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Hardiness as a Career Transition Resource

Katherine Lee Rathburn

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FIARDINESS AS A CAREER TRANSITION RESOURCE

by

**Katherine Lee Rathburn
Bachelor of Arts, Wichita State University, 1995**

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

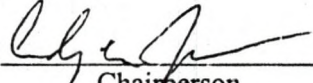
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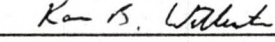
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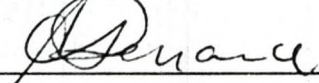
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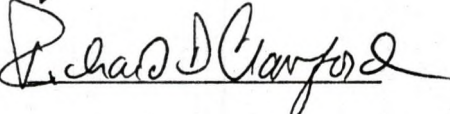
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This dissertation, submitted by Katherine Lee Rathburn in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done is hereby approved.

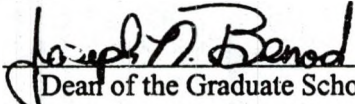

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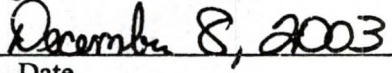

Ken B. Willett





This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.


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PERMISSION

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ABSTRACT

The relationship of hardiness to career transition resources was examined. Hardiness scores were obtained through the use of the Cognitive Hardiness Scale (CHS) (Nowack, 1996) and transition resources were measured by the Career Transitions Inventory (CTI) (Heppner, Multon, & Johnston, 1994). The study included 120 male and female adult participants from multiple settings (primarily from a local university, technical college, and job agency) who had a career transition in the last 15 months. Most participants had experienced multiple career-related changes. The general hypothesis for this study was that certain constructs measured by the CTI correlate with hardiness (the Personal Control factor of the CTI with the element of control in hardiness; the Readiness and Confidence factors of the CTI with the challenge element in hardiness; and the Independence and Support factors of the CTI with the commitment element in hardiness). Additional hypotheses were that people who underwent a voluntary career transition would score more highly on the CTI and the CHS than people who experienced an involuntary career transition.

The data were analyzed through correlations, MANOVA, and factor analyses. Hardiness scores were positively correlated (ranging from $r = .298$ to $.616$, $p = .01$) with four subscales of the CTI: Readiness, Confidence, Control, and Support. CHS and CTI scores were not affected by type of career transition. While CHS and CTI scores correlated to some extent, the main factor analysis did not reveal the hypothesized

overlaps between the CTI subscales and the CHS elements. Instead, one large factor emerged that lent some support for the conceptualization of hardiness as a career transition resource. Implications for practice and future research are discussed.

CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

The concept of hardiness has been subjected to a great deal of study. Recently, people's adaptation to career transitions has come under study. This dissertation was study of the relationship of hardiness to people's adaptations to career transitions. The literature review presented here will cover the following areas: hardiness, career transitions, and the research rationale. The first area presents the concept of hardiness, including its definition and relevant research. Included in this section is information on how hardiness relates to and differs from the similar-sounding concepts of hope, optimism, and resiliency. The second area presents the theories and research on career transitions, with a look at definitions, the stress career transitions cause, and what theoretical and research work has been done on how people deal with career transitions. The third area presents the rationale for pairing hardiness with a set of mental resources for dealing with career transitions. Included is an explanation of the measures used in the proposed dissertation.

Hardiness

Kobasa (1979) and colleagues (Kobasa, Maddi, & Kahn, 1982) generated the current definition of hardiness as it is used in research. In her view, hardiness is a personality trait that enables a person to resist stress without developing physical illnesses and without feeling overwhelmed by the stressor. When Kobasa reviewed the literature

for her 1979 study, a connection between stress and physical (as well as mental) health had been made. However, the relationship was not a strong one. Kobasa suspected that some subtle variable weakened the relationship by allowing certain people to deal with stress in a constructive manner. When she studied a group of executives (from the same company) who were all experiencing a similar level of stress, Kobasa (1979) did find a relationship between hardiness, as she defined it, and the amount of illness that the executives reported having. To better understand the research on hardiness, including Kobasa's (1979) study, an explanation of the conceptual background of this personality dimension is presented.

Conceptual background. Kobasa (1979; Kobasa et al., 1982) explained that hardiness is composed of three parts. One element is entitled "control." Control refers to a person's sense that he or she has some influence over how a situation will turn out, and how he or she will react to a stressor. People who do not feel that they have control do not see how they are able to avoid, alter, or in some way prevent undesirable events.

A second element is "commitment." Commitment refers to the sense of involvement a person has in the area that is causing the person strain. A person with a strong sense of commitment has "a sense of purpose that prevents giving up on one's social context and oneself" (Kobasa, 1979, p. 4). In other words, the person with commitment has the beliefs that (a) other people in the situation can be called upon to help if necessary; (b) the situation is interesting enough to be a part of it, rather than as something to detach or escape from; and (c) he or she takes responsibility for taking care of himself or herself, physically and mentally.

The third element that Kobasa (1979; Kobasa et al., 1982) listed is that of "challenge." People who possess this element are likely to see stressors as tests of ability, as ways of seeing what one can learn and do. This viewpoint implies a positive or optimistic orientation. The opposite of this component would be a sense of threat, or the idea that the stressor exists only as something that harms, instead of something that can lead to improvement.

These three elements of control, commitment, and challenge, taken together, not only make up the definition of hardiness but also reflect an existential orientation (Kobasa et al., 1982). Existential psychology emphasizes the subjective experience of the individual, as opposed to more objective elements such as an observable behavior (Bugental & Sterling, 1995). Maddi and Kobasa, in their 1984 book *The Hardy Executive*, had criticized the stress research of that time by stating that research participants could "only check off the events that happened to them from a list of investigator-established stressful life events"; the researchers did not ask the participants "how they saw or understood the event" (p.23). By definition, the three elements of hardiness reflect this view; for a person to act on these elements, the stressor has to be experienced and defined in a personal way.

An additional feature of hardiness is that it may be learnable. Maddi and Kobasa (1984) explained that hardiness could be developed during childhood. The facet of commitment is developed as the child has his or her needs met, in addition to being allowed to act on his or her interests and abilities. The facet of control is developed by giving the child moderately difficult tasks to do that can be accomplished by the child,

but only with some effort. Finally, the facet of challenge is developed in a child when changes (of any kind) are viewed and presented by the parents as possibilities or opportunities, instead of as disruptions worthy of anxiety. If the child is neglected or not allowed to pursue his or her interests and abilities (because of social norms or other reasons), if the child is given tasks that are too difficult to accomplish or are too easy, or if changes are presented as disruptive, invasive, or disturbing, then hardiness is less likely to develop in a child.

Maddi and Kobasa (1984) ultimately connected hardiness to a general approach to dealing with stress. The approach used by hardy individuals was named transformational coping. This coping style involves an active, direct approach to handling stressors; it involves changing (that is, transforming) something about the stressor. The change could take on a number of forms, including the way the person views the stressor and/or the way he or she acts in response to it.

In contrast, people who are less hardy use regressive coping, which involves sidestepping or avoiding the stressful issue as much as possible. This approach does nothing to reduce or eliminate the cause of the stress; sooner or later, the stressor comes back into the person's memory, if not into his or her life in some way.

Empirical findings. Hardiness has been studied repeatedly since its introduction in 1979. Findings have been mixed. On the one hand, some support exists for the concept of hardiness, with certain studies showing partial support (e.g., showing only two of the elements as having any relationship to stress or mental health) and other studies showing more general support. On the other hand, particular criticisms of the construct repeatedly appear in the literature.

One criticism of the hardiness construct is that it is really measuring something else. One such item may be neuroticism (Florian, Mikulincer, & Taubman, 1995; Funk, 1992). Neuroticism is the part of the five factor model of personality that measures a person's tendency to experience emotional distress and to not cope well with stress (Costa & McCrae, 1992). Individuals high on neuroticism tend to worry a great deal, experience more anxiety, and be more prone to mental disorders than individuals who are lower on neuroticism. When Florian et al. (1995) tried to control for neuroticism while measuring hardiness, they were unsuccessful. Florian et al. (1995) attempted to create a statistical model which directly linked hardiness to appraisal methods, coping methods, and mental health status. However, the model fit their data "only after adding a direct path between low commitment and psychological distress" which "may reflect some expression of neuroticism inherent in the hardiness construct" (Florian et al., 1995, p. 694). Funk and Houston (1987) had similar results when they tried to control for maladjustment. That is, they found that not only was hardiness correlated with maladjustment ($r = -.40, p < .001$), it did not produce any effects once maladjustment was controlled for statistically. Bohle (1997), in measuring the elements of commitment, control, and challenge separately, found that challenge correlated negatively with neuroticism but that commitment and control correlated positively with neuroticism. One implication of these studies is that hardiness does not truly exist in its own right. Another, more plausible implication, suggested by Sinclair and Tetrick (2000) and discussed later, is that hardiness tests have improperly worded items, leading to a confound with neuroticism.

Another construct that hardiness may be measuring is optimism. Paulik (2001), in a sample of Czechoslovakian university lecturers, found that hardiness correlated with

optimism. Bernard, Hutchinson, Lavin, and Pennington (1996) found an overlap between hardiness and optimism. In the study, which included not only hardiness but also the NEO Five Factor Inventory and other variables, Bernard et al. (1996) found that a measure of hardiness covaried a great deal with measures of ego-strength, self-efficacy, optimism, self-esteem, and maladjustment, such that a hierarchical model suggested that the variance could be better explained by a higher-order factor named Health Proneness. Bernard et al. (1996) stated that this factor could be split into two lower-order factors; the one to which hardiness contributed was named Adjustment. Adjustment had a negative relationship with Neuroticism and positive relationships with Conscientiousness and Agreeableness.

Another criticism is that only commitment and control show any relationship to coping ability, stress level, or physical or mental health. Florian et al. (1995), when they studied Israeli soldiers going through a difficult four-month training program, found that control and commitment, but not challenge, had a relationship to mental health. Hull, Van Treuren, and Virnelli (1987), Carver (1989), and Bohle (1997) had developed a similar conclusion, going so far as to suggest that hardiness should not be measured in one test but should be measured as two or three separate traits. On a somewhat related topic, Sinclair and Tetrick (2000), after statistically examining hardiness in two studies, reached the conclusion that hardiness is best viewed--and measured--as having multiple parts "nested under a global construct" (p. 21) and that simply looking at a total hardiness score resulted in a loss of information. Williams and Lawler (2001), in a sample of African-American and Caucasian women with incomes at or below the poverty line, found that only the element of commitment correlated (negatively) with illness; the other two

elements and total hardiness scores did not show any statistically significant relationship to illness.

Hull et al. (1987), Carver (1989), Bohle (1997), and Sinclair and Tetrick (2000) strongly imply in their studies that a debate exists as to whether hardiness should be measured as one general construct or as multiple constructs. These researchers have suggested that hardiness should be measured as multiple traits. However, Nowack (1990, 1996) has developed a hardiness scale that gives a single, global score; this scale has been used by a number of researchers, such as Goss (1994), Martin, Kelley, and Eklund (1999), and Rathburn (1998). While the majority of researchers choose to use a hardiness scale that gives multiple scores (for hardiness, commitment, control, and challenge), such a practice is not universal.

Finally, one last criticism addresses the most contradictory results: that hardiness does not buffer or mediate against the effects of stress, especially in terms of illness. Nowack (1989) did not find a relationship between cognitive hardiness and physical illness in a group of college residential hall monitors. Lightsey (1996), in a review of the literature in the area, concluded that hardiness did not act as a stress buffer in either a mental or physical sense. Sinclair and Tetrick (2000) found only minimal at best support for the hypothesis that hardiness buffered stress. Benishek and Lopez (1997) found that hardiness, when combined with measures of neuroticism and severity of hassles, was predictive of illness severity for men, but not for women. Bohle (1997) found that hardiness did not relate to dissatisfaction among nurses experiencing shiftwork and did not buffer against negative psychological symptoms. Taft et al. (1999), in a study of individuals who had combat exposure, found "no path between hardiness and physical

health conditions for women, and a relatively weak path between hardiness and physical health conditions for men” (p. 17).

However, other evidence does exist to support the concept of hardiness. Feinauer, Mitchell, Harper, and Dane (1996) found, in a study of women who had been sexually abused during childhood, that those women who scored high on hardiness had reported fewer emotional problems (e.g., depression, anxiety) and had better adjustment than women who scored lower on hardiness. Goss (1994) studied a group of swimmers during a period of overtraining. Swimmers who scored high on hardiness were more likely to use adaptive (as opposed to maladaptive) coping strategies and were less likely to experience mood disturbances (e.g., anger, depression) than less hardy swimmers. Pengilly and Dowd (2000) found that people who were high in hardiness were less likely to report symptoms of depression when under stress than individuals who were low in hardiness. Williams and Lawler (2001) found that hardiness correlated negatively with fear, social problems (such as neighborhood crime), and violence, indicating that participants who scored high on hardiness reported fewer serious difficulties in those areas. Clark (2002), in a sample of individuals who were providing care for older adults with disabilities, found that hardiness had negative correlations with depression and fatigue.

Maddi, Khoshaba, Persico, Lu, Harvey, and Bleeker (2002) conducted a pair of studies meant to “continue the process of construct validation” (p. 75) in which hardiness scores were compared to scores on three personality tests: the Minnesota Multiphasic Personality Inventory, Second Edition (MMPI-2), the Millon Clinical Multiaxial

Inventory, Third Edition (MCMI-III), and the NEO Five Factor Inventory (NEO FFI). The MMPI-2 and MCMI-III are used to assess the presence of various mental disorders, including personality disorders, while the NEO FFI assesses normal personality types. Hardiness, in general, showed negative correlations with the subscales of the MMPI-2 and MCMI-III (Maddi et al., 2002). On the NEO FFI, hardiness showed positive correlations with subscales that indicate relatively positive aspects of personality, while showing a negative correlation with a subscale that indicates a tendency for mental health concerns (Maddi et al., 2002).

Sinclair and Tetrick (2000) examined whether the way items on a hardiness scale were worded contributed to the overlap between neuroticism and hardiness. They found that there was a partial overlap between hardiness and neuroticism, but they also found evidence that positively and negatively worded items "measure different constructs or different aspects of the hardiness construct domain" (Sinclair & Tetrick, 2000, p. 14). Positively worded items indicate the presence of something; for example, "I actively enjoy my hobbies," indicates the presence of enjoyment. Negatively worded items indicate the absence or opposite of something; for example, "My hobbies don't do much for me," indicate an absence of enjoyment. Additionally, positively worded items were more weakly related to negative affect than the negatively worded items. This finding, coupled with the partial (as opposed to a complete) overlap between hardiness and neuroticism, suggest that hardiness is distinct from neuroticism (Sinclair & Tetrick, 2000). These findings, coupled with other findings in the study and known response biases that research participants sometimes exhibit, lead Sinclair and Tetrick (2000) to suggest that hardiness scales need to include more positively worded items. An additional

note, addressed by Sinclair and Tetrick (2000), is that multiple measures of hardiness exist, leading to difficulties in comparing study results.

Bartone (1989) measured hardiness, work hassles, recent stressful life events, and other variables in a sample of Chicago bus drivers. Hardiness was measured by modifying the scale Maddi and Kobasa had developed to include more positively worded items and to correct other problems. Bartone (1989) found that significant differences existed in hardiness levels between people with high stress and high illness levels versus people with high stress and low illness levels. The people with high stress and low illness levels generally scored higher on overall hardiness and, specifically, on the elements of commitment and control (Bartone, 1989). Bartone (1999) found, with additionally revised version of the scale used with soldiers exposed to combat stress, that "hardiness was found to interact with combat stress to predict fewer symptoms under stress" (p. 79).

Martin et al. (1999) measured hardiness in a sample of high school athletic directors as part of a study of stress and burnout. Hardiness was found to have negative correlations with stress, emotional exhaustion, and depersonalization. In testing a model of stress and burnout that included hardiness, Martin et al. (1999) found that hardiness and athletic-directing issues were useful in predicting just over half of the variance in stress appraisal. The correlations and the model results indicated that athletic directors who are high in hardiness report less stress and are less likely to see life as stressful.

Maddi, Kahn, and Maddi (1998) compared the effects of hardiness training to the effects of relaxation/meditation training and passive listening training in a sample of utility executives. Using pre- and post-treatment measures, the hardiness training group had the largest increase in its average hardiness score, compared to participants who went

through relaxation/meditation or passive listening training. (An important note is that the phrase "largest increase" is used deliberately. Those participants in the relaxation/meditation group actually had the largest overall mean hardiness score, but the mean went up less than three points, while the hardiness training group went up over four points.) Maddi et al. (1998) also found that the hardiness training group showed the largest increase in job satisfaction scores and the greatest decrease in reported illnesses.

Some studies have examined hardiness in other cultures. As mentioned earlier, Florian et al. (1995) studied Israeli soldiers going through a difficult four-month training program. In another study of Israeli soldiers, Waysman, Schwarzwald, and Solomon (2001) studied a sample that included 164 prisoners of war and 184 veterans to see how hardiness related to long-term changes following war-related trauma. Prisoners of war who obtained high hardiness scores reported fewer negative effects and more positive effects (as measured by a questionnaire that tapped into positive and negative behaviors, attitudes, and personality traits) than prisoners of war who obtained lower hardiness scores. In a third study of Israeli soldiers (a total of 434), Neria, Guttman-Steinmetz, Koenen, Levinosky, Zakin, and Dekel (2001) found that hardiness positively correlated with mental health and well-being and negatively correlated with distress and psychiatric symptoms.

Costantini, Solano, Di Napoli, and Bosco (1997) studied the relationship of hardiness to burnout in a sample of Italian nurses working in the areas of oncology and AIDS. In this study, nurses with higher hardiness scores generally had lower burnout scores and higher personal achievement scores. Ghorbani, Watson, and Morris (2000) studied hardiness in a sample of Iranian managers. Hardiness was measured both globally

and in terms of its individual elements. The individual element scores and global hardiness scores showed negative correlations with scores of health-risk typologies (e.g., coronary proneness) and with levels of self-reported work stress. On another measure of stressful job events, the element of control did not show a statistically significant correlation, but the other two elements and the overall hardiness score did show statistically significant negative correlations (Ghorbani et al., 2000). On other measures of life stress and on mental health variables (depression, anxiety, social dysfunction, and physical complaints), global hardiness and individual element scores showed inconsistent patterns of correlations, having either statistically insignificant correlations or statistically significant negative ones. Alexander and Klein (2001) found, in a sample of ambulance workers in the United Kingdom, that higher hardiness scores corresponded to lower levels of job-related burnout. Nathawat and Joshi (1997), in a study of 276 Catholic nuns in India, found a positive correlation between higher hardiness and a more positive outlook on life experiences; they also found a positive correlation between having a positive outlook and psychological well-being.

Measurements available. The literature on hardiness shows that a variety of scales has been used to measure hardiness. The earliest studies of hardiness used multiple measures to obtain a hardiness score. When Kobasa (1979) did her original work, she used four scales to assess a person's sense of control; one scale of alienation to assess for commitment; and multiple scales for challenge. Nowack and Hanson (1983) used a scale that measured control, a scale that measured sensation seeking (to assess for the element of challenge), and the same alienation scale as Kobasa used in her 1979 work. Kobasa, Maddi, and Kahn (1982) used a similar combination but, instead of a measure of

sensation-seeking, they used two other scales to assess challenge. Taft, Stern, King, and King (1999) measured hardiness “using 11 items assessing the control, change as challenge, and commitment aspects that comprise the personality disposition” that Kobasa conceptualized; the items came “from the larger pool of items developed by Kobasa and colleagues” (p. 8). The only two works by Kobasa and her colleagues that Taft et al. (1999) cited were the 1979 and 1982 works mentioned earlier. Funk and Houston (1987), in reviewing the assessment of hardiness in the 1980s, noted that “the most frequently used Hardiness Scale is a composite of five scales” and that a “hindrance to interpreting past hardiness research stems from inconsistencies in the way hardiness subscales have been used from study to study” (p.572).

After the early 1980s, singular scales that measured hardiness emerged. Funk (1992) explained that an Unabridged Hardiness Scale, with 71 items, was created; it was followed by a 20-item Abridged Hardiness Scale and a 36-item Revised Hardiness Scale (RHS), both developed in 1982. Researchers such as Benishek and Lopez (1997), Bohle (1997), and Siddiqua and Hasan (1998) used the RHS that Kobasa and Maddi developed. Siddiqua and Hasan (1998) cited a personal communication with Kobasa from 1982 about the RHS in which it was described as being derived from the multiple scales that Kobasa, Maddi, and Kahn (1982) used.

Funk (1992), citing information from the Hardiness Institute in 1985, stated that the Personal Views Survey (PVS) was then developed with 50 items. This was apparently the scale used by Bernard et al. (1996), who reported using “the revised 50-item Hardiness scale” (p. 118), and by Costantini et al. (1997), who simply stated that “The Hardiness Scale...is composed of 50 items, each on a 4-point scale” (p. 80). Benishek

(1996) reported using both the RHS and the PVS in the same study. Hull, Treuen, and Virnelli (1987), described the use of a long and short version of a hardiness scale. Hull, Treuen, and Virnelli (1987) clearly identified the 20-item Abridged Hardiness Scale and also mentioned a 36-item scale (presumably the RHS); however, they also describe Kobasa's earlier method of using multiple scales. This leaves one somewhat unclear as to what they mean by a "long" or a "short" version of a hardiness scale. Feinauer et al. (1996), Ghorbani, Watson, and Morris (2000), Maddi, Kahn, and Maddi (1998), Maddi and Hightower (1999), Paulik (2001), Pengilly and Dowd (2000), Nathawat and Joshi (1997), Neria et al. (2001), Florian, Mikulincer, and Taubman (1995), and Waysman, Schwarzwald, and Solomon (2001) all used the PVS, while Maddi et al. (2002) used the PVS-II, a 50-item revised version of the PVS.

Adding another piece to the developmental history of hardiness measures, Bartone (1989) measured hardiness in his study with "a modified version of that used by Maddi and Kobasa with executives" (p. 658). He further described the scale as 45 items in length and stated that it "corrects certain problems of earlier scales, such as the lack of positively keyed items" (Bartone, 1989, p. 658). Bartone (1999) revised the scale, producing a test that consisted only of 15 items. Clark (2002) used the short version, while Alexander and Klein (2001), Wallace, Bisconti, and Bergeman (2001), Williams and Lawler (2001), and Sinclair and Tetrick (2000) used the older, longer version.

The Cognitive Hardiness Scale (CHS), which emerged at about the same time as Bartone's (1989) scale, was created by Nowack (1989). The CHS, a 30-item measure, was based on Kobasa's (1979) theory and was incorporated into a larger measure of stress

(Nowack, 1990, 1996). Other researchers who have used the CHS include Martin, Kelley, and Eklund (1999), Goss (1994), and Rathburn (1998).

Based on the review of the research, the most current (i.e., most recently developed) measures available on hardiness are the PVS-II (Maddi et al., 2002), Bartone's (1999) scale, and the CHS (Nowack, 1996). Even with three recently developed scales, one can see from the cited studies that researchers still sometimes used older versions of scales even when newer ones existed. The variety of scales in existence, coupled with the use of older scales at the same time that newer ones are being used, complicates the research on hardiness. As one attempts to explain differences in research findings, how much can one pin such differences on actual levels of hardiness as a variable instead of on the type of instrument used? Funk and Houston's (1987) contention from 16 years ago that interpreting hardiness research is difficult, due to inconsistent use of a variety of measures, still applies today.

Hardiness can be compared and contrasted with a number of variables that appear to be similar. One obvious variable mentioned earlier is optimism, but other items include resiliency and hope.

Optimism. Bernard et al. (1996) found an overlap between optimism and hardiness. Perhaps the overlap between hardiness and optimism should not be surprising. Seligman (1991), after studying optimism for years, noted that people who are high on optimism tend to see negative events as temporary and situational. Optimistic people do not believe that they are responsible for defeat; in fact, when "confronted by a bad situation they perceive it as a challenge and try harder" (Seligman, 1991, pp. 4-5). This may sound suspiciously like the challenge component of hardiness. Maddi and Kobasa

(1984) viewed optimism as a natural by-product of hardiness. More specifically, they believed that people with high hardiness, due to being high on commitment, control, and challenge, were likely to have an "optimistic cognitive appraisal" of events (Maddi & Kobasa, 1984, p. 33). Conversely, people with low hardiness had a "pessimistic cognitive appraisal" of events (Maddi & Kobasa, 1984, p. 33). The presence or absence of optimism was perceived to be an effect of one's hardiness level.

However, Seligman (1991) observed that optimistic people tended to distort reality, while pessimistic people saw reality more accurately. This observation is important in separating optimism from hardiness, as hardy people are not presumed to have to distort reality to become hardy. In fact, hardy individuals, by definition, may be likely to see the situation for what it is. In her original study, Kobasa (1979) explained that people with a strong sense of challenge had a "predisposition to be cognitively flexible, which allows them to integrate and effectively appraise the threat of a new situation" (p. 4).

Maddi and Hightower (1999) illustrated another difference between optimism and hardiness. They presented three studies comparing the coping approaches used by people high in hardiness versus those used by people who were high in optimism. In general, people who were hardy used coping methods that required activity and effort (e.g., planning, seeking help) while optimistic people were more likely to use passive coping methods (e.g., acceptance, religion) (Maddi & Hightower, 1999).

In summary, optimism is not to be confused with hardiness. Hardiness strongly implies a realistically positive appraisal of a situation and an active involvement in

coping with a stressor. Optimism involves some distortion or re-framing of reality and allows for some passiveness in coping with a situation.

Resiliency. Resiliency has many definitions in the literature. Demos (1989) defined resiliency as "the capacity to bounce back or recover from a disappointment, obstacle, or setback" (p. 3). She did not view this capacity as single-faceted and continuous, but as something that involves several abilities and that fluctuates in response to different variables. The abilities that Demos (1989) saw as part of resiliency include persistence, taking an active stance, the development of a number of problem-solving skills and strategies, a wide range of interests and goals, flexibility, and a sense of success or gratification (at least some of the time) from one's efforts. Garmezy (1983) notes several correlates seen in children described as resilient. These include good social skills, emotional stability, a positive self-identity, a "sense of personal power" (Garmezy, 1983, p. 74), a sense of control over the environment, an intellectual style that included reflection and control over impulsiveness, at least one "adequate identification figure among the significant adults in their lives" and the possession of "a more positive attitude towards adults and authority in general" (Garmezy, 1983, p. 75). As a final example, Werner and Smith (1982) cite the Webster's New Collegiate Dictionary definition of resilience, which includes, "An ability to recover from or adjust easily to misfortune or change" (Werner & Smith, 1982, p. 36). They also give their own definition, which is "the capacity to cope effectively with the internal stresses of their vulnerabilities and external stresses" (Werner & Smith, 1982, p. 5).

Resiliency and hardiness can both be seen as positive ways to deal with stress. Both can include the ability to actively cope via problem-solving skills. However, one

obvious problem with the concept of resiliency is that it does not have a uniform definition that is widely accepted. In contrast, the concept of hardiness is given the same definition, created by Kobasa (1979), throughout the literature. Another difference can be seen in at least two of the definitions of resiliency (Demos, 1989; Werner & Smith, 1982), which focus on recovery or "bouncing back" from stress. Such definitions strongly imply that resiliency is reactionary in nature towards stress. That is, a person can be overwhelmed by stress; he or she can show signs of poor health and low functioning due to stress; but as long as he or she recovers to a normal state, the same person can be considered resilient. Hardiness, by its definition, renders a person resistant to stress; for a person to be hardy, he or she must *not* develop poor health or low functioning.

Hope. Snyder (2000) defined hope two ways: as "a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy) and (b) pathways (planning to meet goals" and "a cognitive set that is based on a reciprocally-derived sense of successful agency (goal-directed determination) and pathways (planning to meet goals)" (pp. 8-9). The definition of hope was further elaborated by explaining that a sense of agency "reflects the person's perception that he or she can begin movement along the imagined pathways to goals; agency can also reflect one's appraisal of the capability to persevere in the goal journey" (Snyder, 2000, p. 10). In this aspect, hope resembles the sense of challenge in hardiness, in that both seem to tap into a person's perception that he or she can handle something. However, Snyder (2000) adds that hope is more than one's perception of one's abilities; goals are considered absolutely essential to hope theory, as they are "endpoints or anchors of mental action sequences" (p. 9). Additionally, a person needs to see at least one way of obtaining the

goals; as Snyder (2000) insists, "Routes to the desired goals are absolutely essential for successful hopeful thought" (p. 9). Snyder (2000) points out that impediments to progress will occur, but for hope to exist, people must at least perceive the possibility of other routes that reach the goal. Hope, then, can include some problem-solving ability, as people try to find ways to reach goals. An additional note is that, while hope depends on the presence of goals, it is not situation-specific (Snyder, 2000).

Hope, like hardiness, includes a person's belief that a problem can be handled. Hope, like hardiness, can include active coping in the form of problem-solving. However, hope is partially defined by the presence of a goal and the existence (perceived or otherwise) of a way to get to the goal. Hardiness does not, in order to exist in a person, need the presence of a goal or the perception of a possible or real solution. Additionally, hardiness includes, in its element of commitment, a sense of belonging to the situation and a sense of self-care that does not seem present in the definition of hope.

In summary, hardiness is viewed as a personality trait that allows a person to resist stress and is defined as having three parts: commitment, control, and challenge. Studies of hardiness provide mixed results on its ability to help a person resist stress and whether it statistically differs from neuroticism and optimism. While hardiness sounds similar to other constructs such as optimism, resiliency, and hope, it differs from these constructs at the theoretical level, especially in terms of how each of these constructs is defined.

Career Transitions

Definitions. The term "career transition" has been given different definitions by different researchers. All of the definitions have in common the ideas that a person is

experiencing, or has recently experienced, some change in working conditions or in the person's views about work.

Louis (1980) defined a career transition as "the period during which an individual is either changing roles (taking on a different objective role) or changing orientation to a role already held (altering a subjective state)" (p. 330). Louis (1980) also noted that transitions can vary in terms of the magnitude and nature of differences that a person will experience; as a result, the time it takes for people to go through transitions will also vary. Louis (1980) classified several types of transitions. Interrole transitions include entry transitions (joining the labor pool, such as obtaining one's first job), intracompany transitions (e.g., moving from one department to another), intercompany transitions (moving from one company to another), interprofession transitions (moving from one profession to another, such as going from teaching to business), and exit transitions (leaving a job for any reason or length of time, such as sabbaticals, maternity leaves, or unemployment). Intrarole transitions emphasize the person's orientation to a current role (Louis, 1980) and include intrarole adjustments (changes in orientation to a role due to experiences over time), extrarole adjustments (changes in one role, such as that of spouse or parent, leads to changes in another role, such as that of employee), role/career stage (a typical change as part of the person's overall career), and life-stage transition (a typical change in a person's overall personal development).

Schlossberg (1981) stated that a transition happened if "an event or nonevent results in a change in assumptions about oneself and the world and thus requires a corresponding change in one's behavior and relationships" (p. 5). Items that qualify as transitions, according to Schlossberg's (1981) definition, include life changes, such as

marriage and having children, and work-related changes, such as obtaining a job and the failure to get a promotion that was expected.

Leibowitz and Schlossberg (1982) state that a transition occurs when an event causes a) "a change in the individual's assumptive world' and/or b)"a change in the individual's relationships" (p. 13). Transitions can be hierarchical or nonhierarchical and can even include people who feel trapped in their current positions. (Feeling trapped can lead to changes in one's assumptive world, such as how high an employee believes he or she will be promoted, and therefore qualifies as a transition.) Leibowitz and Schlossberg (1982) see four specific categories of career transition: moves into a new role (such as by promotion); lateral moves (transferring to the same position at another place); job loss (such as retirement, being fired, and even forced reassignment); and non-occurrence (failure to progress). Leibowitz and Schlossberg (1982) note that the element of control (whether an employee had any choice in what happened) separates the categories from one another.

Heppner (Heppner, 1998; Heppner, Multon, & Johnston, 1994) defined a career transition as involving any one of three changes. First, a task change involves going from "one set of tasks to another set within the same job and same location" (Heppner, Multon, & Johnston, 1994, p. 57). An example is a medical doctor who starts off as a surgeon but switches to gynecology, while still working at the same hospital. Second, a position change is "a shift in jobs, with the same employer or to a different employer or location, but with only a slight shift in job duties" (Heppner et al., 1994, p. 57). An example is a sales clerk who originally worked for a Wal-Mart in one city but who switches to a sales clerk position at a K-Mart in another city. Three, an occupation change is "a transition

from one set of duties to a different set which may include a new work setting" (Heppner et al., 1994, p. 57). An example is an automotive mechanic who quits to become a grocery store manager.

Transition models. What models exist to conceptualize a career transition? Recently, a series of articles in the June 1999 volume of *The Career Development Quarterly* discussed how certain traditional vocational theories could be used to conceptualize the school-to-work transition (Lent & Worthington, 1999). For starters, person-environment fit theories emphasize both the requirements of a job and the characteristics (such as personality traits and abilities) of individual people (Swanson & Fouad, 1999). Three key points that Swanson and Fouad (1999) emphasize in their review of such theories are: 1) people seek out work environments that are harmonious with them; 2) the amount of fit between people and their environments is highly meaningful for concepts such as (but not limited to) job performance, satisfaction, and retention; and 3) the person and the work environment mutually shape one another. The logical conclusion, from this standpoint, is that transitions are more likely to result in success when a person has good knowledge of himself/herself and also fully understands what a given job, or even jobs in general, require of him or her. Decision-making skills are also part of the transition process (Swanson & Fouad, 1999). Finally, these components--knowledge of self, knowledge of work requirements, and decision-making skills--will be used more than once. As Swanson and Fouad (1999) explain, "Emphasis should be placed on how these components may be examined at multiple choice points and transitions likely to occur in an individual's life in the near or distant future" (p. 345).

Lent, Hackett, and Brown (1999) presented social cognitive theory, which is based primarily on the work of Albert Bandura. The main concepts of social cognitive theory, especially in reference to transitions, are self-efficacy, outcome expectations, and goals. Self-efficacy is a person's belief in his or her own abilities, which affect whether that person will start and/or complete a task (e.g., "I know I can do this no matter what happens" or "Why continue? I'm only going to fail."). Outcome expectations are what a person believes will happen as a result of his or her efforts. Goals, according to Lent et al. (1999), "refer to one's determination to engage in a given activity or to effect a particular outcome" (p. 300).

Lent et al. (1999) state that the social cognitive theory would emphasize six processes in a school-to-work transition:

- (a) acquisition of positive yet realistic self-efficacy and outcome expectations,
- (b) development of academic and career interests; (c) the formation of linkages between interests and career-related goals, (d) translation of goals into actions,
- (e) development of academic and work skills and remediation of performance-related problems, and (f) negotiation of social supports and barriers that affect the development of self and occupational beliefs and the pursuit of preferred academic/career options (p. 300).

Lent et al. (1999) note that the beliefs a person holds, in the form of self-efficacy and outcome expectations, can filter out or limit the person's career options if the beliefs are incorrect. The authors also note that a person's willingness to create and act on goals is affected by that person's perceptions of available support and the presence of barriers (Lent et al., 1999).

Savickas (1999) presented a developmental perspective on school-to-work transitions. Drawing on the Career Pattern Study of Super, Savickas (1999) stated that the school-to-work transition consists of the tentative substage (choosing an occupation and getting appropriately trained for it), the trial substage (getting the first job in the occupation and becoming acclimated to it), and the stabilizing substage (securing a job in the occupation). Based on his literature review, the major conclusion Savickas (1999) drew was that students managed the transition far better if they acquired an "awareness of the choices to be made and of the information and planning that bear on these choices" (p. 327).

These models of school-to-work transitions offer some insights about the transition process. A consistent theme is that knowledge--about one's abilities, interests, and beliefs, and about work--is important. However, these models focus only on the school-to-work transition, which is only one of several types of transitions. Furthermore, with school-to-work transitions, there is a tendency to focus primarily on children and on adults in college (Lent & Worthington, 1999). Therefore, other models need to be presented.

Rhodes and Doering (1983) developed a model of career change that primarily looks at the influences of job satisfaction and the withdrawal process. Rhodes and Doering (1983) hypothesized that change is induced by job dissatisfaction, career dissatisfaction, or other factors. The influences that affect job satisfaction include organizational factors (pay, chances for upward mobility); perceived person/organization correspondence (whether the person's needs are met); personal factors (demographics and conflicts between life roles that the person holds); job performance (connected to job

satisfaction by the person's perceptions of how one is rewarded for high performance); alternative opportunities (what chances the person sees for other jobs, training, or financial support to change); personal and environmental factors (influencing the perception of opportunities); and evaluation of outcomes (determining whether the current job is better or worse than other jobs, and the likelihood of obtaining certain results). Rhodes and Doering (1983) conceptualized the withdrawal process as including parts such as thoughts of changing jobs/careers; an intention to search; an actual search; an intention to change; and the actual change. These should not be thought of as absolute steps in a locked sequence. Rhodes and Doering (1983) point out that, at any point, opportunities to change may disappear; additionally, a person may go through part of the process, decide that his or her current job is better than the alternatives, and decide to stay rather than leave. The factors listed under job satisfaction and the parts of the withdrawal process are conceptualized by Rhodes and Doering (1983) as blocks that interconnect in a somewhat sequential, complicated manner.

Rhodes and Doering (1993) conducted a study that found moderate support for their model. In particular, it obtained more support for its presentation of the withdrawal process than for its presentation of job and career satisfaction determinants. Some support for the career satisfaction determinants can be found in Mallon and Cohen's (2001) work, based on interviews of 41 women who had left employment with established businesses and became self-employed. Mallon and Cohen (2001) were not attempting to lend support to Rhodes and Doering's works, but some of the findings are still relevant. Three women in the sample stated that they needed to "move on to another challenge" or "to develop in a new direction" (Mallon & Cohen, 2001, p. 222). Thirty-five women left their

organizations due to one of three categorical reasons. One category was dissatisfaction with organizational employment, including being unable to obtain additional promotions and being unable to resolve conflicts between work and personal needs (Mallon & Cohen, 2001). A second category involved value conflicts; some research participants saw changes in the organization's value systems that the participants did not like (Mallon & Cohen, 2001). The third category involved a lack of balance between personal and professional life, which was reflected by conflicts between parenting and working roles and other issues (Mallon & Cohen, 2001). The need to find additional challenges, dissatisfaction with organizational employment, value conflicts, and a lack of balance appear to correspond to Rhodes and Doering's (1983) concepts of perceived person/organization correspondence and personal factors. Additionally, Rhodes and Doering's (1983) concepts of alternative opportunities and evaluation of outcomes seem related as well to Mallon and Cohen's (2001) study, since the women had to consider what their available opportunities were within an organization and they had to consider (at least implicitly) how a choice to leave might turn out.

Overall, however, the Rhodes and Doering (1983, 1993) model seems rather mechanical in nature, in that it presents the steps that a person goes through in enacting a change. The model does not seem to describe how a person copes with a transition. It also does not seem designed to accommodate involuntary career transitions, such as forced retirements and layoffs.

Louis (1980) noted that people face both objective and subjective differences in career transitions as people move from one position to another. As a result of these differences, and as a result of not always having necessary information, people engage in

what Louis (1980) referred to as sense-making in order to cope with the differences. Sense-making allows people to form cognitive maps of the situation, which in turn allow people to increase their ability "to understand, forecast, and interpret subsequent events in the new setting" (Louis, 1980, p. 337). People in career transitions also assign meaning to the differences they experience and decide whether they need to take any corrective actions. Over time, people also make corrections, as needed, to their cognitive maps of the situation. Several sources of information are incorporated into the sense-making process, such as people's prior experiences, their personalities, other people's interpretations, and knowledge of the local culture. As Louis (1980) points out, people whose transitions have placed them in new environments may not have developed some of these sources of information; therefore, they are likely to make errors until they either obtain the information they need or connect with more established individuals who can help them.

Hopson (1981) presented a model of transitions, with the disclaimer that not everyone's transitions were expected to fit it. The model is linear in nature, starting with immobilization. Immobilization occurs upon the discovery that one is going to experience a transition. Immobilization occurs regardless of whether a transition is positive or negative. Depending on whether the transition is viewed as positive or negative, the person then experiences either elation or despair; these intense feelings are followed by minimization. A period of self-doubt follows ("Am I really qualified for the promotion?" "Will I ever find another job?"). The next phase is letting go of the self-doubts (Hopson, 1981). Following this is a testing-out period, in which the person experiences rapid mood change; these mood changes may include irritability and impatience. The last two stages

of Hopson's (1981) model are a search for meaning and internalization. Perosa and Perosa (1983) tested the model on a sample of individuals undergoing a midcareer crisis; while some of the participants did not change jobs or occupational fields, the participants who did make such changes did so voluntarily (i.e., the sample did not contain anyone who was fired or laid off). Because all career changes were voluntary, Perosa and Perosa (1983) did not find anyone undergoing shock or immobilization. However, they did find that most of the participants did experience most of the stages in Hopson's model.

Schlossberg (1981) presented a general model of adapting to transitions. It is general because it applies to any transition an adult is experiencing, including work-related ones.

Adaptation was defined as "a process during which an individual moves from being totally preoccupied with the transition to integrating the transition into his or her life" (Schlossberg, 1981, p. 7). In this model, because transitions vary in nature, no uniform pattern or level of ease of adaptation is expected. Additionally, adaptation is influenced by the person's environment, the amount of resources and/or deficits the person has available at the time of the transition, "the degree of similarity or difference in one's assumptions about self and in one's environment (especially the interpersonal support system network of relationships) before and after the transition" and the person's "sense of competency, well-being, and health" (Schlossberg, 1981, p. 8). The model allows for the possibility that the same person may adapt well to one transition but not be able to adapt to another transition (perhaps even to the same kind of transition), depending on a number of factors, including the resources or deficits the person may have, which may fluctuate or change throughout a person's life. Schlossberg (1981)

postulated that three sets of factors affect adaptation to transition: the characteristics of the transition, the characteristics of the environment before and after the transition, and the characteristics of the individual.

Characteristics of the transition include role change (whether the person gains or loses roles), affect (whether the transition generates positive feelings, negative feelings, or both), source (whether the transition is internal because it came from the person's own choices, or external because it came from outside sources), timing (the transition's appropriateness to the person's age), onset (an abrupt arrival versus a gradual or predictable arrival), duration (how long the transition or change is expected to last), and degree of stress, which is dependent on the other items mentioned. Schlossberg (1981) postulated that transitions with internal sources, gradual or expected onsets, appropriate timings, and/or of acceptable duration (temporary if painful, permanent if pleasant) are more likely to be less stressful. Conversely, Schlossberg (1981) postulated that transitions with external sources, sudden onsets, inappropriate timings, and/or with a great deal of uncertainty or with an inappropriate duration were more likely to be stressful.

Characteristics of the environment include interpersonal support systems, institutional supports, and physical setting (Schlossberg, 1981). Interpersonal support can assume three forms: intimate relationships, the family unit, and the network of friends. All three types of support are needed or at least useful for a person, both before and after a transition (Schlossberg, 1981). Institutional support can come from agencies (e.g., a career counseling center, a Veteran's Administration hospital) or from social customs (e.g., bar mitzvah, funeral). The physical setting includes a wide range of items such as the weather, size of a city, and one's living situation (e.g., in an apartment in a "good" or

"bad" neighborhood). Schlossberg (1981) felt that the most important items in the physical characteristics category are comfort, privacy, and aesthetics.

Characteristics of the individual are diverse and do not all hold equal value during any given transition for a person (Schlossberg, 1981). The most complex individual characteristic in Schlossberg's (1981) model is psychosocial competence, which itself has three components that Schlossberg borrows from Tyler. The components are self-attitudes (a positive self-evaluation, an internal locus of control, and a sense of responsibility), world attitudes (interactions based on optimism and a medium level of trust), and behavioral attitudes or attributes (based on active coping, high initiative, the setting of realistic goals, a great deal of planning and effort in pursuing goals, and the ability to appreciate and learn from both success and failure). Additional characteristics of the individual identified by Schlossberg (1981) included gender and sex role identification (which may influence how emotionally expressive a person is and what coping behaviors a person uses), age and life stage (which includes social expectations about a particular age and how the person is acclimating to the aging process), and state of health (whether an illness may be depleting energy level and physical resources, or whether a person has to adapt to a permanent, chronic illness). Schlossberg (1981) additionally included race/ethnicity (the effects of which depend on other factors, such as the person's values or situation), socioeconomic status (including financial resources, education level, and knowledge), value orientation (as one's beliefs, religion, and/or strong commitment to a value system may prove either advantageous or disadvantageous, depending on the situation), and previous experience with a transition of a similar nature (since people may learn from their experiences).

Carter and Cook (1995), in examining the transition to retirement, concluded that two psychological resources may be of great help in allowing people to adjust to retirement: an internal locus of control and self-efficacy. An internal locus of control and a sense of self-efficacy would allow people to perceive retirement as something they could handle and to enable them to take active steps (such as seeking activities compatible with retirement to replace work) to make retirement manageable (Carter & Cook, 1995). These two resources resemble what Schlossberg (1981) postulated under psychosocial competence. Adjusting to retirement is also viewed by Carter and Cook (1995) in terms of the roles that people keep, acquire, or lose due to retirement. People with good social roles (e.g., social connections with family and friends outside of work and participation in social organizations like clubs) are more likely to have a positive adjustment to retirement (Carter & Cook, 1995). This view of social roles resembles the stand Schlossberg (1981) took on interpersonal support systems during transitions. How much people value their association or employment with a particular employer or occupation also plays a role in adjustment, as people who consider it important may have difficulty adjusting to retirement (Carter & Cook, 1995), since it cannot be easily replaced or duplicated in retirement.

Effects of transitions. Career transitions may create stressors and problems.

Schlossberg (1981) stated that stress exists, to some degree, for people undergoing any kind of change or transition. Latack (1984), in a sample of 109 individuals from a hospital and a manufacturing firm, found that 78 of them had undergone a job change within their respective companies. Out of those who had changed jobs (usually via promotion), Latack (1984) found a small but statistically significant correlation between

job-related stress and an objective measure of the magnitude of the career transition. Magnitude of career transition was defined and measured in terms of how many job-related changes (e.g., level held within the company, occupational field) the person experienced as a result of the transition. Latack (1984) also found a positive correlation between the magnitude of career transition and the number of personal life transitions the people were facing. Additionally, people in this study who were facing a large number of personal transitions were more likely to use coping strategies that focused on emotions or stress symptoms than problem-solving coping strategies (Latack, 1984).

Interestingly, Latack (1984) found a negative correlation between magnitude of career transition and role overload. This negative correlation was the opposite of what Latack (1984) predicted, since she expected that high-magnitude career transitions would lead the people to believe that they did not have the resources to meet the job demands.

Stout, Slocum, and Cron (1987) studied a sample of 123 salespeople and their supervisors from 7 companies to see how the supervisor's career transitions affected their subordinates' job performance and attitudes. All participants had career transitions within the previous 15 months. The variables measured included magnitude of career transition, locus of control, job involvement, job challenge, organizational commitment, work satisfaction, and other items. Stout et al. (1987) found that the magnitude of career transitions that supervisors and subordinates went through affected how the salespeople rated on some of the variables.

When both the supervisor and the subordinate had major career transitions, the subordinate rated the supervisor as "cool, distant, and aloof" and the subordinate also "described the performance-reward system as one not based on the quantity of one's work

or merit, but on membership in the 'informal' system" (Stout et al., 1987, p. 134). The subordinates also described their supervisors as being unable to improve the subordinates' standing in the view of senior management (e.g., through visible assignments). The subordinates were unhappy with the promotional opportunities and reported relatively low commitment to the company, compared to supervisors and subordinates whose career transitions, when compared to one another, differed. Interestingly, Stout et al. (1987) found similar results when both the supervisor and the subordinate had undergone minor career transitions, in that the subordinates viewed the supervisors as distant, aloof, and cool. These subordinates also reported relatively low commitment to the company, compared to subordinates and supervisors whose relative career transitions differed. When the subordinate experienced a major career transition but the supervisor experienced a medium one, Stout et al. (1987) found that the subordinate reported feeling that the performance-reward system relied more on the subordinate's quality and quantity of work. Also, the person who experienced the lesser career transition was able to help the individual with the greater career transition interpret his or her new role in a sensible way. Finally, when the subordinates underwent a high-magnitude career transition, but the supervisors experienced a medium transition, the subordinates reported that the supervisors did not provide enough visibility to senior management, compared to subordinates who experienced low-magnitude transitions and supervisors who experienced high-magnitude transitions (Stout et al., 1987).

Overall, the literature on career transitions can be characterized as follows: People are theorized to go through several steps in completing any type of career transition and some empirical evidence exists to support this idea. Knowledge of oneself and of work

(e.g., jobs available, position requirements) is considered helpful. Certain factors, such as satisfaction with the job or organization, an individual's personal traits, how people view their situations, the type of career transition, and a person's circumstances are expected by various theorists to affect how a career transition will turn out for a person. People undergoing career transitions experience a certain amount of stress. This stress, and the person's perceptions of his or her current work situation, may be affected negatively if significant others in an organization (a supervisor or subordinate) are also undergoing a career transition.

Psychological resources. If career transitions do create stressors and problems, what tools do people in a career transition have to manage through the transition? Latack (1984), after reviewing literature on coping, noted that people can a) take some kind of action on the stressful situation, b) change the way one thinks about a situation, or c) alter or reduce one's stress symptoms, such as through relaxation techniques. However, Heppner felt that an area "particularly unexplored in the professional literature includes the psychological resources and barriers adults bring to the career transition process" (Heppner, 1998, p. 136). Perosa and Perosa (1997), in writing about the mid-career change process, echo similar sentiments, noting that only a limited number of models exist to "integrate the array of situational, cognitive, and emotional variables deemed influential by theoreticians, practitioners, and researchers" (p. 151).

Gowan, Craft, and Zimmerman (2000) studied a sample of 171 individuals leaving the United States Army for nonmilitary jobs. Gowan et al. (2000) found that self-esteem was negatively correlated with the tendencies to perceive immediate harm and future harm in a career transition; additionally, career resilience (indicated by the ability

to handle career-related change in a positive manner) and the perception of future harm were negatively correlated. Self-esteem and career resilience may be helpful in a career transition by allowing the person to better handle the stress related to the transition, to adapt to change, and increase employability (Gowan et al., 2000).

In Schlossberg's (1981) model presented earlier, the individual brought psychosocial competence (which included a positive self-evaluation, an internal locus of control, and a sense of responsibility, optimism, a medium level of trust, active coping, high initiative, the setting of realistic goals, a great deal of planning and effort in pursuing goals, and the ability to appreciate and learn from both success and failure), gender and sex role identification, age and life stage, state of health, race/ethnicity, socioeconomic status, value orientation, and previous experience with a transition of a similar nature to a particular situation. Schlossberg (1981) also considered the interpersonal support systems to be important to the person in transition. Additionally, Schlossberg (1981) considered various environmental and transition-related variables. Any of these items could be harmful or helpful to the person in the transition. Carter and Cook (1995) also considered good social roles, self-efficacy, and an internal locus of control to be helpful to adjusting to retirement. The idea that locus of control is helpful to adjustment is compatible with a study by Kilmann, Laval, & Wanlass (1978). Participants in that study whose control scores classified them as having an external locus of control reported having greater difficulty adjusting to life events (Kilmann et al., 1978).

Heppner (Heppner et al., 1994; Heppner, 1998) decided on resources that overlap somewhat with Schlossberg's (1981) model. The resources Heppner chose were self-efficacy, a self-versus-relational focus, motivation, rational beliefs, and control (Heppner

et al., 1994; Heppner, 1998). The concepts of self-efficacy, motivation, and control overlap with Schlossberg's (1981) explanation of psychosocial competency and Carter and Cook's (1995) concepts of self-efficacy and internal locus of control. Heppner (Heppner et al., 1994; Heppner, 1998) operationalized five of the six concepts into an instrument named the Career Transitions Inventory, or CTI. (Five were chosen on the basis of a factor analysis that did not support a sixth factor.) The five factors, or areas, were named Readiness, Confidence, Control, Perceived Support, and Decision Independence (Heppner et al., 1994). Readiness refers to how task-orientated and motivated a person is in terms of dealing with his or her career transition. Confidence covers the person's belief in his or her abilities to successfully complete the career transition. Control refers to how much the person believes he or she influences what happens in his or her life, as opposed to feeling that one is under the influence of outside forces, such as fate. Perceived Support reflects how much the person sees significant others as helpful to him or her during the career transition. Decision Independence (shortened, from this point on, to Independence) covers the extent to which the person has to consider other people's needs in any career-related decision he or she makes (Heppner et al., 1994). The factor called Perceived Support appears related to the social connects and interpersonal support that Schlossberg (1981) and Carter and Cook (1995) mentioned as important.

Joseph and Greenberg (2001) conducted a study on their career transition program to see if it helped unemployed individuals obtain work. The program emphasized imagery techniques that allowed the participants to, among other things, identify their reactions to job loss and see themselves successfully completing job-search related tasks.

At two and four months after program completion, the participants in the program were more likely to be employed and had somewhat higher levels of perceived control than those who were assigned to the placebo group (Joseph & Greenberg, 2001). While the study did not establish or claim that higher levels of perceived control led to employment, one can argue that higher levels of perceived control did not hurt the participants' chances of obtaining employment and may have even helped people. This study lends indirect support to the idea, put forth by Carter and Cook (1995) and Heppner (Heppner et al., 1994; Heppner, 1998), that control plays a role in career transitions.

Heppner (1998) conceptualized the CTI as an indicator of states instead of traits. That is, a person's CTI scores may change due to various environmental influences, such as obtaining a job, access to career counseling, the nature of the career change, and the presence or absence of support from significant others. In particular, Heppner (Heppner, 1998; Heppner et al., 1994) felt that the instrument should be used to identify areas that a counselor can emphasize with a client, so that the counselor can select appropriate interventions. If the interventions are successful, the client's scores should change upon another administration of the CTI.

Heppner, Fuller, and Multon (1998) administered the CTI and the NEO Five Factor Inventory, a personality measure, to see how personality traits related to perceived resources (as measured by the CTI) in a sample of adults undergoing an involuntary career change. The NEO Five Factor Inventory (NEO FFI) (Costa & McCrae, 1992) is a 60-item questionnaire that measures personality along five domains: Neuroticism (the tendency to experience a lot of negative emotions); Extraversion (the preference for interacting with people instead of being alone); Openness to Experience (the willingness

to try new things); Agreeableness (the tendencies to be altruistic, sympathetic, and helpful); and Conscientiousness (the tendencies to plan, organize, complete tasks, and engage in self-control). Openness to Experience was found to positively predict all five factors of the CTI (Heppner et al., 1998). Neuroticism was a negative predictor of Readiness, Confidence, Control, and Perceived Support. Extraversion was a positive predictor of Confidence. Conscientiousness was a positive predictor of Readiness, while Agreeableness was a negative predictor of Confidence (Heppner et al., 1998). The results of Heppner et al. (1998) indicate that "career variables and personality variables are inextricably related" (p. 342).

Research Rationale

As indicated by the present literature review, there are multiple theory-based conceptualizations of the career transition process. What is also acknowledged in the literature is that career transitions are stressful for the people experiencing them, or at least have the potential to be stressful. Several models or explanations were presented that attempted to illustrate the mechanics of how someone copes with or moves through a career transition. However, few researchers or theorists explicitly identify what psychological resources a person uses to deal with the career transition and its associated stress, with Schlossberg (1981), Carter and Cook (1995), and Heppner (Heppner et al., 1994; Heppner, 1998; Heppner et al., 1998) being the only ones doing so. Apparently, then, a lack of information exists on the resources people bring to the career transition process.

One possible resource is hardiness. Hardiness, according to some researchers, has a buffering effect on stress. Its origin was in the world of work, with Kobasa's (1979)

original study using a sample of utility executives facing forced career transitions, in the form of possible demotions and other changes within their company. Other studies previously mentioned have examined hardiness with work-related stress and/or samples of certain kinds of workers; some of these studies found that hardiness had a buffering effect. Hardiness, then, could be a resource that people can bring into a career transition process. Furthermore, while hardiness has shown some statistical and empirical problems in a number of studies, perhaps it could be combined successfully with some other construct or measure, as was done in the Bernard et al. (1996) study. Specifically, combining a measure of hardiness with the CTI may contribute to a more thorough identification of resources that people bring to the career transition process.

While hardiness and the CTI seem to part ways in terms of their relationship to the Agreeableness factor of the NEO FFI, hardiness and the CTI seem to share their relationships to Neuroticism and Conscientiousness. In terms of descriptions of the elements or factors in each construct, some additional overlap seems to exist. The control element in hardiness resembles the Personal Control in the CTI, in that both focus on the presence of an internal or external locus of control. The hardiness element of challenge focuses on a person's belief that he or she can handle problems and grow from them; such a belief system is compatible with the Confidence factor and, indirectly, to the Readiness factor, since these CTI factors focus on the person's self-assessed abilities and motivation to do what is necessary. The commitment element in hardiness, with its focus on involvement with the stressful situation and on social context, is compatible with the CTI factors of Independence, which focuses on being able to make a career decision, and with

Support, with its focus on getting help from others. In the context of these research and conceptual similarities, the following hypotheses are presented.

Hypotheses

The general hypothesis for this study was that certain constructs measured by the CTI correlate with hardiness. Specifically, the Personal Control factor of the CTI was hypothesized to correspond to the element of control in hardiness. The Readiness and Confidence factors of the CTI were hypothesized to correspond to the challenge element in hardiness. The Independence and Support factors of the CTI were hypothesized to correspond to commitment element in hardiness.

Three secondary hypotheses were:

- a) People who underwent a voluntary career transition (i.e., a transition they chose) would report more career transition resources (demonstrated by higher scores on the CTI) than people who experienced an involuntary career transition (i.e., a transition they did not plan on or choose).
- b) People who underwent a voluntary career transition would report greater hardiness (as measured by scores on the CHS) than people who experienced an involuntary career transition.
- c) People with knowledge that a career transition was going to happen are hypothesized to have more career transition resources and greater hardiness than people who did not possess advance knowledge of the transition, and so could not prepare for it.

The secondary hypotheses are based on two works. The first is that of Schlossberg (1981), who postulated that transitions with internal sources (i.e., the person caused his or

her own transition) and gradual onsets were less likely to be stressful than transitions with external sources and sudden onsets. The other is that of Kilmann et al. (1978), who found that participants who were classified as having an external locus of control reported having greater difficulty adjusting to life events.

CHAPTER II

METHOD

Participants

A total of 128 participants were recruited for this study. Participants were recruited from Job Service North Dakota, classes from several departments at the University of North Dakota, classes and enrollment activities at Northwest Technical College in East Grand Forks, Minnesota, and classified advertising in the newspaper. Additionally, the researcher used a variation of "snowballing" in which the researcher and/or participants approached other people who were personally known to have experienced a career transition and asked those individuals to participate. Participants had to be at least 18 years old and had to have undergone a career transition within the last 15 months, in order to be consistent with previous career transition research by Stout et al. (1987). Individuals were excluded from research participation or data analysis if they were under 18 years of age, if they had not experienced a career transition in the last 15 months (or if the transition they described was more than 15 months old), or if significant portions of the questionnaires were left unanswered. ("Significant portions" were defined as more than three items left blank in the CTI and/or the CHS.) Eight individuals completing the data collection process were selected out based on one or more of these criteria, leaving a final sample of 120 participants.

Of the 120 participants, 102 (85%) were White, 5 (4.2%) were American Indian, 4 (3.3%) were biracial (2 were Asian/White, 1 was Pacific Islander/White, and 1 was Puerto Rican/White), 3 (2.5%) were Black, 3 (2.5%) were Asian, and 2 (1.6%) were Hispanic. The participants were predominantly single (77 individuals equaling 64.2% of the sample), with a sizable minority being married (29; 24.2%) and a few being divorced (11; 9.2%) or separated (2; 1.6%). Gender was almost evenly split, with 59 women and 61 men. The mean age was 30.9 years ($SD = 11.8$) with a range of 18 to 72 years. Educational levels ranged from high school graduation or completed GEDs to doctorate degrees, with the mean educational level being 14.6 years ($SD = 2$), roughly equivalent to 2.5 years of college. The mean length of time passed since the career transition event was 4.4 months ($SD = 4.4$) with a range of 0 to 15 months (keeping in mind that participants were included if they had a transition in the last 15 months).

Exact numbers were not kept regarding the recruiting source of each participant. However, the following descriptive statements can be made: The vast majority of participants were recruited from classes at the University of North Dakota and Northwest Technical College; these two sources produced approximately 90 participants. Job Service North Dakota provided the next largest group of research participants, providing approximately 30 participants. "Snowballing" techniques produced approximately seven participants. Only one participant was obtained from advertising in the newspaper.

Participants indicated a variety of career-related changes, with most people listing more than one career transition event in the last 15 months. As a result, a large number of categories were created to include more than one career transition event. The most common category was the combination of quitting a job and starting school, which was

endorsed by six participants, or five percent of the sample. The category of "other" that covered changes not listed in the questionnaire (e.g., having a baby that caused the person to reduce work hours) was also endorsed by six participants, or five percent of the sample. In descending order, the next most common categories were quit job/other (4 participants, or 3.3% of the sample), starting school or training (4; 3.3%), laid off (4; 3.3%), quit job/changed occupations (3; 2.5%), quit job (3; 2.5%), voluntary transfer (2; 1.6%), quit job/own or start a business/starting school or training/changed major (2; 1.6%), fired (2; 1.6%), started school or training/changed major (2; 1.6%) and graduation (2; 1.6%). A large number of categories had only one person endorse them.

Most people (77; 64.2%) listed their career transitions as voluntary, while a sizable minority (22; 18.3%) listed theirs as involuntary. Thirteen people (10.8%) were listed as neutral/mixed since they indicated an equal number of voluntary and involuntary changes. (Eight people did not answer questions about whether the transition was voluntary or whether they knew ahead of time if the transition would occur.) Most people (88; 73.3%) knew that a change was going to happen before it happened. Of those people who knew that it was going to happen, the mean length of time that they knew was 9.29 months ($SD = 17$).

Instruments

Cognitive Hardiness Scale. The Cognitive Hardiness Scale (CHS) was developed by Nowack and incorporated into his Stress Assessment Profile (1990, 1996). The CHS is a 30-item scale that is based on Kobasa's hardiness model (Nowack, 1990) and gives a single, global score of hardiness. This scale has recently started to get regular use by Nowack (1989, 1990, 1996) and others (e.g., Goss, 1994; Martin et al. 1999; Rathburn,

1998). Nowack (1990) found the CHS to have an internal consistency reliability of .83, while Martin et al. (1999) found a reliability of .84 and Rathburn (1998) found a reliability of .87. In the current study, the CHS obtained a coefficient alpha of .87. Nowack (1989) found that the CHS correlated to other scales in the Stress Assessment Profile in ways that could be predicted by Kobasa's definition of hardiness. In particular, the CHS had a negative correlation with the Stress scale and positive correlations with the Social Support, Psychological Well-Being, and Problem-Focused Coping scales.

As described above, the CHS is relatively brief (30 items) and has a reasonable reliability. The CHS is based on Kobasa's definition of hardiness. It correlates with other measures in ways one would expect, given the definition of hardiness on which it is based. The decision to use the CHS is based on these reasons.

Career Transitions Inventory. The Career Transitions Inventory, or CTI (Heppner et al., 1994) represents another view of the capacities people have to deal with a career transition. The CTI is a 40-item test developed to measure the mental resources people used during career transitions. It provides five subscale scores: Readiness, Confidence, Control, Perceived Support, and Decision Independence. The test-retest reliability for the overall CTI was .84 and, for the individual areas, was .74 for Readiness, .79 for Confidence, .55 for Control, .77 for Perceived Support, and .83 for Decision Independence. Cronbach's alphas were .85 to .90 for the CTI overall (Heppner et al., 1994; Heppner, 1998), .87 for Readiness, .83 for Confidence, .69 for Control, .66 for Perceived Support, and .67 for Decision Independence (Heppner et al., 1994). In the current study, the CTI obtained an overall internal reliability coefficient of .85. Individual Cronbach's alphas for the CTI subscales in the current study were .70 for Readiness, .80

for Confidence, .62 for Control, .58 for Support, and .52 for Independence. While the reliability numbers in the current study differ from previous research, the overall reliability of the CTI is in the acceptable range. The CTI correlated positively and appropriately with certain portions of another assessment of career readiness, the My Vocational Situation scale (Holland, Daiger, and Power, as cited and used by Heppner et al., 1994). The CTI was predicted to correlate with part of the Hope Scale (Snyder et al., as cited and used by Heppner et al., 1994) and the results supported this prediction. These correlations indicate support for the CTI's construct validity.

As described above, the CTI has a reasonable overall reliability and some positive indications of validity. The CTI includes constructs one would expect to measure in people undergoing a transition, as indicated not only by Heppner's research (Heppner et al., 1994; Heppner, 1998; Heppner et al., 1998) but also by the works of Schlossberg (1981) and Carter and Cook (1995). At 40 items, the CTI is not unusually lengthy. The decision to use the CTI is based on these reasons.

In order to collect information about demographics and transition-related information, a questionnaire was developed specifically for this study. Because there is some evidence that the nature of the career transition can have an affect on the response to the transition (as cited in the literature review), the demographic form included questions about the length of time since the career transition, the person's perception (or view) of the positive or negative nature of the transition, how much warning they had about the transition, whether it was voluntary or not, and what kind of transition was made. The demographic form is presented in Appendix A.

Procedure

The researcher explained the purpose and nature of the study to the participants and had them sign a consent form. The participants were given the questionnaires to complete. The researcher remained present to address any questions or concerns that arose. While participants were allowed all the time they needed to complete the instruments, they took under an hour to finish.

Participants were then given, upon completion, a form to take with them that debriefed them on the research, gave them referral numbers to the UND Counseling Center and Northeast Human Service Center (and the number to Northwest Technical College if the participants were students there) if they perceived the need for counseling or advice about stress and/or career issues, and numbers to call the researcher for questions about the research.

Analyses

While data from 120 questionnaires were entered, not every questionnaire was complete, as some participants skipped items or provided ambiguous answers (i.e., circling two numbers when circling only one was required). When items were skipped or ambiguously answered in the CTI, an item average was inserted to allow calculations to be made (i.e., for subscale scores, factor analysis, etc.) without distorting results. In the case of descriptive statistics, some numbers will fail to add up to 120 due to participants' omissions of data. Out of the 120 questionnaires, 21 had missing or ambiguously answered items; these 21 questionnaires were included because the vast majority of the items were answered and therefore provided adequate amounts of information.

The data from the CTS and the CHS were examined via factor analysis. The items from both scales were coded and entered in a way that made them appear as one large pool of questions. CHS items alone were also analyzed via factor analysis, as were CTI items. Participant scores from the CTI and the CHS were also examined via correlation. Participants were classified in terms of voluntary versus involuntary career transition. The type of career transition (voluntary versus involuntary) and the presence or absence of knowledge of the career transition were entered as factors into multiple analyses of variance (MANOVA), with CHS and CTI scores serving as the dependent variables.

CHAPTER III

RESULTS

A preliminary analysis was performed to determine the means and standard deviations of the test scores. Additionally, independent samples t-tests were performed to see if gender differences existed on any of the test scores. No statistically significant gender differences were found. The results are presented in Table 1.

Table 1. T-Tests of Scores on the CHS and CTI Subscales by Gender.

	<i>df</i>	Female (n = 59)		Male (n = 61)		<i>t</i>
		M	SD	M	SD	
Hardiness	118	110.56	16.38	111.70	13.43	-.42
Readiness	118	63.19	7.99	62.10	7.51	.77
Confidence	118	48.54	8.90	48.75	9.24	-.13
Control	118	23.63	5.11	23.21	5.81	.41
Support	118	25.37	3.80	24.38	4.10	1.38
Independence	118	18.05	4.34	18.79	4.74	-.89

Means and standard deviations were obtained, based on 120 participants, for CHS scores and CTI subscale scores and are presented in Table 2. In addition, the ranges of scores obtained in the sample are also presented. The CHS has a total possible score range of 30 to 150 points. The CTI does not produce an overall score; the total possible

ranges for each subscale are 13 to 78 points for Readiness, 11 to 66 for Confidence, 6 to 36 for Control, 5 to 30 for Support, and 5 to 30 for Independence.

Table 2. Means and Standard Deviations of CHS Scores and CTI Subscale Scores.

Scale	Mean	SD	Obtained Ranges	
			Minimum	Maximum
Readiness	62.63	7.74	32	78
Confidence	48.65	9.04	27	66
Control	23.42	5.46	11	36
Support	24.87	4.00	14	30
Independence	18.43	4.54	8	30
Hardiness	111.14	14.90	62	139

Hypothesis 1: Relationships Between CHS Scores and CTI Subscale Scores

Factor Analysis. Three factor analyses were conducted to address the main hypothesis that the hardiness elements of commitment, control, and challenge would correspond to the subscales of the CTI. Specifically, the Personal Control factor of the CTI was hypothesized to correspond to the element of control in hardiness. The Readiness and Confidence factors of the CTI were hypothesized to correspond to the challenge element in hardiness. The Independence and Support factors of the CTI were hypothesized to correspond to commitment element in hardiness. Since the CTI subscales were hypothesized to correspond to the three elements of hardiness, one issue to be addressed was whether the items of the CTI and the CHS, when combined together, would support three factors. Two more basic issues to be addressed were whether a) the items from the CHS would organize into three factors that could be clearly identified as

the elements of commitment, control, and challenge; and b) whether the items of the CTI formed five factors that corresponded to Readiness, Confidence, Control, Support, and Independence.

The first factor analysis, confirmatory with an oblique rotation, was performed with the CHS items alone, to determine if a) three distinct factors (to equal the three elements) emerged, and b) which CHS items loaded onto those factors. Nine factors emerged from the results with eigenvalues greater than one. One factor dominated the others in size, accounting for 23.53 percent of the variance and having an eigenvalue of 7.06. The second largest factor accounted for 7.86 percent of the variance and had an eigenvalue of 2.36. The third largest factor accounted for 7.31 of the variance and had an eigenvalue of 2.19. Based on an examination of the Scree plot, there was a significant break between the third and fourth factors. (All nine factors, their eigenvalues, and the amount of variance associated with each factor are listed in Table 3.)

Table 3. Eigenvalues and Variances of Factors for the CHS Items.

Factor	Eigenvalue	% Variance	Cumulative Variance
1	7.06	23.53	23.53
2	2.36	7.86	31.39
3	2.19	7.31	38.70
4	1.52	5.08	43.78
5	1.41	4.68	48.46
6	1.30	4.35	52.81
7	1.23	4.11	56.92
8	1.08	3.61	60.53
9	1.05	3.51	64.04

Item loadings of .40 or greater were used to determine which items fit with which of these three factors. The largest factor contained CHS items 3, 6, 9, 11, 12, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, and 29. Most of the items centered around the

themes of a fear of change and pessimism (or the lack of either), with three items describing the degree to which one feels a sense of involvement and satisfaction with one's actions and one's social circle. The first factor, based on its item content, was split between a challenge theme (i.e., the fear of change is related to one's sense of challenge) and a commitment theme (i.e., one's sense of connection to activities and other people). The second largest factor contained items 5, 16, 18, and 22. Two of the items in this factor had a theme of a sense of involvement with one's activities and with other people, suggesting the commitment element of hardiness. Another item emphasized the connection between hard work and success, suggesting the control element of hardiness. The last item was related to the challenge element of hardiness due to its description of frustration with events that do not go as one wishes. The second factor, then, was split among all three elements of hardiness in terms of item content. The third factor had items 3, 4, 10, 21, and 22 (with items 4, 10, and 21 having negative loadings). One item made the connection between hard work and success, suggesting the control element, while the other item discussed a person's confidence level, which could suggest either the challenge or the control element of hardiness. Based on the patterns of item content, the three main factors of the CHS could not be clearly identified as the three elements of hardiness.

The results of the current factor analysis of the CHS items are compatible with what Rathburn (1998) found in her thesis study of hardiness. In that earlier study and in the current one, factor analyses of the CHS items revealed one large, dominant factor. Both studies also showed, after the item content of the factors was examined, that the factors did not clearly and distinctly match the elements of commitment, control, and challenge. These results, in turn, are compatible with what Nowack (the designer of the

CHS) found, as a factor analysis supported the use of a global score from the CHS but not the use of subscale scores (personal communication, August 10, 1998).

A second confirmatory factor analysis, with a varimax rotation, was performed with the CTI items, in order to determine if a) the items from the CTI supported five factors and, subsequently, five subscales; and b) which items went to which factors. The results showed a total of 13 factors that had eigenvalues greater than one. The results additionally showed that the largest factor accounted for 19.02% of the variance and had an eigenvalue of 7.61. The second largest factor accounted for 8.01% of the variance and had an eigenvalue of 3.21. The third largest factor accounted for 5.97% of the variance and had an eigenvalue of 2.39. The fourth largest factor accounted for 5% of the variance and had an eigenvalue of 2. (All 13 factors, their eigenvalues, and the amount of variance associated with each factor are listed in Table 4.)

Table 4. Eigenvalues and Variances of Factors for the CTI Items.

Factor	Eigenvalue	% Variance	Cumulative Variance
1	7.61	19.02	19.02
2	3.21	8.01	27.03
3	2.39	5.97	33.00
4	2.00	5.00	37.99
5	1.87	4.69	42.68
6	1.69	4.23	46.91
7	1.48	3.70	50.61
8	1.34	3.36	53.97
9	1.27	3.18	57.15
10	1.24	3.09	60.24
11	1.16	2.90	63.14
12	1.11	2.78	65.91
13	1.04	2.60	68.51

Based on an examination of the Scree plot, one break occurred between the first and second factors. Another noteworthy break occurred between the third and fourth

factors. Therefore, the three largest factors were examined in more detail. Item loadings of .40 or greater were used to determine which CTI items loaded onto which factors. The item content and factor loadings of the CTI items are presented in Appendix B.

Factor 1 contained items 2, 3, 4, 10, 13, 14, 16, 17, 18, 19, 22, 23, 25, 27, 28, 29, 31, 32, 34, 37 and 39 (all had positive loadings). Based on scoring instructions from the CTI instrument (Heppner, 1991), items 3, 10, 17, 22, 29, and 31 are from the Readiness subscale; these items had a motivational theme to them. Items 2, 4, 16, 18, 23, 25, 32, and 37 are from the Confidence subscale; these items had a theme of self-doubt and worry about one's ability to handle the transition. Items 19 and 39 are from the Control subscale; both of these items described externalized control (i.e., that luck, fate, or other people affect events). Items 13, 27, and 34 are from the Support subscale; two of the items (13 and 24) described emotional encouragement, while item 27 described a theme of an unacceptable level of risk. Finally, items 14 and 28 are from the Independence subscale; one item described an unwillingness to give up one's sense of security, while the other one described the difficulty in handling a transition while handling one's responsibilities to others. Overall, Factor One has items from all five subscales of the CTI. Collectively, these items described themes of having the motivation and emotional support to go through a transition, but not having the confidence in one's abilities, the sense of personal control, the willingness to risk security, or the ability to prevent significant others from being affected by one's actions.

Factor 2 had items 1, 10, 12, 15, 21, 24, 38, and 40, with item 12 having a negative loading. Based on scoring instructions from the CTI instrument (Heppner, 1991), items 1, 10, 15, 24, 38, and 40 are from the Readiness subscale. These items

expressed a theme of having the motivation to undertake a transition, even in the face of risk and difficulty. Item 12 is from the Control subscale. This item described a theme of relying on a career counselor to inform one of what should be done. Item 21 is from the Independence subscale. This item described a decision to make one's needs a higher priority than the needs of one's significant others. Based on its item content and how the subscales are defined, Factor 2 most closely resembles the Readiness subscale of the CTI (Heppner, 1991).

Factor 3 had items 7, 21, 35, and 39, with item 39 having a negative loading. Items 7, 21, and 35 are from the Independence subscale, while item 39 is from the Control subscale [based on scoring instructions from the CTI instrument (Heppner, 1991)]. Items 7, 21, and 35 describe the degree to which one takes the needs of others into account when undertaking a transition or making a career decision, while item 39 describes externalized control (i.e., believing in luck or fate). Overall, based on its item content and how the subscales are defined, Factor 3 most closely resembles the Independence subscale of the CTI (Heppner, 1991).

The results of the factor analysis on the CTI alone indicate a lack of support for five subscales. Three factors distinguished themselves based on size and an examination of the Scree plot. Additionally, all three factors contained items from multiple subscales of the CTI. The largest factor especially contained the most items with the widest variety of content.

For the combination of CTI and CHS items, two confirmatory factor analyses, with oblique rotations, were performed to see if the items supported either three factors or five factors (three based on the CHS, five based the CTI). The two analyses produced

the same pattern of factor loadings, eigenvalues, and other results, so these two analyses will not be discussed separately. The results showed a total of 22 factors that emerged with eigenvalues equal to or greater than one. The results additionally showed one overwhelmingly dominant factor emerged that accounted for 17.5 percent of the variance and had an eigenvalue of 12.25. The second largest factor accounted for 5.46 percent of the variance and had an eigenvalue of 3.82. The third largest factor accounted for 4.93 percent of the variance and had an eigenvalue of 3.45. The fourth largest factor accounted for 4.15 percent of the variance and had an eigenvalue of 2.90. In examining the Scree plots of the factors, a significant gap existed between the first and second factors; another break occurred between the third and fourth factors. Therefore, the three largest factors were examined in more detail. (All 22 factors, their eigenvalues, and the amount of variance associated with each factor are listed in Table 5.)

Items were considered to be loaded onto a factor if they had an absolute value of at least .40. The first factor had CTI items 2, 4, 5, 10, 13, 14, 16, 18, 19, 22, 25, 27, 28, 29, 30, 31, 32, 37, and 39, and CHS items 3, 6, 7, 9, 12, 15, 18, 19, 20, 23, 24, 25, 26, 27, 28, and 29 (all items had positive loadings). These items seemed to center around four themes, the most dominant of which was a perceived lack of ability to handle additional stressors. The second theme was motivation, with items that mostly indicated a high level of it. The third theme centered around control, especially a perceived lack of it. The fourth theme was social in nature, with a heavy emphasis on negative aspects of a person's social life (such as mistrust of others and lack of satisfaction with one's involvement with others). Overall, the first factor's themes might be loosely unified by a person's capacity to handle change, based on perceived abilities (control and handling of

stress) and resources (motivation and social life). The second factor has CTI items 1, 10, 12, 21, and 40, and CHS items 4 and 5 (with CTI item 12 having a negative loading). The theme of the second factor is one of readiness to change, though two items (CTI item 12 and CHS item 5) do not fit this theme. The third factor had CTI item 17 and CHS items 1, 3, and 22 (with CHS items 1, 3, and 22 having negative loadings). Two of the items (CHS items 1 and 3) form a commitment theme, while the other two items form an action theme.

Table 5. Eigenvalues and Variances of Factors for the CTI and CHS Items Combined.

Factor	Eigenvalue	% Variance	Cumulative Variance
1	12.25	17.51	17.51
2	3.82	5.46	22.97
3	3.45	4.93	27.90
4	2.90	4.15	32.04
5	2.60	3.71	35.76
6	2.33	3.33	39.08
7	2.23	3.18	42.26
8	1.99	2.84	45.10
9	1.92	2.74	47.84
10	1.81	2.58	50.42
11	1.69	2.41	52.83
12	1.61	2.30	55.13
13	1.59	2.26	57.39
14	1.47	2.10	59.49
15	1.42	2.02	61.52
16	1.33	1.90	63.41
17	1.30	1.85	65.27
18	1.23	1.76	67.02
19	1.15	1.64	68.66
20	1.05	1.50	70.16
21	1.04	1.49	71.65
22	1.02	1.46	73.11

In short, the hypothesis that certain CTI subscales corresponded to certain hardiness elements could not be supported. First, the CHS items did not organize into

themes that could be clearly recognized and accurately labeled as commitment, control, and challenge. Second, while the combination of CHS and CTI items could arguably form three factors, this point is weakened by the presence of a total of 22 factors, with one factor predominating in size. Third, each of the factors from both the CHS items alone and from the combination of CHS and CTI items had a diversity of themes that did not logically mix together well. For example, the largest factor from the CHS and CTI item combination had a total of four themes by itself. With such a diversity of themes in each factor and with the lack of evidence to clearly identify the hardiness elements of commitment, control, and challenge, there was no way to correspond such elements to the subscales of the CTI.

Correlations. Hardiness, as measured by the CHS in a total score, had positive correlations with the Readiness subscale of the CTI ($r = .298, p = .01$), the Confidence subscale ($r = .616, p = .01$), the Control subscale ($r = .408, p = .01$), and the Support subscale ($r = .400, p = .01$). No statistically significant correlation existed between Hardiness and the Independence subscale of the CTI. These results give partial support to the general hypothesis that hardiness and the subscales of the CTI are correlated. The correlations of Hardiness and the CTI subscales are shown in Table 6.

Hypothesis 2: The Impact of the Nature of the Transition on CTI and CHS Scores

A 3 X 2 multivariate analysis of variance (MANOVA) was completed to test the effects of voluntariness (voluntary, involuntary, neutral/mixed) and knowledge about the transition (knew, didn't know) on CHS and CTI subscale scores. No significant effect was found for either voluntariness [$\Lambda (12, 206) = 1.46, p = .14$], knowledge [$\Lambda (6, 102) = 1.24, p = .29$], or for the interaction of voluntariness and knowledge

[$\Lambda(6, 102) = 1.11, p = .36$] on CHS and CTI subscale scores. However, univariate follow-up ANOVAs indicated that Confidence scores were lower with involuntary transitions [$F(2, 107) = 4.89; p = .01$] and that Readiness scores were highest with neutral/mixed transitions and lowest with involuntary transitions [$F(2, 107) = 3.48; p = .03$]. The same univariate follow-up ANOVAs also indicated differences in CHS scores based on knowledge of the transition [$F(1, 107) = 4.49; p = .036$] and based on the interaction between knowledge and voluntariness [$F(1, 107) = 5.75; p = .02$]. In particular, CHS scores were lowest with participants who reported involuntary transitions and who also reported knowing ahead of time that the transition would happen. The results of the univariate follow-up ANOVAs are presented in Tables 7, 8, and 9 (with the means and standard deviations applicable to all of the follow-up tests presented in Table 7).

Table 6. Hardiness Correlations with CTI Subscales.

	Readiness	Confidence	Control	Support	Independence
Hardiness	.298**	.616**	.408**	.400**	.114
Readiness		.453**	.120	.449**	.223*
Confidence			.523**	.547**	.351**
Control				.341**	.046
Support					.221*

* = significant at the .05 level (2-tailed) ** = significant at the .01 level (2-tailed)

Note. Number of participants for each correlation is 120.

Table 7. ANOVA for CHS and CTI Subscale Test Scores by Voluntariness.

Scale	Voluntariness						df	F	η^2	p
	Means			SD						
	1	2	3*	1	2	3*				
Readiness							2	3.48	.06	.03
Knew	62.43	58.08	66.62	7.89	9.72	7.07				
Didn't Know	63.24	63.40	-----	6.93	5.76	-----				
Confidence							2	4.89	.08	.01
Knew	50.13	41.08	50.77	9.45	9.23	7.52				
Didn't Know	49.18	45.40	-----	7.14	8.46	-----				
Control							2	.68	.01	.51
Knew	23.87	21.58	24.54	5.15	6.17	6.23				
Didn't Know	22.76	23.10	-----	4.19	6.42	-----				
Support							2	3.02	.05	.05**
Knew	24.80	22.50	26.62	4.44	4.08	2.43				
Didn't Know	24.88	25.40	-----	2.71	2.07	-----				
Independence							2	1.23	.02	.30
Knew	18.40	17.08	19.46	5.06	3.58	4.96				
Didn't Know	19.18	17.50	-----	3.52	4.14	-----				
Hardiness							2	2.50	.05	.09
Knew	112.80	97.75	113.69	16.46	14.38	11.91				
Didn't Know	111.76	114.50	-----	11.70	8.17	-----				

* 1 = voluntary transition; 2 = involuntary transition; 3 = neutral/mixed transition

**Actual significance level is .053.

The variables included in this MANOVA are Voluntary (referring to whether people chose to engage in a change or were forced into one), Hardiness (participants' total scores on the CHS), Know (whether the participants knew a change would occur before it happened), and participants' scores from the subscales of the CTI (Readiness, Confidence, Control, Support, Independence). The participants' scores from the CTI subscales and from the CHS were the dependent variables, while Know and Voluntary were entered into the MANOVA as fixed factors. A total 112 cases were included, as

some individuals did not answer questions about whether they knew a transition would occur or did not indicate if the transition was voluntary. Of the 112 participants included, 77 indicated that their transitions were voluntary, 22 indicated that their transitions were involuntary, and 13 indicated that their transitions were neutral/mixed (had both voluntary and involuntary features).

In Table 7, means and standard deviations are included and listed by scale and by participants' answers to the Know variable, since the means and standard deviations varied along these lines. (These same means and standard deviations apply to Tables 9 and 10.) For the Know variable, 85 participants answered that they knew in advance that the transition would happen and 27 participants answered that they did not know in advance. Of the 85 participants who knew that the transition would occur, 60 of them reported experiencing voluntary transitions, 12 reported experiencing involuntary transitions, and 13 reported experiencing neutral/mixed transitions. Of the 27 people who did not know in advance that the transition would occur, 17 reported voluntary transitions, 10 reported involuntary transitions, and no one reported having a neutral/mixed transition. Because no participants fell into the combination of "did not know" and "neutral/mixed transition," no means or standard deviations were reported.

A separate one-way MANOVA was performed to exam the effects of View (whether participants had a positive, mixed, neutral, or negative perception of their transitions) on CHS scores and CTI subscale scores. A significant effect was found [$F(18, 306) = 1.96, p = .012$]. Follow-up univariate ANOVAs indicated significant effects for CHS scores, Confidence scores, and Independence scores. Participants who reported negative views of their transitions had the lowest CHS scores, while those who

reported positive views had the highest CHS scores [$F(3, 113) = 7.28, p = .00$].

Participants who reported neutral views of their transitions had the highest Independence scores, while those who reported mixed views of their transitions had the lowest Independence scores [$F(3, 113) = 3.29, p = .02$]. Participants who reported positive views of their transitions had the highest Confidence scores, while those who reported negative views had the lowest Confidence scores [$F(3, 113) = 5.62, p = .00$]. In general, participants who had positive views of their transitions also had higher levels of confidence and hardiness than those with non-positive views, while people with neutral views of their transitions perceived that they had higher degrees of independence in their decisions, compared to those with non-neutral views. The results of the univariate follow-up ANOVAs are presented in Table 10.

For the View MANOVA results, data from 117 participants were used (due to missing data from the other questionnaires). Of the 117 participants, 54 reported having a positive view of their career transitions, 45 reported a mixed view of their transitions, 10 reported a neutral view, and 8 reported a negative view. (A mixed view involved seeing both positive and negative aspects of a transition, while a neutral view that the participant did not perceive any distinctively positive or negative aspects to his or her situation.)

Table 8. ANOVA for Knowledge of Transition on CHS and CTI Subscale Test Scores.

Test	df	Know* F	η^2	<i>p</i>
Readiness	1	2.43	.02	.12
Confidence	1	1.38	.01	.46
Control	1	.02	.00	.88
Support	1	2.34	.02	.13
Independence	1	.26	.00	.61
Hardiness	1	4.49	.04	.04

*In Tables 8 and 9, the means and standard deviations are the same as in Table 7.

Table 9. ANOVA for Voluntariness x Know Effects on CHS and CTI Subscale Test Scores.

Test	df	Voluntariness x Know F	η^2	<i>p</i>
Readiness	1	1.32	.01	.25
Confidence	1	1.38	.01	.24
Control	1	.91	.01	.34
Support	1	2.09	.02	.15
Independence	1	.02	.00	.88
Hardiness	1	5.75	.05	.02

Table 10. ANOVAs for View Effects on CHS and CTI Subscale Test Scores.

Scale	Mean	View SD	df	F	η^2	<i>p</i>
Readiness			3	.78	.02	.51
Positive	63.43	7.36				
Mixed	62.22	8.48				
Negative	59.38	4.75				
Neutral	63.90	8.49				
Confidence			3	5.62	.13	.00
Positive	51.46	7.62				
Mixed	46.80	9.89				
Negative	39.63	7.98				
Neutral	49.60	7.47				
Control			3	2.39	.06	.07
Positive	24.20	5.02				
Mixed	23.16	5.47				
Negative	19.00	4.50				
Neutral	22.40	6.48				
Support			3	1.35	.04	.26
Positive	25.43	3.62				
Mixed	24.42	4.50				
Negative	22.75	3.58				
Neutral	25.20	2.86				
Independence			3	3.29	.08	.02
Positive	19.33	4.28				
Mixed	16.98	4.75				
Negative	17.75	3.37				
Neutral	20.70	4.47				
Hardiness			3	7.28	.16	.00
Positive	116.67	9.93				
Mixed	109.22	15.89				
Negative	97.00	17.61				
Neutral	102.70	17.80				

CHAPTER IV

DISCUSSION

The overall pattern of results indicates mixed support for the value of hardiness as a career transition resource. The first hypothesis—that certain constructs measured by the CTI correlate with hardiness—obtained the most support, with hardiness correlating with four of the five CTI subscales. The largest correlation occurred between hardiness and the Confidence subscale ($r = .616, p = .01$). The related hypothesis—that certain subscales of the CTI corresponded specifically to certain elements of hardiness—was not supported by the results of three factor analyses. Additionally, the three factors that were hypothesized to emerge did not clearly do so from a factor analysis of the CTI and the CHS items combined, either in terms of variance accounted for or in terms of having groups of highly interrelated items clustering together.

Only slight support existed for the secondary hypotheses (that having a voluntary transition and/or possessing advanced knowledge of a transition would affect levels of hardiness and resource levels). The overall MANOVA results (from the testing of voluntariness and knowledge of a career transition) did not support the hypotheses. Only the results at the univariate ANOVA level indicated any support. These results indicated that participants who reported a voluntary career transition had higher levels of confidence during their transitions; however, knowing about the transition ahead of time showed no relationship to confidence levels. Interestingly, these results also indicated

that those participants who reported neutral/mixed transitions had the highest levels of readiness to go through a career transition; those who reported an involuntary transition had the lowest levels of readiness. Knowledge of the transition showed no relationship to readiness levels. Finally, the results indicated that participants who reported knowing ahead of time about an involuntary transition had the lowest levels of hardiness, while participants who reported *not* knowing about a transition and having an involuntary transition had the highest hardiness levels.

The results from the second MANOVA--where the participants' views of their transitions were compared to test scores--indicated a clearer pattern. Participants who reported positive views had the highest hardiness and confidence levels. Participants who reported neutral views of their transitions had the highest levels of independence in their decisions.

The two sets of MANOVA results present interesting implications. Having a positive view of one's situation increased the likelihood that one also had the confidence and the hardiness to handle a transition. The results also imply that people seemed best able to handle the stress of a transition when they possessed a positive view of an involuntary transition they did not foresee. Having a positive view under such circumstances could be optimism, as Seligman (1991) has discussed. However, such a view could also be the by-product of hardiness, as Maddi and Kobasa (1984) have stated.

Additionally, people with neutral views of their transitions tended to report more independence in their decisions. Since a neutral view of one's transition implied that one did not see distinctively positive or negative aspects to one's situation, a neutral view may allow a person to take a detached standpoint from which to make a decision without

being unduly influenced by isolated aspects of his or her situation. An alternative explanation is that the higher levels of independence obtained from a neutral view are unrealistic ones, as the person may be overlooking or otherwise failing to use relevant situational factors in making a decision. This explanation is compatible with Heppner's (1991) guide to explaining CTI test scores, in which people with high scores on Independence are advised to "examine this independence to determine if it may create negative consequences in the lives of people close to you" (p. 4).

The results of the MANOVAs also have implications for hardiness in a different sense. Hardiness, ever since its introduction by Kobasa (1979), has been presented as a personality trait. However, the MANOVA results in the current study show that hardiness levels (as measured by the CHS) fluctuated relative to whether participants knew about a transition and whether the transition was voluntary. The possession of knowledge (of any topic) and voluntariness of a transition are not personality traits; they instead represent situations or states. An implication, then, is that hardiness is not a stable trait of a person but instead is a situation-dependent state that a person experiences. Put another way, a person may be more hardy in some situations and less hardy in others.

A possible explanation for this exists in the literature. Maddi and Kobasa (1984) explained that hardiness could be developed during childhood. Maddi et al. (1998) also found that hardiness can be taught to adults with some positive outcomes. Perhaps people have situation-related levels of hardiness because it is a skill (or a set of skills) that people have learned to apply in some situations but have not yet learned to apply to others. When faced with a new set of circumstances, people who have otherwise demonstrated hardiness may fail to ask for help, to make changes they are capable of

making, or to otherwise engage in non-hardy actions due to unfamiliarity with the situation. This view of hardiness suggests that it is a skill that one has to continue to develop over one's lifetime across multiple situations.

The fact that one large factor emerged from the factor analysis that combined the CTI and the CHS items suggests that the CTI and the CHS may be tapping into an overarching theme. That theme appears to be one of being able to handle change. This theme was based on several items pulled from both the CHS and the CTI. While the elements of hardiness and the subscales of the CTI did not group together in the ways that were hypothesized, the overarching theme of handling change has relevance. Obviously, career transitions, by definition, involve some kind of change; often, a person undergoing a transition has to handle multiple changes (in income level, job duties, occupational identity, etc.) at the same time or over a short period of time. Perhaps, then, hardiness can still be conceptualized as a career transition resource in terms of a person's general ability to cope with the changes associated with a transition. If hardiness is in fact an ability to cope with the changes of a career transition, then people who are high in hardiness can be described as able to successfully cope with stressful changes, even if such people are given no notice or did not want the transition to happen. An informal way to rephrase this would be to say that such people "make the best of a bad situation." Since not all career transitions can be anticipated or wanted, having the ability to cope with changes when they occur would be a highly useful skill.

A second conceptualization of hardiness is to view it as a variation of confidence. Support for this conceptualization can be found in the correlation between hardiness scores and Confidence scores ($r = .616, p = .01$). Hardiness may contribute to a person's

ability to cope with a career transition by allowing the person to have the belief that he or she can handle anything related to the transition. Such a belief would encourage the person to remain calm during a stressful time ("Why should I worry? I can do this."). A positive belief in one's own abilities can also allow a person to take constructive, appropriate steps. The absence of such a belief may lead people to either do nothing ("Why bother? It's not going to pay off.") or to engage in actions that sabotage the person's chances of success ("I won't go to the job interview today—I'll just get turned down anyway.").

A third conceptualization of hardiness, relative to career transitions, is based on the concept of career adaptability developed by Super and Knasel (1981). Super and Knasel (1981) were attempting to find a way to describe the abilities and attitudes that adults have and use when faced with a career decision. The term "career adaptability" was used to focus "on the interaction between the individual and the environment," and to have that individual "seen as engaged in the process of finding a balance between acceptance of the pressures that come from the world of work and making his or her own impact on the environment" (Super & Knasel, 1981, pp. 198-199). Super and Knasel (1981) advocated the use of the term, in part, because "it allows greater emphasis to be given novel, non-maturational problems which presently confront many people" and that a helping professional "should pay considerable attention to the individual's ability to cope with such tasks" (p. 199). Career adaptability, with part of its focus on the individual making an impact on his or her environment, appears compatible with Maddi and Kobasa's (1984) view of hardiness as involving transformational coping (in which a person takes active steps to handle a stressor). With Super and Knasel's (1981) statement

that a focus should be on people's abilities to handle the career-related problems that they face, career adaptability is also compatible with the view of hardiness as the capacity to handle change.

Implications for Practice and Future Research

Being able to measure or identify a general ability to cope with stressors would be useful to counselors and ultimately to their clients. A person with a low to medium ability to handle change could be given support or services from a counselor, especially during a forced transition (such as a layoff) that does not give anyone the luxury of avoiding a difficult situation. A counselor could design interventions meant to correct a person's deficits in handling change. Such interventions could focus on a person's thinking, attitudes, and problem-solving skills, especially since hardiness involves an active approach to handling difficulties and is based on a person's views of the situation (Maddi and Kobasa, 1984). Since the CTI and the commitment element of hardiness emphasize or imply that people may have access to help or resources (Heppner, 1998; Heppner et al., 1994; Kobasa, 1979), interventions can also be based on the results of these tests to help people identify and take advantage of useful aspects of their situations.

If a person demonstrates high ability to handle change and shows other indicators of being able and ready to engage in a career transition, a counselor may not have to intervene at all. If necessary, the counselor and the client can interact at the most minimal level (e.g., to just "bounce ideas" or for a "checkup") to avoid an unnecessary expense of time and money. Additionally, such high-functioning people can serve as role models or otherwise help others, especially in the context of a group intervention, since such people

have been through the same situation as others and can demonstrate the skills necessary to cope with it.

The results of this study suggest certain possibilities for additional research. One idea, tied to the clinical ideas listed above, is to develop or revise a scale, such as the CTI, to include a hardiness subscale. Since the CTI is supposed to be used to identify areas that a counselor can emphasize in assisting a client (Heppner, 1998; Heppner et al., 1994), and since hardiness was originally developed on a group of executives facing a possible career transition (Kobasa, 1979), a logical line of research is to see how well hardiness can be assessed and then used in clinical situations (such as career counseling).

Additional research on career transitions could be done to identify other resources people use during such a change. While Heppner and her colleagues found support for five resources (Heppner, 1998; Heppner et al., 1994) and the current study found some support for a sixth (hardiness), other resources are at least theoretically possible. For example, individual resources that are potentially useful in a career transition, not measured in either of the tests used in the current study, include skills in budgeting, planning, setting priorities, organization, and time management; good interpersonal skills; foresight; and flexibility, among other possibilities. These possible resources could be tested to see if they actually apply (i.e., if they are considered useful or helpful) to people undergoing a transition. Alternatively, researchers could choose to study people who successfully managed a transition and those who did not, in order to identify any differences that could suggest the presence of career transition resources.

Research could also be done on the relative importance of each resource (including hardiness) to people undergoing career transitions, in order to make sure that

assessment instruments are measuring the most important traits or states that people value during their transitions. Researchers might have people who have recently been through a transition rank-order or list several resources to indicate which ones were most useful. Such research would be helpful in making sure that 1) tests are accurate in what they are measuring; 2) clients' time is not wasted in answering questions on irrelevant topics; and 3) therapists and clients can focus more directly on relevant issues.

Researching the relative importance of each resource could also uncover whether people's needs for particular resources vary across situations or over time. For example, differences may exist between two employees who have lost their jobs in terms of what their needs are. One of the employees may have worked in a field where job loss is common, or perhaps has changed fields more than once. Therefore, through personal experience, this employee knows how to find and obtain what he or she needs. The other employee may, after 20 years with the same company in the same field, have several dependents at home; need to relearn how to write a resume; and face a spouse who is not sympathetic to relocating to find new employment. As another example, a person may, at 16 to 18 years of age, need support from his or her family as he or she enters the job market or college for the first time. However, at age 40, the same person may be dealing with issues relating to the Independence subscale of the CTI, as this person may now be the parent of three dependent children. At age 64, this same person may be struggling with control issues if his or her company has a mandatory retirement age and this person is not willing to leave his or her job. Research can identify such developmental or other patterns of need and clinicians can be more aware of them as they develop interventions for their clients.

Another line of research would be to determine the degree to which hardiness and confidence are similar (if not identical) constructs. While hardiness can be separated at the theoretical level from other related constructs (such as optimism and resiliency), attempts to establish this separation at the statistical or empirical level has produced mixed results. If hardiness is shown to be significantly different than confidence, such a difference would be additional proof that hardiness is truly an independent construct. However, if hardiness is shown to essentially be a version of confidence, then either hardiness or confidence will need to be redeveloped or eliminated as a construct.

Limitations

This study has its limitations. One limitation is that socioeconomic issues were not measured or addressed, so the effect of participants' socioeconomic statuses or backgrounds on their career transition views or on their test scores could not be determined. A second limitation is that the data obtained from participants were limited by incomplete questionnaires. One particular question in the demographic section, which asked participants to indicate how voluntary their career transitions were, appeared to elicit confusion due to its wording, resulting in several non-responses. A third limitation of the study was that the entire range of career transitions was not uniformly covered in the sample; for example, only a couple of individuals indicated that they had undergone retirement, while the most frequently occurring career transitions included quitting a job and starting school. Unfinished questionnaires and "lopsided" frequency distributions of career transition categories led to limited (at best) conclusions drawn on incomplete information. A fourth limitation of the study is that the sample was composed primarily of one ethnic group (Caucasians) from one fairly specific region (North Dakota and

Minnesota). While a handful of people of other ethnic backgrounds and from other regions of the country participated in the study, such participants constituted less than 20% of the sample. Therefore, the results of this study alone cannot be generalized to the national population.

Conclusion

This study was an attempt to look at what people bring into a career transition. Hardiness, with its history of conflicting research results, was examined to see if it could serve as a resource in this transition. While this study has its limits and did not find support for all of the hypotheses, it still contributed some information about how people handle career-related changes.

This study's results indicated that hardiness is correlated to several recognized resources that people use during a transition. Additionally, the results indicated that hardiness, combined with these resources, can be defined as a general ability to cope with change. This general ability to cope with change is necessary during a career transition, since a career transition is a type of change that produces a certain amount of stress in people's lives. Career transitions are also a normal, frequent occurrence in life; everybody who works or goes to school experiences multiple changes over his or her career. Developing and using the ability to successfully handle the inevitable changes in one's career will allow one to avoid the negative effects of stress and to enjoy a higher quality of life.

The results of this study pointed to certain needs in the areas of research and practice. Therapists have a need to identify what a client's strengths and weaknesses are, at least relative to that person's presenting problems. Therapists also need to be able to

create or modify interventions in a way that will allow the interventions to be of maximum benefit to the clients. In order to do these things, therapists need accurate assessment tools. For such tools to exist, someone needs to conduct research designed to develop the tools, document their effectiveness, and to identify the needs that the tools are able to measure. In this case, that research has to identify and quantify what resources are most useful and effective for people undergoing a career transition. The current study is a step in that direction, in that hardiness has been identified and partially supported as a resource that allows a person to cope with stress.

Finally, this study helped, in its own way, to emphasize a more positive aspect of the life experiences people go through by looking at people's strengths (i.e., the resources they use), rather than by looking at their weaknesses. Since people tend to seek therapy only when their problems become severe, and since many people in therapy are dysfunctional in ways that aggravate their own problems, the natural human tendency is to focus on the negative aspects of a situation. Certainly, a career transition can be an unwanted, distressing event that can be made worse by a person's attitudes or approaches to problem solving or coping. However, many people enter therapy with a lack of knowledge of what else they can do about a situation. Additionally, people have been known to ignore or overlook the obvious in situations. They can also discount or undo the positive actions they are capable of undertaking. For these reasons, focusing on more positive aspects in a situation, such as clarifying what can be done and identifying the resources a person has available, can be a tremendous help to people facing career transitions (and other difficulties). Even if a person can be accurately described as lacking both the resources and the skills to cope successfully with a career transition, a therapist

can help that person correct these deficits and allow the person to leave therapy with skills he or she can use over a lifetime. This emphasizes personal strengths, relying on a key philosophy of both counseling psychology and career development.

APPENDICES

APPENDIX A

DEMOGRAPHICS/TRANSITION QUESTIONNAIRE

Demographic questions

Please fill out the following items.

Race:

Gender:

Age:

Marital Status:

Educational level:

Career transition questions

1. Please check off the career changes you have experienced in the last 15 months. Check off all that apply.

Voluntary retirement Forced retirement Forced transfer (any kind)

Voluntarily transfer (any kind) Fired Laid off Quit job

Started/bought own business Started first job Started school/training

Changed major School graduation Quit school

Changed occupations Promoted Demoted

Voluntary increase/decrease in hours Involuntary increase/decrease in hours

Other (please describe; if necessary, use the back of this page):

2. Please state how long ago each change occurred:

3. Some career changes are entirely the result of choices people make, while other career changes are beyond anyone's control. Still other changes are partly due to choices that people make and partly due to outside factors beyond their control. In recognition of how career changes vary for people, you are asked to rate how voluntary you feel each of your career changes was for you, by placing a mark on the line-chart below to correspond to how you feel. If you have two or more changes to rate, please use any system you wish to separate each rating (e.g., numbering the changes, multiple copies of the chart below, etc.). Use the back of this page if necessary.

totally voluntary

totally involuntary

4a. Did you know or suspect in advance whether a career change was going to happen?

yes

no

b. If yes, how much time passed between when you first knew (or suspected) and when the change occurred?

5. How did you view the change (e.g., positive, negative, neutral, mixed feelings)?

Provide as much detail as you wish (use the back of this page if necessary).

APPENDIX B

CTI ITEM CONTENT AND FACTOR LOADINGS

CTI items are from the Career Transitions Inventory, copyright 1991 by Mary Heppner, Career Center, University of Missouri, Student Success Center, Columbia, MO 65211-6060. This organization should be contacted for information or permission regarding use of this instrument.

CTI Items	F1	F2	F3	F4	F5
1. I believe I am ready to risk some of the security I now have in my current career in order to gain something better.	.30	.45	-.15	.35	.10
2. This career transition process may be too complex for me to work through.	.52	-.20	.22	-.23	.31
3. I feel as though I have a driving force within me to work on this career transition right now.	.43	.30	-.19	.22	-.36
4. I have never been able to go through a career transition very easily. I doubt I will this time.	.51	-.21	.28	-.21	.42
5. If you think you are really calling the shots in your career transition, you are only fooling yourself.	.42	-.13	.09	-.05	-.32
6. People in my life are disappointed and resentful that my career transition affects their lives adversely.	.31	-.02	.22	-.52	.30
7. Career choices affect others and I must take the needs of others into account when making a career transition.	.16	-.00*	.50	.17	.25
8. Even though there are risks, I think there is a realistic hope of finding a better career choice.	.12	.37	-.06	.10	.09
9. The risk of changing careers seems serious to me.	.20	-.34	.15	.14	.21
10. My effort, creativity, and motivation will lead me to a new career venture.	.47	.40	.16	-.05	-.04
11. Some would say that this career transition is a risky venture, but the risk doesn't bother me.	.36	.28	.12	.10	.27
12. I am hoping that the right career counselor will tell me what I should do with this career transition.	.22	-.45	-.16	.06	-.25

13. People whom I respect have said they think I can make this career transition successfully.	.50	.16	.17	-.39	-.19
14. I am concerned about giving up the security of what I am presently doing to make a career transition.	.53	-.09	.10	.11	.00*
15. The risks of this career transition are high, but I am willing to take the chance.	.15	.41	-.03	-.00*	.27
16. I don't feel that I have the talent to make a career transition that I will feel good about.	.65	-.15	-.02	.08	-.13
17. This isn't one of those times in my life when I really feel propelled to make a career transition.	.54	-.04	-.07	.26	.07
18. It seems natural with something as scary as a career transition, I would be preoccupied with worry about it.	.54	-.23	-.05	.25	.36
19. The outcome of this career transition process is really up to those who control the "system."	.54	-.14	-.30	.09	.17
20. Significant people in my life are actively supporting me in this career transition.	.30	.06	-.12	-.58	.00*
21. While family and relationship needs are important to me, when it comes to this career transition, I feel I must focus on my own needs.	.06	.44	.54	.33	-.10
22. I don't feel much internal "push" to work hard at this career transition.	.51	.08	-.12	-.29	-.22
23. I am not one of those people who was brought up to believe I could be anything I wanted to be.	.42	-.09	-.03	-.12	.34
24. At this point in my life I really feel the need for more meaning in my work. That need keeps me moving at this process.	.12	.50	-.20	-.06	.06
25. In dealing with aspects of this career transition, I am unsure whether I can handle it.	.71	-.13	.17	.21	-.09
26. If my career transition is destined to happen, it will happen.	.23	-.23	-.30	.32	-.34
27. The risks of career transition seem too great given my current resources and the potential payoffs.	.59	.09	.01	.08	-.19
28. It is hard for me to juggle this career transition given the responsibilities I feel for people in my life.	.53	-.19	.32	.00*	.06
29. Each day I do something on this career transition process. I would say I'm motivated.	.53	.39	-.17	.02	-.12
30. I feel confident in my ability to do well in this career transition process.	.69	.24	-.13	.07	.22
31. I am feeling challenged by this career transition process and this knowledge keeps me motivated.	.52	.31	-.23	-.07	-.00*
32. The magnitude of this career transition process is impossible to deal with.	.62	-.05	.20	-.24	-.00*

33. It would be awful if this career transition process didn't work out.	.32	-.39	.20	.02	.19
34. Important people in my life (partner, teacher, parents) have said things that led me to believe I should limit my career options.	.46	-.18	-.09	-.14	.30
35. My family (partner or friends) are important to me but I can't put too much importance on their desires with regard to this career transition.	-.15	.17	.71	.13	-.14
36. Even though the solution to this career transition is not readily apparent, I believe I will successfully work through it.	.14	.27	.08	-.39	.32
37. The number of unknowns involved in making a career transition bothers me.	.69	-.29	.09	.21	.09
38. Recent events in my life have given me the shove I needed for this career transition.	.20	.47	-.33	-.22	-.22
39. Luck and chance play the major role in this career transition process.	.46	-.18	-.41	.10	.14
40. Even though this may not be the best time for other people in my life, I feel the need to go for it.	.03	.56	.33	.16	-.06

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