SELF-HELP INTERVENTION AND LOCUS OF CONTROL PERCEPTIONS
OF CONJUGALLY BEREAVED OLDER ADULTS

THESIS

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

Christine L. McKibbin, B.S.
Denton, Texas
August, 1994
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Locus of Control (LOC) is operationalized as a dispositional trait remaining stable throughout life, but may also be conceptualized as a domain specific state. Widowed persons' support groups, consisting of recently conjugally bereaved older adults (N=22) and one high functioning, long-term widowed peer group leader, were utilized to test LOC malleability. A significant increase in one State measure subscale, Desire for Control, was noted (p<.02). Trait LOC remained stable. The change in State and Trait LOC change did not significantly relate to psychological symptom reduction. However, Trait LOC Internality related to fewer symptoms whereas State LOC Internality related to more symptoms.
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CHAPTER I

INTRODUCTION TO THE STUDY

Perceived control over life events has been intensely investigated for many years (Lefcourt, 1982; Levenson, 1981; Rotter, 1966). This construct, Locus of Control (LOC), encompasses an expansive area within the psychological literature with contributions from scholastic achievement, pain perception (Weisenberg, 1977), stress and coping (Folkman, 1984), and other areas. In addition, Locus of Control has been investigated in specific age groups across the life span, from childhood to late life (Langer & Rodin, 1976).

A few investigators conceptualize LOC as divided into two somewhat orthogonal categories, Internal LOC and External LOC (Krause, 1986; Linn & Hunter, 1979). In fact, one particular investigator demonstrated the independent nature of these two constructs. Krause (1986) conducted an exploratory factor analysis with a shortened version of the Rotter Internal-External Locus of Control measure (Rotter, 1966). This analysis yielded two separate, weakly correlated factors which reflected both beliefs in the effects of chance and feelings of internal mastery $r = - .154$. This does suggest that the two identified factors are relatively independent dimensions of personal control.
Krause’s Locus of Control conceptualization seems to take into account the various combinations of control and chance beliefs. For example, a high score on the Personal Mastery subscale reflects an Internal LOC and a high score on the Chance subscale indicates an External LOC orientation. An individual may score between high and low on either or both of these factors.

This conceptualization appears to agree with the operationalization of Locus of Control and allows for an individual to maintain both Internal and External Locus of Control beliefs simultaneously. This LOC conceptualization appears to have some value. However, a full range of control orientations does not appear to be defined. It is not clear how individuals may be classified if they do not score high on each factor. This is a point which Krause (1986) does not address.

Other investigators have operationalized Locus of control in a similar way. However, they have investigated this construct as a unidimensional continuum with two poles, Internality and Externality (Haas-Hawkings, Sangster, Ziegler & Reid, 1985; Martin, Abramson, & Alloy, 1984). With this unidimensional conceptualization, individuals are considered to possess varying degrees of control orientations; being more External means being less Internal. This use of a wide range of possible control orientations
appears to provide more complete information for study of this construct.

In order to understand additional conceptualizations of the Locus of Control construct, it is important to present general definitions of both Internal and External Locus of Control. According to Rotter (1966), Locus of Control is defined as generalized beliefs about the extent to which one assumes power to control event outcomes. Internal Locus of Control is the general belief that event outcomes originate from one's own behaviors. External Locus of Control is the general belief that event outcomes originate from Luck, Chance, or Powerful Others. These 3 outcome origins are conceptualized as subfactors of External LOC.

In addition to the definition of Internal and External LOC and its differentiation as an orthogonal or unidimensional construct, Locus of Control may also be conceptualized as a Trait and State variable (Folkman, 1984; Roberts & Nesselroade, 1986; Ziegler & Reid, 1979). Trait LOC is operationalized as a dispositional belief, or a generalized control expectation where as State LOC is situation specific, pertaining to specific events an individual encounters in life.

Although some describe State LOC as specific to various domains such as health or issues specific to the aged (Ziegler & Reid, 1979), others State Locus of Control as somewhat malleable, shifting from day to day (Roberts &
Nesselroade, 1986). The degree of State LOC depends upon the amount of control one believes he or she may have over specific events. Considering both conceptualizations of State Locus of Control, one might posit that State Locus of Control may be both domain specific and malleable; changing from day to day as well as depending upon the specific domain considered. For example, an individual may believe that he or she has greater control over social interaction than physical health (Reid, Haas, & Hawkings, 1977).

Perceptions of State control may also be influenced by one’s dispositional control perceptions or the defined characteristics of the particular event (Folkman, 1984). Folkman (1984) and Rotter (1966), state that ambiguous conditions cause an individual to rely upon generalized, dispositional beliefs about control. For example, when presented with an ambiguous situation, Trait Internals would perceive the situation as controllable, whereas, Trait Externals would not. It is also noted that when a situation is not ambiguous, but defined, perceived controllability is dictated by event characteristics and not by generalized beliefs.

Locus of Control Across the Life Span

As stated previously, LOC has been described by some to be dependent on life experience and malleable over time. In fact, one study, Nurmi, Pulliainen, and Salmela (1992), addressed the Locus of Control construct in relation to
developmental trends. They asked subjects, age 19-71, to write down their goals and concerns and rate each on a scale of Internality-Externality. Findings suggested that control beliefs become more External with age. It was also found that increased Externality may be caused by an increased interest in domains that older individuals become increasingly less able to control like physical health, visitation with children, self care and decision making, and home and financial management issues. It is inferred that the increased desire for control over specific uncontrollable domains, or State events, may serve to reinforce Trait External control perceptions.

Findings of Nurmi et al. (1992) are in accordance with Ziegler and Reid (1979) who state that the aged are in a situation of possible diminished control. Further, this potentially decreased sense of control in the lives of some older adults may be due to increased frequency of several events: loss of spouse and close friends through death, loss of health, role loss, increasing social isolation, and social prejudice (Reid & Ziegler, 1981; Stroebe, Stroebe, & Hansson, 1988). Ziegler and Reid (1979) also concluded that many of these life events lack control and, thus, may serve to reinforce an External Locus of Control orientation.

It is important to note that external limitations do not necessarily reduce a sense of control by themselves, rather, they may contribute. In fact, many people maintain
a stable Trait Internal Locus of Control in spite of a possible decrease in control one may have over life events. Therefore, it is speculated that Internal Locus of Control stability in the presence of increasing external limitations may be due to other environmental factors such as adequate income and advanced education, which provide some means for environmental control (Gallagher, Thompson, & Peterson, 1982).

Stressful Events and Social Support

Life stress, as defined by Litt (1988), consists of the "demands placed on an organism that exceed its ability to adapt efficiently" (p. 9). According to a stress model proposed by Dohrenwend (1978), the experienced intensity of stressful life events, like conjugal bereavement, varies with characteristics of the stressful situation, additional event characteristics, and the psychological characteristics of the person. This model posits that a stressful event leads to a stress reaction which may be directly mediated by environmental supports, like interventions.

According to Dohrenwend (1978), mediation of situational and psychological factors define the context in which the stress reaction occurs and is described to influence the amount of psychological distress elicited. Situational mediators are conditions in the environment which are separate from, but influence the individual and his or her stress reaction. Some examples of situational
mediators are material resources or social supports. Therefore, an individual lacking in material resources and/or social support may be likely to experience greater psychological distress than one with adequate resources.

Social support has been reported to be an effective buffer of stress and it has been utilized by persons to varying degrees depending on Locus of Control orientations. Lefcourt, Martin, and Saleh (1984) conducted a series of LOC studies to investigate the effects of social support availability on psychological symptomatology. Findings suggest that Internals express less need of, but experience better effects (lower psychological symptomatology) from having support than do Externals who show more need of but obtain fewer benefits from this support. In addition, Internals with available social support fared better than those without such support. Thus, it can be seen that social support plays a role in determining how those with varying degrees of LOC respond to life stressors.

Dohrenwend (1978) reported that, psychological characteristics of the individual may also mediate psychological distress. Psychological characteristics include values, coping abilities and Locus of Control, among others. This study will focus on the psychological characteristics, State and Trait Locus of control, as mediators of psychological distress. However, social
support, an important mediator of stress, will also be addressed.

Studies have addressed the psychological characteristic, Locus of control, as a stress buffer. One particular study conducted by Krause and Stryker (1984) reported that those who endorsed a greater degree of Internal LOC responded more adequately to life stress than those who endorsed a greater degree of External LOC beliefs. They examined LOC along a unidimensional continuum from Internality to Externality. Results indicate that those with moderately Internal LOC orientations coped more effectively with life stress than those classified as extremely Internal, extremely External, or moderately External. Moderately External individuals coped least effectively.

Krause and Stryker (1984) inferred that moderate Externals attribute negative outcomes to the self, unlike extreme Externals who attribute outcomes to luck or chance. Krause and Stryker posit that stressful life events may continue as a persistent source of strain for moderate Externals because they are less likely to initiate coping efforts and are more likely to attribute negative outcomes to the self. In addition it is noted that extreme Internals may also have difficulty coping effectively. However, this may be due to an extreme internalization of personal responsibility for life events and subsequent guilt.
feelings. This guilt may, in turn, foster depressive symptomatology.

Krause (1984) and other researchers have conducted studies which have addressed single conceptualization of Locus of Control, Trait-type LOC, while vaguely alluding to the idea that the control one feels over specific events may affect one's Locus of Control orientation. Meanwhile, other studies have specifically addressed control in relation to life events, specifically, perceptions of control as individuals undergo naturally occurring, uncontrollable major life events (Haas-Hawkings et al., 1985; Krause, 1986; Thompson & Spacapan, 1991). Death of a spouse is an example of an uncontrollable major life event (Guarnaccia & Zautra, in press). Spousal death and other life events may be presumed to challenge individuals' beliefs in personal control. Successful coping, in response to these stressors, involves the reestablishment of the perception that one can achieve desired outcomes (Janoff-Bulman & Frieze, 1983; Taylor, 1983).

Locus of Control and Older Adults

Others have also investigated perceived control in relation to psychological adjustment, general well-being and the ability to cope with life stressors. However, this group of researchers have focused on an older adult population (Langer, 1975, 1983; Larson, 1989; Reid & Zeigler, 1980). According to Reid and Zeigler (1980), a
primary factor effecting well-being, life satisfaction, and happiness is the degree one feels in control of significant life events. Those who believe they can influence event outcomes (Internals) are generally more satisfied with their lives. However, those with External LOC perceptions may believe that they have little control over event outcomes. The latter belief, Reid and Zeigler inferred, may lead to feelings of helplessness. Because the Learned Helplessness literature has demonstrated a relationship between helpless feelings and depression, External Locus of Control perceptions may be viewed as a paradigm for depressive symptomatology (Abramson, Seligman, & Teasdale, 1978; Larson, 1989).

As noted, only a few studies exist pertaining to LOC as a mediator of stress and coping older adults. Fewer, still, have implemented an intervention with this particular population. Ziegler and Reid (1980) suggested that further research address Locus of Control changes over time, as well as the relationship of this change to psychological adjustment. Investigation in these areas would serve to further to understand the definition and function of the Locus of Control construct.

Research on Locus of Control, stressful life events, and well-being of older persons lags far behind such research for younger individuals. However, there does appear to be increased attention to this population. A
study conducted by Krause (1986) examined LOC as a mediator between stressful life events and the psychological adjustment of older adults. As with previous studies, it was found that persons with extreme Internal or extreme External Locus of Control beliefs were especially vulnerable to the effects of life stressors. In addition, Krause (1986) reasoned that those with an Internal LOC are likely to experience less distress, on average, than Externals. This was based on the finding that Internals tend to engage in coping behaviors that can help them avoid some stressful life events before they occur.

Depressive symptomatology, one of the three stressful life event outcomes proposed by Dohrenwend (1978), is a possible result of stressful life events and poor psychological adjustment. A few studies have investigated the relationship of Locus of Control perceptions and depressive symptomatology particularly for an older adult population (Kohn & Schooler, 1982; Krause, 1986; Larson, 1989; Stroebe, Stroebe, & Domittner, 1988). Results of these studies indicate the effects of stress on depressive symptomatology and poor adjustment are stronger among those older adults who believe in the effects of Chance than among those who do not.

In an earlier study, Reid et al., (1977), also examined LOC in relation to measures of psychological adjustment in older adults. In order to further measure and define the
Locus of Control construct, they developed a measure specific to the older adult population; the Desired Control Measure (DCM). This instrument was specifically designed to measure older adults' expectancy and desire for controlling daily life, or State-type, events. Locus of Control was measured on a unidimensional continuum from Internality to Externality. Findings indicated that Internal Locus of Desired Control is associated with positive psychological adjustment in older adults. This was evidenced in the positive correlation between Locus of Desired Control and measures of health, life satisfaction, self concept, as well as a negative correlation with a measure of depression. Further, Reid and Ziegler (1980) conducted validity and reliability studies of the Desired Control Measure. It was found that Locus of Desired Control significantly and positively correlated with measures of psychological adjustment taken 12 months later. It again supported the idea that those older adults who feel more in control of every day events, which are important to them, will be better adjusted. However, the authors noted it is not necessarily the desire for control that mediates psychological adjustment, but rather, an expectancy of whether or not one can realize a desired outcome.

Bereavement and Grief

One major life event experienced by many older adults is the loss of a spouse. This loss is expressed in various
ways according to predominate culture. According to Stroebe and Stroebe (1987), the terms bereavement, grief, and mourning all have different connotations should all be distinguished from one another. They defined the term bereavement as the "objective situation of an individual who has recently experienced the loss of someone significant through that person's death" (p.7). Bereavement is the primary causative factor of grief, the "affective response to a loss", and mourning, the "expressive display of individual grief" (p.7).

Grief may be experienced in both normal and pathological ways, and may be dependent on cultural expectations (Stroebe & Stroebe, 1987). Lindeman (1944) has outlined the most common features of recently bereaved individuals. These features include: somatic distress (lack of strength, digestive problems, and other physical discomforts), preoccupation with the image of the deceased, guilt feelings, hostile reactions toward others, and loss of regular patterns of activity (restlessness, apathy, and difficulty with social interactions). Although these symptoms are common to most of those experiencing normal grief, it is important to note that all of these symptoms may not be present in each person, nor may they all be present at the same time for each person.

The use of stage models has been another way of defining the commonalities between bereaved individuals.
Bereaved individuals do not pass through stages in a simple chronologically sequenced manner as many believe. Rather, characteristics from one stage are often interspersed throughout the others or absent altogether (Stroebe & Stroebe, 1987).

Grief following bereavement is not always uncomplicated. In fact, it may take pathological forms as well. Although it is understood that both normal and pathological grief are important to understand within the context of bereavement, this study will primarily focus on those individuals who are experiencing uncomplicated conjugal bereavement.

Bereavement Interventions

In addition to grief experience, a myriad of adjustments are thrust upon newly widowed individuals for which they may experience some need for assistance. Often times some instrumental needs are met for widows immediately following the loss of their spouse often provided by family members, friends and community members. However, at least 6 weeks following a spouse’s death appears to be a widow/widower greatest time of need (AARP, 1988; Silverman, 1988). Widowed individuals need for others to care, listen, and help them with adjustments that they experience. These needs are often not met by those in the community for which widowed persons would normally have contact. It seems the difficulty is that caregivers for which a widowed person
would likely have contact often have difficulty appreciating the intensity of this particular grief experience (Silverman, 1988). Thus, widowed persons may feel lonely, isolated and perhaps misunderstood at times.

Walker (1967) found that the most helpful person to a widowed individual during the first year of bereavement was another widowed person. This evidence sparked the beginning of Widow-to-Widow mutual help programs based on the apparent benefit of widow-to-widow relationships (Silverman, 1988). A mutual-help exchange involves people who share a common problem one of whom has personal experience and has previously coped successfully with this particular problem (Silverman, 1978). A mutual-help model offers learning and growth through relationships with other widows. These relationships help to identify new options for social roles as well as new ways of relating to him/herself and the external world. Individuals also gain perspective, from other widowed persons, about ways to cope with and organize life following spouse loss as well as the changes that event imposes (Silverman, 1986, 1988).

Predictors of Conjugal Bereavement Outcome

Several factors, in addition to Locus of Control, exist as predictors of conjugal bereavement outcome. These include demographic factors, individual factors, situational factors, concurrent stressors, and environmental
circumstances following the death of a spouse (e.g., social support) (Sanders, 1988; Stroebe & Stroebe, 1987).

Demographic factors that influence the outcome of conjugal bereavement include lower social class, male gender, and younger age (Ball, 1977; Parkes, 1975; Stroebe & Stroebe, 1987; Windholz, Marma, & Horowitz, 1985). Individual factors such as religiosity, personality, and individual health may also influence bereavement outcome. Antecedent situational factors, like previous life stressors, prior bereavements, and quality of marital bond also influence conjugal bereavement outcome. Individuals with greater levels of antecedent life stressors, experience prior bereavement at an early age, or experience ambivalent or dependent marital relationships prior to conjugal bereavement tend to experience negative outcomes (Parkes & Weiss, 1983; Raphael, 1983; Stroebe & Stroebe, 1987). In addition, the mode and cause of death may also affect bereavement outcome. More negative outcomes are experienced by those whose spouses die a sudden or violent death as opposed to one which is lengthy and expected. Finally, environmental circumstances following bereavement, like availability of social support, also predict adjustment to conjugal bereavement. Those who receive higher levels of social support report less depressive symptomatology and somatic complaints than those who receive lower levels (Stroebe & Stroebe, 1987).
Locus of Control and Conjugal Bereavement

A few researchers have addressed the Locus of Control for conjugally bereaved older adults within a stress and coping paradigm. Reich and Zautra (1989) investigated LOC effects on psychological well-being and distress, positive and negative affect and measures of daily life events and activities. This intervention study included empowerment education, to make older adults more aware that they, themselves, could alter event outcomes. It was found that those who received the intervention and who maintained an Internal Locus of Control throughout this intervention program, experienced increased personal mastery, lower psychological distress and lower negative affect, than those who maintained an External Locus of Control. However, the significant effect of the intervention was time limited.

Another study of recently widowed older adults was conducted in order to investigate the effects of social support, preparation for spouse loss, and Locus of Control as three primary factors determining self-reported adjustment and life satisfaction (Haas-Hawkings et al., 1985). Findings suggested two significant positive correlations: one between preparation and self-report of adjustment and another between Internal control perceptions and life satisfaction. Therefore, those who were prepared for conjugal bereavement reported themselves more well-adjusted. Similarly, those who were conjugally bereaved and
maintained an Internal LOC reported more satisfaction with their lives.

Throughout the literature, Locus of Control has been operationalized as either a dispositional trait or a specific, non-enduring, situational control attribution. No literature to date has investigated the malleability of State versus Trait Locus of Control and their relationships to psychological symptomatology in the same study. As an effort to better understand the nature and function of Locus of Control, this study will investigate effects of a self-help, peer counseling intervention on the malleability of State versus Trait LOC of conjugally bereaved older adults, as well as the mediator function of LOC between major life stressors and psychological symptomatology.

As noted previously, a differentiation is presumed to exist between State and Trait Locus of Control. These two categories of Locus of Control appear to be measurable by various LOC instruments. The Ziegler and Reid Locus of Desired Control Measure (1979) appears to measure State LOC, which are specific to life circumstance and populations whereas The Rotter I-E LOC measure (Appendix C) indicates Trait Locus of Control. This Trait measure taps LOC orientations which are more stable, global, and removed from everyday experience (Rotter, 1966). Because it is important to understand the relationship between State and Trait Locus of Control as well as their possibly unique effect on
psychological symptomatology, a measure indicating each of
the two types of control will be used separately in this
particular study.

Hypotheses

It is hypothesized that a self-help, peer-lead
intervention will alter State Locus of Control perceptions
toward Internality. Because a greater degree of control and
predictability tends to reduce stress and depression (Martin
et al., 1984), it is also hypothesized that change toward
State Internality relates to the reduction of psychological
symptomatology scores. Trait LOC is presumed to remain
stable. Those who experience an increased degree of State
Internality are hypothesized to experience a reduction of
psychological symptomatology. This may be due to an
increased tendency to internalize their peers’ examples of
situational life event control.
Participants

Subjects included a total of 36 cognitively intact English-speaking independently living older adults, over 50 years of age, who reside in and near Denton, Texas and who have experienced the death of their spouses within approximately the last one year. A total of 141 mailings were made to potential participants which yielded 36 respondents. Although 36 participants were initially interviewed, not all completed the program. A total of 14 participants discontinued participation, thus, data was collected for 22.

The participants' average age was 69.86. Participants ranged from 34 to 474 days post bereavement with a mean of 231 days. A majority of the subjects had a high school education and a few had some college. Participants average annual income was between 20 and 30 thousand dollars. No subjects appeared to be effected by cognitive deficits. Refer to Table 1.

Procedure

Subjects were recruited by various means: referrals from retirement communities and senior centers, Area newspaper announcements, endorsements from a local hospice,
and the review of published obituaries. All who met criteria were invited to participate through mailings. Letters were mailed to individuals whose spouses were listed as deceased in newspaper obituaries. Participants were informed of the self-help group study and invited to participate. Interested individuals completed and returned a request for information enclosed with each letter.

Participants were initially given a risk-status assessment (Parkes, 1986) to determine individual risk differences. However, little if any differences were noted between participants on this measure of risk. Therefore a stratified random sampling procedure, which was initially planned as part of a larger study, was not used (Guarnaccia & Hayslip, 1992). The first group consisted of a standard Widowed Persons Services (AARP, 1984) self-help support group directed by one of three long-term widowed peer leaders. The second group was directed by one of the same three peer leaders and a newly recruited leader. However, these two received additional training and supervision from a Clinical Psychologist and advanced graduate students. In addition, this study included a control condition that consisted of participants who received the same measures, but a delayed intervention. The intervention groups consisted of a peer leader and 4 to 6 members who conducted 6 bi-weekly sessions, each lasting approximately 1 1/2 hours.
Peer leaders had no professional mental health training. However, they were selected as high functioning, active, well-adjusted, long-term widowed older women. This was determined by the project directors during a series of individual interview and briefing sessions. Some leaders who conducted the standard Widow-to-Widow self-help group and who were expressed an interest to conduct additional group meetings then received additional counseling techniques training in order to conduct an enhanced intervention. This included the use of non-verbal communication, listening, responding and reflecting skills, emotional support, active problem-solving, normalizing of feelings/experiences, and avoidance of advice giving (Alpaugh & Haney, 1985). Peer leaders achieved an acceptable level of proficiency before running the second set of supervised groups. All measures were administered pre-group (time-one), post-group (time-two), and at one month follow up.

Measures

Measures administered in this study were: the Locus of Desired Control Measure (DCM) (Ziegler & Reid, 1979); a modified version of Rotter's Internal-External Locus of Control Scale (I-E LOC) (Collins, 1973; Rotter, 1966); the Brief Symptom Inventory (BSI) (Derogatis & Spencer, 1982), the Louisville Social Support Scale (LSSS) (Norris & Murrell, 1987), Crowne-Marlowe Social Desirability Scale
(Crowne & Marlowe, 1960), and Demographic measures. Other measures not used in this project were also given.

**Desired Control Measure**

The Locus of Desired Control Measure (DCM) (Reid & Ziegler, 1980; Ziegler & Reid, 1979), is a self-report measure of Locus of Control. The standard DCM consists of two similarly worded subscales with 35 items each. The Desirability subscale measures an individual's desire to control specific daily life events. Items are measured on a five-point Likert-type scale from "Not Desirable/Not Important" to "Very Desirable/Very Important." Summing the responses to these items yields a Desirability subscale score. The Expectancy subscale consists of 35 items matched to the Desirability subscale items that measure an individual's perceived ability or expectation of controlling daily life events. The items are measured on a similar five-point Likert-type scale from "Strongly Disagree" to "Strongly Agree." Summing these items yields an Expectancy subscale score. The sum of the corresponding item cross-products of the 35 Desirability subscale items and 35 Expectancy items yields a composite Locus of Desired Control measure (Reid & Ziegler, 1980). Calculating a cross-product of the desired and expectancy items allows each expectancy response to be weighed according to the desirability level that the subject holds for each respective outcome (Reid & Zeigler, 1977). The short form of the DCM, which will be
used to minimize the length of the questionnaire, consists of 16 Desirability items and 16 Expectancy items. Scores are obtained in a way identical to the standard DCM instrument (Reid & Zeigler, 1980).

Reliability coefficients for a sample of older adults were: Desirability (alpha=.82 to .90), Expectancy (alpha=.82 to .90) and Locus of Desired Control composite (alpha=.82 to .90). Test-retest reliabilities over 1 year were: Desirability ($r=.46$), Expectancy ($r=.56$), and Locus of Desired Control composite ($r=.63$). According to the authors, these moderate to low stability coefficients are consistent with the expectation that Locus of Desired Control fluctuates over time (Reid & Ziegler, 1980).

**I-E Locus of Control Measure**

Psychometric properties of the Rotter I-E Scale (Appendix C) were based on, a sample of university women yielded adequate internal consistency (alpha=.79) and adequate Test-retest reliability ($r=.83$) one month following, and ($r=.61$) two months following the first administration (Rotter, 1966). Collin's (1973) modified the Rotter I-E scale to create a Likert-type response format to increase measured variability. This study used Collin's version of the Rotter's Internal External Locus of Control Scale (1966) to assess subjects' methods for relating to and internalizing life events. The instrument consists of a 46-item, 4-point Likert-type format consisting of a
unidimensional scale from Internality and Externality. Collins (1973) factor analyzed the items and identified four orthogonal I-E subscales: Difficult-Easy World, Just-Unjust World, Predictable-Unpredictable World, and Politically Responsive-Unresponsive World. The correlation between Rotter's (1966) and Collins' (1973) format is .82. Therefore, it can be concluded that the forced-choice and Likert-type formats are closely related.

**Brief Symptom Inventory (BSI)**

The Brief Symptom Inventory (Derogatis & Spencer, 1982) a shortened version of the Symptom Checklist-90-R (Derogatis, 1982) is a self-report inventory measuring symptom dimensions and three global indices of distress. These dimensions include Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. The three global indices consist of the General Severity Index, the Positive Symptom Total, and the Positive Symptom Distress Index. This study used the Depression subscale as well as the General Severity Index, which combines information on numbers of symptoms of intensity of distress in order to attain a global measure of distress.

This measure takes approximately 10 minutes to complete with older individuals sometimes requiring a bit longer. Each item of the inventory is rated on a 5-point Likert-type scale of distress from "not-at-all" (0) to "extremely" (4).
Derogatis and Spencer (1982), report internal consistencies ranging between a low of \( \alpha = .71 \) for Psychoticism to a high of \( \alpha = .85 \) for Depression. Test-retest reliability are reported within an appropriate range (\( r = .68 \) to \( .91 \)) for symptom constructs and the Global Severity Index (\( r = .90 \)). In addition, this measure has reported both convergent and construct validity (Derogatis & Spencer, 1982).

**Louisville Social Support Scale**

The Louisville Social Support Scale (LSSS) (Norris & Murrell, 1987) consists of 13 social support items which are rated on a 5 point scale. The total possible scores range from 13 to 65 with higher numbers indicating greater levels of social support. The LSSS had an alpha internal consistency of .82, and a test-retest reliability of .70 in a sample of 1,411 adult subjects (Murrell & Norris, 1991) (Appendix E).

**Demographic Questionnaire**

A demographics questionnaire was also be utilized to collect information concerning subjects' age, number of years of marriage, time since spouse's death, and general health information. Demographic variables appropriate to this study were included in analyses, particularly the variables time since spouse's death and Social Support (Appendix F).
Summary

The hypotheses of this study contained four predictors and two criterion variables which were examined by a pre-post, repeated measures design (Posavac & Carey, 1980). The predictors consist of a change score between pre and post State and Trait Locus of Control, perceived social support, and time since spouse's death. The criterion variables consisted of pre and post State or Trait Locus of Control and a change score between pre and post psychological symptomatology.

Locus of Control was examined on a continuum from low Internality (high Externality) to high Internality. Characteristics that served as possible predictors of psychological symptomatology, along with Locus of Control consist of time since spouses death, and perceived social support. These factors were controlled in the analysis.

Hypothesis 1: Participation in self-help/support group interventions will alter State Locus of Control perception toward Internality. Thus, post-measure score of State LOC, Desired subscale was expected to be more Internal than the pre-measure score of State LOC. Trait LOC was expected to remain stable. Because little difference in LOC was expected between the different group interventions, all self-help/support group interventions were collapsed into one group. Pre and post support group participation data was collected for both experimental and control subjects.
This data was pooled and treated as one group. However, additional analyses were conducted on experimental and control groups separately. Initially, a matched-pair t-test was employed to test significance between pre and post Locus of Control measures. This was to be followed with an Analysis of Covariance controlling for time since spouse’s death and perceived social support. Additional analyses, Multiple Analysis of Variance procedure and Wilcoxon Matched-Pairs Signed Ranks Tests, were also conducted for experimental and control subjects to support research findings.

Hypothesis 2: The degree of change toward State or Trait Internality from pre to post support group relates to the reduction of psychological symptomatology scores. The predictors consisted of time since spouse’s death, perceived social support, and a change score for State and Trait Locus of Control. Psychological symptomatology was the criterion variable. Locus of Control measured at pre and post intervention, was examined as a continuous variable. Psychological symptomatology, examined at pre and post intervention, was also examined as continuous variables. The degree of change toward internality, the predictor, was expressed as a difference score between pre and post measures of State and Trait LOC. The degree of reduction of psychological symptomatology, the predictor, was also expressed as a difference score between pre and post
measures of symptomatology. It was predicted that the correlation between the two reduction measures would be significant. A hierarchical multiple regression was employed to test this hypothesis. Time since spouse's death and social support were entered first and second in the hierarchical regression followed by the measure of increased Internality. MANOVA procedures and Wilcoxon Matched-Pairs Signed Ranks Tests were also conducted to support research findings.
CHAPTER III

RESULTS

All measures used in this study were completed by participants at two intervals as part of a pre-post, repeated measures design (Posavac & Carey, 1980). Although data was collected for 22 subjects, one to two items were skipped by 3 of these 22 subjects on the Trait Locus of control measure. The missing scores for these items were predicted from a regression equation. Beta weights from the regression equation, with Locus of Control (LOC) as a dependent variable, were used to calculate participants predicted item responses.

Means and standard deviations were calculated for each measure used in analysis (See Table 2). Mean scores, for each Locus of Control instrument administered in this study, indicated moderately Internal Locus of Control orientations (M = 2.75 using Collins, 1973; M = 17.5 using Reid Ziegler, 1979). Reliability calculations and inter-test correlations for all measures are presented in Table 3.

The mean for the overall measure of psychological symptomatology, the Global Severity Index was calculated at both pre and post intervention. The calculated mean was somewhat greater than the mean found by Derogatis and Spencer (1982) for non-patient normals and less than means
calculated for psychiatric outpatient groups. There was a trend toward reduction of global psychological symptomatology from pre to post intervention, but this reduction was non-significant. Participants did, however, experience a significant reduction in depression ($t = 3.43, p < .003$).

**Hypothesis 1**

The primary prediction that participation in self-help/support group intervention will alter individuals' State Locus of Control Perceptions toward Internality, was tested using a matched pair $t$-test. This analysis yielded no significant differences between the pre and post State Desired Locus of Control composite scores. Thus, participants did not experience an increase in overall State Locus of Control. However, there was a significant increase in a subscale of the Locus of Desired Control measure, Desire for control ($t = -2.54, p < .02$).

Although individuals' Expectancy for control became more External, this change was not significant. In accordance with State Locus of Control, analysis of participants' Trait Locus of Control indicated no significant increase from pre to post intervention. In fact, no change took place, pre and post Locus of Control means were essentially identical (See Table 2).

**Hypothesis 2**
Due to the continuous nature of all variables, Multiple regression was used to test this hypothesis: the degree of change toward Internality throughout the program relates to the reduction of psychological symptomatology scores. The degree of change toward Internality and reduction of psychological symptomatology were expressed as difference scores between pre and post measures. It was predicted that the correlation between the two reduction measures would be significant. Predictors were entered hierarchically with time since spouse's death entered first, followed by social support, and last, the difference score pertaining to change in Internality.

Findings indicate that there was virtually no change in overall State or Trait Locus of Control. Therefore, the second hypothesis did not achieve significance. Increases in the composite measure of State Locus of Control orientations toward Internality did not predict reduction in psychological symptomatology. In addition, the Desire for control, or the Expectancy for control orientations toward Internality did not predict reduction in psychological symptomatology. However, two opposite trends for the relationship of State and Trait Locus of Control to psychological symptomatology were noted. The correlation between Trait Locus of Control and psychological symptomatology reveals a significant negative relationship ($r = -0.62$). Those who report a more Internal Trait LOC
experience fewer psychological symptoms. However, a measure of participants' State LOC appears to be slightly positively related to psychological symptomatology ($r = .11$). Those who report a less Internal, more External, Locus of Control regarding specific situations, like death of a spouse, may experience fewer psychological symptoms.

Additional analyses of collected data, in an experimental design, were conducted in order to support previous correlational analyses. Subjects were divided into two groups, treatment (experimental) and control in order to discern treatment effects due to the intervention. Each subject received three measures, one per interval respective to the experimental condition. The control subjects received the same measures, but a delayed intervention. Analyses consisted of Repeated Measures Analysis of Variance (ANOVA), as well as Wilcoxon Matched Pairs Signed Ranks Test and Friedman non-parametric tests. Findings indicated that no initial differences existed among the groups on measures of Internal-External Locus of Control, Locus of Desired Control, overall psychological symptomatology or depression prior to participation in the support group program. Groups were considered equal prior to subjects participation.

Locus of Desired Control Measure (DCM) subscales, Desired and Expectancy for control were tested for group differences using a repeated measures ANOVA procedure. Analysis revealed a significant difference between pre and
post intervention measures of the Desired subscale scores for experimental subjects (F = 4.51, p<.05). Non-parametric analyses support this finding. An ANOVA procedure conducted for control data reveals that no significant difference between the two pre-measures. This indicates that no change, regarding the desire for control, occurred as a function of time. No significant differences due to treatment effects were noted regarding participants Expectancy for control. Pre and post measure differences were also not indicated for the Internal-External Trait Locus of Control measure. Trait Locus of Control remained stable.

Analysis of overall psychological symptomatology scores revealed no significant differences between experimental and control subjects. However, repeated measures ANOVA procedure indicated a significant change in the Depression subscale of the overall symptomatology measure (BSI) (F = 10.14, p<.01). No change occurred for controls' Depression subscale scores as a result of time. This indicates that significant pre-measure, post-measure Depression score differences were likely due to treatment effects. Non-parametric analyses also support this finding.
CHAPTER IV

DISCUSSION

A majority of researchers have investigated Locus of Control (LOC) as one construct supposedly representing a personality characteristic. However, few have investigated State Locus of Control or even reasoned the relationship between State and Trait Control and how they may differentially impact one’s well-being. In addition, this study has separately explored the nature of State and Trait LOC as mediators between stressful life events and psychological symptoms. This study specifically addressed whether control orientations may be altered as well as how individuals’ LOC orientation may effect their level of reported psychological symptoms.

Two separate Locus of Control measures were utilized in this study the Locus of Desired Control Measure (DCM) (Reid-Ziegler, 1979) and the Adapted I-E Locus of Control Scale (I-E LOC) (Collins, 1973). There was a small, negative correlation between these two scales ($r = -.08$) which indicates that they may, in fact, be measuring two different aspects of Locus of Control.

Inspection of scale items indicated that the DCM addresses aspects of control specific to older adult
concerns. These items may also indicate immediate concerns of recently bereaved individuals. For example an individual may endorse items such as:

Item 2: Maintaining my own health strongly depends on my own efforts.

Item 7: Although it is sometimes strenuous, I try to do the chores by myself.

Therefore, an individual may indicate a less Internal orientation on a State Locus of Control measure simply due to life circumstances surrounding bereavement.

The I-E LOC measure (Collins, 1973) LOC contains more general, abstract items, that appear to indicate aspects of control removed from everyday life. For example:

Item 6: I have often found that whatever is going to happen will happen.

Item 39: Many times we might as well decide what to do by flipping a coin.

Although the use of a measure specific to older adult concerns is important for a study of this nature and may provide valuable information, it does not appear to tap the control orientations inherent in one’s personality. The I-E LOC, appears to better tap this dispositional dimension. Therefore, both measures were employed to gain the maximum information about Locus of Control.

State and Trait Locus of Control were not found to significantly change over the course of this intervention.
Although some evidence exists to support the malleability of Locus of Control (Roberts & Nesselroade, 1986), this may not actually be the case. It is possible that one's Locus of Control does not alter. These findings may also mean that self-help/support interventions in particular do not alter LOC orientations toward internality.

Upon further analysis, it was revealed that the Desired Control subscale of the DCM (Reid-Ziegler, 1979) did, in fact, change significantly between pre and post support group participation. Therefore, this intervention may have served an awareness and motivational purpose, creating in individuals the awareness that they can control some of their situational events. Possibly, a longer intervention duration or specific skills training would have increased individuals' expectation for control, the second aspect of State LOC needed for control orientation change. It seems accurate that Trait Locus of Control, measured by the I-E LOC measure (Collins, 1973) would not change over the course of a 3 week intervention. This measure appears to indicate a more dispositional and, likely, less malleable measure of LOC.

Two interesting trends were noted which may help to delineate the influences of State and Trait Locus of Control. Keep in mind that the Collin's Locus of Control measure contains general items and the DCM contains more specific, everyday items. On the I-E LOC, those who
indicated that they can effect their event outcomes, tended to experience less psychological symptomatology. Findings based on the DCM revealed that those who indicated they were less able to effect their situational outcomes, tended to endorse fewer symptomatology. The latter trend appears unusual. However, an explanation may lie in the types of items present on the DCM.

It appears that items of the Locus of Desired Control Measure tap specific concerns of older adults as Reid-Ziegler (1979) intended. However, older individuals may in fact have less and less control over these concerns as they continue to age. It would appear more beneficial to believe that one cannot control uncontrollable situations rather than false expectation that one can control an event that he/she is not able to control. Drawing from previous literature, it seems to follow that the latter belief may generate feelings of guilt, helplessness and depression (Langer, 1975, 1976; Larson, 1989; Reid & Zeigler, 1980).

Although the results of the current study revealed a change in the Desire for control subscale, the change in the Desire for control was not related to a reduction in psychological symptoms and the final hypothesis was also not supported. Test findings indicated that increases in State control beliefs or the desire for concerning specific situations did not relate to the reduction of psychological symptoms.
Several limitations existed in the present study. One problem was the small sample size. It is rather difficult to obtain a large sample of older adults, living independently in the community particularly those who are recently bereaved. It also appears that this sample of older adults would not be representative of all recently bereaved older adults as this study's response rate was approximately 10% of those solicited for participation in the study. Subjects participating in the study were moderately Internal in their control orientations. According to Krause and Stryker (1984) these persons are likely to cope most effectively. In addition, no variability was indicated on the Parkes Risk Index (Parkes, 1986). Therefore, a selection bias is evident.

It seems that individuals who refuse participation in research are working and too busy at that time, not in need of support at that time, or the least likely to cope with their bereavement effectively. Those who are least likely to cope effectively often experience feelings of isolation, depression and worthlessness. Feelings of depression, guilt and worthlessness may create difficulty for some individuals to carry on with daily activities, to leave their homes or to even get out of bed in the mornings. Individuals experiencing difficulties such as these are not likely to receive the help that they need (Stroebe & Stroebe, 1989-90).
In spite of these limitations, findings from the present study do provide some important and useful information. It appears that through the investigation of both State and Trait Locus of Control, we have arrived at a new understanding of this construct which may eventually be applied outside of the research setting to interventions like the program presented in this study. It appears that some aspect of Locus of Control that is situation specific is actually malleable. Self-help groups appear to serve some benefit beyond social support and emotional release and actually increase ones desire for control and change. This is the first step toward actual change or recovery.

In addition, information gained from this study indicates that awareness may not be a sufficient factor to create change in control orientations. Providing the means to acquire a change may also be necessary, specifically skills training may help to alter one's expectancy for control. For example, learning what resources are available to an individual and how they are used to one's own benefit may increase beliefs about personal control.

Aspects of control that are inherent in one's personality seem to remain stable and require repetitive experience over time to alter. In addition, previous literature has shown that increased control awareness on psychological symptoms appear to be time limited (Reich & Zautra, 1989). Therefore, intervention programs and
possibly psychotherapeutic practice, may find it useful to target situational aspects of personal control orientations, and encourage the practice of newly acquired skills over a period of time in order to influence long lasting personality change.

Although this study has shed some new light on the Locus of Control Construct, more research is still needed in this area to fully understand the Locus of Control malleability. The study of interventions which create awareness as well as provide skills for situation control would yield more evidence about the malleability of State LOC as well as its relationship to psychological symptomatology. The malleability of Trait LOC should also be more thoroughly investigated, specifically the circumstances and duration needed to create change. Understanding the malleability of each control aspect individually, the effect that changes in one type of control has on the other, as well as their relationships to symptomatology will provide a greater and more useful understanding of this construct than has been revealed by previous literature.
**Table 1**

**Demographic Variables for All Participants**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Participants</th>
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<tr>
<td><strong>Continuous variables</strong></td>
<td>M</td>
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<tr>
<td>Age (years)</td>
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<tr>
<td>Days Post Bereavement</td>
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</tr>
<tr>
<td>Income(^a)</td>
<td>2.96</td>
</tr>
<tr>
<td>Education(^b)</td>
<td>2.62</td>
</tr>
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</table>

| **Categorical Variables**        | n            | Percent     |
| Gender                           |              |             |
| Females                          | 18           | 81          |
| Males                            | 4            | 19          |
| Race                             |              |             |
| White                            | 21           | 95          |
| Hispanic                         | 1            | 5           |

\(^a\) Income is described in dollars: 1=$0-$10,000, 2=$10,000-$20,000, 3=$20,000-$30,000, 4=$30,000-$40,000, 5=$40,000 and over

\(^b\) Education is described in years: 1=0-8, 2=9-12, 3=13-16, 4=16 and over
<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-measure</th>
<th>Post-measure</th>
<th>( t^a )</th>
<th>(p)</th>
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<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
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<tr>
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<tr>
<td>I-E LOC</td>
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<td>.36</td>
<td>2.71</td>
<td>.30</td>
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<td>Z-R Cross product</td>
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<td>2.25</td>
<td>17.13</td>
<td>2.25</td>
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<tr>
<td>Z-R Expectancy LOC</td>
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<td>.38</td>
<td>3.87</td>
<td>.36</td>
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<tr>
<td>Z-R Desired LOC</td>
<td>4.30</td>
<td>.34</td>
<td>4.43</td>
<td>.35</td>
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<tr>
<td>BSI Total</td>
<td>.50</td>
<td>.27</td>
<td>.44</td>
<td>.36</td>
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<tr>
<td>BSI Depression</td>
<td>.93</td>
<td>.50</td>
<td>.68</td>
<td>.62</td>
</tr>
<tr>
<td>LSSS Total</td>
<td>3.22</td>
<td>.63</td>
<td>3.28</td>
<td>.48</td>
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</table>

*Degrees of Freedom for t-tests = 15

**Note.** I-E LOC refers to the Rotter Internal-External Locus of Control Scale; Z-R LOC refers to the Locus of Desired Control measure; BSI refers to the Brief Symptom Inventory; LSSS refers to the Louisville Social Support Scale.
<table>
<thead>
<tr>
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<th>Pre-measures</th>
<th>Post-measures</th>
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<tr>
<td></td>
<td>1  2  3  4  5 6  7</td>
<td>1P  2P  3P  4P  5P  6P  7P</td>
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<td><strong>Pre-measures</strong></td>
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<tr>
<td>I-E LOC</td>
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<tr>
<td>DCM</td>
<td>2 .19 (.77)</td>
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<tr>
<td>Desired LOC 3</td>
<td>.12 .68** (.82)</td>
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<tr>
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<tr>
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<tr>
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<tr>
<td><strong>Post-measures</strong></td>
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<tr>
<td>I-E LOC</td>
<td>1P .68** -.06 -.14 .03 -.62** -.56** -.09 (.78)</td>
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<tr>
<td>DCM</td>
<td>2P .10 .61** .61** .26 .11 -.05 .10 -.08 (.81)</td>
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</tr>
<tr>
<td>Desired LOC 3P</td>
<td>.01 .50** .88** -.13 .09 -.01 .11 -.16 .71 (.82)</td>
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<tr>
<td>Actual LOC 4P</td>
<td>-.12 .46** .15 .47* .61 -.13 .05 .06 .84** .21 (.78)</td>
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<tr>
<td>BSI</td>
<td>5P -.45 -.16 .08 .12 .88** .80** .03 -.51* -.02 -.11 -.02 (.93)</td>
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</tr>
<tr>
<td>Depression</td>
<td>6P -.52* .01 -.09 .07 .66** .84** -.12 -.35 .17 -.22 .13 .82** (.86)</td>
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<tr>
<td>LSSS</td>
<td>7P .07 .26 .11 .23 .07 .02 .80** -.01 .21 .07 .22 .07 -.02 (.69)</td>
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<td>Income</td>
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<tr>
<td>Education</td>
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<td>Days Bereaved</td>
<td>.02 -.14 .01 -.18 .10 .13 -.01 .20 .21 .08 .22 -.19 -.08 .07</td>
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**Intercorrelations and Reliabilities (cont.)**

**Note.** 1) Internal External Locus of Control 2) Locus of Desired Control 3) Desired Locus of Control subscale 4) Expected Locus of Control subscale 5) Psychological Symptoms 6) Depression 7) Social Support.

**Note.** All reliabilities are presented on diagonals. Intercorrelations are presented on sub-diagonals.

**Note.** *p<.05; **p<.01
APPENDIX A

Informed Consent
Informed Consent for Study of Conjugally Bereaved People

I, __________________________, agree to participate in the Study of Conjugally Bereaved People. The information from this study will be used to further understand how widowed people cope with life stress.

I understand I will be interviewed once, participate in 6 support group meetings, and fill out questionnaires on three occasions. The questionnaires will concern: recent events I experienced and how I coped with them, my experiences as a widowed person, and symptoms I experience. The interview and the first questionnaire are to be done at this time. The second questionnaire will be completed at the end of the last support group meeting. The third and final questionnaire will be a follow-up to be filled out one month after the support group ends.

I understand there is no expected risk or discomfort involved with this study and that I am free to withdraw my consent and discontinue participation at any time. A decision to withdraw from this study will not in any way affect any services I receive.

I understand that at the time I complete the one month follow-up questionnaire I will be asked to complete and sign a form so I can receive $30 to compensate me for my time and effort during this study.

If I have any questions or problems that arise in connection with my participation in this study, I should contact the project directors, Dr. Charles Guarnaccia and Dr. Bert Hayslip, in the Department of Psychology of the University of North Texas, at 817-565-2671.

In addition to signing a copy of this Informed Consent, I have received a copy for my records.

(Signature of participant) (Today's date)

(Signature of interviewer - witness) (Today's date)

THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY THE UNIVERSITY OF NORTH TEXAS COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS, (UNT phone: 817-565-3940)
APPENDIX B

Cover Letter
Dear NAME,

We want to better understand how older adults adjust to the death of their husbands and wives. We hope to make this process less difficult. As a surviving spouse, we found your name in the local newspaper. We do not mean to upset your privacy, but we would like to invite you to participate in a bereavement support group.

We understand that you may need time to be by yourself. However, in the next few months we will organize support groups for recently widowed persons. We would like you to participate in a group. Each group will be lead by a long-time widowed person. Support groups will meet twice a week for about three weeks. These meetings will allow you to discuss your concerns with other widowed people.

If you participate in one of these support groups we will need you to fill out questionnaires, as this is part of a study. These questionnaires will help us know if the groups were helpful and what type of people were helped the most.

There is no cost to participate in a bereavement support group as we want to know what aspects of the group are most helpful and for whom. We will pay you one lump sum of $30 for attending the support group meetings and completing the questionnaires before the group, at the end of the 6 meetings, and at a follow-up. This payment is meant to thank you for your time and effort.

We will not be in further contact unless you express an interest in attending a support group for recently widowed persons. If you would like to consider participating, or simply want to know more, we encourage you to fill out the enclosed response and return it to us in the self-addressed postage paid envelope. You may also call either of us at 565-2671.

Yours truly,

Charles A. Guarnaccia, Ph.D.  Bert Hayslip Jr., Ph.D.
Assistant Professor of Psychology  Professor of Psychology

University of North Texas
Department of Psychology

DATE

NAME
STREET ADDRESS
CITY, TX

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Charles A. Guarnaccia, Ph.D.  Bert Hayslip Jr., Ph.D.
Assistant Professor of Psychology  Professor of Psychology

University of North Texas
Department of Psychology

DATE

NAME
STREET ADDRESS
CITY, TX

Dear NAME,

We want to better understand how older adults adjust to the death of their husbands and wives. We hope to make this process less difficult. As a surviving spouse, we found your name in the local newspaper. We do not mean to upset your privacy, but we would like to invite you to participate in a bereavement support group.

We understand that you may need time to be by yourself. However, in the next few months we will organize support groups for recently widowed persons. We would like you to participate in a group. Each group will be led by a long-time widowed person. Support groups will meet twice a week for about three weeks. These meetings will allow you to discuss your concerns with other widowed people.

If you participate in one of these support groups we will need you to fill out questionnaires, as this is part of a study. These questionnaires will help us know if the groups were helpful and what type of people were helped the most.

There is no cost to participate in a bereavement support group as we want to know what aspects of the group are most helpful and for whom. We will pay you one lump sum of $30 for attending the support group meetings and completing the questionnaires before the group, at the end of the 6 meetings, and at a follow-up. This payment is meant to thank you for your time and effort.

We will not be in further contact unless you express an interest in attending a support group for recently widowed persons. If you would like to consider participating, or simply want to know more, we encourage you to fill out the enclosed response and return it to us in the self-addressed postage paid envelope. You may also call either of us at 565-2671.

Yours truly,

Charles A. Guarnaccia, Ph.D.  Bert Hayslip Jr., Ph.D.
Assistant Professor of Psychology  Professor of Psychology

University of North Texas
Department of Psychology

DATE

NAME
STREET ADDRESS
CITY, TX

Dear NAME,

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Yours truly,

Charles A. Guarnaccia, Ph.D.  Bert Hayslip Jr., Ph.D.
Assistant Professor of Psychology  Professor of Psychology
Dear NAME,

If you would like to participate in a bereavement support group, or simply would like to know more, please fill in your name, address and phone number and return this letter in the postage paid envelope. When we receive this letter we will ask an interviewer to call you.

Thank you for your assistance,

Charles A. Guarnaccia, Ph.D.
Assistant Professor of Psychology

Bert Hayslip Jr., Ph.D.
Professor of Psychology

I would like to consider participating in the Study of Spousal Bereavement. I understand that I may withdraw from this study at any time. I will receive $30 for my time and effort attending the support group meetings and completing questionnaires.

Full name: ____________________________________________

Address: _____________________________________________

Phone: _______________________________________________

Please feel free to add comments: ____________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
APPENDIX C

I-E Locus of Control Scale
ID: ______________

LOC

Directions: Please read each of the following statements and circle the number corresponding to the degree to which you agree or disagree (1=Mostly Agree, 2=Somewhat Agree, 3=Somewhat Disagree, 4=Mostly Disagree).

1. Sometimes I feel that I don't have enough control over the direction my life is taking.

   Mostly Agree   Somewhat Agree   Somewhat Disagree   Mostly Disagree
   1               2                   3                      4

2. Most people don't realize the extent to which their lives are controlled by accidental happenings.

   1               2                   3                      4

3. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

   1               2                   3                      4

4. Many times I feel that I have little influence over things that happen to me.

   1               2                   3                      4

5. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

   1               2                   3                      4

6. I have often found that what is going to happen will happen.

   1               2                   3                      4

7. Without the right breaks one cannot be an effective leader.

   1               2                   3                      4

8. Getting a good job depends mainly on being in the right place at the right time.

   1               2                   3                      4

9. People's misfortunes result from the mistakes they make.

   1               2                   3                      4
10. Capable people who fail to become leaders have not taken advantage of their opportunities.

11. In the long run people get the respect they deserve in this world.

12. What happens to me is my own doing.

13. People are lonely because they don't try to be friendly.

14. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

15. In the long run the bad things that happen to us are balanced by the good ones.

16. People who can't get others to like them don't understand how to get along with others.

17. In my case getting what I want has little or nothing to do with luck.

18. There really is no such thing as "luck".

19. It is impossible for me to believe that chance or luck plays an important role in my life.

20. Many of the unhappy things in people's lives are partly due to bad luck.
21. Getting people to do the right things depends upon ability; luck has little or nothing to do with it.

22. Becoming a success is a matter of hard work, luck has little or nothing to do with it.

23. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

24. By taking an active part in political and social affairs the people can control world events.

25. This world is run by the few people in power, and there is not much the little guy can do about it.

26. With enough effort we can wipe out political corruption.

26. The average citizen can have an influence in government decisions.

27. It is difficult for people to have much control over the things politicians do in office.

28. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.

29. In the long run the people are responsible for bad government on a national as well as on a local level.

30. One of the major reasons why we have wars is because people don't take enough interest in politics.
31. There will always be wars, no matter how hard people try to prevent them.

32. No matter how hard you try some people just don't like you.

33. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

34. It is hard to know whether or not a person really likes you.

35. There's not much use in trying too hard to please people, if they like you, they like you.

36. Most of the time I can't understand why politicians behave the way they do.

37. When I make plans, I am almost certain that I can make them work.

38. How many friends you have depends upon how nice a person you are.

39. Many times we might as well decide what to do by flipping a coin.
APPENDIX D

Crowne-Marlowe Scale
ID:__________

C-M Scale

Directions: Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

T  F  1. Before voting I thoroughly investigate the qualifications of all the candidates.

T  F  2. I never hesitate to go out of my way to help someone in trouble.

T  F  3. It is sometimes hard for me to go on with my work if I am not encouraged.

T  F  4. I have never intensely disliked anyone.

T  F  5. On occasion I have had doubts about my ability to succeed in life.

T  F  6. I sometimes feel resentful when I don't get my way.

T  F  7. I am always careful about my manner of dress.

T  F  8. My table manners at home are as good as when I eat out in a restaurant.

T  F  9. If I could get into a movie without paying and I was not seen, I would probably do it.

T  F  10. On a few occasions, I have given up doing something because I thought too little of my ability.

T  F  11. I like to gossip at times.

T  F  12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

T  F  13. No matter who I'm talking to, I'm always a good listener.

T  F  14. I can remember "playing sick" to get out of something.

T  F  15. There have been occasions when I took advantage of someone.

T  F  16. I'm always willing to admit it when I make a mistake.

T  F  17. I always try to practice what I preach.
T  F  18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.
T  F  19. I sometimes try to get even, rather than forgive and forget.
T  F  20. When I don't know something I don't at all mind admitting it.
T  F  21. I am always courteous, even to people who are disagreeable.
T  F  22. At times I have really insisted on having things my own way.
T  F  23. There have been occasions when I felt like smashing things.
T  F  24. I would never think of letting someone else be punished for my wrong doings.
T  F  25. I never resent being asked to return a favor.
T  F  26. I have never been irked when people expressed ideas very different from my own.
T  F  27. I never make a long trip without checking the safety of my car.
T  F  28. There have been times when I was quite jealous of the good fortune of others.
T  F  29. I have almost never felt the urge to tell someone off.
T  F  30. I am sometimes irritated by people who ask favors of me.
T  F  31. I have never felt that I was punished without cause.
T  F  32. I sometimes think when people have a misfortune they only got what they deserved.
T  F  33. I have never deliberately said something that hurt someone's feelings.
APPENDIX E

Louisville Social Support Scale
1. During the past few weeks, how many times did you get together with friends--I mean things like going out together or visiting in each other's homes?

1. None
2. Once or twice
3. 3 to 5 times
4. 6 to 10 times
5. 11 times or more

2. About how many neighbors here do you know well enough to visit with?

1. None
2. 1 to 3 neighbors
3. 4 to 8 neighbors
4. 9 to 15 neighbors
5. 16 or more

3. What about organizations such as church and school groups, labor unions, or social, civic, and fraternal clubs. About how many do you take an active part in?

1. None
2. One
3. 2
4. 3 or 4
5. 5 or more

4. How often do you visit with family and relatives who live outside the home? Would you say...

1. Daily
2. Every week or so
3. Monthly
4. Less than once a month (or)
5. Less than once a year
5. In an average day how many people would you say "hello" to, either on the phone or in person?

1. None  
2. 1 or 2  
3. 3 or 4  
4. 5 to 9  
5. 10 or more

6. Thinking of the best friend you now have, how close are you to that friend in being able to share your innermost thoughts, worries, and feelings?

1. Extremely close  
2. Very close  
3. Somewhat close  
4. Slightly close  
5. Not close at all

7. If everything went badly, how many people could you turn to for real comfort and support?

1. None  
2. 1 to 5  
3. 6 to 15  
4. 16 to 20  
5. 21 or more
Instructions: Place a check mark beside the answer that most applies to you for each question.

8. People deal with emergencies in different ways. In an emergency, how much help would your immediate family by able to give you?
   1. A great deal of help
   2. A fair amount of help
   3. Only a little help
   4. No help at all

9. In an emergency how much help would your relatives outside the home be able to give you?
   1. A great deal of help
   2. A fair amount of help
   3. Only a little help
   4. No help at all

10. In an emergency, how much help would friends be able to give you?
    1. A great deal of help
    2. A fair amount of help
    3. Only a little help
    4. No help at all

11. In an emergency, how much help would neighbors be able to give you?
    1. A great deal of help
    2. A fair amount of help
    3. Only a little help
    4. No help at all

12. In an emergency, how much help would churches in your community be able to give you?
    1. A great deal of help
    2. A fair amount of help
    3. Only a little help
    4. No help at all
APPENDIX F

Demographic Information
General Information

What is your age? ______ (years) Date of Birth: ________________

What is your gender? ______ Male ______ Female

What is your current marital status?

___ Married ___ Single (Never married) ___ Divorced or separated

___ Widowed ___ If widowed, what was the date of your spouse's death? __________________________

Length of most recent marriage (years): ______

Number of times married: ______

What is your racial/ethnic background?

___ Caucasian/White (not Hispanic) ___ Hispanic

___ African American/Black (not Hispanic) ___ Other - Please describe __________________________

What is your yearly personal income?

___ $0 to $9,999 ___ $10,000 to $19,999 ___ $20,000 to $29,999

___ $30,000 to $39,999 ___ $40,000 or more

Number of years of education:

___ 0-8 ___ 9-12 ___ 13-16 ___ over 16

(high school) (4 year college) (graduate work)

How many people live with you?

What are each of their relationships to you?

1. __________________________________________

2. __________________________________________

3. __________________________________________

4. __________________________________________

5. __________________________________________

How many times have you been to the doctor in the last year? ______

Are you taking any prescription medications? ______

If so, please list: __________________________________________

__________________________________________

__________________________________________
Have you had any major or minor surgeries in the last year? ______
If so, please describe: _______________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Have you had any hospitalizations or visits to the emergency room in the last year that you have not already described? If so, please describe: _______________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

How would you rate your overall health?

Very good ______ Quite good ______ Somewhat good ______ Okay ______ Somewhat poor ______ Quite poor ______ Very poor ______
For married individuals:

How many times has your spouse been to the doctor in the last year? __

Is your spouse taking any prescription medications? __
If so, please list: ____________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Has your spouse had any major or minor surgeries in the last year? __
If so, please describe: __________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Has your spouse had any hospitalizations or visits to the emergency room in the last year that you have not already described? If so, please describe:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

How would you rate your spouse's overall health?

Very good ___  Quite good ___  Somewhat good ___  Okay ___  Somewhat poor ___  Quite poor ___  Very poor ___
REFERENCES


