Investigating the grief process related to job loss

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INVESTIGATING THE GRIEF PROCESS RELATED TO JOB LOSS

by

Mary P. Donahue

A Dissertation

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# Tables of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>iii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>iv</td>
</tr>
<tr>
<td>List of Figures</td>
<td>v</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td>Chapter I: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Chapter II: Literature Review</td>
<td>13</td>
</tr>
<tr>
<td>Chapter III: Methodology</td>
<td>32</td>
</tr>
<tr>
<td>Chapter IV: Results</td>
<td>50</td>
</tr>
<tr>
<td>Chapter V: Discussion</td>
<td>58</td>
</tr>
<tr>
<td>References</td>
<td>73</td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>Appendix A: Tables</td>
<td>84</td>
</tr>
<tr>
<td>Appendix B: Figures</td>
<td>96</td>
</tr>
<tr>
<td>Appendix C: Consent Form</td>
<td>100</td>
</tr>
<tr>
<td>Appendix D: Instruments</td>
<td>101</td>
</tr>
</tbody>
</table>
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List of Tables

Table 1. Description of the Sample 82
Table 2. Statistical Analysis – Assumptions of Normality 87
Table 3. Descriptive Statistics of Demographic and Study Variables 88
Table 4. Intercorrelations Among the Study and Demographic Variables 89
Table 5. Comparison of Mean Scores Across Samples on the Study Variables 90
Table 6. Comparison of Means and Standard Deviations of Bereavement Reference Group of Grief Experience Inventory – Loss Version 91
Table 7. Comparison of Confidence Intervals with Brewington et al. (2004) Group of IJL Workers: Grief Experience Inventory – Loss Version Subscales 92
Table 8. Summary of Standard Regression Analysis for Variables Predicting General Psychological Health 93
Table 9. Summary of Standard Regression Analysis for Variables Predicting Depression 94
Table 10. Summary of Standard Regression Analysis for Variables Predicting Anxiety 95
List of Figures

Figure 1. Histogram for general psychological distress – GHQ-12 96
Figure 2. Histogram for Depression – Zung Depression Scale 97
Figure 3. Histogram for Anxiety State Trait Anxiety Inventory – State 98
Figure 4. Scatterplot for General Psychological Health, Depression and Anxiety 99
Abstract

Adults in the workforce face various psychosocial challenges over the course of their career. One of the most stressful life experiences is the involuntary loss of employment (Holmes & Rahe, 1967). This study explored psychological reactions to involuntary job loss and the overlap between reactions to job loss and bereavement loss. It was hypothesized that the pattern of symptoms reported by a job loss group would not differ significantly from a bereavement group. In addition, a second research question explored three specific contextual variables (social support, work salience, and time since loss) and their correlation with psychological outcomes of the job loss.

Data was collected from 106 men and women who lost their job involuntarily within the last two years. In hypothesis one, independent t-tests revealed that the job loss group experienced similar or higher degrees of grief compared to the bereavement group. Thus, the job loss group in this study exhibited similar levels of hopelessness, tension, stress, confusion, and physical symptoms. Additionally, the group reported higher degrees of irritation, guilt, withdrawal from social responsibility, oversensitivity, and brooding, than did the reference group.

In the second hypothesis, three hierarchical multiple regressions were conducted. Covariates (age, gender, financial difficulty) were included in the first steps, and contextual variables were added in step two. Results revealed that social support and gender were significantly related to psychological distress, such that higher degrees of felt social support served to lower distress, and women reported experiencing greater psychological distress than men. Financial difficulty was a significant predictor in depression and anxiety, but not in general distress, and work salience was of significant
influence only in the anxiety model. Neither age nor time since loss was significantly related to indicators of psychological distress in any of the models.

The results suggest that individuals who lose their jobs may experience a psychological reaction at a similar or even more intense level to those who have had a bereavement loss. It is important for career counselors working with unemployed individuals to assess for psychological functioning and provide social support, in addition to traditional interventions focused on reemployment.
Chapter One
Introduction

Career transitions have become a common experience in the lives of an increasing number of adult American workers (Hanisch, 1999). These career transitions involve changes in the circumstances of one’s work life (Myers & Cairo, 1984) or discontinuity of established employment (Hanisch). Such transitions typically require employees to embrace a different work role, assume new ideas relative to the current one, or surrender the role permanently (Ebberwein, Krieshok, Ulven, & Prosser, 2004; Latack & Dozier, 1986). These transition events can often include a phase of vulnerability and self-assessment as the worker struggles to make adjustments to change (Latack & Dozier).

One event that has become more prevalent in the world of work concerns employees who are involuntarily dismissed from their jobs. Involuntary job loss (IJL) is defined as “an involuntary transition in which the worker has little or no influence over the dismissal” (Ebberwein et al., 2004, p. 293). Therefore, in contrast to unemployment, which is a condition of not working (Holmes & Rahe, 1967; Latack, Kinicki & Prussia, 1995), IJL is a career event activated by forces largely outside of the employees’ control (Latack et al.). Currently, such a transition event often compels workers to hastily make many personal adjustments such as accepting lower employment status or salary, changing careers, or receiving public assistance in order to address important financial difficulties that may arise (Guindon & Smith, 2002). Many workers also seek professional assistance in places such as company-sponsored programs, unemployment offices, and career counseling.
Traditionally, involuntary job loss has been viewed as a competency-based event, meaning the employee did not possess requisite proficiencies for the job. Thus, vocational counseling is often conceptualized as an intellectual exercise that addresses skill deficits or cognitive gaps in an attempt to remedy the job loss (Krumboltz, 1993). Involuntary job loss, therefore, may be customarily viewed as situational and so is often assumed to be resolved when the client regains employment. However, the literature increasingly suggests a more holistic function of work (Blustein, 2001). That is, the importance of the work role fulfills not only financial necessities, but also addresses latent needs, such as a sense of pride and accomplishment, social contact, time structure, status, and a sense of identity, the losses of which may be equally as devastating to the displaced worker (Archer & Rhodes, 1987; Johada, 1979).

Indeed, research commonly suggests that complex mental and physical health reactions are also characteristic of IJL events (Graetz, 1993; Hanisch, 1999; Keefe, 1984). Many dismissed workers feel defective, discouraged, confused, powerless, and personally rejected (Zippay, 1995). They often experience a variety of psychological and physical symptoms that may complicate their adjustment to the job loss event such as depression, anxiety, memory problems, restlessness, guilt, anger, loneliness, self consciousness, feelings of inadequacy and dejection, headaches, achy limbs, indigestion, and sleep problems (Cassidy, 2001; Graetz; Guindon & Smith, 2002; Hanisch; Rowley & Feather, 1987). Indeed, employees experiencing IJL face a potentially traumatic transition that can be compared to coping processes experienced in a variety of other negative loss events. Holmes and Rahe (1967) considered being dismissed from a job to be one of the most stressful negative events that individuals can face, superseded only by
incidents related to divorce, imprisonment, and death. Unemployment has also been
correlated with a hastening of diagnosable mental health disorders, even in those with no
previous history of psychological disorders (Hanisch). Further, if left unrecognized or
ineffectively treated, psychological distress resulting from IJL can continue even after
reemployment (e.g., Goldsmith, Veum, & Darity, Jr., 1996; Mallinckrodt, 1990; Zippay).

While no one model of coping with job or other psychosocial losses can be
universally applied in treatment of IJL workers, several theories have been offered as a
means of understanding transition and managing adjustment to this disturbing event.
Such models typically include stages in which the individual engages in coping activities
such as denying or minimizing the loss, withdrawal, self doubt, hypersensitivity, and fear,
and the individual eventually moves on and accepts the event and reorganizes his or her
personal values, lifestyle, and views of self and the world (Brown & Heath, 1984;
Hopson & Adams, 1977; Parkes, 1988). Other models of career transition equate job loss
reactions (e.g., apathy, loneliness, dread, guilt, anger, and somatic symptoms) to similar
patterns exhibited by people who experienced a death loss (Fagin & Little, 1984; Parkes;
Winegardner, Simonetti, & Nyodym, 1984). Indeed, while seldom referring to emotional
reaction patterns of IJL specifically as “grief,” many theories and empirical studies
nonetheless describe these patterns of psychological distress in the same manner as do
scholars investigating reactions following the loss of an important person. That is,
literature on the emotional effects of IJL and the literature on bereavement loss both
indicate that individuals can experience periods of significantly elevated levels of
emotional distress following the loss event that are indicative of depression, despair,
dysphoria, restlessness, anxiety, social isolation, and somatic reactions (e.g., Amundson
Borgen, 1982; Faria, 1983; Kubler-Ross, 1997; Parkes; Rondo, 1984; Winegardner et al. 1984). Indeed, in her work with dying and bereaved patients, Rando asserted that a symbolic loss, such as that of a job, will “initiate a grief process just as do tangible losses” (p. 16).

While the death of a loved one and job loss are two distinct events, each involves the loss of a critical life role for an individual. Faria (1983) and others (Glukoski & Wortman, 1996; Gottfredson, 1983; Johada, 1981; Mallinckrodt & Fretz, 2002) asserted that individual life roles include a set of underlying behaviors and expectations which, when effectively realized, promote a sense of accomplishment and worth, social contact, status, vitality, controllability, and predictability, as well as a sense of self and of goals held in common with others. The loss of those roles, therefore, can be viewed as behavioral losses which encompass forced changes in status, abilities, role responsibilities, and daily routines (Trolley, 1994). Thus, depending upon the significance attributed to a specific role, role losses can lead to difficulties related to self-definition, social contacts, and self-worth (Burke, 1991; Faria, 1983; Shaver & Tancredy, 2001). Losses in these core components of identity can disturb one’s personal and emotional organization, producing emotional vulnerability and generating debilitating psychological and somatic symptoms (Latack & Dozier, 1986). Accordingly, transition events such as these often prompt a search for purpose and new meaning (Winegardner et al., 1984). Consequently, where “loss” was once understood to uniquely convey a death loss, individuals can be perceived to have experienced traumatic role losses in a variety of life events, and these diverse losses can certainly produce emotional distress.
manifesting itself via psychological and somatic reactions (e.g., Faria; Hanisch, 1999; Harris, Morley, & Barton, 2003; Hayes & Nutman, 1981; Murray, 2001; Trolley).

Similar psychological and physiological symptoms associated with loss across a broad array of loss situations (i.e., including death of a loved one, job loss, divorce, pet death, emigration, and physical disability) have also been noted in the bereavement literature. Commonly mentioned symptoms include pining for the lost object, crying, anxiety, depression, despair, isolation, disorganization, impaired concentration, substance abuse, anger, guilt, and heightened physical complaints (Burnett, Middleton, Raphael, Dunne, Moylan, and Martinek, 1994; Horacek, 2001; Murray, 2001; Rondo, 1984; Roskin, 1986; Trolley, 1994; Vargas, Loya, & Hodde-Vargas, 1989; Wrobel & Dye, 2003). It is important to note that the reactions to a death loss include many of the same symptoms described as job loss reactions. Indeed, studies from both the bereavement and job loss literatures typically consider these various psychological and physiological symptoms to be “normal emotional responses to loss” (Murray, p. 219). Accordingly, research concerning both the bereaved and the unemployed indicates a substantial overlap in distress symptoms reported in each group, and that these symptoms can be affected by contextual factors such as those listed above.

A small body of literature exists that explores the overlap and similar patterns of symptoms between bereavement and job loss. For example, Brewington, Nassar-McMillan, Flowers, and Furr (2004) compared symptoms reported by a small group of IJL participants with those endorsed in the reference group of an established grief loss measure. The authors found significant symptom overlap between the groups on 8 of 9 subscales including, Despair, Anger-Hostility, Guilt, Social Isolation, Loss of Control,
Rumination, Somaticism, and Death Anxiety. One scale, Depersonalization, produced only a moderate difference score. Further, the symptoms appeared to be positively correlated with the amount of time passed since the loss occurred.

Similarly, in conducting a comparative review of theories regarding psychosocial transition and adjustment to role loss due to death and job loss, Archer and Rhodes (1993, 1995) asserted that the experience of IJL elicits symptoms much like those faced by people who have experienced a death loss. In order to test their theory, the authors developed a structured questionnaire that assessed the applicability of the bereavement grief process to experiences undergone by job loss individuals. The questionnaire was developed from descriptions of grief components across many bereavement studies, with descriptions modified specifically for job loss, and items added to address commonly acknowledged latent losses, such as social contact, sense of self worth, and status, among others. In their initial study, Archer and Rhodes (1993) used a semi-structured interview to assess symptoms reported by a group of long-term unemployed men and found evidence of grief reactions in more than 25% of the participant sample. Such grief reactions included symptoms of preoccupation with the loss, rumination, anxiety, denial, anger and bitterness, guilt, loss of occupational identity, depression, and somaticism. These symptoms did not decrease with time, and were related to the degree of attachment the workers felt toward the work role. Archer and Rhodes (1995) then extended their study using a sample of recently unemployed men and monitored their symptoms over a 12 month period. Again, over 25% of this longitudinal sample initially demonstrated a grief reaction similar to the comparison group of bereaved individuals, and the grief
reaction included many of the same symptoms as were found in the 1993 study and was related to the degree of role salience reported in the sample.

**Purpose of the Current Study**

The purpose of the present study is to expand on the previous research on psychological reactions to job loss and the overlap between reactions to job loss and bereavement loss. The first hypothesis of this study asserts that individuals who have undergone IJL will report similar symptom patterns as do those experiencing a bereavement loss, as demonstrated by an overlap of similar symptoms between the two groups. Indeed, these similar symptoms are commonly reported by the job loss and bereavement loss groups and include a myriad of psychological and somatic symptoms such as anxiety, despair, anger and hostility, guilt, rumination, social isolation, and loss of control. Therefore, in order to test for the presence of such loss reactions in a current job loss group, it is proposed that individuals experiencing an involuntary job loss will report similar degrees of these symptoms as a reference sample of bereaved individuals (i.e., those who experienced the loss of a loved one).

From the research literature it is clear that employees experiencing involuntary job loss report diminished levels of psychological health as compared to their employed counterparts (Graetz, 1993; Kokko & Pulkkinen, 1998; Waters & Moore, 2001). Indeed, the literature on job loss consistently describes depression and anxiety, as well as other affective and somatic reactions including hostility, social stress, decreased ability to concentrate, feelings of worthlessness, sleep disturbances, and headaches as manifesting the distress typically experienced by IJL individuals. Investigation regarding such symptoms reveals a number of factors that have often been shown to affect the intensity
of psychological reactions to major loss events. Therefore, the second research question
will explore the degree to which three specific factors (social support, work role salience,
and time since loss) are correlated with psychological outcomes of involuntary job loss
including depression, anxiety, and general mental health distress reactions.

The job loss literature posits that perceived social support from family and friends
is one of the most important factors affecting the loss experience, as its presence can
attenuate or prevent a stress appraisal as well as help individuals to recover more readily
from the impact of a stress event (e.g., Kokko & Pulkkinen, 1998; Latack & Dozier,
1986; Mallinckrodt & Fretz, 1988). Social support is defined by as “the feeling of
belonging to and of being esteemed by” a group perceived to be significant to a person’s
perception of emotional security (Keefe, 1984, p. 265). Research findings suggest that
greater social support is related to significantly lowered levels of stress symptoms in
unemployed people (Keefe; Leana, Feldman & Tan, 1998). Therefore, it is hypothesized
that those who report higher amounts of perceived social support will experience a lower
degree of depression, anxiety, and general mental health distress reactions.

A second variable that has been connected to the intensity of the job loss reactions
is the salience or importance of the lost role. Identity theory purports that one’s personal
identity is a collection of role identities that people organize into a hierarchy relative to
the importance that each role has in that individual’s life, and its importance is
determined by the person’s social and emotional commitment to that role (Burke, 1991;
Thoits, 1991). The greater value accorded a particular life role in an individual’s
hierarchy of roles (i.e., the more salient that role is to the concept of self), the more
important that role is to one’s psychological well-being (Thoits). Regarding the role of
employment, Greenhaus (1973) defined Work Role Salience as “the perceived importance of work and a career in one’s life” (p. 53) and suggested it to be an important component of self concept. Indeed, the work role has been acknowledged as “a central organizing feature of life” (Guindon & Smith, 2002; pg. 74). Thus, the degree of distress experienced at the loss of this specific role depends upon the degree of salience assigned to it by the jobless worker. Indeed, the literature consistently demonstrates that work role salience positively corresponds with the intensity of psychological and somatic levels of distress reported by IJL workers. Research studies have found that among individuals who have lost jobs, those who felt work to have a more central role in their lives experienced more depression, anxiety, and psychological distress than those whose work was less meaningful to them (Parkes, 1988; Simon, 1992). It is therefore hypothesized that the higher degree of work role salience reported, the greater depression, anxiety, and general mental health distress reactions will be reported.

A third variable that has been consistently related to psychological reactions to job loss is the amount of time that has passed since the loss was experienced. Several studies have demonstrated that the psychological and somatic symptoms reported as a result of IJL may persist over time (e.g., Archer & Rhodes, 1993; Brewington, 2004; Winegardner et al., 1984). Indeed, theorists posit that, as time passes after the loss, resources are taxed, social networks wane with ensuing isolation, feelings of helplessness may develop, and coping may become more difficult (Latack & Dozier, 1986; Latack et al., 1995; Winegardner, 1984). Based on these observations, it is hypothesized that the more time that has passed since the loss will positively correlate with greater depression, anxiety, and general mental health distress reactions.
The proposed study extends the previous literature by using a more rigorous methodology to examine the degree to which individuals experiencing IJL report similar symptom patterns associated with bereavement loss. The current study will improve upon some of the methodological weaknesses of the previous studies in using a substantially larger sample of both males and females who have been involuntarily dismissed from their jobs.

Implications

Traditionally, career and outplacement counseling have treated IJL experiences as unidimensional events that are largely resolved when the client regains employment (Guindon & Smith, 2002; Osipow & Fitzgerald, 1993). Many studies, however, have found that much psychological distress continues even after reemployment (e.g., Goldsmith et al., 1996; Mallinckrodt, 1990; Zippay, 1995). Indeed, because losing a valued role can severely affect the employee's sense of self and world, IJL produces not only a loss of practical benefits, but it puts forth a unique set of psychological conditions and impediments that can deeply affect emotional factors within the client that are not readily seen or measured (Johada, 1981; Osipow & Fitzgerald). Nevertheless, ignoring these important contextual aspects of IJL often leads to the worker developing a sense of negativity and mistrust toward the world of work which, in turn, can negatively affect how the individual functions in other life roles. By recognizing the potential for grief reactions to be associated with involuntary job loss, however, therapists might more effectively assist displaced workers to recognize the potential need for a shift in their view of self, others, and the world around them. In addition, exploring the potential for certain contextual factors to affect the intensity of psychological and somatic reactions...
would add to the literature by assisting therapists in planning more effective interventions for treating IJL employees. Clients would therefore be aided in processing their experiences which may otherwise hinder the development of a normalized, reworked, and more realistic outlook on their lives (Amundson & Borgen, 1982; Archer & Rhodes, 1993, 1995; Brewington et al., 2004). Clients could then be helped to develop a more open attitude toward planful exploration of self and environment, thus enabling them to better focus on career decision making and future employment. Such skills are the keys to career adaptability and renewed career readiness (Savickas, 1997).

In summary, the current study will add some important elements to the job loss literature in that it will use a more rigorous methodology to clearly compare specific symptoms reported by current involuntary job loss participants with scores of bereaved individuals. The expectation is that the reactions of the job loss group would closely resemble those of the bereavement group. Significant pattern similarities found in the degree of symptomatology would add to external validity of previous studies and contribute to the discussion regarding the need to address deeper, more personally constructed employment issues than have typically been the focus of traditional job loss interventions, i.e., skills training and reemployment. Indeed, recognition of possible grief reactions attached to involuntary job loss, as well as possible intervening factors, could lead to new frameworks with which to view the job loss client who may be struggling with issues such as self efficacy or self definition. In addition, identifying how specific contextual factors may influence psychological and somatic reactions to IJL would help to address increasing appeals for a more holistic understanding of job loss. Results gained by this study would serve to enhance the effectiveness of interventions used to
address the role loss with newly directed sensitivity therefore assisting the role inhabitant to normalize and validate the affective and physical manifestations of distressing internal processes resulting from their IJL experiences.
Chapter Two

Review of the Literature

Adults in the workforce face various major psychosocial challenges over the course of their career. One of the most stressful life experiences is the involuntary loss of employment (Holmes & Rahe, 1967). The unemployment literature has tended to address the activity of re-employment primarily via focusing on skill-building and job seeking behavior (Krumboltz, 1993; Waters & Moore, 2001); however, emotional challenges resulting from IJL often produce feelings of disorganization and inadequacy (Savickas, 1997), which must be addressed in order to facilitate beneficial adjustment (Trolley, 1994). Indeed, researchers posit that the loss of a meaningful life role such as "employee" can negatively impact one’s self concept, thus leading to symptoms such as anxiety, despair, anger and hostility, guilt, rumination, social isolation, loss of control, and somatic symptoms (Guindon & Smith, 2002; Hanisch, 1999; Thoits, 1991; Rondo, 1984).

Interestingly, some researchers have found that strong distress reactions often resulting from IJL tend to mirror elements of a grief reaction (Amundson & Borgen, 1982; Archer & Rhodes, 1993, 1995; Trolley, 1994), while still others identify job loss as "an emotionally significant loss" similar to death-loss (e.g., Fagin and Little, 1984). Indeed, bereavement grief has been defined as "the process of psychological, social, and somatic reactions to the perception of loss" (Rondo, 1984, p. 15). Researchers have proposed a job loss model that compares job loss reactions to bereavement reactions and suggests interventions accordingly (Amundson & Borgen; Hurst & Shepard, 1986). Not surprisingly, a small body of literature exists specifically examining loss reactions...
reported in both forms of loss events, and results suggest that grief symptoms can indeed accompany involuntary job loss (Archer & Rhodes, 1993, 1995; Brewington et al, 2004). Indeed, literature reviews in both job loss and bereavement revealed that a number of comparable reactions such as those stated earlier are typically reported in each type of loss (e.g., Amundson & Borgen; Faria, 1983; Hanisch, 1999; Hurst & Shepard; Murray, 2001). In addition, both bodies of literature describe individual, contextual factors such as social support, role salience, and time since loss as related to the intensity of distress symptoms reported.

Reactions and Contextual Factors Regarding Involuntary Job Loss

Psychological symptoms such as depression, anxiety, anger and hostility, guilt, hypersensitivity, headaches, and digestive problems, among others, are widely reported as manifestations of IJL distress (Guindon & Smith, 2002; Hanisch, 1999; Murray, 2001.) For example, Murphy and Athanasou (1999) conducted a meta-analysis of 16 longitudinal studies in order to investigate the link between a change in employment status and psychological well being. Overall, a large majority of the studies reviewed by the authors produced strong evidence that individuals experiencing job loss tended to be more symptomatic than comparison group participants who were employed, with depressive symptoms being most notably associated with unemployment (effect size = .36). Specifically evaluating five studies that directly examined the move from employment to unemployment (n = 616), Murphy and Athanasou found that, on average, job loss tends to have a negative impact on mental health in that scores on measures of depression, anxiety, and general psychological decline are higher for unemployed and displaced workers than for the employed. The authors also found that, over time, the job
loss individuals continued to be more symptomatic than employed or re-employed individuals.

In seeking to identify specific components of mental health that are negatively affected by a recent job loss, Goldsmith et al. (1996) reviewed data collected from 12,686 individuals as part of the established National Longitudinal Survey of Youth. Results gleaned from Rosenberg’s Self-Esteem Scale, which was part of the Survey, demonstrated that, compared to individuals who were continuously employed during the same survey time period, unemployed individuals exhibited significantly lower levels of general self esteem, and that these symptoms seemed to persist over time and, to some extent, after re-employment. In seeking to clarify specific components of the self-esteem reaction of the unemployed, Goldsmith et al. decomposed the 10 questions of Rosenberg’s scale and matched specific subsets of questions to comparable items in the Minnesota Multiphasic Personality Inventory (MMPI). The broad self-esteem questions sorted into three more detailed categories: depression, anxiety, and self-alienation. Comparisons between the instruments in these three areas demonstrated a strong presence of depressive symptoms (sadness, self-blame, loss of general interest, sleep and appetite disturbances), and anxiety (heightened worries and the feeling of being ‘on edge’ and out of control), as well as some signs of alienation (a sense of identity loss).

Similarly, Ensminger and Celenano (1990) compared unemployed (n = 133), recently re-employed (n = 135), and continuously employed (n = 92) individuals on their affective responses to job loss. Overall, the unemployed group reported significantly more psychological distress (i.e., depression, anxiety, hostility, and social impairment) than the two employed groups, with those reporting lower social support endorsing a
higher degree of symptomatology. These findings held firm when controlling for various other life roles such as those of parent and spouse, sibling, or friend. Finally, in comparing the re-employed with the continuously employed group, a trend emerged indicating that the myriad of negative symptoms produced by the job loss event appear to persist to some degree even with subsequent re-employment.

Next, in a study examining the impact of job loss on 35 professionals over age 40, significant levels of depression and psychological distress were reported (Mallinckrodt & Fretz, 1988). Further, the perception of available social support was significantly correlated with both depression and psychological symptoms. Similarly, symptoms of psychological distress were also found in a sample of 41 displaced blue collar workers (Mallinckrodt & Bennett, 1992). For example, significant levels of depression were reported overall, and 28% of respondents were categorized as severely depressed. The authors then examined how the contextual factor of social support correlated with reported symptoms and found that social support accounted for 30% of the variance in depressive symptoms ($r = -.44, p < .01$).

Finally, in addition to focusing on comparing employed, reemployed, and unemployed, Miller and Hoppe (1994) examined whether the type of involuntary job loss (i.e., fired or laid off) affected the degree of psychological distress experienced. Defining psychological distress as symptoms relating to depression and anxiety, results demonstrated that anxiety level for both fired and laid off were significantly higher relative to workers who were employed. Ratios of depression were even greater, ranging from three to four times higher, for laid off and fired than for employed workers.
In summary, the research findings revealed that workers who have lost their jobs involuntarily experience a number of psychological and somatic symptoms (Graetz, 1993; Guindon & Smith, 2002; Hanisch, 1999.) The specific psychological symptoms of note in the research include depression and anxiety, as well as other psychological distress reactions including as degree of concentration, self confidence, a sense of disempowerment and worth, feelings of uncontrollability, and somatic reactions. Further, the intensity of these symptoms appear to be related to individual contextual factors such as social support (Kokko & Pulkkinen, 1998; Leana et al., 1998; Mallinckrodt & Fretz, 1988) and work role salience (Archer & Rhodes, 1993, 1995; Rowley & Feather, 1987), and they tend to persist over time (Archer & Rhodes, 1993; Brewington et al., 2004; Goldsmith et al., 1996). Indeed, it appears that forced change incurred as the result of a lost life role such as that of employee may be more complex than previously envisioned. Therefore, the negative psychological reactions to involuntary job loss, particularly those most frequently reported in the literature, may resemble a grief reaction, such as that which can occur during bereavement.

Reactions and Contextual Factors regarding Bereavement Loss

As noted earlier, the unanticipated loss of an important life role often disturbs one’s internal organization, thus producing a myriad of symptoms that negatively affect well-being. Further, a number of these symptoms appear across loss situations. In an effort to identify common themes in grief reactions, Vargas et al. (1989) analyzed data collected for a more comprehensive grief study that reviewed all four modes of death (natural, accidental, suicidal, and homicidal). Using principal component analysis, they examined several aspects of early grief reactions reported by 201 participants who had
experienced the recent death loss of a loved one. The authors found that 99 percent of participants endorsed depressive symptoms, including signs such as appetite and sleep change, concentration problems, fatigue, restlessness, and feeling sad or despondent. Further, feelings of anger and blaming toward the deceased (43%) as well as perseveration (64%) of the loss were also reported. Perseveration, or rumination, was also observed in a study of 253 middle-aged bereaved adults (Nolen-Hoeksema, Parker, & Larson, 1994) and correlated highly with depression \( r = .56; p < .001 \). The authors also found that high quality social support (i.e., feeling affirmed and valued as a person) was a significant factor in the level of depression experienced by loss participants.

Similarly, Burnett et al. (1994) sought to develop a more objective understanding of responses experienced in loss. Rather than directly examining those suffering the specific loss, the authors surveyed 77 third-party caregivers and bereavement workers, and asked the participants to rate the frequency of symptoms exhibited by their clients, from the caregiver or bereavement worker perception. Overall, participants rated their clients as frequently experiencing 23 of 25 symptoms in the first 6 weeks after the loss. These symptoms included feelings of depression, anxiety, sadness, crying, rumination, and “unreality” feelings, among others. Six of the 23 symptoms (e.g. sadness, distress at reminders of the loss, reduced social interaction, preoccupation, intrusive thoughts, and yearning) persisted after one year post loss. The authors posit that these six symptoms are correlated with the degree of attachment felt toward the deceased.

In a study seeking to investigate parental grief in the loss of a child, Gilliss, Moore, and Martinson (1997) surveyed 97 parents in a large mid-Western catchment area approximately 2 years after the loss of their child to cancer. They found that parents who
had lost a child experienced a number of grief symptoms including: somatic complaints, interpersonal symptoms (i.e., feeling self-conscious with self and others and feelings discomfort in crowds), and affective symptoms (i.e., feeling irritated, blue, or critical of others, temper outbursts, and feeling trapped or blocked in the performance of daily activities).

Finally, Miles (1985) compared acute symptoms of bereaved parents whose children died either suddenly by accident or by longer-term disease with a control group of non-bereaved parents. The author found no difference between the two loss groups on the symptoms experienced, and both bereaved groups demonstrated significantly higher overall distress reactions (e.g. depression, anxiety, somatic complaints, interpersonal sensitivity, and disorganized or confused behavior) than the non-bereaved parents. Further, time since the death occurred did not appear to alleviate distress as the majority of symptoms appeared to persist up to two years post-loss.

In summary, there are a number of psychological and somatic symptoms that commonly appear in response to a death loss. More specifically, symptoms relating to depression and despair, anxiety, anger and hostility, withdrawal, hypersensitivity, disempowerment, and somatic symptoms seem to compose the components of a grief reaction. These reactions, collected via both self report and by independent observation, occurred regardless of the mode of death. The symptoms also appear to endure over time, may be related to the degree of attachment felt toward the deceased, and be affected by the degree of social support received.

In reviewing the literatures on the reactions to job loss and bereavement loss, a significant overlap emerges between the types of symptomology reported. Multiple
Empirical studies from a variety of interest areas suggest that IJL is more than a situational problem to be solved and set aside but, rather, may be a distressing, life-changing event. Further, because grief is considered to be the psychological and somatic response to death loss (Stroebe & Stroebe, 1987) and is demonstrated via a myriad of regularly reported symptoms, it is plausible that, because those experiencing job loss often demonstrate similar patterns of symptoms (e.g., depression, despair, anxiety, guilt, anger and hostility, social withdrawal, feelings of disempowerment, hypersensitivity, and somatic symptoms) IJL individuals may therefore be suffering from a similar grief-like reaction to their own form of loss. Accordingly, inquiry into a possible connection between the two forms of emotional reactions would seem pertinent. Additionally in order to gain a clearer understanding of the multidimensionality of job loss, several researchers have called for investigation into various individual contextual factors (Guindon & Smith, 2002; Hanisch, 1999; Hayes & Nutman, 1981). Of these, perceived social support, work role salience, and time since loss appear most consistently in the literature review.

Reactions and Contextual Factors regarding Involuntary Job Loss as a Grief Response

A small body of literature exists exploring the degree to which people who have lost their jobs experience grief-like symptoms. In one of the first studies exploring the idea that job loss can produce a grief reaction, Archer and Rhodes (1993) studied the degree to which unemployed workers exhibited psychological and affective symptoms similar to those found in individuals who had experienced a bereavement loss. The authors used a structured interview questionnaire that they developed from descriptions of grief components across many bereavement studies and modified items to specifically
reflect job loss. Archer and Rhodes (1993) interviewed 60 unemployed British men for signs of grief reactions. The participants had been unemployed between 6 months to 8 years. Overall, 70% or more of the participants reported experiencing symptoms such as restlessness, depression, and irritability, and 60% reported anxiety problems. Other symptoms reported include preoccupation with loss and somatic symptoms. The authors calculated a total grief index score and found that approximately 27% of total participants experienced a “full-blown” grief-like response represented by an intense level of 8 or more symptoms, occurring simultaneously. Further, a principal components analysis of the grief symptoms items revealed seven components accounting for 64% of the variance. In particular, the first component, which represented a general intensity of the grief response, was defined by symptoms of sleeplessness, anxiety, depression, preoccupation, loss of self, restlessness, and physical symptoms. Other notable findings included a second component characterized by guilt and denial, and a third component comprised primarily of irritability, dreams, searching, and psychological disturbance.

Also studying contextual factors within this study, Archer and Rhodes (1993, 1995) used an empirically established six-point scale measuring an individual’s work involvement (i.e., “psychological identification”) with the lost job. They found that the higher the perceived involvement with the lost role, the greater the level of anxiety and depression ($r = .44$ and $r = .35$, respectively) reported by the research participant. Such distress was characterized by problems with sleeping, diminished concentration, greater unhappiness or depression, and loss of self confidence. Finally, Archer and Rhodes (1993) used a sample of individuals whose losses occurred within several years prior to the actual study. While they found evidence of a decline in an overall grief index ($F_{(4,101)}$
= 2.79, \( p < .03 \)), no significant declines over time were associated with the individual distress symptoms of depression, anxiety, anger, or restlessness, thus suggesting a relative lack of adjustment to unemployment over time.

Overall, the results revealed a significant overlap of symptoms between those occurring in a bereaved group and those exhibited by the unemployed group. Of those, symptoms typically classified as depression or despair, anxiety, anger, guilt, loss of self, preoccupation, and somatic symptoms were most prevalent. Therefore, based on their analysis, it appears that the psychological and somatic effects of job loss often correspond to similar symptoms encountered with bereaved individuals, and that the intensity of these symptoms are often related to time since loss and the amount of salience felt for the lost role, thus giving credence to the emerging argument for a revised view of IJL employees’ needs.

The Archer and Rhodes (1993) study is important in understanding job loss reactions as a grief response. However, it was an exploratory study without defined hypotheses and it used nominal level data. Further, a high percentage of participants (>20%) in this study had left their jobs voluntarily and so may not have experienced their job loss in as distressed a manner as those whose job was terminated unexpectedly or involuntarily.

Archer and Rhodes (1995) extended their research on the applicability of the grief process to job loss, using a longitudinal sample of 38 newly unemployed British men. Employing the same structured grief questionnaire used in their previous study, the authors found that 24% of their sample exhibited a full-blown, intense, grief response. In addition to their questionnaire, Archer and Rhodes added an established measure of grief
symptoms. A factor analysis on the structured grief questionnaire items revealed one overall grief factor accounting for over 50% of the variance. The factor was defined by symptoms such as depression, anxiety, restlessness, anger, and preoccupation with loss. Results therefore revealed a strong presence of grief-related affective reactions reported by one quarter of unemployed men. These results correspond with the result of their previous study (Archer & Rhodes, 1993) such that both samples of unemployed men reported comparable symptoms with regard to the total grief index scores as well as levels of distress, and that these symptoms are correlated with work role salience. Further, approximately 25% of each participant group demonstrated a clear grief-like constellation of symptoms similar to that reported by bereaved individuals. Thus, although many of the same limitations from their 1993 research apply to this study, the results from both studies provide strong evidence that unemployed men experienced initial overall affective and somatic loss reactions.

Brewington et al. (2004) also explored the similarity of the reactions and psychological symptoms experienced by individuals who have lost a job with those who have experienced a bereavement loss. The authors administered a commonly used bereavement grief inventory to 30 men and women who recently experienced involuntary job loss. Participants were recruited from the Employment Security Commission in two southeastern cities. They were primarily Caucasian (83%) and ranged in age from 20 to 60+ years of age. The inventory measures nine components of grief, including Despair, Anger-Hostility, Guilt, Social Isolation, Loss of Control, Rumination, Somaticism, Depersonalization, and Death Anxiety on a dichotomous scale. Results from the job loss group were compared to the normative reference group (i.e., bereaved individuals) for the
instrument. Results demonstrated that, overall, the symptoms reported by job loss participants was similar in magnitude to the reference group on 8 of the 9 scales, including depression, despair, anxiety, anger and hostility, guilt, social withdrawal, rumination, and somatic symptoms. Depersonalization, the only scale not demonstrating a significantly high correlation, nevertheless delivered a “moderate” effect size. Thus, the authors concluded that the grief reactions of individuals who had experienced a recent job loss strongly paralleled those exhibited by bereaved individuals.

Brewington et al. (2004) also explored the influence of a number of contextual factors on reported IJL grief reactions. In particular, they examined the degree to which gender, time since loss, age, and skill level were related to the specific grief symptoms as well as an overall grief response. Results suggested that grief reactions may prove persistent among those who have been unemployed for extended periods of time. Brewington et al. found that time since the job loss was positively correlated with many grief response symptoms such as Despair ($r = .34, p < .05$), Anger-Hostility ($r = .34, p < .05$), Social Isolation ($r = .33, p < .05$), and Loss of Control ($r = .47, p < .05$), and was also significantly correlated with an overall grief score ($r = .43, p < .05$).

Finally, in a study paralleling unemployment with a “living death,” Winegardner et al. (1984) mailed a questionnaire based on Kubler-Ross’s (1969) 5 stages of bereavement to 300 job loss participants in order to examine whether they were experiencing the stages of grief affect similar to those reported by bereaved individuals. The authors found that each stage was experienced by a majority of respondents, with the exception of Bargaining. A review of the qualitative statements given by respondents within this category reflected a general feeling of disempowerment and loss of control.
More strikingly, 80% of respondents reported feeling greater depression as a result of their job loss. In order to refine their results, Winegardner et al. also evaluated statements to more specifically determine the manner in which job loss respondents react individually to their loss. Mean rankings revealed issues such as lowered self-image, heightened negative feelings, greater mental health issues, and more problematic communication with family and friends as specific problems, and that these symptoms increased as unemployment experiences persisted.

Thus, results of the above studies investigating the link between job loss and bereavement reactions suggest that similar grief symptoms often appear in reaction to both types of loss events. These findings also revealed that a number of other contextual life factors namely, social support, role salience, and time since loss, might to some degree either mitigate or exacerbate the reporting of grief-like symptoms by job loss respondents. Given the results of the research, it is apparent that reaction to involuntary job loss is a complex issue. Studies such as those conducted by Archer and Rhodes (1993, 1995), Brewington et al. (2004), and Winegardner et al. (1984) are intriguing and serve as a catalyst to further study. Nevertheless, these studies contained a number of limitations that can be improved upon in future research. For example, Archer and Rhodes’ studies used samples consisting of men who had experienced either IJL or had been voluntarily unemployed, which may confound results in part because those quitting their job voluntarily may have felt a larger sense of control over themselves and their future. Given the vast changes to the world of work over the last few decades, it seems prudent to gather a larger sample that is more representative of today’s U.S. workforce. Further, the Winegardner et al. study was based on frequencies but lacked the type of
qualitative analysis suggested in later research method models (such as, direct observation, open ended interviews, and coding of responses). Though qualitative research is highly valuable, contemporary research design now allows for more accurate quantitative investigation of the effect of IJL and contextual factors on the distress of displaced workers.

Current Study

Based on the literature and research on job loss and grief reactions, the present study seeks to extend the previous research by further exploring the degree to which the reactions to IJL are similar to a bereavement loss response. In particular, the current study proposes to replicate and extend the previous research in this area by comparing patterns of psychological and somatic symptoms reported by a group of individuals experiencing involuntary job loss to the normative reference group for a measure of bereavement loss. The demographic characteristics in the early bereavement portion of the reference group are similar to those in the current sample in that it is primarily Caucasian, with a mean age of 52, and a postsecondary graduation level of 43%.

In addition, the study also seeks to replicate previous research on the mental health consequences to job loss by exploring the degree to which affective and somatic reactions are influenced by a number of commonly observed contextual factors. Specifically, the contextual factors of perceived social support, work role salience, and time since loss are expected to directly correlate with the intensity of certain elements resulting from IJL such as depression, anxiety, and psychological distress.

As previously demonstrated, the stress of IJL can lead one to experience a multitude of different symptoms, including depression, anxiety, anger, disorganization,
and headaches, among others. The myriad psychological and somatic symptoms are generally referred to as “psychological distress” (e.g. Johada, 1981; Mallinckrodt & Fretz, 1988; Miller & Hoppe, 1994.) While their existence is undeniable, the type and severity of such psychological distress is variable and may be affected by individual difference factors (Brewington, 2004; Kokko & Pulkkinen, 1998; Leana et al., 1998). In particular, the literature has often suggested the importance of exploring the amount of social support perceived by the grieving individual, the degree of salience held for the lost work role, and the time elapsed since the loss occurred (e.g. Greenhaus, 1971; Latack & Dozier, 1986).

**Social Support.** The quality of social support perceived by the IJL worker has been shown to lessen the distress felt after a significant loss (Leana et al., 1998; Nolen-Hoeksema et al., 1984). For example, in studying predictors of coping behaviors of 106 laid off industrial workers, Leana et al., found that participants who felt higher social support was significantly correlated with lower levels of depression and despair ($r = .27; p<.05$) and lower social isolation ($β = -.39; p<.01$). In other studies, social support was also shown to decrease the intensity of rumination ($r = -.27; p<.001$) in bereavement loss (Nolen-Hoeksema et al., 1994). Though not directly measuring social support, Brewington et al. (2004) found that living on one’s own was positively correlated with despair ($r = .35, p <.05$) and social isolation ($r = .31, p<.05$) and were thus consistent with the literature regarding higher social support as a contributor to lessening the impact of job loss.

Finally, in his examination of the stressful physical and emotional effects of being unemployed, Keefe (1984) reported social support to be a key interpersonal factor in
ameliorating stressful effects. He posited that social support helps unemployed individuals to feel that they are understood and not alone. Moreover, high quality social relationships can also assist workers in expressing deep fears or resentments thus allowing them to process their emotions and regain a sense of control (Keefe). Therefore, based on these and the above findings, social support will be examined as an important element relating to psychological distress. The current study hypothesizes a negative correlation between psychological distress and social support. This is, as the degree of social support rises, the degree of distress symptoms will fall.

**Work Role Salience.** Stryker and Serpe (1994) posited that role identities are generally organized hierarchically, primarily relative to their salience. They defined salience as the degree of perceived importance given to a status, role, or identity in comparison to others also held. Presumably, an unimportant role can be given up without difficulty (Faria, 1983). However, stressors disrupting more salient role identities are likely more damaging to the individual (Burke, 1991; Shaver & Tancredy, 2001; Thoits, 1991). For example, Simon (1992) studied 430 parents to investigate a possible link between role salience and vulnerability to role strains. She found that parents who were highly committed to their role as parents experienced higher distress than those who were less committed. She therefore proffers that highly committed people are perhaps more vulnerable to the strains typically encountered in roles more salient to one’s identity.

Research studying psychological reactions to job loss has also explored the salience of the lost work role to individuals. In general, the research findings suggest that individuals who believed work played a more central role in their lives experienced more distress when losing their jobs involuntarily than those whose work role was less
meaningful or salience to them. For example, Archer and Rhodes (1993, 1995) used an empirically established six-point scale measuring an individual’s work involvement (i.e., “psychological identification”) with the lost job. They found that the higher the perceived involvement with the lost role, the greater the level of anxiety and depression ($r = .44$ and $r = .35$, respectively) reported by the research participant. Such distress was characterized by problems with sleeping, diminished concentration, greater unhappiness or depression, and loss of self confidence. In addition, Rowley and Feather (1987) found a positive correlation between degree of work role salience and psychological distress and somatic symptoms in a sample of 107 unemployed South Australian men ($r = .33$, $p<.001$).

Thus, the current study hypothesizes a positive correlation between reported psychological and somatic symptoms and the degree of role salience. In other words, we would expect to see that a higher attachment to the role lost would produce a higher report of psychological distress.

*Time Since Loss.* Although involuntary job loss is a situational event, it tends to generate a transition process that unfolds over time (Latack & Dozier, 1986). Though commonly believed that one adjusts over time to the loss of an important person or roles, many bereavement and job loss studies suggest that deleterious distress symptoms may persist. Latack et al. (1995) noted that as time passes after the job loss, savings are used up, friendships and professional networks are lost, individuals can withdraw or become isolated, helplessness may set in, motivation wanes, and coping strategies may become overtaxed. Finally, based on previous findings, the current study posits that the longer time elapsed since the job loss, the greater the experience of psychological distress.
Hypotheses

The main purpose of the current study is to extend past research by exploring the overlap of affective and somatic symptoms experienced by workers who involuntarily lose their jobs are statistically similar to those symptoms experienced by individuals who suffer a bereavement loss. This study expects to demonstrate a similar pattern of symptoms in the IJL group, as was outlined in the previous literature. This pattern would be evidenced by elevated scores on the subscales of an established grief loss measure. In addition, the study will explore the degree to which certain contextual factors (e.g. perceived social support, work role salience, and time since loss) influence the degree of depression, anxiety, and psychological distress, experienced by job loss participants. The criterion variables will be measured via a well researched mental health screening instrument as well as commonly used self report questionnaires for depression and anxiety.

Hypothesis 1: The pattern of symptoms demonstrated by the job loss group will not differ significantly from that of the bereavement group norms on each of the grief experience domains (Despair, Anger/Hostility, Social Isolation, Guilt, Rumination, Loss of Control, Depersonalization, Death Anxiety, and Somaticism).

Hypothesis 2: The individual outcome variables of psychological distress, anxiety, and depression will be correlated with the contextual factors of perceived social support, work role salience, and time since loss.

Hypothesis 2(a): Psychological distress will be related to perceived social support, work role salience, and time since loss, such that experiencing greater psychological
distress will be correlated with a lower social support, higher work role salience, and more time passed since the loss occurred.

Hypothesis 2(b): Anxiety will be related to perceived social support, work role salience, and time since loss, such that experiencing greater anxiety will be correlated with lower social support, higher work role salience, and more time passed since the loss occurred.

Hypothesis 2(c): Depression will be related to perceived social support, work role salience, and time since loss, such that experiencing greater depression will be correlated with a lower social support, higher work role salience, and more time passed since the loss occurred.
Chapter 3
Methodology

Design

The first hypothesis of this ex post facto study was tested with a series of independent $t$-tests to compare the mean differences between the involuntary job loss group and the reference group of bereaved individuals as reported by Sanders et al. (1985). The nine different dimensions of the GEI-LV (Sanders et al.) were examined across the two groups for the between-group differences. The independent variable, involuntary job loss (IJL), is described as “an involuntary job transition in which the worker has little or no influence over the dismissal” (Ebberwein et al. 2004, p. 293). The dependent variables in this hypothesis are the nine GEI-LV (Sanders et al., 1975) subscales, as follows: Despair, Anger/Hostility, Social Isolation, Guilt, Rumination, Loss of Control, Depersonalization, Death Anxiety, and Somaticism.

For the second hypothesis, three separate multiple regressions were conducted in order to determine the relationships between the three predictor variables of perceived social support (SS), work role salience (WRS), and time since the loss occurred (TSL), the three covariates that were identified during the preliminary analysis (age, gender, and financial difficulty), and the three outcome variables of psychological distress, anxiety, and depression.

Power Analysis

An a-priori power analysis was conducted in order to determine the number of subjects needed to obtain appropriate statistical power. To ensure an appropriate sample size, a power analysis was conducted using the individual variables for Hypothesis Two.
According to Cohen (1988), power is a function of several elements, including: the effect size, the sample size, degree of freedom for error and hypothesis, and the criterion for statistical significance. Power was set at .80, indicating an 80% likelihood of achieving statistical significance, and the significance at $\alpha = .05$ for the hypothesized relationships under study. In terms of the effect size for social support, Cassidy (2001) sampled 148 unemployed males and found a correlation between the amount of perceived social support and grief symptoms experienced to be -.37 ($r^2 = .14$). Mallinkrodt and Fretz (1988) observed strikingly similar results of -.38 ($r^2 = .14$) in a sample of 35 unemployed males. Regarding role salience, in their study of 60 unemployed men, Archer and Rhodes (1993) found a significant correlation between work involvement and their overall grief component ($r^2 = .18$). Finally, in examining symptoms as they related to the time passed since the loss occurred, Brewington et al. (2004) reported positive correlations with overall grief scores ($r^2 = .18$), anxiety ($r^2 = .14$), and despair ($r^2 = .12$). Using the lowest anticipated value of $r^2 = .12$ and the degrees of freedom for hypothesis at 3, it was estimated that a sample of 80 participants was needed in order to achieve a statistical power of .80 for Hypothesis Two.

Computations revealed that a sample size of 80 participants would be adequate to yield an estimated power at or above an 80% chance of correctly rejecting a null hypothesis. Given the results of the power analysis, the final sample size of 106 was deemed adequate to conduct the analyses.

Participants

Participants were solicited from a northern New England catchment area. Participants were individuals who self-identified as having experienced a recent job loss.
and self-selected to complete the questionnaires; involvement in the study was strictly voluntary. Demographic information about the sample is listed in Table 1. As seen in Table 3, the sample size was 106 participants, with a mean age of 46.08 years ($SD = 12.63$). There were more females (55.7%) than males (44.3%). Ethnicity was primarily Caucasian (98%). Sixty-six percent reported at least some college education. Nearly two-thirds were married or partnered, and 38% reported they were not in a relationship at the time of the survey. More than half the sample reported being employed at their most recent job (prior to the job loss) for between 1 and 5 years, and 80.8% reported having been fired or laid off less than 7 months before data collection. Half reported receiving unemployment benefits, and only 11.5% were re-employed. On a scale of 1 (Lowest) to 10 (Highest), participants reported a mean of 7.16 ($SD = 2.60$) for degree of financial difficulty experienced, suggesting that participants reported a fairly great degree of financial difficulty.

Seventy-nine percent of the participants reported no death of a loved one in the past five years. Of the total sample, 84 participants (79.2%) met the original inclusion criteria regarding whether or not they had experienced the death of a loved one in the last five years. An additional 22 individuals reported that the death of someone close to them had occurred between one and five years previously. Although the initial exclusion criteria for the study was that participants should not have experienced a bereavement loss within the past five years, given that more than half of the sample was above age 50, and thus they would be more likely to have parents or important authority figures in their lives who would be at or over the average age of life expectancy, it seemed that the five year limit for bereavement loss was too stringent. Further, while the duration of grief
experiences varies given a number of factors, the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2002)) indicates that grief symptoms lasting longer than two months may then be considered under other diagnoses. In addition, the combined bereavement group examined by Sanders et. al (1975) and used as a reference group for this study consists of individuals who had experienced a death loss between two and 12 months prior to entering the study. Therefore, it was determined that because the 22 cases in question reported their job losses as having occurred more than 12 months before the survey, (and presumably would have been disqualified from the GEI reference groups as having experienced their loss too long before the Sanders et al. data collection) those cases could be retained in the data set.

In addition to reporting their status of unemployment benefits, participants also reported financial help coming from a variety of sources such as spouse/partner, social security or disability benefits, retirement, and savings. Those reporting no other forms of income totaled 17%. Forty-seven percent reported having children under the age of 21, and 62% percent reported having one or more pets in the home.

Procedure

Participants who self-identified as involuntarily losing their jobs within the past 6 years were included in the study. In addition, although most studies reviewed included primarily males in their subject pools, females currently make up 46% of the total U.S. labor force, and their numbers are expected to increase (U.S. Department of Labor, 2007). Therefore, the sample included both men and women.

Initially, data collection was attempted using an on-line survey; however, potential participants responding to poster and advertisements seemed reluctant to
participate electronically. Over a two month period, information for logging on to the on-line survey was requested by 22 individuals, with only 3 participants completing the survey. Thus, the primary mode for collecting data changed to a paper-and-pencil format. In addition, while compensation was initially offered in the form of a random drawing for a gift card, it was determined to be an ineffective means of attracting participants. Therefore, the incentive was changed and participants were compensated $5.00 after sending back their packets.

Participants were solicited via posters, newspaper advertisements, and tabling outside of two local job fairs. The posters and advertisements directed them to email or call a telephone number and talk directly to the principal investigator, while individuals approaching the investigator at the job fair table were provided with a survey to mail back. Each potential participant was screened to disqualify those who were employed in their lost job for less than one year or who left their employment voluntarily. Also, in order to address possible contamination of the grief data, those participants who had experienced a bereavement loss within the last two years were excluded from the participant pool. Overall, 190 packets were distributed in person, five mailed to participants screened over the phone, and 22 people requested electronic information. Of the 217 contacts, 113 cases were returned to the investigator resulting in a 52% return rate. Two cases were dropped as they did not meet the bereavement criteria, and five cases were dropped due to insufficient data, resulting in a sample size of 106.

Once accepted into the study, participants were given a packet which included the seven questionnaires, a consent form, a debriefing statement with contact information for area career centers, and a stamped envelope addressed to the principal investigator. Also
included in the packet was a form asking for contact information should the participant
desire to know the outcome of this study. A separate form was also included in the packet
asking for an address to where the investigator could send the remuneration. Participants
receiving the packet were instructed to fill out the questionnaires and appropriate contact
forms at their convenience, seal them in the envelope, and drop them into the mail. Once
received, the investigator separated the two contact information forms from the survey
data. The incentive was wrapped in the original claim form and mailed to the indicated
address. The results form was stored in a separate folder.

Instrumentation

Demographic Questionnaire. A demographic questionnaire (see Appendix B) was
included in the survey to collect general demographic information such as age,
gender, race, ethnicity, marital status, number of dependent relatives (i.e., children,
parents, grandparents), education level. Participants were also asked the length of time
they had been employed in the job from which they were let go, the length of subsequent
unemployment, current employment status, and whether or not they engaged in career or
support services. Given that salary tends to be a central consideration in work,
participants were also asked to indicate their degree of financial difficulty on a scale from
1 (no difficulty) to 10 (great difficulty). These responses were used in preliminary data
analysis as a means of describing the group participants and for consideration as potential
covariates.

Grief Experience. The loss version of the Grief Experience Inventory (GEI-LV;
Sanders et al., 1985) was used to measure grief reactions. As there are few instruments
currently designed to assess grief resulting from a life-loss (rather than a death-loss),
event, and in order to more accurately compare present results to those in the Brewington et al. (2004) study, it was decided to retain use of the GEI-LV in the current study.

The original GEI is multidimensional 135-item self-report inventory designed to measure the domains of the grief experience via a true/false format. Each item is scored as “true” or “false,” indicating whether the participant is experiencing the symptom in the current time period. The Loss Version differs from the original form only in that the wording of items was changed to reflect a loss event as opposed to a death event. Neither the original GEI nor the GEI-LV produces a composite score. Instead, there are nine clinical scales, each indicating the intensity and severity of prevalent aspects of grief. These clinical scales include: Despair (feelings of hopelessness and worthlessness, low self-esteem, slowing of thoughts or actions, fear); Anger/Hostility (level of irritation, anger, and feelings of injustice); Guilt (belief that respondent is somehow responsible for the loss); Social Isolation (withdrawal from social contacts and responsibilities, both by choice and by perception that others have withdrawn from them; oversensitivity); Loss of Control (feeling as though one cannot control overt emotional experiences; tension, anxiety, and stress); Rumination (measures amount of time spent thinking of loss, brooding, blaming); Depersonalization (degree of numbness, shock, and confusion); Somatization (extent of physical problems such as appetite change, perception of physical strength, occurrences of headaches); and Death Anxiety (intensity of one’s personal death awareness). Each scale consists of true and false items, and a scoring key provides a value of either 0 or 1 to each answer. Higher scores indicate a greater intensity of the symptom measured by the specific scale.
In terms of reliability, internal consistency estimates ranged from .52 (Guilt) to .84 (Despair) on a sample of 135 bereaved individuals (Sanders et al., 1985). For example, Despair, which is the longest subscale, consists of 18 items, while the shortest subscale (Guilt) is comprised of only six items. Test-retest reliability for the various subscales range from .47 to .63, over 18 months, in a sample of 79 individuals who experienced a death in the preceding two months. Although the internal consistency reliability coefficients are somewhat low, it is possible that the dichotomous format of the measure affects the reliability of the scores, given that the response format allows for less variability. Despite the limitations of the scale, it was chosen because it has been used in other studies regarding non-death loss (e.g., Alderman, 1996; Roback & Weitzman, 1998). More notably, the GEI was used by Brewington (2004), and this study attempts to replicate and extend that research.

Sanders et al. (1985) also reported validity evidence for the individual subscales. For example, when comparing the individual scales of the GEI with scales on the Minnesota Multiphasic Personality Inventory (MMPI), the authors found acceptable correlations with subscales measuring similar constructs: the GEI scale of Despair correlated with the MMPI Depression scale (.44); the Anger/Hostility scale correlated satisfactorily with the MMPI Paranoia (.43) and Psychopathic Deviate (.41) scales; Guilt and Loss of Control were each related to Psychasthenia (.39 for both); Social Isolation correlated with F (.35), Paranoia (.41), Depression (.36), and Social Introversion (.32); Rumination was associated with Psychasthenia (.47) and Paranoia (.39); and Somaticism was correlated with Hypochondriasis (.37) and Hysteria (.34). Further, Pearson product moment correlations on 92 individuals in the early bereavement indicate response
patterns that support the theoretical formulation of the GEI scales. That is, the GEI scales are shown to tap aspects of bereavement that are not sampled by the MMPI.

Discriminant validity was tested using a control group of 107 individuals who had not experienced a bereavement loss in the five years prior to data collection (Sanders et al., 1985.) T-tests conducted between the groups yielded significant differences on all subscales, ranging from 3.65 to 10.33 ($p < .001$), thus indicating the test’s ability to establish that symptoms profiled by the GEI were indeed representative of a general grief experience. The authors also investigated the inventory’s predictive validity by seeking to separate the bereavement group’s scores by relationship to the deceased (i.e., child, parent, or spouse). Indeed, outcomes derived with univariate analyses of variance generally mirrored the direction of results reported in the grief literature, which is that the loss of a child tends to produce significantly greater grief intensity, predictably followed by that of a spouse, then parent.

Reliability analysis on the current sample revealed the following internal consistency estimates (see Table 6): Despair (.88); Anger/Hostility (.78); Social Isolation (.66); Guilt (.63); Rumination (.67); Loss of Control (.64); Depersonalization (.72); Death Anxiety (.56); and Somaticism (.80). These values were comparable to each subscale as reported in Sanders et al.’s original sample and suggest that the scale demonstrated adequate reliability with this sample.

*General Health Questionnaire-12 (GHQ-12).* The GHQ-12 (Goldberg, 1972, 1978) is a self-report instrument designed to screen for non-psychotic mental disorders in the general community. It provides a general score of psychological distress and is comprised of 12 questions, asking participants about their general level of happiness and
experiences of depressive, anxiety, and sleep symptoms over the past few weeks. The GHQ-12 is a shortened form of the multidimensional General Health Questionnaire, which consists of 60 items and is designed to assess a broad array of minor psychiatric morbidity in a general community sample (Goldberg, 1972). The GHQ-12 is a unidimensional form of the original and has been demonstrated as an appropriate instrument in occupational studies (Banks, Clegg, Jackson, Kemp, Stafford, & Wall, 1980). A sample item is: “Have you recently felt constantly under strain?” Answers are based on a 4-point response scale which is scored using a bimodal method, asking if the symptom is present ‘not at all’ or ‘same as usual’ = 0, and ‘same as usual’ or ‘more than usual’ = 1. Scores greater than 4 are considered high.

The validity and reliability of the GHQ-12 was investigated in occupational studies and has been shown as psychometrically sound. For example, Banks et al. (1980) examined both employed (n = 633) and unemployed (n = 92) workers. Internal consistency was calculated using Cronbach’s alpha and was acceptably high (.90 and .87, respectively). In addition, using principal components analysis, the authors determined a first factor accounting for between 34 and 48 percent of the variance in their samples, which is similar to Goldberg’s (1972) first factor finding of 45.6 percent. The study therefore provides strong evidence for the presence of one factor, psychological distress. Discriminant validity was also demonstrated in this study as comparisons between employed and unemployed participants yielded large differences in symptomology (t = 14.35; p<.001).

Next, in researching the validity of the GHQ-12, a number of studies were reviewed, and Cronbach’s alpha was reported between .82 and .86 in all studies reviewed
The authors then compared the GHQ-12 against the GHQ-28, a longer, more broadly researched subversion of the original instrument. They first determined the Prescreening determined that symptoms such as depression, anxiety, dysthymia, somatic disorder, hypochondriasis, and panic were represented in the sample of 5,438 participants. Receiver Operator Characteristic (ROC) analysis was applied to examine the sensitivity and specificity of the scales, and a mean area of .88 was determined to fall underneath the ROC curve for each instrument. The area under the curve is typically interpreted as an estimate of the probability that a participant having the criterion will have a higher score at the cut off point than one who does not fit the criterion. Sensitivity and specificity for the GHQ-12 was reported as 76.3 and 83.4, respectively, while the results for the GHQ-28 were 79.7 and 79.2, respectively. Thus, the authors determined that the shorter GHQ-12 appears to work at least as well as the longer version and should be used in studies seeking an overall general score for case identification. Reliability analysis on the current sample revealed an alpha coefficient of .74, which is comparable to the original instrument.

*Depression.* The Zung Self-Rating Depression Scale (SDS; Zung, 1965) is at 20-item scale examining affective, psychological, and somatic symptoms. Respondents are asked to report frequencies of symptoms experienced over the past several days. The responses are based on a 4-point scale, as follows: 1 – a little of the time; 2 – some of the time; 3 – a good part of the time; and 4 – most of the time. To computer the score, responses on half of the items (#2, #5, #6, #11, #12, #14, #16, #17, #18, #20) are reverse scored, and the raw scores summed. The full scale score ranges from 20 to 80. The raw
score is then converted to a 100 point scale. Those scoring above 50 are considered to be experiencing depression, with higher scores reflecting more depression.

Evidence of sufficient reliability for the SDS has been demonstrated using alpha coefficients and split half reliability. In a large community sample of primarily blue collar workers \((n = 1,205)\), Cronbach’s alpha was reported as .79, thus indicating sufficient scale homogeneity (Knight, Waal-Manning, and Spears, 1983.) Internal consistency was further demonstrated in a study comparing non-depressed, depressed, and family observers of depressed participants (Gabrys & Peters, 1985). Alpha coefficients were reported as .93, .88, and .91, respectively. The authors also calculated a split half coefficient reliability of .94, which accounted for 88% of the total variance.

Several forms of validity have also been reported for the SDS. Regarding convergent validity, researchers compared scores from the SDS to the Depression scale of the MMPI-2 as administered to 259 individuals participating in a vocational rehabilitation program (Thurber, Snow & Honts, 2002). Results revealed a zero-order correlation of .77 \((p < .001)\). In terms of discriminant validity, Gabrys and Peters (1985) found that both family observers and non-depressed participants reported significantly less depression than did the depressed participants \((t_{518} = 21.92; p < .001, \text{ and } t_{585} = 30.85; p < .001, \text{ respectively})\). Further, scores from a group of depressed individuals and a group of alcohol abuse participants were compared on the SDS, MMPI-2 D scale, and the MacAndrew Alcoholism Scale-Revised (MAC-R; McKenna & Butcher, 1987) (Thurber et al.) Results indicate that the depressed group had significantly higher scores on the SDS \((t = 7.51; p < .001)\) and D \((t = 5.93; p < .001)\) measures, whereas the MAC-R indicated significantly elevated scores for the alcohol abuse group \((t = -2.93; p < .005)\).
These results signify the ability of both the SDS and the D scale to differentiate between each groups’ diagnosis. The internal consistency estimate for the current sample was $\alpha = .876$.

*Anxiety.* Anxiety was measured using the State scale of the Spielberger State-Trait Anxiety Inventory (STAI; Spielberger, 1983). This instrument measures transient levels of anxiety, defined as an unpleasant emotional arousal in face of threatening demands or dangers (Spielberger). The scale consists of 20 questions, with scores ranging from 20-80. The score is converted into a percentile, with higher percentages indicating more symptomatic responses.

Internal consistency was explored in a group of older adults residing in a residential community (Stanley, Beck, & Zebb, 1996). In comparing individuals having no mental health diagnosis ($n = 94$) with participants diagnosed with anxiety ($n = 50$), Cronbach’s alpha was reported for the no-diagnosis group as .85 for the State subscale and .94 in the anxiety group. Cronbach’s alpha was also used in Knight et al.’s (1983) community sample ($n = 1,205$) wherein results for internal consistency were reported as .93 for the State subscale. Lastly, in a meta analysis spanning articles written between 1990 and 2000, 45 articles were studied to determine score reliability for the STAI (Barnes, Harp & Jung, 2002). Overall, internal consistency was stable, with coefficients ranging from .81 to .96 for State subscale. The authors also found good test-retest reliability, with the majority of scores above .62 on the State subscale. Stanley et al., also reported test-retest reliability by comparing initial scores on the State subscale (.85) with the retest scores obtained two to three weeks later (.62).
In terms of convergent validity, Stanley et al. (1996), used their no-diagnosis group to examine intercorrelations of the STAI subscales with those of a well-established measure for worry and another for fear. The State subscale correlated with the worry scale total score (.41; \( p < .001 \)), and with the fear scale total score (.38; \( p < .001 \)). Thus, the STAI can be considered as a valid measure of state anxiety. In the current study, Cronbach’s alpha on the State subscale was .943, demonstrating more than adequate reliability.

Work Role Salience. The Work Role Salience Scale (WRSS; Greenhaus, 1971) was used to measure individual’s perceived importance of work and career. The WRSS is a 27-item scale designed to measure the relative importance of work and career. A sample item is: “Planning for and succeeding in a career is my primary concern.” The scale uses a 5-point Likert-type scale that ranges from “strongly disagree” to “strongly agree.” Some items are reverse scored, and scores are calculated by adding the point values. Higher scores indicate a higher degree of work role salience. In addition to the total score, there are three subscales: Relative importance of work and career; general attitude toward work; and planning and thinking about career.

Internal consistency has been reported via Cronbach’s alpha coefficients and range between .81 and .90 (Beutell & Greenhaus, 1982; Greenhaus, 1971). In terms of the subscales, a factorial investigation of the WRSS (\( n = 203 \)) revealed three dimensions of career salience that accounted for 27 percent of the total variance (Greenhaus, 1973). The first factor, Relative Priority (subscale 1), reflects the individual’s ascribed priority of a career compared to specific sources of life satisfaction (e.g. family, friends, leisure). Factor 2, General Attitude, identifies one’s general approach toward working, i.e.,
viewing it with positive affect and/or anticipation, while Factor 3 measures concern with Career Advancement and Planning. The authors also examined the correlations between WRS and self-esteem. They found that self-esteem is generally positively related to career salience, especially for men and women who view work in a positive way ($r = .41$; $p < .01$ and $r = .309$; $p < .01$, respectively) and those who see work as a means of expressing themselves ($r = .27$; $p < .01$; $r = .17$; $p < .01$, respectively) (Greenhaus, 1973). The significance of connecting work role salience with self esteem is that work provides individuals with meaning and purpose. Indeed, work salience has been positively correlated with ambition ($r = .42$; $p < .01$) and positive self rating ($r = .36$; $p < .01$; Greenhaus, 1973). Reliability analysis on the current sample revealed an alpha of .635, which is lower than generally accepted.

**Social Support.** Perceived social support was measured using the Social Provisions Scale (SPS; Cutrona & Russell, 1987; Russell & Cutrona, 1984). The SPS is composed of 24 items to which participants respond using a 4-point Likert-type scale ranging from *strongly disagree* (1) to *strongly agree* (4), with higher scores indicating higher levels of corresponding support. In addition to a general score, six subscales, composed of 4 items each, assess a different social support provision. These provisions are: (a) Guidance, or belief that trustworthy others will provide advice; (b) Reliable Alliance, meaning the individual can depend on assistance under any circumstances’ (c) Reassurance of Worth, the impression that their skills and abilities are acknowledged and valued; (d) Attachment, safety and security provided via a sense of emotional connection; (e) Social Integration, the belief that the individual’s interests and concerns are shared by others; and (f) Opportunity for Nurturance, which indicates a feeling of responsibility for
the well-being of another (Cutrona & Russell; Mallinckrodt & Bennett, 1992). Sample items include statements such as, “There are people I can depend on to help me if I really need it” and, “There is someone I could talk to about important decisions in my life.” Subjects are asked to consider their entire support network in assessing the extent to which they feel that each of the 6 provisions is currently available to them (Cutrona, 1989).

Internal consistency for the total scores has been high (.85 to .92), and alpha coefficients for the individual subscales have ranged from .76 to .84 in a sample of older adults, and from .61 to .76 in a sample of teachers (Cutrona & Russell, 1987; Russell & Cutrona, 1984). Test–retest reliability in a sample of 50 older adults was .55, over a period of 6 months (Cutrona, Russell & Rose, 1986). Regarding individual scales, test–retest reliabilities have ranged from .61 to .76 in a sample of teachers, and from .76 to .84 in a sample of older adults (Cutrona & Russell, 1987). A confirmatory factor analysis resulted in a goodness-of-fit index of .86 for the six-factor subscale structure, indicating a fairly good fit of the data of the author's six-factor model (Russell & Cutrona, 1984).

Convergent validity was demonstrated in a sample of college freshman who were administered both the SPS and the UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980). The individual SPS scales of Social Integration, Reassurance of Worth, and Guidance were significantly related to scores on the Loneliness Scale. The SPS total score correlated from .28 to .31 ($p < .05$) with life satisfaction, loneliness, and depression (Cutrona et al, 1984). Predictive validity was found in a study of first-time expectant mothers. One group of mothers reported feeling supported in their pregnancy, and the other group did not. Results indicated that the subscales of Reliable Alliance,
Reassurance of Worth, Social Integration, and Guidance predicted those who were more likely to become depressed post-pregnancy (Cutrona, 1984). Further, in a study of teacher burnout, the SPS scores were predictive of loneliness, depression, and health problems (Russell, Altmaier, & Van Velzen, 1987). Reliability analysis on the current sample revealed high reliability ($\alpha = .889$) on the total score of the SPS and is therefore acceptable for use with the current sample.

*Time Since Loss.* In order to measure time since the job loss occurred, the demographics questionnaire included a single question asking the participant to estimate the length of time that has passed since the individual experienced the job loss, e.g., “How many months have passed since your job loss?”

*Hypotheses*

This study included two hypotheses. The first asserted that there would be a similar pattern of psychological and somatic grief symptoms, measured by the GEI-LV, reported by the job loss group, and compared to the bereavement group. The second hypothesis maintained that the psychological distress symptoms reported by those experiencing involuntary job loss would be correlated with certain popularly recognized contextual factors. Specifically, it was expected that social support would be negatively correlated with psychological distress, while work role salience and time since loss would be positively correlated with psychological distress.

*Test of the Hypotheses.* Hypothesis one states that a similar pattern of symptoms will be found between the mean scores of the two groups in the nine subscales. To test this hypothesis, i.e., to compare the pattern of grief symptoms reported in the group of job loss participants with those of the bereavement norm group, a series of independent t-
tests was conducted to examine the mean differences in the nine different dimensions of the grief symptoms between the two groups using the following formula: 
\[ t = \frac{[M(\text{job loss}) - M(\text{bereavement})]}{\sqrt{\frac{SD(\text{job})^2}{N(\text{job})} + \frac{SD(\text{ber})^2}{N(\text{ber})}}} \]. A statistical non-significance of the \( t \)-test indicates that the two groups have no statistical difference in the dimensions of the grief symptoms and are therefore assumed to conform to the pattern of symptoms demonstrated in the referenced bereavement group.

To test Hypothesis 2, the three predictor variables (i.e., social support, work role salience, and time since loss) were regressed upon the dependent variables of general psychological distress, anxiety, and depression in three separate regression equations. Covariates of age, gender, and financial difficulty were added in the first step of the model. Significant \( F \) statistics indicated the effects of the six predictor and covariate variables. The model is defined as:

1. \( Y_{(\text{Psychological distress})} = a + b_1 x_1 + b_2 x_2 + e. \)
2. \( Y_{(\text{Depression})} = a + b_1 x_1 + b_2 x_2 + e. \)
3. \( Y_{(\text{Anxiety})} = a + b_1 x_1 + b_2 x_2 + e. \)

In the first regression model, the criterion variable is general psychological distress, in the second model, the criterion is depression, and in model three, anxiety is the criterion variable. Each model was tested using simultaneous regression, with \( \alpha = .05 \). The magnitude of the multiple squared correlations and adjusted \( R^2 \) are reported, and the \( F \) statistic was used to test the overall significance of each regression equation. Where significance was indicated, \( t \) tests of the beta weights indicate whether any of the predictors have unique and significant contributions to the prediction of outcome variables (e.g., psychological distress, anxiety, and depression.)
CHAPTER IV

Results

The purpose of the study was to extend past research by exploring the overlap of affective and somatic symptoms experienced by workers who involuntarily lose their jobs with those individuals who have suffered a bereavement loss. The study also explored the degree to which certain contextual factors (e.g. perceived social support, work role salience, and time since loss) influence the degree of depression, anxiety, and general psychological distress experienced by job loss participants.

Preliminary Analyses

In reviewing the raw data, there were ten instances wherein a single item was not answered. In these cases, the missing values for those participants were replaced with the mean score for the sample on those items.

Checking for normality assumptions. Skewness and kurtosis values were assessed for each of the criterion variables. As shown in Table 2, the statistic was less than three times the standard error in all of the cases (e.g. Tabachnick & Fidell, 2001). As well, histograms depicting the distribution of each dependent variable (see Figures 1, 2, and 3) indicated that all study variables appeared to be normally distributed.

Testing for the assumption of statistical independence. Because the GHQ-12 is designed to assess general (non-psychotic) psychological functioning, and the remaining two dependent variables, depression and anxiety, are two relatively common psychological disorders that could conceivably be correlated with observations on the GHQ-12, it was important to check for statistical independence on all dependent variables. As shown in Table 2, analysis of the Durbin-Watson values shows of all three
measures to be well within the acceptable range of 1.5 to 2.5 and are therefore considered to meet the assumption of statistic independence (Morgan & Griego, 1998).

**Checking for outliers, influence points, and leverage points.** The scatterplot in Figure 4 demonstrates moderate scatter among the variables. However, in reviewing the standardized residuals for each dependent variable (Table 2), all standardized residuals lie within three standard deviations of the mean and are therefore judged to be within the acceptable limits, i.e., no outliers have undue influence on the statistical models.

**Checking for multicollinearity.** In order to assess possible correlations between predictor variables, zero order correlations were examined. All of the correlations revealed coefficients well under 0.5. In addition, the variance inflation factor shows values well below the common rule of thumb of VIF >4 (Kutner, Nachtsheim, & Neter, 2004). Therefore, no assumptions were violated and multicollinearity was not of concern.

**Descriptive statistics.** Descriptive statistics (see Table 3) for all study variables were calculated as a means of describing salient characteristics of the participant sample, as well as the relationships between the variables. In addition, a significance level of $\alpha = .05$ was used to determine which demographic variables (e.g., gender, etc.) should be incorporated into the regression equations as covariates. As described below, age, gender, and degree of financial difficulty were included in the regression analyses as covariates given their relationships with the dependent variables.

A zero-order correlation matrix (see Table 4) reveals the magnitude and direction of the relationships between the study and demographic variables. Of note, Age was positively correlated with Time Since Loss ($r = .278; p<.01$) and negatively correlated with depression ($r = -.250; p<.01$) and anxiety ($r = -.283; p<.01$). Gender (coded as 1 =
Female and 2 = Male) was also negatively correlated with depression ($r = -.211; p<.05$) and anxiety ($r = -.348; p<.01$), as well as with general psychological distress ($r = -.250; p<.01$) and financial difficulty ($r = -.235; p<.05$). Apart from Gender, financial difficulty was positively correlated to general psychological distress ($r = .250; p<.05$), depression ($r = .279; p<.01$), and anxiety ($r = .321; p<.01$). General psychological distress was positively correlated with depression ($r = .355; p<.01$) and anxiety ($r = .449; p<.01$), and was negatively related to social support ($r = -.243; p<.05$). Depression was positively correlated with anxiety ($r = .756; p<.01$) and negatively correlated with social support ($r = -.458; p<.01$). Anxiety was also negatively correlated with social support ($r = -.535; p<.01$). These correlations suggest that the older the participant, the greater depression and anxiety reported. Further, women and participants reporting higher financial difficulty tended to experience more distress on all three variables. Finally, higher perceived social support suggests lower general distress, depression, and anxiety.

Table 5 shows the means and standard deviations for the main variables in this study as compared with other research. Results are similar and thus judged appropriate for purposes of the current research.

**Main Analyses**

Independent $t$-tests were employed to compare the pattern of grief symptoms between the current participant sample and the bereavement reference group using the nine subscales of the GEI–LV. A Bonferroni correction ($p < .05/9 = .006$) was used as a means of addressing experiment-wise error due to multiple comparisons. Means, standard deviations, $t$-scores and significance for each subscale are presented in Table 6. It was hypothesized that the current participant group would show a similar pattern of grief
symptoms on all subscales, i.e. no significant difference between the grief symptoms experienced by the job loss group as compared to the bereavement group. Indeed, five subscales (Despair, Loss of Control, Depersonalization, Somaticism, and Death Anxiety) demonstrated no significant differences between the two groups. Thus, job loss participants in this study tended to feel about the same regarding hopelessness, pessimism, ability to control emotions, tension, numbness, shock, physical problems, and awareness of death loss as the bereavement group.

The four remaining subscales showed significant differences: Anger/Hostility ($t = 3.83, p < .001$), Guilt ($t = 5.53, p < .000$), Social Isolation ($t = 5.73, p < .000$), and Rumination ($t = 3.28, p < .001$). Therefore, as indicated by the number of significant $t$-scores, the two groups differ on many of the grief symptoms, suggesting that the job loss group showed a different pattern of grief symptoms compared to the bereavement norm group. Thus, Hypothesis One is not supported. Of particular interest, however, is that the $t$-scores of these four scales demonstrate a higher degree of symptomology in the job loss sample than was in the bereavement group. This means that the job loss group in this study exhibited lower levels of self-esteem, and higher degrees of irritation, anger, responsibility for the loss, withdrawal from social contacts and responsibility, oversensitivity, brooding, and blaming, than the bereavement norm group.

Post hoc tests were conducted to compare results obtained in the Brewington et al. (2004) study with the current study. Confidence intervals were calculated around the scores in each of the GEI-LV subscales for both the Brewington et al. and the present study. They are presented in Table 7. In Brewington et al.’s sample, age and ethnicity were similar to the current study, and both samples had experienced IJL. Further,
independent t-tests also indicate a pattern of similar symptoms. After a Bonferroni correction, only Social Isolation and Depersonalization were significantly different. A possible explanation regarding higher Social Isolation in the current sample may be due to cultural differences between the samples in that New Englanders are known to be reserved and stoic. Of note regarding the second subscale is that Brewington et al. found a lower level of Depersonalization in their study versus Sanders et al. (1985), while the current sample reported similar levels to Sanders et al. Overall, however, comparisons of confidence levels and t-scores serves to bolster results obtained herein.

To investigate Hypothesis Two, three separate hierarchical multiple regressions were conducted on each of the three criterion variables (general psychological distress, depression, and anxiety). In the first step, the covariates of age, gender, and degree of financial difficulty were entered in a block, and the predictor variables of social support, work role salience, and time since loss were entered as a block in step two.

**General Psychological Health.** In the first regression analysis predicting general psychological distress (shown in Table 8), step 1 of the model was significant and one of the covariates contributed significantly to the variance in general psychological health ($F_{(3, 99)} = 5.47, p < .01, R^2 = .11, R^2_{adj} = .09$). Gender accounted for a significant amount of variance ($\beta = -.23; t = 2.36; p < .01, sr^2 = .05$). This suggests that women tended to report more anxiety than men.

The second step of the model demonstrated that the predictor variables did explain significant variance in general health ($F_{(6, 96)} = 4.09, p < .01, R^2 = .20, R^2_{adj} = .15$). The $R^2$ Change (.09, $p < .05$) from step 1 to step 2 was significant, supporting Hypothesis 2(a) asserting that the predictor variables would be related to the general psychological health.
Reviewing the individual predictor variables, tests of the beta weights reveal that social support was negatively related to general health ($\beta = -0.25; t = 2.72; p < 0.01$, $sr^2 = 0.06$). Neither work role salience nor time since loss were significant. Thus, regarding general psychological health, women and those with less social support tended to report more psychological distress.

**Depression.** In the second regression analysis (see Table 9), the covariates significantly predicted variance in scores on the depression inventory ($F_{(3, 99)} = 5.47, p < 0.01, R^2 = 0.14, R^2_{adj} = 0.17$). In particular, Age ($\beta = -0.19; t = -2.02; p < 0.05$, $sr^2 = 0.04$) and Financial Difficulty ($\beta = 0.21; t = 2.12; p < 0.05$, $sr^2 = 0.04$) predicted unique variance, suggesting that older individuals tended to score lower on depression, whereas those with greater perceived financial difficulty tended to score higher on depression.

The full model was significant and the predictor variables accounted for a significant amount of variance in depression, above and beyond the covariates ($F_{(6, 96)} = 8.83, p < 0.01, R^2 = 0.36, R^2_{adj} = 0.32, R^2_{change} = 0.21, p < 0.01$). An examination of the Beta weight values for the predictor variables revealed that Social Support ($\beta = -0.46; t = -5.53; p < 0.01$, $sr^2 = 0.21$) was highly associated with depression, while Work Role Salience ($\beta = -0.120; t = 1.459; p = 0.148$, $sr^2 = 0.01$), and Time Since Loss ($\beta = -0.043; t = 0.505; p = 0.615$, $sr^2 = 0.00$) were non-significant. Gender was also significantly related to depression. The results imply that women in this sample tended to experience greater depressive symptoms, as did those who perceived greater financial difficulty. Lastly, as social support increased, distress contributing to depression decreased.

**Anxiety.** In step 1 of the third model in which the covariates were regressed on anxiety (see Table 10), all three covariates were significantly related to anxiety. Gender
(β = -.30; t = -3.32; p < .001, sr² = .08), financial difficulty (β = -.21; t = 2.31; p < .05, sr² = .04), and age (β = -.22; t = -2.49; p < .05, sr² = .05), each accounted for a significant amount of variance, and together they explain 24% of the variance (F (3, 99) = 10.44, p <.001, R² = .24, R² adj = .22). Again, women tended to report higher degrees of anxiety than men, and participants experiencing higher degrees of financial difficulty also reported higher anxiety. As age increased, however, the anxiety levels tended to decline.

Adding the predictor variables in the full model also reveals a significant contribution to the overall variance (F (6, 96) = 17.08, p <.001, R² = .53, R² adj = .50, R² change = .29). Reviewing the individual covariate and predictor variables, tests of the beta weights indicate that gender (β = -.35; t = 4.75; p < .001, sr² = .11), financial difficulty (β = -.21; t = 2.79; p < .01, sr² = .04), social support (β = -.53; t = 7.48; p < .001, sr² = .26), and work role salience (β = -.15; t = 2.09; p < .05, sr² = .00), significantly related to the degree of anxiety reported by the current sample. Age (β = -.14; t = 1.94; p < .056) and time since loss (β = -.004; t = -.53; p < .96) were not significant to anxiety. Accordingly, women in this sample who experienced involuntary job loss reported higher anxiety than did males, and as financial difficulty increased, anxiety also increased. Also, higher degrees of perceived social support and work role salience served to decrease anxiety.

In viewing the results from all three models, both social support and gender tended to be significantly related to dimensions of psychological distress, such that higher degrees of felt social support served to lower overall distress and women reported experiencing greater psychological distress than men. Financial difficulty was a significant predictor in both depression and anxiety, but not in general psychological
distress, and work role salience was of significant influence only in the anxiety model. Neither age nor time since job loss were significantly related to indicators of psychological distress in any of the models.
CHAPTER V

Discussion

The purpose of the study was twofold. First, it explored the overlap of affective and somatic symptoms experienced by workers who involuntarily lost their jobs with those individuals who have suffered a bereavement loss. Secondly, the study explored the degree to which certain contextual factors (e.g. perceived social support, work role salience, and time since loss) and covariates (age, gender, financial difficulty) influenced the degree of depression, anxiety, and general psychological distress, experienced by job loss participants.

Hypothesis 1: Grief and Involuntary Job Loss

It was hypothesized that symptoms reported by the job loss group would demonstrate a similar pattern to those reported by the normative reference bereavement group. The results demonstrated that a similar pattern of grief symptoms was not established, as only five of the nine scales (Despair, Loss of Control, Depersonalization, Somatization, and Death Anxiety) were statistically non-significant from those of the reference group. Nevertheless, the \(t\)-scores of the four remaining subscales (Anger/Hostility, Guilt, Social Isolation, and Rumination) indicated significantly higher symptomatology reported by participants. Thus, despite having found no similar pattern, the scores for the job loss group on all subscales were either similar or higher to the bereavement norm group, which suggests not only a strong grief response by the current sample, but a much stronger one than had originally been hypothesized.

Nevertheless, the above results are not surprising, particularly because the role of worker is typically a substantial part of one’s identity (Super, 1990). Through work, the
individual has an opportunity to gain not only a means of financial support, but also a sense of accomplishment and worth, social contact, status, and a sense of self as well as a set of goals to reach in common with others (Johada 1981, Mallinckrodt & Fretz, 2002). Nevertheless, while one may have a relatively established sense of identity, he or she is continually internalizing external input and comparing it against what is believed to be true (Horowitz, 1991). For many, the loss of employment often leads to perceived negative validation and its attendant struggles, including emotional and physical reactions. The results of this study give rise to support of those theories.

In terms of the design of the current study, it is important to note that, though the strategy used in this study is technically a one-group ex post facto design with comparison to a normative reference group, the sensitive and often spontaneous nature of IJL makes it difficult to plan pretest/posttest designs. However, Kerlinger and Lee (2000) suggest that some such designs can be made useful with at least one formal comparison. This comparison is found in work presented by Brewington et al. (2004). Using the same measure in their study of IJL participants (GEI-LV; Sanders et al., 1985), the researchers found a statistically similar pattern of responses when compared to the same normative reference bereavement group as used in the current study. This, too, indicates a grief response. Further, the study was done at a different point in time and with a different IJL population that was of comparable ethnicity and age range. State unemployment rates were 5.5% in the Brewington et al. study, and 8.5% in the current study (U.S. Department of Labor, 2009).
Of note when comparing the grief scores in the current study to both Brewington and the reference group, however, are the higher scores exhibited on the “non-similar” subscales (Anger/Hostility, Guilt, Social Isolation, and Rumination.) In addition to the higher state unemployment rates at the time the present data was collected, the national economy took a rapid downturn between 2006-2008 (International Monetary Fund, 2008) and a recession occurred wherein workers experienced wage freezes and increased expenses. Thus, it is logical to assume that increased levels of anger and irritation would be present in the current population. Indeed, participants have remarked to this investigator that they felt guilty at their inability to retain their jobs, but angry at the same time. As one person said, “No matter how good I did (at my job), I was powerless to affect my own future.” Another noted that she could not get another job and she could not afford to go back to school; she remarked, “I have the will, but where’s the way?” These comments seem to indicate a sense of anguish and disempowerment.

Where losing a job once meant finding another and moving forward, the current intricacies of the employment outlook (i.e., tied to housing and transportation declines, high inflation, personal debt, etc.) can understandably lead the unemployed worker to be preoccupied by the job loss and to withdraw from outside contacts and social responsibilities. In addition, social isolation tends to include not only one withdrawing, but also a person’s perception of the degree to which other people abandon them. In an environment where collective needs have increased and support from social services has decreased, it is reasonable to assume that workers suffering from involuntary job loss would report increased symptomology.
When compared to the reference group, the current study also reveals no differences in five subscales (Despair, Depersonalization, Loss of Control, Somatization, and Death Anxiety). In reviewing the elements of each of the five subscales, the differences on Despair (hopelessness, pessimism) and Depersonalization (the degree of numbness, shock, and confusion), may be artifacts of data collection in that the majority of data for the current study was collected at job fairs, where individuals were actively seeking reemployment. Presumably, individuals using job fairs have a measure of hope, are looking their best, with résumés in hand, and appearing alert and aware. One might infer, therefore, that symptoms measured in the Despair and Depersonalization subscales would not be significantly present in a group of active, self-selected job seekers. Secondly, the differences in the Loss of Control subscale (which gauges control of overt emotions as well as tension and anxiety) and the Death Anxiety subscale (measuring one’s personal awareness of death), might be explained by cultural differences as the population of northern New England, where current participants were solicited, is typically described as stoic, self-controlled, practical, and direct. This would seem to preclude unrestrained emotional manner as well as reveal a mindset of accepting the inevitable (death).

Hypothesis 2: Contextual Factors and Covariates

The second part of this study investigated three contextual factors commonly appearing in the unemployment literature (perceived social support, work role salience, and time since loss) as they related the general psychological well being, depression, and anxiety. Three covariates were also included: age, gender, and financial difficulty. First, regression analyses revealed that Social Support and Gender were significant predictors
in all three regression models. Specifically, the higher social support perceived by the participant, the lower distress reported. As well women tended to experience more distress than the men in this study. Secondly, Financial Difficulty was positively related to depression and anxiety, but not to general well being and, lastly, Work Role Salience was positively related to anxiety. Neither Time Since Loss nor Age were significantly related to any outcome variable.

The literature is rich with illustrations conveying the presence of emotional and cognitive disorders, depression, anxiety, and somatic symptoms reported by individuals experiencing involuntary job loss. While the design of the current study precludes identification of a grief model in terms of “stages,” there appear to be several shared aspects of grief between both the life-loss event of IJL and a death-loss event. Though many would argue that the loss of a beloved person is more complex than that of a lost role, it has been suggested that common symptoms displayed between them may form a reasonable bridge between the two forms of loss, thereby recognizing the possible need for grief work in IJL and other role losses (e.g. Trolley, 1994). Initial proposals regarding the formation of a life-loss (versus death-loss) model for grief might include recognition that the loss is involuntary, and so presumably outside the individual’s local of control, that anger, guilt, rumination, and social isolation are strongly corrected with that loss, and that despair, depersonalization and somatic symptoms are also possible reactions. At the same time, interventions traditionally focus on reemployment rather than the full extent of what was lost. As a means of normalizing and validating the IJL workers’ experiences, it seems prudent to allow for the possibility that IJL clients might feel traumatized to some degree by their loss.
Overall, a review of dynamic labor market changes seems to indicate that adaptability may well be replacing career maturity as a critical developmental construct (e.g. Savickas, 1997). By becoming aware of common grief elements in each person’s unique IJL experience, theoretical frameworks can be selected and interventions anticipated more appropriately. For example, anticipating symptoms such as brooding, self denigration, or other maladaptive/distorted thinking patterns might indicate use of cognitive therapy, existential analysis might be helpful to address despair at the deterioration of self image, and Adlerian theory could facilitate isolation and social difficulties. As well, a client may find solace in developing a ritual or strategy to recognize and commemorate the lost role. What appears to be evident by examining studies regarding grief concepts (e.g. Archer & Rhodes, 1993, 1995; Brewington et al., 2004; Trolley, 1994) is that involuntary loss challenges more aspects of self than those typically accounted for, and basic personal assumptions are sometimes substantially tested.

Next, interventions in connection with IJL are also informed in that using a client’s strengths and assets is typically useful. One such asset is seen in terms of social support. As purported in the literature and upheld by this study, perceived social support is one of the most important factors affecting the loss experience, as greater social support is negatively correlated with stress symptoms in both unemployed people and in those suffering a bereavement loss (e.g. Keefe, 1984; Leana et al., 1998). Indeed, Cutrona et al. (1986) offer that physical and mental health are positively influenced when the distressed individual feels valued and receives help from esteemed others. Although not accounted for in the current study, future research might consider the effect of social
support on grief reactions such as social isolation as presumably, when individuals are able to reach out to or feel support from others, they may less lonely or less tempted to withdraw.

Regarding gender, past research has focused heavily on male participants (e.g. Archer & Rhodes, 1993, 1995; Rowley & Feather, 1987). While Brewington et al. (2004) did examine both men and women, their sample was small (8 males and 22 females), thus confounding their results of men reporting greater symptomology than women. In the current study, 44% of the participants were male (n = 47), and 46% were female (n = 59). Results revealed that the females in this study reported experiencing higher distress than the males. Also, because financial difficulty was prevalent as a covariate, post hoc analysis was performed on gender and financial difficulty. Women reported considerably more financial distress ($M = 7.7; SD = 2.38$) than men ($M = 6.49; SD = 2.72$), and independent $t$-tests confirm significant differences ($t_{(101)} = 9.03; p < .01$).

There may be several reasons for the gender findings in this study. First, men and women use language differently, and the language used to describe grief feelings in the items might be geared more toward women. Additionally, it has been suggested that men and women differ in how they access social support and in their level of reliance on others (Latack et al., 1995). Further, the manner in which men and women perceive social support may be different. For example, women who lose their jobs have reported receiving more support from friends and coworkers (Harris, Heller, & Braddock, 1988), while men rely most on immediate family and spousal support (Vaux, 1985). Next, some studies have linked psychological distress in women with a sense of interpersonal failure (Caplan, Vinokur, Price, & van Ryn, 1989). As well, there is a growing number of single
parent, female head-of-households as well as an increasing number of females in the workforce (U.S. Bureau of Labor Statistics, 2007). These factors might logically imply an increase in stress due to increased responsibility both at home and at work.

Unfortunately, data is not available in this study to compare single- and two-parent households. Further, due to misinterpretation of the demographic question inquiring about the number of household dependents, it was also not possible to determine differences between households with none or aged children versus those with dependent children under 18. Future study might concentrate more heavily on these observations.

Next, although not examined as a predictor variable, preliminary analysis indicated that financial difficulty was a significant covariant in this study. Indeed, financial difficulty is, without a doubt, a primary concern when faced with job loss. In addition to providing support for acquisition of material necessities, which are important in their own right, a salary also facilitates leisure activities, the ability for workers to engage in self care, and a feeling of agency (Johada, 1981; Waters & Moore, 2001.) The loss of income also tends to greatly restrict an individual’s movements and range of choices (Creed et al., 2001). Thus, the literature regularly connects financial difficulty with depression and anxiety, as did the current study. Nevertheless, the hierarchical regression analysis employed herein groups all covariates into one step. In addition, specific socio-economic status data was not collected, nor were secondary sources of income specifically broken out. It was therefore not possible to effectively investigate the contribution of financial difficulty in this study.

Of interest is the non-significant finding between financial difficulty and general psychological health. Returning to the literature, a study investigating between-patient
differences in clinical states and health related quality of life used confirmatory factor analysis to compare several factor structures of the GHQ-12 (Gao, Luo, Thumboo, Fones, Li, & Cheung, 2004). Results demonstrated that the questionnaire addresses three factors: Anxiety and Depression, Social Dysfunction, and Loss of Confidence. Further, half of the questions on the measure relate to social dysfunction. The surprising results relating to financial difficulty and general psychological health, therefore, may also be in participants’ perceived ability to effectively interact with their particular social group. In other words, participants may acknowledge depression and anxiety, but they perhaps do not feel lacking in social interaction. This finding might be particularly informative in planning IJL interventions as it seems to point more succinctly toward symptoms relating to depression and anxiety rather than to general dysphoria.

Work Role Salience relates to how an individual values the importance of work and career. The literature asserts that the degree of distress experienced at the loss of this specific role generally depends upon the degree of salience assigned to it by the jobless worker. Given this, the results of the current study are somewhat surprising in that neither general psychological health nor depression ($\beta = .137$ and $\beta = -.120$, respectively) but, rather, only anxiety ($\beta = -.147$; $p < .05$) is significantly associated with WRS. Interpretation of this finding may be impractical, however, as the reliability for the WRS scale in this study ($\alpha = .72$) is appreciably lower than that reported in other studies ($\alpha = .81 - .90$). As well, WRS assumes that work in and of itself is of substantial value in an individual’s life. While this was once true and may still be true in various parts of the world, the population from which participants were drawn for this study have continually experienced major plant closings and manufacturing outsourcing over the past 30 years.
According to participants’ comments, many of these jobs were in logging, paper production, and other manufacturing where generations of family had previously been employed. In addition, the majority of participants (91%) had been in their job for less than 1 year. Attachment to work or the work role, therefore, may occupy a less prominent position as workers may be becoming inured of changing whole occupations, specific jobs, environments, coworkers, and benefits or had not yet had enough time to attach to their work. Research specifically examining work and salience may be particularly informative in this regard.

Regarding Time Since Loss (TSL), several studies have demonstrated that the psychological and somatic symptoms reported as a result of IJL often persist over time (e.g., Archer & Rhodes, 1993; Brewington et al., 2004; Winegardner et al., 1984). Indeed, theorists posit that, as time passes after the loss, resources are taxed, social networks wane with ensuing isolation, feelings of helplessness may develop, and coping may become more difficult (Latack & Dozier, 1986; Latack et al., 1995; Winegardner, 1984). Contrary to past research, however, TSL in the current study was not significantly related to any of the three outcome variables. A possible explanation for this result is that the average TSL in this study is 4 months ($SD = 8.87$; Range <1 to 74 mos.) which could mean that financial and community resources have not yet been exhausted. Indeed, Archer and Rhodes (1993) initially found that TSL was not a factor in grief reactions, i.e., the symptoms they examined did not decline over time. As well, in their longitudinal examination following men from the time of job loss through the ensuing year (1995), the authors found that the cognitive and motivational aspects of grief (e.g. preoccupation and
searching) tended to decline over time, but that depression and anxiety, which are forms of affective distress, tended to remain.

**Strengths and Limitations**

Several factors contribute strength to the current study. First, the number of participants \((n = 106)\) as well as the gender mix lends sufficient influence to the research questions. Next, although research tends to emphasize generalizability via heterogeneous samples, the study of homogenous groups can be seen to add potency to the literature in that they provide more specialized focus. Indeed, the sample of Caucasian, middle aged and middle educated New England workers is an important subpopulation whose contributions provide a firm base for further research. In addition, the timing of the current research is opportune, particularly given the present economic situation in the northeastern United States.

In spite of the foregoing, there are several limitations to consider. First, due to the nature of ex post facto studies, causality cannot be assumed. Next, individuals acquire, change, and lose a significant number of life roles over the course of their lives (Gottfredson, 1996). It is impossible to account for every single lost role in a participant’s experience and, therefore, we cannot be assured to have isolated grief reactions arising solely from IJL (as opposed to divorce, empty nest, loss of a pet, cultural deficits, etc.)

Mono-operation bias is a factor in that participants were asked to complete several questionnaires in a short period of time. The survey format is also subject to individual interpretation of questions. Indeed, some demographic data was rendered unusable due to differing perspectives. The subjects were also self-selected and were paid for their participation. Given that most participants were unemployed, secondary gain may have
influenced some responses. Next, some of the data was compared against a norm-referenced sample which can be problematic because the sample population measured at the time the instrument was normed may be comparatively different in terms of historical influence. In addition, although one portion of the GEI-LV reference group is well described in its manual, the demographic characteristics of the entire reference sample are not adequately reported and so cannot be assumed as on a par with the current sample. In addition, the design of this study provided no baseline data against which to more appropriately compare the results, nor were comparison groups employed against which to interpret the results. Also, because there was no pre-test data, the existence of absence of pre-existing depression or anxiety is unspecified.

Finally, some instruments used herein may be problematic regarding interpretation of results. Some subscales on the GEI-LV, for example, have low reliability. In review of the survey, some questions appear particularly subjective and state-like (i.e., “My arms and legs feel heavy”) such the rigidity of the answer formal (Y/N) may not be adequate enough to fully capture the concept. Other questions appear to have little to do with job loss (i.e., “I made all the arrangements after the loss.”) and could have easily confused respondents. Therefore, caution should be used when considering use of the GEI-LV in future studies.

The Work Role Salience scale also revealed low reliability (.72) in this sample. This is particularly important given the plethora of literature finding attachment to role as a significant factor in loss, yet findings in the current study were weak to insignificant. As well, the survey may be outdated. For example, the question “I intend to pursue the job of my choice…” may be irrelevant today due to the current job market both
nationally and regionally, wherein there are many fewer opportunities for choice than were likely in 1971, when the survey was created. In addition, the age of the current participant group (\( M = 46 \)) may also have invalidated questions such as “I enjoy thinking about and making plans about my future career.” In fact, many participants communicated a fear that their (late) age would make them less employable than some younger applicants such that they would take any job offered rather than wait for one that may never materialize. In view of this, future studies might explore different measures to assess an individual’s internalized meaning of work.

*Implications for this study.*

Involuntary job loss encompasses forced changes in status, abilities, role responsibilities, and daily routines (Trolley, 1994) which can be traumatic on many levels. Indeed, many studies indicate that career clients share many of the same symptoms of distress upon involuntary job loss (e.g. Goldsmith et al., 1996; Murphy & Athanasou, 1999). Bearing in mind the job loss literature suggesting that distress reactions from IJL mirror bereavement loss (e.g. Archer & Rhodes, 1993, 1995; Trolley) and that bereavement grief has been identified as a psychological, social, and somatic reactions (Rondo, 1984), the results of this study reveal an opportunity to broaden the scope of services offered by career counselors. At the very least, interventions cannot overlook assessing depression and anxiety when evaluating skills and talents. Indeed, by ignoring possible grief that might be attached to IJL and assuming that reemployment is the ultimate goal, attention may be deflected away from examining damaged assumptive world views and changed personal schema that may produce subsequent and continued mental or physical health problems. Certainly, awareness of internal experiences
associated with IJL (and which can be hindered by repression, dissociation, isolation, or denial) can be used as a constructive tool for necessary, time sensitive (and well as future) decision-making (Horowitz, 1991). However, ignoring important contextual aspects of IJL can lead the worker into developing a sense of negativity and mistrust toward the world of work which, in turn, can affect the appropriateness of how the individual focused on future employment and career decision making (Ebberwein et al., 2004). At the very least, validating and normalizing a possible grief reaction could be a valuable first step in assisting clients toward symptom management and adaptive coping.

Interventions might include frameworks for embracing a grief component whereby the lost role and its attendant values, which are subjective, inanimate, and not readily operationalized to the masses, would be recognized as essential considerations in any form of employee release or reemployment standard. As demonstrated by the current study, women in particular would benefit from expanded counseling supports focusing, as suggested by (Rondo, 1984), on their sense of betrayal and collective relationships. Coping resources, particularly uncovering or enhancing utilization of perceived social support, can serve to mitigate psychological and somatic reactions during a typically vulnerable experience. Overall, some interventions may well require the same type of redefinition of self as would be required in death-loss experiences (Archer & Rhodes, 1993).

Conclusion

It was hypothesized that individuals experiencing involuntary job loss would demonstrate a significantly similar pattern of physical and psychological symptoms as was reported by a reference group of people having experienced a death loss. Indeed,
many of the same symptoms were reported by the IJL participants in this study as have been described within the bereavement grief literature. Although the participants in this study did not indicate the same pattern of grief reactions when compared to the normed bereavement group, the symptoms were either generally equivalent to the reference group or higher thus indicating the possibility that a grief reaction can occur as a result of involuntary job loss. Moreover, specific investigation of general psychological health, depression, and anxiety as they related to three contextual variables (social support, work role salience, and time since loss) revealed that social support is positively correlated with general psychological health and negatively correlated with depression and anxiety. Work role salience was slightly positively correlated only with anxiety, while time since loss had no relationship. Women in this study tended to report higher symptomology than men, and financial difficulty was positively correlated with depression and anxiety.

The findings of this study add appealing depth to the discussion regarding emotional and physical reactions exhibited by individuals experiencing involuntary job loss. Of primary importance is to understand that workers facing IJL may suffer considerably more than what is tangibly evident. The sense of loss that often accompanies IJL can be complex and may mirror personal losses experienced in a death loss. However, attitudinal variables such as perceived social support should be examined as a means of bolstering personal supports.
References


APPENDIX A

Tables

Table 1

Description of the Sample ($N = 106$)

<table>
<thead>
<tr>
<th>Characteristic</th>
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<th>%</th>
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<td></td>
</tr>
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<td>30 – 39</td>
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<td>40 – 49</td>
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<td>50 – 59</td>
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<td>47</td>
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### Education

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<td>34</td>
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<td>Some college</td>
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<td>Graduate degree</td>
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### Relationship Status

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<td>Single</td>
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<td>Divorced/Separated/Widowed</td>
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### Years employed at job

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<td>7.8</td>
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<tr>
<td>20 and above</td>
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### Time Since Job Loss (Months)

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<th>Months</th>
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<td>0 - 6</td>
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<td>7 – 12</td>
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<td>12 – 18</td>
<td>4</td>
<td>3.9</td>
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<tr>
<td>19 and above</td>
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<td>4.8</td>
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### Unemployment Benefits

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<td>51</td>
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<tr>
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<td>51</td>
<td>49</td>
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### Reemployed

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<td>92</td>
<td>85.8</td>
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### Death of a Loved One in last 5 years

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<th>79.2</th>
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<td>13.2</td>
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<tr>
<td>4 – 5 years</td>
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<td>7.5</td>
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Table 2

*Statistical Analysis – Assumptions of Normality*

<table>
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<th>Variable</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Durbin-Watson</th>
<th>Standardized Deviation Minimum</th>
<th>Standardized Residual Maximum</th>
<th>Standard Deviation</th>
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<td>GHQ-12</td>
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<td>-.104</td>
<td>1.621</td>
<td>-2.525</td>
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<td>.970</td>
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<tr>
<td>ZUNG</td>
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<td>2.229</td>
<td>.970</td>
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<tr>
<td>STAI-S</td>
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<td>-.865</td>
<td>1.911</td>
<td>-2.644</td>
<td>2.116</td>
<td>.970</td>
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</table>

Note: GHQ-12 – General Health Questionnaire-12; ZUNG: Zung Depression Scale;
STAI-S – State Anxiety Scale of the State Trait Anxiety Scale.
Table 3

**Descriptive Statistics of Demographic and Study Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>12.63</td>
<td>20</td>
<td>73</td>
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<tr>
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<td>ZUNG</td>
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<td>11.18</td>
<td>20</td>
<td>72</td>
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<tr>
<td>STAI-S</td>
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<td>13.7</td>
<td>24</td>
<td>79</td>
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<td>SPS</td>
<td>75.17</td>
<td>11.18</td>
<td>46</td>
<td>95</td>
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<tr>
<td>WRS</td>
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<td>13.59</td>
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<td>125</td>
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<td>Time since Job Loss Occurred (months)</td>
<td>4.88</td>
<td>8.87</td>
<td>&lt;1</td>
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Note: GHQ-12 – General Health Questionnaire-12; STAI-S – State Anxiety Scale of the State Trait Anxiety Scale; ZUNG: Zung Depression Scale; SPS – Social Provisions Scale; WRS – Work Role Salience Scale.
Table 4

**Intercorrelations Among the Study and Demographic Variables**

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<tr>
<th>Variable</th>
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<th>7</th>
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<th>9</th>
<th>10</th>
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<td>-.086</td>
<td>-.250**</td>
<td>-.283**</td>
<td>.125</td>
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<td>.043</td>
<td>-.235*</td>
<td>-.250**</td>
<td>-.211*</td>
<td>-.348**</td>
<td>-.073</td>
<td>-.023</td>
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<td>3. Education</td>
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<td>-.79</td>
<td>-.070</td>
<td>.039</td>
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<td>-.085</td>
<td>.041</td>
<td>.030</td>
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<td>-.008</td>
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*Note: Gender: Female = 1, Male = 2: GHQ-12 – General Health Questionnaire-12: STAI-S – State Anxiety Scale of the State Trait Anxiety Scale: ZUNG: Zung Depression Scale: SPS – Social Provisions Scale; WRS – Work Role Salience Scale.*

* *p < .05; **p < .01*.
Table 5

*Comparison of Mean Scores Across Samples on the Study Variables*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Current Study</th>
<th>Prior Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>GHQ-12 (1982)</td>
<td>8.26</td>
<td>2.9</td>
</tr>
<tr>
<td>STAI-S</td>
<td>52.3</td>
<td>13.7</td>
</tr>
<tr>
<td>ZUNG</td>
<td>47.1</td>
<td>11.2</td>
</tr>
<tr>
<td>SPS (Rose, 1987)</td>
<td>75.2</td>
<td>11.2</td>
</tr>
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<td>WRS (1971)</td>
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<td>13.6</td>
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</table>

*Note: N = 106; GHQ-12 – General Health Questionnaire-12: STAI-S – State Anxiety Scale of the State Trait Anxiety Scale: ZUNG: Zung Depression Scale: SPS – Social Provisions Scale; WRS – Work Role Salience Scale.*
Table 6

*Comparison of Means and Standard Deviations with Bereavement Reference Group of Grief Experience Inventory – Loss Version Subscales*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Current Study</th>
<th>Sanders et al.</th>
<th>t (797) (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>GEI-LV</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>DES</td>
<td>7.95</td>
<td>4.78</td>
<td>6.72</td>
</tr>
<tr>
<td>AH</td>
<td>4.95</td>
<td>2.51</td>
<td>3.97</td>
</tr>
<tr>
<td>GU</td>
<td>2.53</td>
<td>1.69</td>
<td>1.60</td>
</tr>
<tr>
<td>SI</td>
<td>3.39</td>
<td>1.86</td>
<td>2.37</td>
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<tr>
<td>LC</td>
<td>4.82</td>
<td>2.18</td>
<td>4.48</td>
</tr>
<tr>
<td>RU</td>
<td>5.67</td>
<td>2.66</td>
<td>4.81</td>
</tr>
<tr>
<td>DP</td>
<td>4.04</td>
<td>2.21</td>
<td>4.39</td>
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<tr>
<td>SOM</td>
<td>6.87</td>
<td>3.97</td>
<td>6.05</td>
</tr>
<tr>
<td>DA</td>
<td>5.46</td>
<td>2.29</td>
<td>6.05</td>
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</table>

*Note: Current Study, N = 106; Original Measure, N = 693; *p < .006.*

GEI Scales: DES – Despair; AH – Anger/Hostility; GU – Guilt; SI – Social Isolation;
LC – Loss of Control; RU – Rumination; DR – Depersonalization; SOM - Somaticism;
DA – Death Anxiety:
### Table 7

**Comparison of Confidence Intervals with Brewington et al. (2004) Group of IJL Workers: Grief Experience Inventory – Loss Version Subscales**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Current Study</th>
<th>Brewington et al.</th>
</tr>
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<tr>
<td></td>
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<td>CI</td>
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<tr>
<td>GEI_LV</td>
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<tr>
<td>DES</td>
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<td></td>
<td>SD = 4.78</td>
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<tr>
<td>AH</td>
<td>M = 4.95</td>
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<td>SD = 2.51</td>
<td>SD = 2.68</td>
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<td>GU</td>
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<tr>
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<td>SD = 1.69</td>
<td>SD = 1.69</td>
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<tr>
<td>SI</td>
<td>M = 3.39</td>
<td>M = 2.50</td>
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<td>SD = 1.86</td>
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<td>SD = 2.18</td>
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<td>SD = 2.66</td>
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<tr>
<td>DP</td>
<td>M = 4.04</td>
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<td>SD = 3.97</td>
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<td>M = 5.46</td>
<td>M = 5.27</td>
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<td>SD = 2.29</td>
<td>SD = 3.00</td>
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</table>

*Note: Current Study, N = 106; Brewington et al. (2004), N = 66; **p < .001. GEI Scales: DES – Despair; AH – Anger/Hostility; GU – Guilt; SI – Social Isolation; LC – Loss of Control; RU – Rumination; DR – Depersonalization; SOM - Somaticism; DA – Death Anxiety:*
Table 8

Summary of Standard Regression Analysis for Variables Predicting General Psychological Health

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>sr^2</th>
<th>R^2</th>
<th>R^2_adj</th>
<th>R^2 change</th>
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</thead>
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<td>Financial Difficulty</td>
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<td>.11</td>
<td>.19</td>
<td>1.96</td>
<td>.05</td>
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<tr>
<td><strong>Step 2</strong></td>
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<td>.02</td>
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<td>-2.72**</td>
<td>.01</td>
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Note: N = 106

The full model was statistically significant, F(6, 96) = 4.09, p<.001, R^2 = .20, R^2_adj = .15, R^2 change = .09; **p <.01, *p < .05.

Gender: Female = 1, Male = 2: SPS = Social Provisions Scale, WRS = Work Role Salience Scale, TSL = Time Since Loss.
Table 9

**Summary of Standard Regression Analysis for Variables Predicting Depression**

<table>
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<th>Variable</th>
<th>B</th>
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<th>β</th>
<th>t</th>
<th>sr²</th>
<th>R²</th>
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<th>R² change</th>
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Note: N = 106

The full model was statistically significant, $F(6, 96) = 8.83, p < .01, R^2 = .36, R^2_{adj} = .32,$

$R^2_{change} = .21.$ **p < .01, *p < .05

Gender: Female = 1, Male = 2: SPS = Social Provisions Scale, WRS = Work Role Salience Scale, TSL = Time Since Loss.
Table 10

Summary of Standard Regression Analysis for Variables Predicting Anxiety

<table>
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<th>SEB</th>
<th>β</th>
<th>t</th>
<th>sr²</th>
<th>R²</th>
<th>R²_adj</th>
<th>R² change</th>
</tr>
</thead>
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<td>.01</td>
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<td>.00</td>
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<tr>
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<td>.48</td>
<td>.21</td>
<td>2.31*</td>
<td>.02</td>
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<td><strong>Step 2</strong></td>
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<td>.96</td>
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</table>

Note: N = 106

The full model was statistically significant, $F(6, 96) = 17.08, p < .01, R^2 = .53, R^2_adj = .50.$

Gender: Female = 1, Male = 2; SPS = Social Provisions Scale, WRS = Work Role Salience Scale, TSL = Time Since Loss.

**p < .01, *p < .05
APPENDIX B

Figure 1

Histogram for general psychological distress – General Health Questionnaire – 12

Mean = 8.26
Std. Dev. = 2.853
N = 106
Figure 2

Histogram for Depression – ZUNG Self-Rating Depression Scale
Figure 3

Histogram for Anxiety: State Trait Anxiety Inventory – State

Mean = 52.33
Std. Dev. = 13.724
N = 106
Figure 4

Scatterplot for General Psychological Health, Depression, and Anxiety
APPENDIX C

Investigating the Grief Process Related to Job Loss

Informed Consent

You are being asked to participate in a research project being conducted by Mary P. Donahue, B.A. of the University of New York at Albany, under the direction of her faculty supervisor, LaRae M. Jome, Ph.D. The purpose of this research is to investigate mental and physical reactions to job loss that has occurred as a result of being fired, laid off, or for other involuntary reasons. This study has been approved by the Institutional Review Board at the University at Albany. All information obtained in this study is strictly confidential unless disclosure is required by law. In addition, the Institutional Review Board and University or government officials responsible for monitoring this study may inspect these records.

If you agree to participate, you are asked to read and answer the enclosed questionnaires, and then to return them in the enclosed, postage paid envelope. This activity should take no more than 1/2 hour. We do not expect any risk in your participation other than you may become uncomfortable answering some of the questions. Although you may not experience direct benefit from your participation, others may ultimately benefit from knowledge obtained from this research. As I appreciate your participation in this study, I am offering all participants a cash incentive of $5, which will be paid upon receipt of the questionnaires. Also, should you wish to know the results of this study, you may include your contact information on a separate sheet also attached to the questionnaire packet. Please be assured that neither of these two pages (the contact information for the cash and that for the survey results) will be associated in any way with the answers you provide on your survey questionnaires.

Completing and submitting of the questionnaire materials constitutes your consent to participate in this project. Your participation is voluntary. You may choose not to answer any questions and may refuse to complete any portions of the research for any reason. You may decide to leave the study at any time without penalty or loss of benefits to which you may have otherwise been entitled. If you do not wish to participate in this study, please return the unanswered questionnaires in the enclosed pre-paid envelope.

Should you have any questions regarding your participation in this study, please contact the principal investigator, Mary Donahue, via email at jobstudy@yahoo.com or by telephone at 207-351-6719, or LaRae M. Jome, Ph.D., faculty advisor, at LJome@uamail.albany.edu or (518) 442-5047. Finally, if you have any questions concerning your rights as a research participant that have not been answered by the investigator, or if you wish to report any concerns about the study, you may contact the University at Albany Office of Regulatory Research Compliance at 800-365-9139 or via email at orrc@uamail.albany.edu.
APPENDIX D

INSTRUMENTS

Demographic Questionnaire

Please answer the following question to help us describe the people who participated in our research project.

1. Age: ________

2. Sex (circle one)
   a. Female
   b. Male
   c. Transgendered

3. What is your race/ethnicity? (circle one)
   a. Caucasian/European American
   b. Black/African American
   c. Caribbean American
   d. Hispanic/Latino
   e. Mexican American/Chicano
   f. Asian/Asian American (please specify country ____________________)
   g. Pacific Islander
   h. Native American
   i. Biracial/Multiracial (please specify _____________________________)
   j. Other (please specify _____________________________)

4. What is your highest educational level? (circle one)
   a. 7th grade
   b. 8th grade
   c. 9th grade
   d. 10th grade
   e. 11th grade
   f. High school graduate/GED
   g. Some college or technical/vocational school
   h. College graduate
   i. Some Master’s level work
   j. Master’s degree
   k. Doctoral degree

5. Are you: (circle one)
   a. Single
   b. Married
   c. Living with Partner
   d. Divorced/Separated
e. Widowed

6. Number of children ________
   a. Ages of children, if applicable ______________________

7. Number of dependents living with you _______________

8. How many years were you employed at your job?
   ____________________________________________

9. How long ago did you lose your job?
   ____________________________________________

10. Are you currently receiving unemployment benefits?
    ____________________________________________

11. Are you currently reemployed?
    ____________________________________________

12. What is your major form of income?
    ____________________________________________

13. How many pets do you own? ________________ Type?
    __________________________

    How long have you owned pets?
    ____________________________________________

14. Have you suffered the death of a love one in the last 5 years?
    __________________________

    If so, how long ago?
    ____________________________________________

15. On the below scale of 1 – 10, with 10 being highest, please circle the degree of financial difficulty that has resulted as a consequence of your loss:

    Lowest __________ Highest __________

    0  1  2  3  4  5  6  7  8  9  10