Content coded here includes concepts that fit the following subcategories and has not been coded elsewhere within this response set. Each of the following two subcategories should be coded for presence or absence. In addition, if multiple distinct examples are given that fit one of the subcategories, the rating should reflect the number of concepts mentioned. For example, a participant who mentions that others seemed to feel the child did not count and feeling as if other people expected him/her to "get over it" would receive a 2 for **PASSIVELY FEELING DISENFRANCHISED**. Please underline content in the responses you code as **DISENFRANCHISEMENT**.

1 PASSIVELY FEELING DISENFRANCHISED-This subcategory includes feelings that others do not acknowledge or recognize the lost child, feeling that others do/did invalidate the participant's grief, implied expectations that a grief reaction is inappropriate or should be more minimal than it is/was, reporting a need to know that feelings or reactions were valid or appropriate, etc.

2 ACTIVELY ACTING AGAINST BEING DISENFRANCHISED-This subcategory includes references to the participant actively working against feelings of disenfranchisement. Such content may include talking about the child to make others aware that he/she existed or counted, including the child as part of the family, actively seeking validation for feelings and experiences from others, etc.

## QUESTION #2: HELPED

### Content Categories

ABSENCE=0

PRESENCE=1 or FREQUENCY where indicated

A ANTICIPATING THE LOSS-This category includes references to the idea that having a diagnosis or knowing the cause of the death prior to the loss was helpful. This category should be coded for presence or absence.

B DESIRE TO HELP OTHERS-This category includes references to a desire to help others in similar situations, sharing the experience of the loss to support and help others, taking a leadership role in a support group, learning about one's own loss in the hopes it will prevent other losses, etc. This category should be coded for presence or absence.

C EMOTIONAL REACTIONS-This category includes references to emotional reactions associated with the loss including thoughts and feelings. Each of the following four subcategories should be coded for presence or absence. Additionally, if multiple symptoms are reported, the rating should reflect the number of distinct symptoms. For example, a participant who reports tears and hopelessness would receive a 2 for Sad/hard/devastated.

1 ANGER-This subcategory includes references to feelings of anger, frustration, irritation, etc., either abstractly or directed at a specific person or entity.

\*2 SAD/HARD/DEVASTATED (2C2)-This subcategory includes references to depression, sadness, hopelessness, emptiness, the experience being hard/difficult, hurting, being devastated, behaviors commonly associated with sadness such as crying, etc.

3 GUILT/SHAME-This subcategory includes references to feelings of guilt, shame, self-blame, etc.

4 ANXIETY-This subcategory includes references to fear, worry, feeling anxious, panic attacks, physical symptoms commonly associated with an anxious pattern, etc.

D EXPERIENCES OF OTHERS-This category includes references to healing through the experiences of others. This category should be coded for presence or absence.

**E FOCUS ON TIME WITH CHILD**-This category includes references to thinking about the child, appreciating the time the child was alive, holding the child, etc. This category should be coded for presence or absence.

**F INABILITY TO SUPPORT**-This category includes references to others being unable to support the participant due to their own grief, others not knowing how to support the participant, etc. This category should be coded when the lack of support does not appear to be due to disenfranchisement of the participant, rather the unsupportive party is dealing with their own difficulties or at a loss. This category should be coded for presence or absence.

**G JOURNALING**-This category includes references to writing in a journal, keeping a diary, etc. This category should be coded for presence or absence.

**H MEMORIAL GESTURES AND RITUALS**-This category includes references to ways in which the participant acknowledged the lost child. Each of the following eight subcategories should be coded for presence or absence.

1 **REFERENCES TO GRAVE OR SEMETARY**-This subcategory includes references to visiting the cemetery, decorating the grave, burying the child, making burial arrangements, having the child cremated, etc.

2 **REFERENCES TO HAVING A FUNERAL**-This subcategory includes references to having a funeral or memorial service for the lost child, making funeral arrangements, dealing with the funeral home, etc.

3 **PHOTOS**-This subcategory includes references to keeping photos, displaying photos, etc.

4 **MOMENTOS**-This subcategory includes references to collecting things in memory of the child, buying a Christmas ornament each year in memory of the child, etc.

5 **TRADITIONS**-This subcategory includes references to developing traditions in memory of the child such as special aspects of holidays, ritualizing the child's birthday, etc.

6 **WRITINGS**-This subcategory includes references to the creation of a web site in memory or honor of the child, writing poetry, including a previously written story of his/her experience in response to this questionnaire, etc.

7 **MEMORY BOXES OR ALBUMS**-This subcategory includes specific references to a memory box, scrapbook, etc. that serves as a central place for mementos related to the child.

8 **GESTURES AND REMEMBERENCES OF OTHERS**-This subcategory includes references to ways in which people other than the participant have memorialized the child.

**I NAMING THE CHILD**-This category includes references to having named the child. This category should not be coded as present if the child is referred to by name but there is no

explicit statement indicating that naming the child was helpful in the grieving process. This category should be coded for presence or absence.

**J PARTICIPANT'S OTHER CHILDREN**-This category includes references to the participant's other children. References to other pregnancy losses should not be coded here. Each of the following two subcategories should be coded for presence or absence.

1 **PRIOR**-This subcategory includes references to children born prior to the loss.

2 **SUBSEQUENT**-This subcategory includes references to children born following the loss and current pregnancies.

**K PHYSICAL SYMPTOMS FOLLOWING THE LOSS**-This category includes references to any physical symptoms following the loss. This category should be coded for presence or absence. In addition, if the participant reports multiple physical symptoms, the number of symptoms reported should be reflected in the rating.

**L POSITIVE/HOPEFUL REGARDING FUTURE CHILDREN**-This category includes references to feeling hopeful about having children in the future, wanting more children, wanting to try again, ease of becoming pregnant, hopefulness regarding future pregnancies, etc. This category should be coded for presence or absence.

**\*M READING/EDUCATION (2M)**-This category includes references to reading books, articles, newsletters, on-line materials, becoming educated, etc. This category should be coded for presence or absence.

**N RETURN TO ROUTINE**—This category includes references to re-establishing routine aspects of daily life. Each of the two following subcategories should be coded for presence or absence.

1 **HELPFUL**-This subcategory includes references to finding getting back into a routine, getting back to work, etc. to be helpful.

2 **HINDERING**-This subcategory includes references to finding returning to work, getting back to a routine, etc. to be difficult or to complicate the grieving process.

**O SPIRITUAL**-This category includes references to issues related to religion, spirituality, or other signs that the participant presents as personally meaningful. Each of the following six subcategories should be coded for presence or absence.

1 **AFTERLIFE**-This subcategory includes references to heaven, the child living after death, seeing the child again, etc.

2 **PERSONAL RELATIONSHIP WITH A HIGHER POWER**-This subcategory includes references to a personal and active relationship with a higher power, intentional actions of a higher power, feeling that the higher power is purposely punishing the participant through the loss, etc.

3 PHILOSOPHICAL BELIEFS REGARDING A HIGHER POWER-This subcategory includes references to the participant's beliefs, faith, God's will, God's plan, belief in a higher power, feeling cursed, feeling blessed, reading scripture, etc.

4 PRAYER-This subcategory includes references to prayer, praying, the prayers of others, etc.

5 RELIGIOUS RIGHTS-This subcategory includes references to religious ceremonies or rituals such as baptism, making the sign of the cross, last rights, etc.

6 QUESTIONING FAITH-This subcategory includes references to questioning one's faith, being unsure about one's beliefs, etc.

P SUPPORT-This category includes references to receiving support from the following people or entities. Each of the following six subcategories should be coded for presence or absence.

\*1 FAMILY (2P1)-This subcategory includes references to receiving support from family members other than a spouse or significant other.

\*2 FRIENDS (2P2)-This subcategory includes references to receiving support from friends, who are not family members.

3 GENERAL-This subcategory includes references to some kind of support without mention of who provided it such as receiving cards, receiving positive comments from others, generally feeling supported, etc.

4 MEDICAL PROFESSIONALS-This subcategory includes references to supportive or helpful doctors, nurses, social workers, etc. Specific references to therapy or other mental health interventions should not be coded here.

5 SPIRITUAL LEADER-This subcategory includes references to receiving support from a priest, pastor, etc.

6 SPOUSE/SIGNIFICANT OTHER-This subcategory includes references to receiving support from a spouse or significant other.

Q TALKING-This category includes specific references to finding talking or sharing with others helpful. Each of the following six subcategories should be coded for presence or absence.

1 TALKING WITH OTHERS INFORMALLY-This subcategory includes references to talking with other people, who are not specified, and who are in an informal setting. This subcategory does not include talking with others in a support group.

2 TALKING WITH FAMILY-This subcategory includes talking with other people who are family members.

3 TALKING WITH FRIENDS-This subcategory includes talking with other people who are friends.

4 TALKING WITH THERAPIST-This subcategory includes talking with a therapist or other mental health professional.

5 TALKING WITH PEOPLE IN SIMILAR SITUATIONS-This subcategory includes talking with other people who have also experienced a loss but not in the formal context of a support group.

\*6 TALKING WITH OTHERS IN THE CONTEXT OF SUPPORT GROUPS (2Q6)- This subcategory includes references to attending or participating in organized support groups or meetings.

R TIME AS HEALER-This category includes references to things getting better with time, time serving to heal, etc. This category should be coded for presence or absence.

S DISENFRANCHISEMENT-This category includes references to a lack of recognition, invalidation, or dismissive attitude on the part of others regarding the loss. Content coded here includes concepts that fit the following subcategories and has not been coded elsewhere within this response set. Each of the following two subcategories should be coded for presence or absence. In addition, if multiple distinct examples are given that fit one of the subcategories, the rating should reflect the number of concepts mentioned. For example, a participant who mentions that others seemed to feel the child did not count and feeling as if other people expected him/her to “get over it” would receive a 2 for PASSIVELY FEELING DISENFRANCHISED. Please underline content in the responses that you code as DISENFRANCHISEMENT.

1 PASSIVELY FEELING DISENFRANCHISED-This subcategory includes feelings that others do not acknowledge or recognize the lost child, feeling that others do/did invalidate the participant’s grief, implied expectations that a grief reaction is inappropriate or should be more minimal than it is/was, reporting a need to know that feelings or reactions were valid or appropriate, etc.

2 ACTIVELY ACTING AGAINST BEING DISENFRANCHISED-This subcategory includes references to the participant actively working against feelings of disenfranchisement. Such content may include talking about the child to make others aware that he/she existed or counted, including the child as part of the family, actively seeking validation for feelings and experiences from others, etc.

### QUESTION #3: HINDERED

#### Content Categories

ABSENCE=0

PRESENCE=1 or FREQUENCY where indicated

A ABSENCE OF CHILD FROM LIFE-This category includes references to the inability to act out motherhood, a feeling that the child is missing, powerlessness to bring the child back, etc. This category should be coded for presence or absence.

B CAUSE UNKNOWN-This category includes references to the idea that there is no known medical cause or explanation for the loss. The participant discusses the fact that the loss is unexplained or that the cause of the loss is not known.

C CHAOS THEORY-This category includes references to the idea that bad things sometimes happen regardless of one's actions or beliefs, bad things happen for no reason, good behavior can not ensure no bad things happening, etc. This category should be coded for presence or absence.

D CHILDREN AND/OR PREGNANCIES OF OTHERS-This category includes references to witnessing others' children or pregnancies. This category should be coded for presence or absence.

E EMOTIONAL REACTIONS-This category includes references to emotional reactions associated with the loss including thoughts and feelings. Each of the following six subcategories should be coded for presence or absence. Additionally, if multiple symptoms are reported, the rating should reflect the number of distinct symptoms. For example, a participant who reports tears and hopelessness would receive a 2 for Sad/hard/devastated.

1 GUILT/SHAME-This subcategory includes references to feelings of guilt, shame, self-blame, etc.

\*2 SAD/HARD/DEVASTATED (3Z2)-This subcategory includes references to depression, sadness, hopelessness, emptiness, the experience being hard/difficult, hurting, being devastated, behaviors commonly associated with sadness such as crying, etc.

3 DENIAL-This subcategory includes references to denial, irrational thoughts that the situation was not really happening, having hope that is clearly unfounded, an unwillingness to face the loss, refusing to cope with the loss, etc.

4 TIME STANDING STILL-This subcategory includes references to the idea that time stopped, time stood still, life stopped, an inability to move forward, etc.

5 SUPPORTING OTHERS-This subcategory includes feeling a need or obligation to support others, be strong for others, etc. at the expense of the participant's own healing.

6 FEELINGS OF ISOLATION-This subcategory includes references to feeling isolated, alone, etc.

F FUTURE PREGNANCIES-This category includes references to having future children, becoming pregnant in the future, etc. Each of the two following subcategories should be coded for presence or absence.

1 POSITIVE/HOPEFUL REGARDING FUTURE CHILDREN-This subcategory includes references to feeling hopeful about having children in the future, wanting more children, wanting to try again, ease of becoming pregnant, hopefulness regarding future pregnancies, etc.

2 NEGATIVE/CONCERNED REGARDING FUTURE CHILDREN-This subcategory includes references to fear of pregnancy, anxiety regarding having future children, concern for future children, etc.

G HEALTH CONCERNS-This category includes references to physical problems, health-related concerns, etc. This category should be coded for presence or absence. In addition, if the

participant references multiple difficulties, the number of distinct symptoms or problems should be reflected in the rating.

**\*H HURTFUL COMMENTS (3H)**-This category includes references to hurtful comments made by others regarding the loss such as “Aren’t you over that yet?,” “You’re young, you can have other children.,” “It’s not like you got to know the baby.,” etc. This category should be coded for presence or absence.

**I INITIAL TRAUMA**-This category includes references to the experience of pregnancy loss serving as the first or most severe traumatic event to occur in the participant’s life, never having been through something this hard before, never having a family member die before, etc. This category should be coded for presence or absence.

**J LACK OF SUPPORT**-This category includes explicit references to nonsupport or a lack of support from the following people or entities. A lack of support could also be in the form of another person “upstaging” the participant’s grief. Each of the following six subcategories should be coded for presence or absence.

1 **FAMILY**-This subcategory includes references to a lack of support from family members.

2 **SPOUSE/SIGNIFICANT OTHER**-This subcategory includes references to a lack of support from a spouse or significant other.

3 **FRIENDS**-This subcategory refers to a lack of support from friends.

4 **MEDICAL PROFESSIONALS**-This subcategory includes references to a lack of support from doctors, nurses, other hospital staff, etc.

5 **LACK OF OTHERS IN SIMILAR SITUATIONS**-This subcategory includes references to not knowing others in a similar situation, having no one to talk to in a similar situation, etc.

6 **LACK OF SUPPORT GROUPS**-This subcategory includes references to not having a support group to attend, being unable to attend a support group, etc.

**K MARITAL PROBLEMS**-This category includes references to problems in the primary relationship, divorce, breaking up, sexual problems, having a hard time in the marriage, etc. This category should be coded for presence or absence.

**L NOTHING**-This category includes references to the idea that nothing hindered the participant’s coping, he/she did not feel hindered in his/her coping, etc. This category should be coded for presence or absence.

**M OTHER STRESSORS**-This category includes references to other stressful issues that complicate the grief process such as loss of a job, loss of spouse’s/significant other’s job, financial problems, work-related difficulties, other deaths or major illness in the social network, moving, etc. This category should be coded for presence or absence. Additionally, if multiple distinct stresses are mentioned, the number of stresses should be reflected in the rating.

**N PARTICIPANT'S OTHER CHILDREN**-This category includes references to the participant's other children. References to other pregnancy losses should not be coded here. Each of the following two subcategories should be coded for presence or absence.

1 **PRIOR**-This subcategory includes references to children born prior to the loss.

2 **SUBSEQUENT**-This subcategory includes references to children born following the loss and current Pregnancies.

**O REFERENCES TO SPECIFICS OF CHILD'S LIFE/DEATH**-This category includes references to wanting to hold the child longer, shattered dreams, regretting not participating more in the child's life, not getting to hold the child, etc. This category should be coded for presence or absence.

**P REMINDERS OF LOST CHILD**-This category includes references to being reminded of the lost child, such as the child's room, anniversary dates, etc. This category should be coded for presence or absence.

**Q RETURN TO ROUTINE**—This category includes references to re-establishing routine aspects of daily life. Each of the two following subcategories should be coded for presence or absence.

1 **HELPFUL**-This subcategory includes references to finding getting back into a routine, getting back to work, etc. to be helpful.

2 **HINDERING**-This subcategory includes references to finding returning to work, getting back to a routine, etc. to be difficult or to complicate the grieving process.

**R SPIRITUAL**-This category includes references to issues related to religion, spirituality, or other signs that the participant presents as personally meaningful. Each of the following four subcategories should be coded for presence or absence.

1 **AFTERLIFE**-This subcategory includes references to heaven, the child living after death, seeing the child again, etc.

2 **PERSONAL RELATIONSHIP WITH A HIGHER POWER**-This subcategory includes references to a personal and active relationship with a higher power, intentional actions of a higher power, feeling that the higher power is purposely punishing the participant through the loss, etc.

3 **PHILOSOPHICAL BELIEFS REGARDING A HIGHER POWER**-This subcategory includes references to the participant's beliefs, faith, God's will, God's plan, belief in a higher power, feeling cursed, feeling blessed, reading scripture, etc.

4 **QUESTIONING FAITH**-This subcategory includes references to questioning one's faith, being unsure about one's beliefs, etc.

**S DISENFRANCHISEMENT**-This category includes references to a lack of recognition, invalidation, or dismissive attitude on the part of others regarding the loss. Content coded here includes concepts that fit the following subcategories and has not been coded elsewhere within this response set. Each of the following two subcategories should be coded for presence or

absence. In addition, if multiple distinct examples are given that fit one of the subcategories, the rating should reflect the number of concepts mentioned. For example, a participant who mentions that others seemed to feel the child did not count and feeling as if other people expected him/her to “get over it” would receive a 2 for PASSIVELY FEELING DISENFRANCHISED. Please underline content you code as DISENFRANCHISEMENT.

\*1 PASSIVELY FEELING DISENFRANCHISED (3S1)-This subcategory includes feelings that others do not acknowledge or recognize the lost child, feeling that others do/did invalidate the participant’s grief, implied expectations that a grief reaction is inappropriate or should be more minimal than it is/was, reporting a need to know that feelings or reactions were valid or appropriate, etc.

2 ACTIVELY ACTING AGAINST BEING DISENFRANCHISED-This subcategory includes references to the participant actively working against feelings of disenfranchisement. Such content may include talking about the child to make others aware that he/she existed or counted, including the child as part of the family, actively seeking validation for feelings and experiences from others, etc.

#### QUESTION #4: CHANGED

Content Categories

ABSENCE=0

PRESENCE=1 or FREQUENCY where indicated

A BETTER HEALTH-This category refers to positive health changes the participant has made or experienced since the loss such as a healthier diet, more exercise, the resolution of health problems, etc. This category should be coded for presence or absence. In addition, if multiple changes are mentioned, the number of changes should be reflected in the rating.

B BETTER PARENT-This category includes references to feeling that he/she has become a better parent, improved parenting skills, has a better understanding of parents and parenting, etc. This category should be coded for presence or absence.

C BETTER SENSE OF WHAT IS AND IS NOT HELPFUL-This category includes references to a sense of knowing how to be helpful to others who have experienced a similar loss, recognizing things that are not helpful to others in a similar situation, insight into how past behaviors were insensitive to others in similar situations and regret or a desire to do things differently in the future, etc. This category should be coded for presence or absence.

D COMPASSION FOR OTHERS/EMPATHY/SYMPATHY/HELPING BEHAVIORS-This category includes references to an increased sense of empathy or compassion for others. Also included here are the desire to help others and actually seeking the opportunity to assist others in similar situations. Each of the following two subcategories should be coded for PRESENCE OR ABSENCE.

\*1 COMPASSION (4D1)-This subcategory includes references to increased empathy, increased sympathy, more compassion, more sensitivity, being less judgmental, etc.

toward others experiencing similar losses or death in general. Also included here is a lessening of discomfort with the topic of death or those persons who have experienced a loss.

2 HELPING BEHAVIORS-This subcategory includes references to ways in which the participant wants to help others or has helped others such as writing letters, listening to others, providing support to others, HELPING OTHERS, ETC.

E EMOTIONAL REACTIONS-This category includes references to emotional reactions associated with the loss including thoughts and feelings. Each of the following eight subcategories should be coded for presence or absence. Additionally, if multiple symptoms are reported, the rating should reflect the number of distinct symptoms. For example, a participant who reports tears and hopelessness would receive a 2 for Sad/hard/devastated.

1 SAD/HARD/DEVASTATED-This subcategory includes references to depression, sadness, hopelessness, emptiness, the experience being hard/difficult, hurting, being devastated, behaviors commonly associated with sadness such as crying, etc.

2 SLEEP DIFFICULTIES-This subcategory includes references to sleep difficulties following or associated with the loss.

3 ANGER-This subcategory includes references to feelings of anger, frustration, irritation, etc., either abstractly or directed at a specific person or entity.

4 SENSE OF PROTECTIVENESS-This subcategory includes references to A new sense of concern specifically associated with the health and safety of family, other people's pregnancies, etc.

\*5 ANXIETY (4Z5)-This subcategory includes references to fear, worry, feeling anxious, panic attacks, physical symptoms commonly associated with an anxious pattern, etc.

6 AVOIDANCE-This subcategory includes references to avoiding reminders of the child, avoiding becoming pregnant, reminders of the loss, other children, other pregnant women, items associated with pregnancy/birth/babies, etc.

7 JEALOUSY-This subcategory includes references to being jealous, envious, etc of others who are pregnant or who have children.

8 PREOCCUPATION WITH CHILD-This subcategory includes being preoccupied with the child, constantly thinking of the child, etc.

F HEALTH CONCERNS-This category includes references to physical problems, health-related concerns, etc. This category should be coded for presence or absence. In addition, if the participant references multiple difficulties, the number of distinct symptoms or problems should be reflected in the rating.

G INITIAL TRAUMA-This category includes references to the experience of pregnancy loss serving as the first or most severe traumatic event to occur in the participant's life, never having been through something this hard before, never having a family member die before, etc. This category should be coded for presence or absence.

H MARRIAGE/FAMILY-This category includes references to changes within the marriage or family. Each of the following two subcategories should be coded for presence or absence.

1 MARITAL PROBLEMS-This subcategory includes references to problems in the primary relationship, divorce, breaking up, sexual problems, having a hard time in the marriage, etc.

2 POSITIVE ASPECTS-This subcategory includes references to positive changes in the marriage or family, the recognition of the strength of the marriage, etc.

I MORE OPEN/MORE FREE WITH EMOTIONS-This category includes references to being more open with others, more straightforward, allowing for more genuine expression of emotions, being more emotional, etc. This category should be coded for presence or absence.

J NEW SENSE OF SELF/NEW SELF-UNDERSTANDING-This category includes references to the participant's perception that, as a person, he/she has changed or is now different in some meaningful way. Each of the following three subcategories should be coded for presence or absence. In addition, if multiple changes about the self are mentioned, the number of perceived changes should be reflected in the rating.

1 NEGATIVE SHIFT-This subcategory includes references to an awareness of negative changes in the self since the loss such as feeling worse, more depressed, less confident, less optimistic, less happy, as if something is missing that will never be remedied, etc.

2 NEUTRAL-This subcategory includes references to feeling different since the loss, feeling more self-aware, feeling like a new person etc. without any comment of things being more positive or more negative.

\*3 POSITIVE SHIFT (4J3)-This subcategory includes references to perceived positive changes in the self since the loss such as feeling more responsible, more mature, feeling like a better person, feeling stronger, etc.

K RANDOMNESS OF EVENTS-This category includes references to the awareness that some things happen for no particular reason and may be out of anyone's control. The following two subcategories should be coded for presence or absence.

1 CHAOS THEORY-This subcategory includes references to the idea that bad things sometimes happen regardless of one's actions or beliefs, bad things happen for no reason, good behavior can not ensure no bad things happening, etc.

2 RECOGNITION OF LACK OF CONTROL-This subcategory includes references to the idea that the participant could do nothing to change or control his/her child's situation, a recognition of not being in control of all events or situations in life, etc.

L SPIRITUAL-This category includes references to issues related to religion, spirituality, or other signs that the participant presents as personally meaningful. Each of the following five subcategories should be coded for presence or absence.

1 AFTERLIFE-This subcategory includes references to heaven, the child living after death, seeing the child again, etc.

2 PERSONAL RELATIONSHIP WITH A HIGHER POWER-This subcategory includes references to a personal and active relationship with a higher power, intentional actions of a higher power, feeling that the higher power is purposely punishing the participant through the loss, etc.

3 PHILOSOPHICAL BELIEFS REGARDING A HIGHER POWER-This subcategory includes references to the participant's beliefs, faith, God's will, God's plan, belief in a higher power, feeling cursed, feeling blessed, reading scripture, etc.

4 PRAYER-This subcategory includes references to prayer, praying, the prayers of others, etc.

5 QUESTIONING FAITH-This subcategory includes references to questioning one's faith, being unsure about one's beliefs, etc.

M WORLD VIEW-This category includes references to a change in the participant's approach to life or to the world in general. Each of the following four subcategories should be coded for presence or absence.

\*1 APPRECIATING LIFE (4M1)-This subcategory includes references to a new appreciation for life, a desire to live life to its fullest, an awareness that life is short, not taking things for granted, living life with more fervor, being more appreciative of family, an awareness of the fragility of life, etc.

2 MORE LAID BACK/RELAXED-This subcategory includes references to being more calm, more relaxed, letting little things go, being more patient or forgiving, etc.

3 SENSE OF WHAT IS IMPORTANT-This subcategory includes references to a newfound sense of what is important, that little things are not important, things that used to seem important do not since the loss, etc.

4 FAMILY FIRST-This subcategory includes references to a new commitment to prioritizing family above other things, putting the family first, worrying less about financial or material things, putting family ahead of work, etc.

N DISENFRANCHISEMENT-This category includes references to a lack of recognition, invalidation, or dismissive attitude on the part of others regarding the loss. Content coded here includes concepts that fit the following subcategories and has not been coded elsewhere within this response set. Each of the following two subcategories should be coded for presence or absence. In addition, if multiple distinct examples are given that fit one of the subcategories, the rating should reflect the number of concepts mentioned. For example, a participant who mentions that others seemed to feel the child did not count and feeling as if other people expected him/her to "get over it" would receive a 2 for PASSIVELY FEELING DISENFRANCHISED. Please underline content you code as DISENFRANCHISEMENT.

1 PASSIVELY FEELING DISENFRANCHISED-This subcategory includes feelings that others do not acknowledge or recognize the lost child, feeling that others do/did invalidate the participant's grief, implied expectations that a grief reaction is inappropriate or should be more minimal than it is/was, reporting a need to know that feelings or reactions were valid or appropriate, etc.

2 ACTIVELY ACTING AGAINST BEING DISENFRANCHISED-This subcategory includes references to the participant actively working against feelings of disenfranchisement. Such content may include talking about the child to make others aware that he/she existed or counted, including the child as part of the family, actively seeking validation for feelings and experiences from others, etc.

QUESTION #5: ADJUSTED  
Content Categories

ABSENCE=0

PRESENCE=1 or FREQUENCY where indicated

\*A ACCEPTENCE (5A)-This category includes references to accepting the loss, feeling adjusted to the loss, incorporating the loss into one's life, etc. Discussion of adjusting to the loss need not be accompanied by a sense of completion. The participant may qualify such statements with words like somewhat or partially. This category should be coded for presence or absence.

B ACKNOWLEDGMENT OF ANIVERSERY REACTION-This category includes references to fluctuations in emotions or awareness of the participant of his/her reactions based on an anniversary reaction of some important event related to the loss. Content may include certain months being difficult times, feeling worse around a certain date, etc. This category should be coded for presence or absence.

\*C CONTINUED SENSE OF LOSS (5C)-This category includes references to feeling a sense of someone or something being missing from the family, a continued yearning to mother the lost child, an ongoing feeling of pain or heartache, imaginings of what the child would be like, etc. This category should be coded for presence or absence.

D EMOTIONAL REACTIONS-This category includes references to emotional reactions associated with the loss including thoughts and feelings. Each of the following eight subcategories should be coded for presence or absence. Additionally, if multiple symptoms are reported, the rating should reflect the number of distinct symptoms. For example, a participant who reports tears and hopelessness would receive a 2 for Sad/hard/devastated.

1 ANXIETY-This subcategory includes references to fear, worry, feeling anxious, panic attacks, physical symptoms commonly associated with an anxious pattern, etc.

2 RE-EXPERIENCING-This subcategory includes references to going over the events surrounding the loss, nightmares about the loss, reliving the loss, etc.

3 AVOIDANCE-This subcategory includes references to avoiding reminders of the child, avoiding becoming pregnant, reminders of the loss, other children, other pregnant women, items associated with pregnancy/birth/babies, etc.

\*4 SAD/HARD/DEVASTATED (5D4)-This subcategory includes references to depression, sadness, hopelessness, emptiness, the experience being hard/difficult, hurting, being devastated, behaviors commonly associated with sadness such as crying, etc.

5 GUILT/SHAME-This subcategory includes references to feelings of guilt, shame, self-blame, etc.

6 ANGER-This subcategory includes references to feelings of anger, frustration, irritation, etc. either abstractly or directed at a specific person or entity.

\*7 WORKING THROUGH THE GRIEF PROCESS (5D7)-This subcategory includes references to working through grief, going through the stages of grief, dealing with grief, grieving, etc.

8 RETURN OF HAPPINESS SINCE THE LOSS-This subcategory includes references to feeling happiness again, joy in living, being able to remember the happy aspects of the pregnancy/child, etc.

E HELPING BEHAVIORS-This category includes references to ways in which the participant wants to help others or has helped others such as writing letters, listening to others, providing support to others, helping others, etc. This category should be coded for presence or absence.

F JOURNALING-This category includes references to writing in a journal, keeping a diary, etc. This category should be coded for presence or absence.

G MARITAL PROBLEMS-This category includes references to problems in the primary relationship such as divorce, breaking up, sexual problems, having a hard time in the marriage, etc. This category should be coded for presence or absence.

H MEMORIAL GESTURES AND RITUALS-This category includes references to ways in which the participant acknowledged the child. Each of the following eight subcategories should be coded for presence or absence.

1 REFERENCES TO GRAVE OR SEMETARY-This subcategory includes references to visiting the cemetery, decorating the grave, burying the child, making burial arrangements, having the child cremated, etc.

2 REFERENCES TO HAVING A FUNERAL-This subcategory includes references to having a funeral or memorial service for the lost child, making funeral arrangements, dealing with the funeral home, etc.

3 PHOTOS-This subcategory includes references to keeping photos, displaying photos, etc.

4 MEMENTOS-This subcategory includes references to collecting things in memory of the child, buying a Christmas ornament each year in memory of the child, etc.

5 TRADITIONS-This subcategory includes references to developing traditions in memory of the child such as special aspects of holidays, ritualizing the child's birthday, etc.

6 WRITINGS-This subcategory includes references to the creation of a web site in memory or honor of the child, writing poetry, including a previously written story of his/her experience in response to this questionnaire, etc.

7 MAKING THE CHILD PART OF EVERYDAY LIFE-This subcategory includes references to incorporating the child into everyday life, comments in the abstract regarding remembering the child without specific gestures mentioned, etc.

8 OTHER-This subcategory includes references to gestures made to honor the child other than those previously coded in this category.

I NEED TO BECOME PREGNANT AGAIN-This category includes references to feeling a need or desire to become pregnant, have another child, have a successful pregnancy, etc. This category should be coded for presence or absence.

\*J NO RECOVERY/RESOLUTION (5J)-This category includes references to the idea that recovery is impossible, recovery is never going to happen, a person does not recover from this kind of loss, etc. This category should be coded for presence or absence.

K OTHER STRESSORS-This category includes references to other stressful issues that complicate the grief process such as loss of a job, loss of spouse's/significant other's job, financial problems, work-related difficulties, other deaths or major illness in the social network, moving, etc. This category should be coded for presence or absence. Additionally, if multiple distinct stresses are mentioned, the number of stresses should be reflected in the rating.

L PARTICIPANT'S OTHER CHILDREN-This category includes references to the participant's other children. References to other pregnancy losses should not be coded here. Each of the following two subcategories should be coded for presence or absence.

1 PRIOR-This subcategory includes references to children born prior to the loss.

\*2 SUBSEQUENT (5L2)-This subcategory includes references to children born following the loss and current pregnancies.

M PHYSICAL RECOVERY-This category includes references to being physically recovered, one's body having returned to normal, etc. This category should be coded for presence or absence.

N PROCESS-This category includes process comments made by the participant regarding his/her experience of completing the questionnaire. This category should be coded for presence or absence.

O READING/EDUCATION-This category includes references to reading books, articles, newsletters, on-line materials, becoming educated, etc. This category should be coded for presence or absence.

P SPIRITUAL-This category includes references to issues related to religion, spirituality, or other signs that the participant presents as personally meaningful. Each of the following five subcategories should be coded for presence or absence.

1 AFTERLIFE-This subcategory includes references to heaven, the child living after death, seeing the child again, etc.

2 PERSONAL RELATIONSHIP WITH A HIGHER POWER-This subcategory includes references to a personal and active relationship with a higher power, intentional actions of a higher power, feeling that the higher power is purposely punishing the participant through the loss, etc.

3 PHILOSOPHICAL BELIEFS REGARDING A HIGHER POWER-This subcategory includes references to the participant's beliefs, faith, God's will, God's plan, belief in a higher power, feeling cursed, feeling blessed, reading scripture, etc.

4 PRAYER-This subcategory includes references to prayer, praying, the prayers of others, etc.

5 QUESTIONING FAITH-This subcategory includes references to questioning one's faith, being unsure about one's beliefs, etc.

Q SUPPORT-This category includes references to receiving support from the following people or entities. Each of the following eight subcategories should be coded for presence or absence.

1 FAMILY-This subcategory includes references to receiving support from family members other than a spouse or significant other.

2 FRIENDS-This subcategory includes references to receiving support from friends, who are not family members.

3 MEDICAL PROFESSIONALS-This subcategory includes references to supportive or helpful doctors, nurses, social workers, etc. Specific references to therapy or other mental health interventions should not be coded here.

4 MENTAL HEALTH PROFESSIONALS-This subcategory includes references to receiving support from counselors, therapists, etc.

5 OTHERS IN SIMILAR SITUATIONS-This subcategory includes references to receiving support from other people who have experience pregnancy loss, who were not part of a formalized support group.

6 SPIRITUAL LEADER-This subcategory includes references to receiving support from a priest, pastor, etc.

7 SPOUSE/SIGNIFICANT OTHER-This subcategory includes references to receiving support from a spouse or significant other.

8 SUPPORT GROUPS-This subcategory includes references to attending or associating with a formalized support group.

\*R TALKING (5R)-This category includes specific references to finding talking or sharing with others helpful. This category should be coded for presence or absence.

S TIME AS HEALER-This category includes references to things getting better with time, time serving to heal, etc. This category should be coded for presence or absence.

T DISENFRANCHISEMENT-This category includes references to a lack of recognition, invalidation, or dismissive attitude on the part of others regarding the loss. Content coded here

includes concepts that fit the following subcategories and has not been coded elsewhere within this response set. Each of the following two subcategories should be coded for presence or absence. In addition, if multiple distinct examples are given that fit one of the subcategories, the rating should reflect the number of concepts mentioned. For example, a participant who mentions that others seemed to feel the child did not count and feeling as if other people expected him/her to “get over it” would receive a 2 for **PASSIVELY FEELING DISENFRANCHISED**. Please underline content in the responses you code as **DISENFRANCHISEMENT**.

**1 PASSIVELY FEELING DISENFRANCHISED**-This subcategory includes feelings that others do not acknowledge or recognize the lost child, feeling that others do/did invalidate the participant’s grief, implied expectations that a grief reaction is inappropriate or should be more minimal than it is/was, reporting a need to know that feelings or reactions were valid or appropriate, etc.

**2 ACTIVELY ACTING AGAINST BEING DISENFRANCHISED**-This subcategory includes references to the participant actively working against feelings of disenfranchisement. Such content may include talking about the child to make others aware that he/she existed or counted, including the child as part of the family, actively seeking validation for feelings and experiences from others, etc.

#### QUESTION #6: HEALTH

##### Content Categories

ABSENCE=0

PRESENCE=1 or FREQUENCY where indicated

**A INADEQUATE HEALTHCARE**-This category includes references to inadequate or substandard healthcare. This category should be coded for presence or absence.

**\*B LOSS/BIRTH/DEATH OF CHILD (6B)**-The participant refers to the specific event of the birth, death, or loss of the child including references to C. sections etc. This category is coded for presence or absence.

**C MENTION OF INCONGRUENCE BETWEEN THE MOTHER AND CHILD’S PHYSICAL HEALTH AND THE LOSS EXPERIENCE**-The participant refers to the idea that she lost her child despite having good health. This category also includes discussion of there being no apparent physical or medical cause for the loss. This category is coded for presence or absence.

**D PHYSICAL HEALTH DURING PREGNANCY**-Content in this area involves references to the health of the mother during the pregnancy. Each response should be coded for presence or absence of such references in the following four subcategories. It is possible for participants to have multiple subcategories present in their responses.

**\*1 NORMAL/UNREMARKABLE (6D1)**-The participant refers to her health as typical for her, good, fine, OK, etc.

\*2 SUPERLATIVELY POSITIVE (6D2)-The participant refers to her health as being excellent, especially good, better than it has ever been, etc.

3 EXPECTED HEALTH PROBLEMS/MINOR OR COMMON COMPLICATIONS-

The participant refers to common health problems associated with pregnancy such as some morning sickness, swelling, feeling tired, emotionality or irritability, minor stress, etc. This category also includes minor health problems such as being slightly overweight or a decrease in exercise due to the advancing pregnancy.

4 SERIOUS HEALTH PROBLEMS-The participant refers to major complications with the pregnancy or serious health problems surrounding the pregnancy such as being put on bed rest due to high blood pressure, severe weight loss, major health problems prior to pregnancy, etc.

E PHYSICAL SYMPTOMS FOLLOWING THE LOSS-This category includes references to any physical symptoms following the loss. This category should be coded for presence or absence. In addition, if the participant reports multiple physical symptoms, the number of symptoms reported should be reflected in the rating.

F PSYCHOLOGICAL SYMPTOMS FOLLOWING THE LOSS-Participants should be rated in the two following subcategories for presence or absence as well as whether multiple symptoms are discussed. A participant who mentions crying and taking antidepressants would receive a 2 for DEPRESSIVE SYMPTOMS. A participant who mentions feeling anxious would receive a 1 for SYMPTOMS OF ANXIETY.

1 DEPRESSIVE SYMPTOMS-Content included in this subcategory involves crying, feeling depressed, taking antidepressants, fatigue, etc.

a APPETITE DIFFICULTIES- Appetite difficulties may be included here if they appear to be related to a depressive pattern. This more narrow subcategory should be coded for presence or absence.

b SLEEP DIFFICULTIES- Sleep difficulties may be included here if they appear to be related to a depressive pattern. This more narrow subcategory should be coded for presence or absence.

2 SYMPTOMS OF ANXIETY-This subcategory includes references to paranoia, fear, worry, taking anti-anxiety medication, panic, etc.

a APPETITE DIFFICULTIES- Appetite difficulties may be included here if they appear to be related to an anxious pattern. This more narrow subcategory should be coded for presence or absence.

b SLEEP DIFFICULTIES- Sleep difficulties may be included here if they appear to be related to an anxious pattern. This more narrow subcategory should be coded for presence or absence.

\*G SELF-CARE (6G)-The participant includes references to actively promoting good health through exercise, diet, vitamins, regular physical exams, avoiding harmful substances, preparing emotionally for parenthood, preparing physically for pregnancy, etc. In addition to whether or not this category is present or absent in the response, the rating should reflect whether multiple

behaviors are mentioned. For example, a participant that mentions regular exercise, taking vitamins, and watching her diet would receive a 3. A participant that only mentions regular exercise would receive a 1.

**H SUBSEQUENT CHILDREN**-This category includes references to children born following the loss and current Pregnancies. This category should be coded for presence or absence.

**I DISENFRANCHISEMENT**-This category includes references to a lack of recognition, invalidation, or dismissive attitude on the part of others regarding the loss. Content coded here includes concepts that fit the following subcategories and has not been coded elsewhere within this response set. Each of the following two subcategories should be coded for presence or absence. In addition, if multiple distinct examples are given that fit one of the subcategories, the rating should reflect the number of concepts mentioned. For example, a participant who mentions that others seemed to feel the child did not count and feeling as if other people expected him/her to “get over it” would receive a 2 for **PASSIVELY FEELING DISENFRANCHISED**. Please underline content in the responses that you code as **DISENFRANCHISEMENT**.

**1 PASSIVELY FEELING DISENFRANCHISED**-This subcategory includes feelings that others do not acknowledge or recognize the lost child, feeling that others do/did invalidate the participant’s grief, implied expectations that a grief reaction is inappropriate or should be more minimal than it is/was, reporting a need to know that feelings or reactions were valid or appropriate, etc.

**2 ACTIVELY ACTING AGAINST BEING DISENFRANCHISED**-This subcategory includes references to the participant actively working against feelings of disenfranchisement. Such content may include talking about the child to make others aware that he/she existed or counted, including the child as part of the family, actively seeking validation for feelings and experiences from others, etc.

#### QUESTION #7: FAMILY Content Categories

ABSENCE=0

PRESENCE ONLY=1 or FREQUENCY where indicated

PRESENCE OF POSITIVE RELATIONSHIP=25

PRESENCE OF NEGATIVE RELATIONSHIP=999

PRESENCE OF AMBIVALENT RELATIONSHIP=1234

**QUALITY OF RELATIONSHIP**-These ratings should be made if the participant, in mentioning a person they consider as part of their “family,” discusses the nature of his/her relationship with that individual. Only one of the three following subcategories should be coded for any one relationship mentioned. If a person in one of the following categories or subcategories is included in the definition of “family,” but no elaboration of the relationship is made, the code is PRESENCE ONLY=1. If elaboration on the relationship is given, PRESENCE OF POSITIVE RELATIONSHIP=25, PRESENCE OF NEGATIVE RELATIONSHIP=999, AND PRESENCE

OF AMBIVALENT RELATIONSHIP=1234. These definitions apply to categories A, B, C, and D in this response set.

1 POSITIVE-This includes references to a supportive or helpful relationship.

2 NEGATIVE-This includes references to an unsupportive or detrimental relationship. This concept may also be indicated through the specific exclusion of an individual (e. g. “not my brother”).

3 AMBIVALENT-This includes discussion of a relationship that includes both positive and negative characteristics. For example, a participant might describe how her mother was not supportive but “I know she loves me.”

A FAMILY-This category includes references to individuals related to the participant through blood or marriage as described below. Each of the following nine subcategories should be coded for absence, presence only, presence of positive relationship, presence of negative relationship, or presence of ambivalent relationship.

1 UNSPECIFIED-This subcategory includes vague references such as my family, immediate family, extended family, etc.

\*2 SPOUSE/SIGNIFICANT OTHER (7A2)-This subcategory includes references to husband, wife, significant other, a former spouse, etc.

\*3 PARENTS (7A3)-This subcategory includes references to mother, father, etc.

\*4 SIBLINGS (7A4)-This subcategory includes references to brothers or sisters.

\*5 LIVING CHILDREN (7A5)-This subcategory includes references to LIVING sons or daughters.

6 Deceased CHILDREN-This subcategory includes references to deceased sons or daughters.

\*7 EXTENDED FAMILY (7A7)-This subcategory includes references to any other blood-related family members-aunts, uncles, grandparents, cousins, nieces, nephews, etc.

\*8 IN-LAWS (7A8)-This subcategory includes references to any type of in-laws-sister-in-law, mother-in-law, spouse’s family, etc.

9 STEP-FAMILY MEMBERS-This subcategory includes references to step-parents, step-siblings, step-children, etc.

B FRIENDS-Any reference to a friend who is not a family member but is considered “part of the family” etc. This category should be coded for absence, presence only, presence of positive relationship, presence of negative relationship, or presence of ambivalent relationship.

C PETS-This category includes references to pets. This category should be coded for absence, presence only, presence of positive relationship, presence of negative relationship, or presence of ambivalent relationship.

D SELF-This category includes specific references to self. This category should be coded for absence, presence only, presence of positive relationship, presence of negative relationship, or presence of ambivalent relationship.

ABSENCE=0

PRESENCE=1 or FREQUENCY where indicated

E DISENFRANCHISEMENT-This category includes references to a lack of recognition, invalidation, or dismissive attitude on the part of others regarding the loss. Content coded here includes concepts that fit the following subcategories and has not been coded elsewhere within this response set. Each of the following two subcategories should be coded for presence or absence. In addition, if multiple distinct examples are given that fit one of the subcategories, the rating should reflect the number of concepts mentioned. For example, a participant who mentions that others seemed to feel the child did not count and feeling as if other people expected him/her to “get over it” would receive a 2 for PASSIVELY FEELING DISENFRANCHISED. Please underline content you code as DISENFRANCHISEMENT.

1 PASSIVELY FEELING DISENFRANCHISED-This subcategory includes feelings that others do not acknowledge or recognize the lost child, feeling that others do/did invalidate the participant’s grief, implied expectations that a grief reaction is inappropriate or should be more minimal than it is/was, reporting a need to know that feelings or reactions were valid or appropriate, etc.

2 ACTIVELY ACTING AGAINST BEING DISENFRANCHISED-This subcategory includes references to the participant actively working against feelings of disenfranchisement. Such content may include talking about the child to make others aware that he/she existed or counted, including the child as part of the family, actively seeking validation for feelings and experiences from others, etc.

APPENDIX L

TABLES

Table 1. Intercorrelations of PGS and the HGRC Variables.

	1	2	3	4	5	6	7	8	9	10	12
1. PGS Total N	(.92) 44	.91** 44	.91** 44	.90** 44	-.79** 44	-.75** 44	.50** 44	-.68** 43	-.78** 44	-.61** 43	.87** 42
2. PGS Active Grief N	.91** 44	(.87) 47	.74** 46	.70** 46	-.74** 47	-.60** 47	-.43** 47	-.53** 46	-.68** 47	-.49** 46	.73** 45
3. PGS Difficulty Coping N	.91** 44	.74** 46	(.73) 46	.76** 45	-.67** 46	-.76** 46	.44** 46	-.64** 45	-.78** 46	-.68** 45	.85** 44
4. PGS Despair N	.90** 44	.70** 46	.76** 45	(.78) 46	-.73** 46	-.66** 46	.54** 46	-.69** 45	-.68** 46	-.55** 45	.79** 44
5. HGRC Despair N	-.79** 44	-.74** 47	-.67** 46	-.73** 46	(.88) 47	.67** 47	-.39** 47	.64** 46	.69** 47	.50** 46	.85** 45
6. HGRC Panic Behavior N	-.75** 44	-.60** 47	-.76** 46	-.66** 46	.67** 47	(.91) 47	.34* 47	.50** 46	.68** 47	.67** 46	.88** 45
7. HGRC Personal Growth N	.50** 44	.43** 47	.44** 46	.54** 46	-.39** 47	-.34* 47	(.92) 47	-.56** 46	-.50** 47	-.35* 46	.50** 45
8. HGRC Blame and Anger N	-.68** 43	-.53** 46	-.64** 45	-.69** 45	.64** 46	.50** 46	-.56** 46	(.83) 46	.63** 46	.44** 45	.74** 45
9. HGRC Detachment N	-.78** 44	-.68** 47	-.78** 46	-.68** 46	.68** 47	.68** 47	-.50** 47	.63** 46	(.87) 47	.67** 46	.88 45
10. HGRC Disorganization N	-.61** 43	-.49** 46	-.68** 45	-.55** 45	.50** 46	.67** 46	-.35* 46	.44** 45	.67** 46	(.92) 46	.79** 45
11. HGRC Distress-Related N	-.87** 42	-.73** 45	-.85** 44	-.79** 44	.85** 45	.88** 45	-.50** 45	.74** 45	.88** 45	.79** 45	(.96) 45

Note: \* =  $p < .05$ ; \*\* =  $p < .01$ ; Parenthesized values on the diagonal are alpha coefficients.

Table 2. Intercorrelations of PSS and the HGRC Variables.

	1	2	3	4	5	6	7	8	9	10
1. PSS Family N	(.94) 46	.45** 46	.86** 46	-.18 44	-.16 46	-.08 46	.23 46	-.18 45	-.25 46	-.13 45
2. PSS Friends N	.45** 46	(.94) 47	.85** 46	-.19 45	.08 47	-.20 47	.24 47	-.31* 46	-.15 47	-.15 46
3. PSS Total N	.86** 46	.85** 46	(.95) 46	-.21 44	-.04 46	-.16 46	.27 46	-.28 45	-.23 46	-.16 45
4. HGRC Distress-Related N	-.18 44	-.19 45	-.21 44	(.96) 45	.85** 45	.88** 45	-.50** 45	.74** 45	.88** 45	.79** 45
5. HGRC Despair N	-.16 46	.08 47	-.04 46	.85** 45	(.88) 47	.67** 47	-.39** 47	.64** 46	.68** 47	.50** 46
6. HGRC Panic Behavior N	-.08 46	-.20 47	-.16 46	.88** 45	.67** 47	(.91) 47	-.34* 47	.50** 46	.68** 47	.67** 46
7. HGRC Personal Growth N	.23 46	.24 47	.28 46	-.50** 45	-.39** 47	-.34* 47	(.92) 47	-.56** 46	-.50** 47	-.35* 46
8. HGRC Blame and Anger N	-.18 45	-.31* 46	-.29 45	.74** 45	.64** 46	.50** 46	-.56** 46	(.83) 46	.63** 46	.44** 45
9. HGRC Detachment N	-.25 46	-.15 47	-.23 46	.88** 45	.68** 7	.68** 47	-.50** 47	.63** 46	(.87) 47	.67** 46
10. HGRC Disorganization N	-.13 45	-.15 46	-.16 45	.79** 45	.50** 46	.67** 46	-.35* 46	.44** 45	.67** 46	(.92) 46

Note: \* =  $p < .05$ , \*\* =  $p < .01$ ; Parenthesized values on the diagonal are alpha coefficients.

Table 3. Stepwise Regression Analysis Predicting PGS Scores.

Criterion	Predictor Steps	Final Beta	Adjusted R <sup>2</sup> at each step
PGS	1. READING/EDUCATION	.40	.16
	2. PHYSICAL HEALTH DURING PREGNANCY - SUPERLATIVELY POSITIVE	.43	.28
	3. INSPIRIT	.32	.37

N = 35; F = 7.53, p < .001

Table 4. Stepwise Regression Analysis Predicting HGRC Distress-Related Scores.

Criterion	Predictor Steps	Final Beta	Adjusted R <sup>2</sup> at each step
HGRC Distress	1. WORLD VIEW - APPRECIATING LIFE	-.49	.16
	2. Number of Pregnancy Losses	-.31	.25
	3. MEMORIAL GESTURES AND RITUALS - NAME	-.50	.32
	4. DESCRIPTION OF CHILD'S LIFE/DEATH/ FAMILY'S TIME WITH CHILD - INTERACTIONS WITH CHILD	.46	.49

N = 35; F = 9.17, p < .001.

## REFERENCES

- Bowlby, J. (1969). Attachment and Loss: Volume 1 Attachment. New York: Basic Books.
- Clayton, P. J. (1980). Bereavement and its management. In E. S. Paykel (Ed.), Handbook of Affective Disorders. Edinburgh, Churchill Livingstone.
- Cole, D. (1987). It might have been: Mourning the unborn. Psychology Today, 21, 64-65.
- Covington, S. N. (1999). Pregnancy loss. In Infertility counseling: A comprehensive handbook for clinicians. Burns, L. H., & Covington, S. N. (Eds.) pp.227-245, New York: Parthenon Publishing Group Inc.
- Doka, K. J. (2002). Disenfranchised grief: New directions, challenges, and strategies for practice. Champaign, IL: Research Press.
- Engel, G. L. (1961). Is grief a disease?: A challenge for medical research. Psychosomatic Medicine, 23, 18-22.
- Figley, C. R., Bride, B. E., Mazza, N. (1997). Death and trauma: The traumatology of grieving. Washington D.C.: Taylor & Francis.
- Freud, S. (1959). Mourning and melancholia. Collected Papers. New York: Basic Books, 152-170. (original work published 1917)
- Gamino, L. A., Sewell, K. W., & Easterling, L. W. (2000). Scott & White grief study—phase II: Toward an adaptive model of grief. Death Studies, 24, 633-660.
- Goldbach, K. R., Dunn, D. S., Toedter, L. J., & Lasker, J. N. (1991). The effects of gestational age and gender on grief after pregnancy loss. American Journal of Orthopsychiatry, 61, 461-467.
- Haight, B. K. & Webster, J. D. (1995). The art and science of reminiscing: Theories, research, methods, and application. Washington D.C.: Taylor & Francis.

- Hogan, N. S., Greenfield, D. B., and Schmidt, L. A. (in press). Development and validation of the Hogan Grief Reaction Checklist. Death Studies, 25, 1-32.
- Hunfeld, J. A. M., Wladimiroff, J. W., & Passchier, J. (1997). Prediction and course of grief four years after perinatal loss due to congenital anomalies: A follow-up study. British Journal of Medical Psychology, 70, 85-91.
- Hunfeld, J. A. M., Wladimiroff, J. W., Passchier, J., Venema van Uden, M. U. et al. (1993). Reliability and validity of the Perinatal Grief Scale for women who experienced late pregnancy loss. British Journal of Medical Psychology, 66, 295-298.
- Hunfeld, J. A. M., Wladimiroff, J. W., Verhage, F., & Passchier, J. (1995). Previous stress and acute psychological defense as predictors of perinatal grief: An exploratory study. Social Science and Medicine, 40, 829-835.
- Janssen, H. E. J. M., Cuisinier, M. C. J., De Graauw, K. P. H. M., & Hoogduin, K. A. L. (1997). A prospective study of risk factors predicting grief intensity following pregnancy loss. Archives of General Psychiatry, 54, 56-61.
- Janssen, H. E. J. M., Cuisinier, M. C. J., & Hoogduin, K. A. L. (1996). A critical review of the concept of pathological grief following pregnancy loss. Omega: Journal of Death and Dying, 33, 21-42.
- Johnson, M. P., & Puddifoot, J. E., (1998). Miscarriage: Is vividness of visual imagery a factor in the grief reaction of the partner?. British Journal of Health Psychology, 3, 137-146.
- Johnson, M. P., & Puddifoot, J. E. (1996). The grief response in the partners of women who miscarry. British Journal of Medical Psychology, 69, 313-327.

- Kass, J. D., Friedman, R., Leserman, J., Zuttermeister, P. C., & Benson, H. (1991). Health outcomes and a new index of spiritual experience. Journal for the Scientific Study of Religion, 30, 203-211.
- Kennell, J. H., Slyter, H., & Klaus, M. H. (1970). The mourning response of parents to the death of a newborn infant. New England Journal of Medicine, 283, 344-349.
- Lasker, J. N., & Toedter, L. J. (1991). Acute versus chronic grief: The case of pregnancy loss. American Journal of Orthopsychiatry, 61, 510-522.
- Lindemann, E. (1944). Symptomatology and management of acute grief. American Journal of Psychiatry, 101, 141-148.
- Parkes, C. M. (1972). Bereavement: Studies of grief in adult life. New York: International Universities Press.
- Procidano, M. E. & Heller, K. (1983). Measuring perceived social support from friends and from family: Three validation studies. American Journal of Community Psychology, 11, 1-24.
- Puddifoot, J. E., & Johnson, M. P. (1999). Active grief, despair, and difficulty coping: Some measured characteristics of male response following their partners' miscarriage. Journal of Reproductive and Infant Psychology, 17, 89-93.
- Rajan, L., & Oakley, A. (1993). No pills for the heartache: The importance of social support for women who suffer pregnancy loss. Journal of Reproductive and Infant Psychology, 11, 75-87.
- Reed, K. S. (1984). Involuntary pregnancy loss: Research and the implications for nursing. Issues in Mental Health Nursing, 6, 209-217.
- Smith, A. C., & Borgers, S. B. (1988-1989). Parental grief response to perinatal death. Omega: Journal of Death and Dying, 19, 203-214.

- Stringham, J. G., Riley, J. H., & Ross, A. (1982). Silent birth: Mourning a stillborn baby. Social Work, 27, 322-327.
- Tadmor, C. S. (1986). A crisis intervention model for a population of mothers who encounter neonatal death. Journal of Primary Prevention, 7, 17-26.
- Toedter, L. J., Lasker, J. N., & Alhadeff, J. M. (1988). The Perinatal Grief Scale: Development and initial validation. American Journal of Orthopsychiatry, 58, 435-449.
- Williams, A. W., Gamion, L. A., Sewell, K. W., Easterling, L. W., & Stirman, L. S. (1998). A content and comparative analysis of loss in adaptive and maladaptive grievers. Journal of Personal and Interpersonal Loss, 3, 349-368.
- Worden, J. W. (2002). Grief Counseling and Grief therapy: A Handbook for the Mental Health Practitioner, (3<sup>rd</sup> ed.). New York: Springer.