Human agency, hardiness, and proactive personality: potential resources for emerging adults in the college-to-career transition

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HUMAN AGENCY, HARDINESS, AND PROACTIVE PERSONALITY: 
POTENTIAL RESOURCES FOR EMERGING ADULTS 
IN THE COLLEGE-TO-CAREER TRANSITION 

by 
Arie Todd Greenleaf

An Abstract 
Of a thesis submitted in partial fulfillment 
of the requirements for the Doctor of 
Philosophy degree in Rehabilitation and Counselor Education 
(Counselor Education and Supervision) 
in the Graduate College of 
The University of Iowa 

July 2011 

Thesis Supervisor: Assistant Professor Susannah Wood
ABSTRACT

Using Krumboltz’s (2009) Happenstance Learning Theory as a theoretical framework, the three constructs of human agency, hardiness, and proactive personality were identified for their effectiveness in facilitating proaction and resilience during transitional and stressful circumstances. The purpose of this study was to explore whether human agency, hardiness, and proactive personality predict a successful college-to-career transition, measured by the confidence and readiness factors on the Career Transition Inventory (Heppner, 1991; Heppner, Multon, & Johnston, 1994). Linear regression analyses found that each of the study’s independent variables predicted both the confidence and readiness factors. In addition, a stepwise regression analysis selected proactive personality as the strongest predictor of readiness. With proactive personality in the model, the stepwise analysis chose hardiness as the next strongest predictor of readiness. Proactive personality and hardiness together explained 38.2% of the variance for readiness. When a stepwise analysis was run with the three independent variables and confidence as the dependent variable, hardiness was selected as the strongest predictor of confidence. With hardiness in the model, the stepwise analysis chose general self-efficacy as the next strongest predictor of readiness. Hardiness and general self-efficacy together explained 28.1% of the variance for confidence.

Abstract Approved: ____________________________

Thesis Supervisor

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Title and Department

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Date
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CERTIFICATE OF APPROVAL

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PH.D. THESIS

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This is to certify that the Ph.D. thesis of

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has been approved by the Examining Committee
for the thesis requirement for the Doctor of Philosophy
degree in Rehabilitation and Counselor Education (Counselor Education and
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Susan Birrell
To my wife, Dewa: Your love, encouragement, and sacrifice have made this Dream possible.

To my daughter, Divya: My darling, know that I was thinking of you and your future.

To my Mom: God heard and answered your countless prayers. Thank you.

To my Dad: I climbed this mountain for you.
ABSTRACT

Using Krumboltz’s (2009) Happenstance Learning Theory as a theoretical framework, the three constructs of human agency, hardiness, and proactive personality were identified for their effectiveness in facilitating proaction and resilience during transitional and stressful circumstances. The purpose of this study was to explore whether human agency, hardiness, and proactive personality predict a successful college-to-career transition, measured by the confidence and readiness factors on the Career Transition Inventory (Heppner, 1991; Heppner, Multon, & Johnston, 1994). Linear regression analysis found that each of the study’s independent variables predicted both the confidence and readiness factors. In addition, a stepwise regression analysis selected proactive personality as the strongest predictor of readiness. With proactive personality in the model, the stepwise analysis chose hardiness as the next strongest predictor of readiness. Proactive personality and hardiness together explained 38.2% of the variance for readiness. When a stepwise analysis was run with the three independent variables and confidence as the dependent variable, hardiness was selected as the strongest predictor of confidence. With hardiness in the model, the stepwise analysis chose general self-efficacy as the next strongest predictor of readiness. Hardiness and general self-efficacy together explained 28.1% of the variance for confidence.
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CHAPTER I
INTRODUCTION

The transition from college to career represents a challenging time for emerging adults between the ages of 18 and 25 (Arnett, 2000; Holton, 2001; Kenny & Sirin, 2006; Polach 2004; Schulenberg, Bryant, & O’Malley, 2004). Individuals in this developmental stage face the often difficult task of leaving school and navigating into the world of work (Arnett, 2000). The difficulty of this transition, however, has been amplified in recent years by the economic reality identified as the “Great Recession” (Elsby, Hobijn, & Sahin, 2010, p. 2). According to economists (Bernanke, 2010; Burtless, 2010; Elsby et al., 2010; Foray & Phelps, 2010; Shierholz, 2010; Zandi, 2010) who evaluate labor market indicators (i.e., unemployment, employment, labor force participation, and hours), the current recession “represents the deepest downturn in the labor market in the postwar era” (Elsby et al., 2010, p. 2). This new economic world presents challenges not only to recent college graduates transitioning into the job market, but also to career counselors attempting to help their students create a positive trajectory for their personal and professional lives (Murphy, Blustein, Bohlig, & Platt, 2010).

Currently, the dominant model used by university career counselors to guide their students to post-education employment is based on the trait-and-factor theory (Krumboltz, 2001, 2009; Mitchell, Levin, & Krumboltz, 1999). This approach to career counseling focuses primarily on assessing career interests, making a career decision, choosing a major, improving resumes, polishing interview skills, and assisting with the job search (Krumboltz, 2001, 2009; Mitchell et al., 1999; Wendlandt & Rochen, 2008). While each of these areas plays an important role in the transition from school to full-
time work, these traditional career counseling interventions now require an additional component to meet the uncertainties and challenges of today’s labor market (Krumboltz, 2009; Mitchell et al., 1999; Murphy et al., 2010). Personal counseling is needed to directly equip emerging adults with the psychological resources that can help them adapt and thrive under stressful transitional circumstances (Heppner, 1992, 1998; Heppner, Multon, & Johnston, 1994; Krumboltz, 2001, 2009; Mitchell et al., 1999; Murphy et al., 2010). This concept of career adaptability is defined as the “the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions” [Italics added] (Savickas, 1997, p. 254).

What is unknown are the internal factors that allow an individual to cope, adapt, and be resilient under these unpredictable and stressful circumstances. Exploring factors that could potentially relate to these inner resources expands our understanding of how individuals survive and thrive in the working world. When applied to the emerging adult population in the present study, new information could be used to better prepare emerging adults for the transition into a hostile world of work that “neither wants nor needs them” (Queenan, 2010). Hence, the purpose of the current study is to identify psychological resources that could serve to promote a successful college-to-career transition.

Chapter 1 of this dissertation will begin with an overview of the Great Recession, and the inherent challenges that emerging adults face in finding employment. This will be followed by a brief synopsis of the college-to-career literature, including research on the psychological resources associated with career transition. Next, an overview of
Krumboltz’s Happenstance Learning Theory (2009) will be presented. Finally, the literature concerning the three constructs chosen as independent variables in the current study – human agency, proactive personality, and hardiness – will be briefly examined.

The Great Recession

Since the recession started in December 2007, 10 million jobs have been lost (Bureau of Labor Statistics). During the same time period the unemployment rate has risen from a pre-recession minimum of 4.4 percent to reach 10.1 percent in October 2009 (Bureau of Labor Statistics). This increase of 5.7 percentage points is the largest upswing in the unemployment rate since the Great Depression in the 1930s (Eslby et al. 2010).

When the percentage of the “underemployed” (those who want a full-time job but are unable to find one) is factored into the equation, the figure jumps to an astounding 17.3 percentage points (Bureau of Labor Statistics). Even that larger figure does not include the hundreds of thousands of individuals who have simply given up looking for work each month (e.g., 661,000 people in this category left the labor force in December, 2009) (Bureau of Labor Statistics). If the number of the unemployed is added to the number of those who have stopped looking for work, the real jobless rate climbs to a Great Depression level of 22 percent.

Associated with the record rise in the unemployment rate has been a surge in long-term unemployment, where individuals have been out of work for at least six months. Long-term unemployment reached its highest level on record in August, 2010, as 6.8 million Americans, or 46% of the unemployed, have been officially jobless for six months or longer (Bureau of Labor Statistics). Likewise, the average length of time the typical unemployed person has been looking for work is now a postwar record high of
35.2 weeks (Bureau of Labor Statistics). These unemployment figures mean that for every open job in the U.S., six people are actively looking for work (Bureau of Labor Statistics).

For emerging adults, the prospect of employment, even for those with a college degree, has rarely been this bleak (Elsby et al., 2010). Graduates will enter an economy eerily reminiscent of the Great Depression, where currently 14.7% of their peers under the age of 25 are unemployed and seeking work (Bureau of Labor Statistics). This rate is five percentage points higher than the national rate. While most emerging adults are still hoping to find a job, 23% are not even looking for work (Bureau of Labor Statistics). Though some of these individuals have undoubtedly sought refuge in graduate school, many feel overwhelmed and discouraged by the process of finding a job and have simply given up looking (Queenan, 2010). The number of emerging adults without a job totals 37%, the highest percentage since the 1930s. Though college graduates under the age of 25 fare much better in finding work than those without a college degree (e.g., 9.1 percent unemployed compared to 22.8%), this mark is nearly double what it was in 2007 when the Great Recession began, and is the highest level on record. The reason for increased college-to-career unemployment can be traced to the precipitous drop in available new jobs from 4.4 million in December 2007 to 2.9 million in June 2010 (Bureau of Labor Statistics). As a result, according to the National Association of Colleges and Employers (2010), two million college graduates under the age of 25 are currently unemployed. Of those who graduated in May, 2010, only one-fourth had acquired a job by the following August (National Association of Colleges and Employers, 2010).
Despite the hope for a quick recovery, things may not be getting better any time soon (Bernanke, 2010; Elsby et al., 2010; Krugman, 2010; Zandi, 2010). According to Nobel Prize winning economist Paul Krugman (2010), it may be a decade or more for the economy, specifically the labor market and the unemployment rate, to return to pre-recession levels. Even though the GDP (Gross Domestic Product) measured a mild rebound in economic activity in the second half of 2009, the unemployment rate continued to rise and remains at 9.4% as of December, 2010 (Bureau of Labor Statistics). Economists refer to this tepid rebound as a possible “jobless recovery” (Elsby et al., 2010). There are a few reasons why the unemployment rate may stay high despite a growth in GDP (e.g., structural unemployment; geographical disparities between workers and job openings; changes in trade, technology, and consumer “tastes”; off-shoring of jobs, etc.) (Elsby et al., 2010). With a wide variety of reasons impacting the size of the labor force, the concern will continue to be the persistently high unemployment rates that will plague the U.S. economy for many years to come (Elsby et al., 2010). Support for this position comes from a number of prominent economists (Bernanke, 2010; Elsby et al., 2010; Shapiro, 2010; Zandi, 2010), including Federal Reserve Chairman Ben Bernanke. Bernanke (2010) predicts a sluggish economic recovery and expects unemployment to remain high for years due to slow job creation (2010). Joseph Shapiro (2010), chief United States economist at MFR Inc., also forecasts a stalled recovery: “Our view is that this is going to be a really protracted, drawn out recovery” (p.?). According to Zandi (2010) “…the unemployment rate will be permanently higher, or at least higher for the foreseeable future” (2010).
A quick turnaround in the economy will be difficult to achieve due to the massive number of jobs lost: 10 million. This amount represents the number of working individuals who comprised five percent unemployment (the approximate rate before the recession started, and one that the United States has averaged for a generation) (Phelps, 2010; Shierholz, 2010; Tilman, 2010). With population growth combining with the huge numbers of people who continually come into the job market each year, the economy would need to produce 1.5 million new jobs a year, or 125,000 a month, just to break even (Bureau of Labor Statistics). Even if the economy were to produce jobs that quickly, something which has not happened in over thirty years (Bureau of Labor Statistics), this growth would still not replace the 10 million jobs already lost.

Unfortunately, three years after the Great Recession began, job growth overall is still headed in the wrong direction (e.g., 352,000 jobs were lost in June and July, 2010) (Bureau of Labor Statistics). The long-term prognosis is for unemployment to reach a new floor level of 6.5 percent to 7.5 percent, even after the economy has recovered (Phelps, 2010). Shierholz (2010) predicts a slightly higher rate, noting that if the current recovery follows the similar trajectory of past recoveries, 1991 and 2001, unemployment will still be approximately 8% in 2014. What all this means for emerging adults transitioning into the world of work is that well into the next decade, they will be entering a labor force that “neither wants nor needs them” (Queenan, 2010). “We haven’t seen anything like this before: a really deep recession combined with a really extended period, maybe as much as eight years, all told, of highly elevated unemployment,” (Shierholz, 2010, p. 46).
Thus, with the obvious exception of those making the college-to-career transition during the Great Depression, no generation of college graduates in American history faces more daunting obstacles to their career development. In fact, it could be argued that today’s situation is even worse, since those with a college degree during the Great Depression stood out among the vast majority of the labor force who were without a college degree. Today, almost everybody with a white-collar job is college educated.

Without an advanced or professional degree or years of experience detailed in a resume, there is little to distinguish on paper one college graduate from another (Queenan, 2010). The problem is compounded by each year’s graduating class competing head-to-head with all those from the previous year’s class who are still seeking work. As long as the labor market remains depressed, each year more college graduates will struggle to find meaningful employment.

The world of work has experienced dramatic and, perhaps, permanent changes (Eslby et al., 2010). It has shifted from a place where yearly economic growth produced enough new jobs for the latest college graduates to expect a bounty of high-paying career opportunities (Contomanolis, 2010), to a challenging economic world where jobs will be scarce and, hence, competition for those jobs fierce. Because the working world environment has been irrevocably altered, it is important for research on how to successfully navigate the college-to-career transition keep abreast with changing times. Current literature has not fully explored the relevant themes characterizing emerging adults’ adaptive transitions from college-to-career (Arnett, 2000; Galambos, Barker, & Krahn, 2006; Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002; Murphy et al., 2010; Schulenberg et al., 2004). Hence, research is required to elucidate how college
career counselors might help emerging adults not only survive but thrive in the midst of bleak economic times.

Themes of the College-to-Career Transition Literature

College-to-career transition literature identifies the common challenges encountered by graduates. These challenges can be divided into personal and professional obstacles. Polach (2004) identified a personal challenge as: moving to a new city, making friends, fitting into a social group, finding religious places of worship, and managing expenses. Wendlandt and Rochlen (2008) completed an extensive review of the literature to identify the most common professional obstacles associated with transitioning into a working environment. They created a college-to-career transition model which outlines three stages of development in the transition process: (a) a change in culture associated with the transition between the two different environments of college and work; (b) college graduates’ lack of experience and skills required by employers; and (c) college graduates’ inaccurate expectations about work life (Gardner & Lambert, 1993; Graham & McKenzie, 1995; Perrone & Vickers, 2003).

While most emerging adults face common transition issues, the coping response to these issues varies individually as graduates deal with the changes and challenges associated with the transition from college to an adult working life (Murphy et al., 2010). As Schulenberg and colleagues (2004) pointed out, the college-to-career transition

…can be a turning point: some young people falter and flounder during the transition who come from the ranks of well-functioning adolescents; likewise, some troubled adolescents demonstrate a turnabout through successful experiences with the new opportunities and tasks of this transition (p. 1120).
Thus, despite their backgrounds, some college graduates create and capitalize on opportunities in the midst of the challenges brought on by transition, while others falter. The research on emerging adults sheds partial light on factors associated with a successful college-to-career transition. For example, in a qualitative study designed to explore the sources of adaptability and resilience in the midst of the college-to-career transition, Murphy and colleagues (2010) discovered that recent graduates are more adaptable in their transition into the work environment when they have realistic expectations about the world of work and take a flexible approach to negotiating the associated changes and challenges. Their study also identified the importance of social support and optimism “in the face of difficult transitions, unfulfilled expectations, and overall dissatisfaction with one’s life circumstances” (Murphy et al., 2010, p.181). In several longitudinal studies (Arnett, 2000; Galambos et al., 2006; Schulenberg et al., 2004) on the well-being of emerging adults, researchers have found the transition from college to career greatly assisted by the benefit of a social support network, while the lack thereof resulted in decreased well-being, self-esteem, and overall adjustment (Galambos et al., 2006; Mortimer et al., 2002; Polach, 2004).

The existence of internal, psychological factors which serve as strengths in the college-to-career transition can explain why some graduates swim and others sink. Heppner (1991, 1998) and Heppner and colleagues (1994) identified five psychological resources crucial for a successful career transition: readiness, confidence, control, support, and decision independence. Heppner and colleagues (1994) demonstrated that individuals with greater psychological resources experienced less stress, made more progress in their career transitions, and had a clearer vocational identity. Consequently,
individually identifying the factors related to these psychological resources would provide more insight for graduates hoping to make a successful transition from college to career. The use of Happenstance Learning Theory (HLT) (Krumboltz, 2009) as a theoretical framework for this study sheds light on three potential factors.

Happenstance Learning Theory

Krumboltz (2009) posits that career adaptation is greatly facilitated by engaging in proactive career behaviors. Thus, at least conceptually the psychological resources associated with proaction and performance under stressful circumstances could represent important variables in the college-to-career transition. Proactive career behaviors “include the deliberate actions undertaken by individuals in order to realize their career goals” (De Vos, De Clippeleer, & Dewilde, 2009, p. 763). Research in this area supports Krumboltz’s (2009) claim. For example, De Vos and colleagues (2009) conducted a longitudinal study exploring the impact of proactive career behaviors. They found that emerging adults who proactively searched for a job during the time of graduation were then more positively affected, as young employees, with subjective feelings of career satisfaction, along with an improved satisfaction with their salary level, a more objective measurement (De Vos et al., 2009, p. 774). Moreover, their research suggested that networking during one’s early career directly correlated with objective and subjective career success (De Vos et al., 2009). These findings have their place in the growing literature (Claes & Ruiz-Quintanilla, 1998; King, 2004; Sturges, Conway, Guest, & Liefgooghe, 2005; Sturges, Guest, Conway, & Mackenzie Davey, 2002) which proposes that proactive career behaviors positively affect successful job search (Brown, Cober,
Kane, Levy, & Shalhoop, 2006) and can “lead to the attainment of desired career outcomes and to general feelings of career success” (De Vos et al., 2009, p. 761).

The notion that proactive behaviors result in better career outcomes is, perhaps, the key premise of Krumboltz’s (2009) Happenstance Learning Theory. This is evidenced in HLT’s four fundamental propositions:

1. The goal of career counseling is to help clients learn to take actions to achieve more satisfying career and personal lives—not to make a single career decision. [italics added]

2. Career assessments are used to stimulate learning, not to match personal characteristics with occupational characteristics.

3. Clients learn to engage in exploratory actions as a way of generating beneficial unplanned events. [italics added]

4. The success of counseling is assessed by what the client accomplishes in the real world, outside the counseling session. [italics added]

HLT was specifically created as a theoretical framework to aid people who are seeking satisfying career and personal lives in the midst of the rapidly changing world of work (Krumboltz, 2009). New employment opportunities are now opening up in unexpected directions, and other opportunities are disappearing overnight. Traditional career planning rarely takes into account these continuously shifting circumstances which define today’s work environment. As a result, the traditional career counseling model (trait-and-factor), designed to help a client such as an emerging adult make a career decision, may no longer be adequate to address all the problems facing today’s worker (Krumboltz, 2001, 2004, 2009). As Krumboltz (2001) points out, “making a career
decision for a life’s work makes less and less sense” (Feller, Honaker, & Zagzebski, 2001, p. 220). Since the trait-and-factor approach to career counseling is better suited for an era when a career decision meant a single lifetime choice, its effectiveness may be limited today. For many people the opportunity, or even the desire, for lifetime employment in the same field, let alone the same venue, is becoming rare. Instead, the “new normal” is for individuals to transition from job-to-job, even from career-to-career. Currently, the average college-educated person will have several dozen jobs and multiple careers over the course of his or her lifetime (Krumboltz, 2009).

Unexpected changes and transitions define work in the 21st Century. With this reality in mind, Krumboltz (2009) created HLT to provide clients with techniques to help them adapt and thrive in the midst of shifting circumstances. Accordingly, “the goal of counseling needs to be expanded so that whatever unexpected changes in the workplace occur, clients will be prepared to adapt to them and benefit from them” (Feller et al., 2001, p. 221). Helping clients prepare for “unexpected changes” and how to “benefit from them” is at the heart of Happenstance Learning Theory (Krumboltz, 2009).

Krumboltz (2009) believes that capitalizing on unexpected events is often a major catalyst in an individual’s career transition. Krumboltz and Levin (2004) give numerous real life examples of people whose careers took unexpected, yet positive turns when they took advantage of unforeseen opportunities. Even in their own lives, the authors came to realize their “own careers were a matter of creating and capitalizing on unexpected opportunities” (Krumboltz & Levin, 2004, p. 25). In fact, “unplanned events – chance occurrences – more often determine life and career choices than all the careful planning we do” (Krumboltz & Levin, 2004, p. 20). Hence, learning to capitalize on serendipitous
events can advance a stalled career, or can lead to new opportunities obtained from a different career path. For example, Krumboltz (1998) comments on the findings of a qualitative study on the beneficial impact of serendipitous events on the careers of 13 successful female counseling psychologists (Williams, Soeprapto, Like, Touradji, Hess, & Hill, 1998): “the impact of these unplanned events caused a major change in their career directions, revitalized their career interests, altered their self-concepts, increased self-confidence, and established important contacts with significant professionals” (p. 390).

Growing research on the impact of chance events on career development supports Krumboltz’s position (Betsworth and Hansen, 1996; Bright, Pryor, & Harpham, 2005; Bright, Pryor, Chan, & Rijanto, 2009; Chen, 2005; Hancock, 2009; Hirschi, 2010; Williams et al., 1998). These researchers discovered that a majority of individuals felt their careers were impacted positively by serendipitous events. For example, Hirschi (2010) in his longitudinal study on the impact of chance events on the college-to-career transition found that 65% of participants stated that chance events had either some or a great influence on their career transition. In a study by Bright and colleagues (2005), 69% of the sample reported that chance events had significantly influenced their career decision making.

It is important, however, for people to simply not wait on fate to hand them a serendipitous event. HLT advocates that people “learn to take advantage of unplanned events and even to create some unplanned events of their own” [italics added] (Krumboltz & Worthington, 1999, p. 318). In other words, Krumboltz (2009) believes people can be taught to create their own luck. Although Krumboltz (1998) admits it
might appear an oxymoron to speak of someone creating a beneficial, unplanned event, he suggests that serendipity can be created through engaging in proactive career behaviors. “Serendipity requires action on the part of the recipient – action to create favorable circumstances, action to recognize opportunities when they arise, and action to capitalize on unplanned events in a timely manner” (Krumboltz, 1998, p. 392). Some examples of proactive behaviors people can take to generate new opportunities are: applying for an internship, taking the lead on a class activity or project, networking at a conference, taking the initiative to meet new people, joining clubs, volunteering, interviewing, or trying part-time jobs (Krumboltz, 2009).

Potential Psychological Resources

The use of HLT as a theoretical framework for understanding how to promote a successful college-to-career transition is particularly relevant considering the rapid changes taking place in the world of work. As the emerging adult makes the transition from college to the working world, the challenges to be faced demand more than the traditional career counseling emphasis on a career decision (Krumboltz, 2001, 2009). While having career goals can be helpful, the trait-and-factor approach may not take into consideration the relatively limited opportunities fostered by the Great Recession. Since new college graduates have fewer opportunities before them, proactive emerging adults who are able to create and capitalize on unforeseen opportunities are at a distinct advantage over their less proactive peers (Krumboltz, 2001, 2009). Thus, a more successful transition occurs for the proactive college graduate who creates and capitalizes on unforeseen opportunities. Three variables, established in the literature for their effectiveness in relating to proaction and performance in stressful circumstances, have
been chosen for study. The three variables - human agency, proactive personality, and hardiness – may relate with a successful college-to-career transition.

**Human Agency**

Some emerging adults hit the ground running as they exit college, finding within the psychological resources to take necessary actions to create beneficial unplanned events. Other graduates seem to balk at the task and become immobilized as they leave college (Arnett, 2000; Erikson, 1963; Kenny & Sirin, 2006; Mortimer et al., 2002). Those in the first category, when faced with the challenge of transitioning into the working world, become action-oriented individuals able to create and take advantage of opportunities through their “proaction, initiative, assertiveness, and persistence” (Chen, 2006, p. 132). These individuals demonstrate what is known as **human agency** (Bandura, 2001; Betz & Hackett, 1987; Chen, 2006; Lent, Brown, & Hackett, 2002). Studies involving theory, research and practice have shown human agency plays a vital role in one’s life-career development (Betz, 2001; Betz & Hackett, 1987; Chen, 1999, 2002; Cochran, 1990, 1991, 1997; Cochran & Laub, 1994; Lent, Brown, & Hackett, 1994; Lent et al., 2002; Lent & Hackett, 1987, 1994; Lent, Larkin, & Brown, 1989).

The construct of human agency has its theoretical origins in Bandura’s social cognitive theory (1982, 1986), specifically in the theory’s central tenet of self-efficacy, which has been studied for its impact in the life-career context (Cochran, 1990, 1991, 1997; Cochran & Laub, 1994; Bandura, 2001; Betz, 2001; Betz & Hackett, 1987; Chen, 2002; Lent, Brown, & Hackett, 2002). Self-efficacy represents a powerful predictor of “an individuals’ capacity for and potential in their vocational development trend” (Chen, 2006, p. 132), revealing that the higher the level of self-efficacy a person has, “the more
competent and prepared the person is to handle career tasks and solve career problems” (Chen, 2006, p. 132). Bandura (2001) asserted:

Human agency is characterized by a number of core features. These include intentionality for shaping future plans and courses of action, temporal extension of agency through forethought, self-regulation of motivation, affect, and action through self-influence, and self-reflectiveness concerning one’s functioning and the meaning and purpose of one’s life. These core features of self-directedness enable humans to play a part in their own development, adaptation, and self-renewal. (p. 12)

To explain the notion of human agency in a life-career context, Cochran (1990, 1991, 1997) and Cochran and Laub (1994) suggested that human agency is a combination of human intention and action that result in making things happen. “Action is an exercise of human agency, a person’s power to act” (Cochran, 1997, p. 28). Kush and Cochran (1993) described agentic individuals as people who “decide, plan, act, and, in general, make things happen” (p. 434). In essence, agentic people translate their intentions into concrete actions (Chen, 2006; Polkinghorne, Young, & Borgen, 1990).

Agency then, by definition, reflects a general proactive disposition; agentic individuals “make things happen”. Self-efficacy theory (Bandura, 1997) helps explain why some individuals may be more agentic than others. For example, because actions are pre-shaped in thought, and people anticipate either optimistic or pessimistic scenarios in line with their level of self-efficacy (Bandura, 1997), highly agentic individuals share an optimistic sense of personal competence across a wide range of behaviors. In other words, highly agentic individuals are highly agentic because they have a strong sense of competence that facilitates their motivation to perform in a variety of settings (Scholz, Dona, Sud, & Schwarzer, 2002). This trait, referred to by some as perceived, or general
self-efficacy, has been defined as an individual’s sense of “personal action control or agency” [italics added] (Scholz et al., 2002, p. 242).

Similar to task-specific self-efficacy, general self-efficacy involves a person’s belief in being able to produce a desired effect. The difference is, while self-efficacy is domain specific, general self-efficacy applies across domains to reflect an individual’s overall sense of control over one’s environment. This “can do” cognition can lead to a more active and self-determined life (Scholz et al., 2002). Hence, while self-efficacy helps explain motivation to perform task- or domain-specific behaviors, general self-efficacy explains why some individuals are generally more motivated, engaged, proactive, or simply, agentic, than others. However, it is duly noted, that general self-efficacy is not synonymous with agency. Based on the tenets of Social Cognitive Theory (Bandura, 1997), general self-efficacy reflects the crux of human agency, and explains why some individuals reflect more of the qualities of agency than others, but general self-efficacy does not encompass everything that is meant by the construct of agency.

Proactive Personality

In the case of emerging adults transitioning into the world-of-work, another potentially important resource is represented by proactive personality or proactivity. Bateman and Crant (1993) defined the construct proactive personality “as a dispositional construct that identifies differences among people in the extent to which they take action to influence their environment” (p. 103). Greguras and Diefendorff (2010) described proactive individuals as “dynamic agents who identify and seize opportunities that bring about change in their environments by either improving their current situations or creating new ones” [italics added] (p. 540). Greguras and Diefendorff (2010) also
pointed out that proactive individuals tend to be future oriented (Parker, Williams, & Turner, 2006), self-starters (Frese, Kring, Soose, & Zempel, 1996) who persist with activities until their objectives are achieved (Crant, 2000). According to Bateman and Crant (1993) proactive people “identify opportunities and act on them; they show initiative, take action, and persevere until they bring about meaningful change” (p. 532).

Proactive people are identified by their inclination to engage in proactive coping (Greenglass, 2002). Greenglass (2002) defined proactive coping as a multidimensional and forward-looking coping style that integrates “processes of personal quality of life management with those of self-regulatory goal attainment” (p. 38). Proactive individuals stand in contrast to their reactive peers in three main ways. First, reactive coping individuals tend to deal with stressful events after they’ve already occurred with the aim of minimizing loss (Greenglass, 2002). In contrast, proactive people are future-oriented; they make efforts to build up resources that facilitate promotion of challenging goals and personal development (Greenglass, 2002). “Individuals are not reactive, but proactive in the sense that they initiate a constructive path of action and create opportunities for growth” (Greenglass, 2002, p. 42). Second, reactive people typically engage in risk management, while proactive individuals employ goal management (Greenglass, 2002). In other words, proactive people have a vision. “They see risks, demands, and opportunities in the future, but they do not appraise these as threats, harm, or loss. Rather, they perceive difficult situations as challenges. Proactive coping becomes goal management instead of risk management” (Greenglass, 2002, p. 39). Third, proactive individual are motivated by positive influences derived from perceiving situations as challenging and stimulating. By contrast, the motivation behind reactive coping emanates from risk appraisal, i.e., environmental demands are appraised negatively, as threats (Greenglass, 2002).
Research on the construct of proactive personality has explored its impact in various fields, such as job performance (e.g., Ashford & Northcraft, 1992; Crant, 1995), career success (Bell & Staw, 1989; Erdogan & Bauer, 2005; Seibert, Crant, & Kraimer, 1999), feedback seeking (Ashford & Cummings, 1985), entrepreneurship (Becherer & Maurer, 1999), new employee adaptation (Chan & Schmitt, 2000), leadership (Crant & Bateman, 2000; Deluga, 1998) and job search success (Brown, Cober, Kane, Levy, & Shalhoop, 2006). The results of these studies suggest that proactive personality is likely an important psychological resource in the college-to-career transition.

**Hardiness**

The third potential psychological resource for emerging adults in the college-to-career transition is personality hardiness. The construct of hardiness has emerged over the last 25 years of research as three interrelated attitudes: *commitment, control, and challenge*. These 3C’s, as they’re known, work as one construct to facilitate resilience under pressure by turning stressful circumstances resulting from potential disasters into growth opportunities (Kobasa, Maddi, & Kahn, 1982; Maddi, 1994, 2002; Maddi & Kobasa, 1984). A strong commitment attitude keeps an individual involved with people and events despite mounting stressors, which could make the person who is less committed withdraw and sink into alienation. Those with a strong control attitude believe their efforts applied to a difficult circumstance will influence the ensuing outcome. They don’t perceive themselves as powerless in the face of adversity. Lastly, those with a strong challenge attitude see stressful life changes as part of normal living. They embrace difficult transitions as opportunities for growth, rather than insist on easy comfort, security, and routine (Maddi, 2008; Maddi et al., 2009a; Maddi et al., 2009b).
As they work together, it’s clear “these attitudes of hardiness have been shown to constitute the existential courage to recognize (rather than deny) stresses and to be motivated to try to turn them to one’s advantage” (Maddi, 2008, p. 563).

Research has confirmed that hardiness maintains and enhances health under stressful circumstances. In a diverse range of stressful contexts, ranging from life-threatening events in military combat and peace-keeping missions (Bartone, 1999), to dealing with culture shock (Kuo & Tsai, 1986), or working abroad (Atella, 1989), to handling the everyday pressures and demands of school and work (Maddi, 2002), hardiness has been shown to buffer the impact of stress, resulting in decreased mental and physical illness symptoms.

Accumulated findings show that hardiness improves performance under stress. For example, positive relationships have been found between hardiness and: (1) basketball performance among varsity high school basketball players (Maddi & Hess, 1992); (2) success rates in officer training school (Florian, Milkulincer, & Taubman, 1995) and in firefighter training (Maddi, Harvey, Resurreccion, Giatras, & Raganold, 2007); (3) leadership behavior among West Point Military cadets (Bartone & Snook, 1999); (4) retention rate and grade point average among college students (Lifton, Seay, & Bushke, 2000; Maddi, Harvey, Khoshaba, Fazel, & Resurreccion, 2009); and (5) speed of recovery to baseline functioning following culture shock (Atella, 1989; Kuo & Tsai, 1986). Other research (Maddi, 1986, 1994, 1997, 2002; Maddi, Wadhwa, & Haier, 1996; Weibe & McCallum, 1986) has found that hardiness is positively related to problem-solving coping, socially supportive interactions, and beneficial self-care efforts.

Purpose of the Study
In considering their effectiveness, it would appear that human agency, proactive personality, and hardiness represent important psychological resources in the college-to-career transition. For example, research demonstrates that agentic, proactive, and hardy individuals are adaptive and resilient; qualities which help people survive and thrive under stressful and shifting circumstances (Krumboltz, 2001, 2009; Murphy et al., 2010). By fostering these factors in emerging adults, career counselors in university settings could set new graduates on a positive and productive trajectory into adulthood. However, there is a lack of empirical evidence showing the relationship among human agency, proactivity, hardiness, and the college-to-career transition. Thus, the purpose of this study is to explore whether human agency, proactivity, and hardiness predict a successful college-to-career transition, measured by the Confidence and Readiness factors on the Career Transition Inventory (Heppner, 1991; Heppner, Multon, & Johnston, 1994). The following research questions guide this quantitative study:

1. What is the relationship between hardiness, proactive personality, human agency, and the psychological resources of Readiness and Confidence as measured by the Career Transition Inventory (CTI)?

2. Does hardiness predict the psychological resources of Readiness and Confidence as measured by the CTI?

3. Does proactive personality predict the psychological resources of Readiness and Confidence as measured by the CTI?

4. Does human agency predict the psychological resources of Readiness and Confidence as measured by the CTI?
Significance of the Study

The relevance of this study has a special importance to university career counselors and counselor educators. The dominant trait-and-factor model has fostered too little attention among career professionals to equipping emerging adults with the psychological resources needed to successfully navigate the college-to-career transition (Krumboltz, 2009; Mitchell, Levin, & Krumboltz, 1999; Murphy et al., 2010). This study could provide pivotal information to challenge the status quo division between personal and career counseling, as well as to provide a useful roadmap for preparing emerging adults for their upcoming transitions. For example, with the knowledge that college graduates with higher levels of human agency, proactivity, and hardiness are better prepared psychologically for the college-to-career transition, counselor educators could place greater emphasis in their career counseling training on promoting the development of the whole person. Additionally, career counselors could employ proven training methods to enhance these traits and build up these factors across the spectrum of individuals (Chen, 2006; Krumboltz, 2009). Consequently, emerging adults would be better prepared to adapt and to thrive despite the unpredictable changes and challenges which have resulted from the Great Recession.

Definitions

*Career adaptability* is “the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions” (Savickas, 1997, p. 254).
College-to-career transition “means any career-related event or nonevent (i.e., an event that was supposed to happen, but did not happen) resulting in changes in roles, relationships, routines, or assumptions. Some of the examples are:

(a) change of a career goal or a major;
(b) attainment, change, or loss of a part-time/full-time job;
(c) change of the course of action to achieve a career goal; or
(d) graduation from school/college” (Yang & Gysbers, 2007, p. 159)

Emerging adulthood is a phase of the life span between adolescence and full-fledged adulthood, extending approximately from the ages of 18 to 25.

General self-efficacy facilitates goal-setting, effort investment, persistence in face of barriers and recovery from setbacks (Schwarzer, 2009). According to Tong and Song (2004), “general self-efficacy aims at a broad and stable sense of personal competence to deal effectively with a variety of stressful situations” (p. 637).

Human agency is “a combination of human capacity and potential that assists a person to exercise some control over the nature and quality of his or her own life, including aspects such as forethought; self-regulation of motivation; affect; and action through self-influence, self-awareness, meaning, and purpose in life” (Chen, 2006, p. 131)

Hardiness is “a composite of the interrelated attitudes of commitment, control, and challenges that provides the existential courage and motivation to turn stressful
circumstance from potential disasters into growth opportunities” (Maddi et al., 2009; p. 292)

*Proactive individuals* are “dynamic agents who identify and seize opportunities that bring about change in their environments by either improving their current situations or creating new ones” [italics added] (Greguras & Diefendorff, 2010, p. 540).

*Proactive career behaviors* “include the deliberate actions undertaken by individuals in order to realize their career goals” (De Vos, 2009, p. 763).

Bateman and Crant (1993) defined the construct *proactive personality* “as a dispositional construct that identifies differences among people in the extent to which they take action to influence their environment” (p. 103).

*Psychological resources* are the perceived resources – readiness, confidence, control, support, and decision independence - that illustrate self-appraisal of the adaption to the career transition (Heppner, 1991).

(a) *Readiness* represents the perceived motivation to progress in the career transition

(b) *Confidence* reflects self-efficacy related to successful career transition

(c) *Control* reflects the individual’s perceived control over the career transition

(d) *Support* represents perceived available social support for the successful career transition
(e) *Decision independence* indicates a personal perception of autonomy in the career transition decision.
CHAPTER II

LITERATURE REVIEW

Unique challenges face today’s emerging adults as they transition from college into the world of work. The depressed economic environment created by the Great Recession has produced an inadequate supply of new jobs to support the tens of thousands of new graduates entering the work force each year (Elsby et al., 2010; Phelps & Tilman, 2010; Shierholz, 2010; Zandi, 2010). This new economic reality also poses unique challenges for career counselors as they advise their students on ways they can adapt and thrive personally and professionally during these bleak economic times. Krumboltz (2009) and other career-related scholars (e.g., Murphy et al., 2010; Patton & McMahon, 1999; Savickas, 1993, 1996; Wendlandt & Rochen, 2008) have criticized the dominant trait-and-factor paradigm of career development facilitators, arguing that the problem-solving approach of matching people with particular jobs and careers is unlikely to meet the needs of clients living in today’s complex world.

Chapter 2 of this dissertation will begin with a critique of the commonly used trait-and-factor approach, and how it fails to prepare emerging adults for the challenges of today’s world-of-work. This will be followed by an overview of Krumboltz’s evolving career theory, including his most recent iteration, and the theoretical framework for the current study: Happenstance Learning Theory (HLT). Next, the literature concerning the three constructs chosen as independent variables in the current study – human agency, proactive personality, and hardiness – will be examined. Finally, the second chapter will end with a description of the emerging adult population, including its major tenets and the social forces that created this new developmental stage.
Criticisms of the Trait-and-Factor Approach

Krumboltz (1994) observed, “Trait-and-factor theory…paints a picture, creates an image, and draws a map that oversimplifies the complexities of helping people with a wide range of career problems” (p. 15). The oversimplification of the trait-and-factor career counseling approach was humorously described by Crites (1981) as “three interviews and a cloud of dust” (p. 49). Patton and McMahon (1999), voicing a common concern among career development scholars, argued that the trait-and-factor theory “does not help us to understand the increasingly complex issues brought about by today’s world of work, such as job-related phobias, sexual harassment, job burnout, dual-career families, unemployment, and job seeking” (p. 228).

Curiously, despite the heavy criticism toward the trait-and-factor approach to career counseling, this approach finds itself in the unusual position of being both much maligned and at the same time widely used. This is an example of theory not staying abreast of change. Occupational choice was once the predominant issue clients brought to their career counselors (Patton & McMahon, 1999). In days past, most people only made one or two employment decisions in a lifetime; thus, trait-and-factor approaches were appropriate for helping clients choose a stable, almost permanent vocation. However, times have changed dramatically. In today’s world, people may have dozens of jobs and numerous professions. Further, occupational choice is only one of a myriad of concerns for individuals as they negotiate their career development. Consequently, in using Krumboltz’s (1994) map metaphor of career counseling, the trait-and-factor approach now only occupies a rather small section of the map. The new map, one that adequately illustrates the complexity of today’s career development, points to the need
for career counseling facilitators to adopt more sophisticated approaches to career
counseling. This point was made by Savickas (1993), who urged that career counseling
“keep pace with our society’s movement to a postmodern era” (p. 205). While the
counseling profession has moved into a “fourth wave”—that is, the constructivist
approach which includes an emphasis on multicultural awareness, knowledge, and skills
—career counseling has remained based in the more one-dimensional problem-solving
mode of the “second wave” (O’Hanlon, 1993, p. 3).

Understanding the complexities of modern career development is exemplified in
the debate over the fusion of career and personal counseling (Hackett, 1993; Krumboltz,
1993; Manuele-Adkins, 1992; Subich, 1993). This debate in the early 1990s represented
the first major challenge to the problem-solving traditions of career counseling, and
highlighted the need for career counselors to adapt their practices to maintain their
relevancy (Patton & McMahon, 1999). A major outcome of this discussion was a
growing realization among career counseling scholars that trait-and-factor separates
career issues from personal concerns, resulting in a failure to help clients face many other
career problems. As Krumboltz (1993, p. 144) has observed, trait-and-factor approaches
do nothing to equip clients in the following areas:

*Locus of Control:* Who is in charge of my career?

*Career Obstacles:* How can I hope to achieve my career goals when I face so
many obstacles?

*Job Search Motivation:* How can I keep looking for a job in the face of real and
potential rejection?

*Job Relationships:* How can I learn to get along with my boss and co-workers?
Job Burnout: What should I do when I am no longer satisfied with my present job?

Occupational Advancement: How can I become more successful in my career?

Retirement Planning: How can I arrange a satisfactory transition to my retirement?

The personal and the career blend together in these problem domains. As Savickas (1996) stated, “career is personal” (p. 212). Thus, approaches which inherently divide the personal from the career create a superficial divide within the individual. Burlew (1996) explained, “There is no way to separate issues with which clients come into counseling because they’re housed in one body, one mind, and one soul.” He further added, “You can’t pull a person apart and dissect mind and spirit issues as clearly as you can separate, for example, the heart from the rest of the body” (p. 375). Imbimbo (1994) suggested that the division between career counseling and personal counseling may actually be more the counselor’s perception of his or her role than an actual division in the client. Krumboltz (1976, 1979, 1993, 1998, 2004, 2009) has argued for many years that a distinction between career and personal counseling is an illusion. Retirement planning, for example, according to Krumboltz (1993), “is not a simple case of learning some new hobbies. Giving up one’s work environment requires a profound shift in values and relationships. It can pose emotional problems just as severe as those triggered by divorce” (p. 144-145). Because career issues affect personal issues, and vice versa, the integrated nature of personal and career problems mandates that career counselors broaden their range of interventions by taking on other counseling roles. In fact, according to Krumboltz (1993, 1996, p. 59), because career counseling involves personal
counseling, career counseling is more complex, and requires more skill and interventions than personal counseling alone:

“Career counseling is the most complex type of counseling because the counselor must possess all the skills of other counselors and, in addition, know employment trends, methods of preparing for various work roles, career assessment techniques, and methods for changing work-related behavior, emotions, and cognitions”, and thus, “career counseling is, in fact, the most complex, fascinating, and important form of counseling”.

Overview of Krumboltz’s Social Learning Theories

Krumboltz (1976) was one of the earliest career theorists to merge personal and career counseling into a single theoretical approach. His social learning theory of career decision making (Krumboltz, Mitchell, & Jones, 1976) was the first adaption of Bandura’s (1977) social learning theory to the career field. A significant restatement of the theory was published in 1979 (Krumboltz, 1979). Krumboltz (1979) referred to his theory as Social Learning Theory of Career Decision Making (SLTCDM). Since that time, Krumboltz has amended his theory on three occasions: in 1996 (Krumboltz, 1996), renaming it the Learning Theory of Career Counseling (LTCC); in 1999 (Mitchell, Levin, & Krumboltz, 1999), Planned Happenstance Theory (PHT); and lastly, in 2009 (Krumboltz, 2009), Happenstance Learning Theory (HLT). The changes to the theory’s name reflect a significant re-focusing of the theory’s goals: from explaining the factors that influence career decision-making to the importance of facilitating client actions in order to generate unplanned opportunities. However, each theory shares a foundation on the tenets of social learning theory (Bandura, 1977).

The addition of social learning theory as a model of career development extends trait-and-factor theory by including the factors which shape career choices with the
process used to reach them. Most theorists champion this inclusion as foundational to understanding career goals, because social learning theory acknowledges the various factors that influence the career decision-making process. For example, Holland (1994) suggested that “the most promising integration would be to insert the Krumboltz learning theory into every other vocational theory” (p. 45). Holland also said (quoted in Minor & Burtnett, 1983) that Krumboltz’s theory “fills in the cracks in my typology.”

Social learning theory, which is based on learning principles, posits that career decision making results from individuals learning about themselves, their preferences, and the world of work through direct and indirect experiences. Learning experiences consist of contact with and cognitive analysis of positively and negatively reinforcing events. Krumboltz (1976, 1979, 1996, 1999, 2009) believes that as people live their lives and are exposed to a unique pattern of learning experiences, they learn about themselves (i.e., their values, preferences, and skills) and the nature of the employment world. From these observations they make decisions concerning which careers they believe are appropriate for them. As a result, individuals take action to reach career goals based on these knowledge- and skill-based experiences. For example, as a result of being born into a particular family setting, individuals are exposed to a limited number of learning opportunities. The social, cultural, economic, geographic, and political circumstances that comprise an individual’s environment make available vastly different learning opportunities for different people. As a result, each person will perceive a small range of possibilities because each person has been exposed to a relatively limited number of opportunities. In addition, the consequences of learning differ as well. For equal performance, some children, based on cultural and social group differences, may receive
generous praise and support, whereas other are abused or ignored. Thus, the
“…maximum career development of all individuals requires each individual to have the
opportunity to be exposed to the widest array of learning experiences, regardless of race,
gender or ethnic origin” (pp. 167-168).

four categories containing factors which influence an individual’s career decision-making
process: genetic endowment and special abilities, environmental conditions and events,
learning experiences, and task approach skills (Mitchell & Krumboltz, 1990). Krumboltz
(1979, 1996, 1999, 2009) posits that each of these factors plays a role in all career
decisions, but the combination of interactions between the factors produces the multitude
of differing career choices made by individuals. The first category, an individual’s
 genetic endowment and special abilities, includes gender, ethnicity, appearance, and
ability or disability. Krumboltz believes that certain talents, such as musical and artistic
ability, are only developed if the environment exposes the individual to favorable
opportunities. For example, a young girl with artistic ability raised in a low-income
family may be unable to develop her talent because of the prohibitive costs of art-related
materials and related tutoring.

Thus, the second category of influence, environmental conditions and events,
comes into play. Krumboltz (1979) listed 12 factors in this area, some planned and some
unplanned, which fall either in the realm of human action (social, cultural, political or
economic) or are experienced through natural forces (location of natural resources or
natural disasters). When these factors occur, they naturally influence an individual’s
career preferences, skills, plans and activities. These factors are most often outside the individual’s control. They include:

(1) number and nature of job opportunities, (2) number and nature of training opportunities, (3) social policies and procedures for selecting trainees and workers, (4) monetary and social rewards of various occupations, (5) labor laws and union rules, (6) natural disasters, (7) availability of and demand for natural resources, (8) technological developments, (9) changes in social organization, (10) family training experiences and social and financial resources, (11) the educational system, and (12) neighborhood and community influences. (Mitchell & Krumboltz, 1996, p. 238)

Learning experiences represents the third category of influential factors. As understood, most individuals have unique learning experiences in their lifetime which lead them down related career paths. These learning experiences come in two forms, instrumental and associative. Instrumental is a direct learning experience in which an individual acts on the environment to generate a positive response (based on operant conditioning). Krumboltz (Krumboltz 1979; Mitchell & Krumboltz, 1996) explained that antecedents – genetic endowments and special abilities, the environmental conditions, and the characteristics of a particular task – interact with the individual, who then responds and receives consequences (positive or negative) from the environment. As in the previous example, some discover at an early age they have certain abilities, such as musical talent. The environment will inevitably have either a positive or a negative impact on the fulfillment of these talents, perhaps ultimately affecting career choices. For each individual, the environment interacts with personal characteristics and impacts the opportunity to make career decisions.

Associative learning experiences (ALE) accompany instrumental learning. ALE is based on a classical conditioning model concerned with how external stimuli affect the
development of positive or negative attitudes and beliefs about particular occupations. For example, children growing up in an inner-city, low-income environment may learn positive messages about athletes and negative messages about the business world. As these messages are associated with occupation, their positive or negative impact can affect the career decision making process.

Finally, the fourth category, task approach skills, is a result of interactions between the first three categories of influence. These skills include performance standards and values, work habits, perceptual and cognitive processes, mental sets, and emotional responses. Mitchell and Krumboltz (1996) acknowledge that it is not fully understood how previously experienced factors interact to produce task approach skills, but it’s clear they affect future decisions and their and results. Task approach skills are therefore factors that influence outcomes, and are outcomes themselves.

The complex interaction between the four categories and their factors produces four outcomes. The first outcome is self-observation generalizations, or simply beliefs about oneself. They usually include perceptions of intellectual aptitude, artistic talent, or dexterity. These generalizations develop over time and are the result of environmental feedback. The second outcome is worldview generalizations, which represent a person’s beliefs and assumptions about the nature of external reality. These observations may be accurate or inaccurate and, like self-observation generalizations, are derived from positive or negative learning experiences. A third outcome, as discussed above, is task approach skills. Mitchell and Krumboltz (1996) defined outcome task approach skills as “cognitive and performance abilities and emotional predispositions for coping with the environment, interpreting it in relation to self-observation generalizations, and making
covert and overt predictions about future events” (p. 246). Applied to career decision
making, individuals survey the generalizations they’ve made about themselves and the
world of work and use specific skills relevant to the career-planning process.

Finally, the fourth outcome is action. These behaviors include engaging in
various activities that allow entry into a career, such as “applying for jobs or to schools or
training programs, seeking promotions, and changing jobs or majors” (Mitchell &
Krumboltz, 1996, p. 161). This last outcome, according to Krumboltz (1993, 1996,
2009), is critical for achieving career satisfaction. In fact, the distinguishing aspect of
Krumboltz’s theories (1996, 1999, 2009) has been an emphasis on facilitating action.
Krumboltz (1996, 1999, 2009) suggests that a central focus of career counseling should
be empowering clients to take action, since it’s through creating new learning
experiences that individuals expand their interests and skills, as well as make invaluable
networking connections for gaining employment (Krumboltz, 1996, 2009). As
Krumboltz (1996) highlights in his theory, the importance of action on the career
development process represents a distinct contrast with classic trait-and-factor
approaches:

Clients need help in taking effective action. The task of finding a suitable niche
in the world of work is a long process of trial and error. It is understandable that
clients procrastinate and develop zeteophobia, the fear of exploring future
possibilities, when facing the overwhelming prospect ahead. Trait-and-factor
theory must take much of the blame for this inaction because there is nothing in
the theory that states that clients need to take action. When career counselors
apply trait-and-factor theory, they collect information about the client, make
occupational informational available, and then either recommend or encourage the
client to state the best possible match. The job is then complete, according to
classic trait-and-factor theory. The occupational match is the end product
(Krumboltz, 1996, p. 58).
In 1996, Krumboltz observed that his earlier work (e.g., 1976, 1979, 1980, 1990) offered little practical guidance for career counselors. His theories, up to that point, were less a road map for counseling practice and more a scholarly explanation of the various environmental factors that influence the career decision-making process (Krumboltz, 1996). As a result, in 1999, Krumboltz altered his theory again, this time making it more applicable to real-world counseling. In the process, he shifted the focus of his theory from career decision-making to facilitating client action as a means of creating happenstance events to improve employment opportunities. The outcome is Krumboltz’s (1999) Planned Happenstance Theory (PHT), based on the notion that unplanned opportunities play a major role in everyone’s career. Although chance events are, by definition, impossible to predict with any accuracy, Krumboltz (1999) suggests that events attributed to chance are often indirect outcomes of effective behavior. In other words, while individuals may be uncertain which specific opportunities occur from their actions, effective actions will usually create a beneficial result. Thus, rather than attempt to eliminate the role of chance in career counseling (e.g., a goal of trait-and-factor approaches), Krumboltz (1999, p. 115) suggests that “career counselors can teach their clients to act in ways that generate a higher frequency of beneficial chance events on which clients can capitalize”. Hence, the goal of PHT is principally to encourage clients to be proactive, thus increasing the probability of achieving personal and career satisfaction.

Happenstance Learning Theory

behavior is the product of countless numbers of learning experiences made available by both planned and unplanned situations in which individuals find themselves. The learning outcomes include skills, interests, knowledge, beliefs, preferences, sensitivities, emotions, and future actions” (Krumboltz, 2009, p. 135). HLT, like its predecessor, focuses heavily on the importance of generating and capitalizing on chance opportunities.

“Every situation can be seen as presenting potential opportunities if individuals can recognize them and then take action to capitalize on them” (Krumboltz, 2009, p. 136). Citing a personal example of how his own career development has evolved by way of capitalizing on happenstance, Krumboltz (2009) stated:

Over the course of my lifetime so far, I personally have been employed as a gardener, magazine sales person, chauffeur, farmer, drill press operator, aluminum foundry worker, cereal packager, railroad loader, elevator operator, chemist’s assistant, pancake taster, book publisher’s assistant, radio announcer, teaching assistant, tennis coach, camp counselor, career counselor, high school counselor, algebra teacher, military officer, test construction specialist, research psychologist, professor, and author. I did not, and never could have, predicted this pattern of employment. And who knows what I will do next?

His anecdotal description outlines a key postulation of HLT, notably that career paths often take unpredictable twists and turns as people create and respond to unforeseen opportunities. Thus, Krumboltz (2009) argues, since careers are typically defined by their uncertainties, it is appropriate for career counselors to adopt a counseling approach that views unplanned events as both inevitable and desirable. HLT (2009) presents four fundamental propositions to help career counselors as they guide and encourage their clients to take effective action toward meaningful employment, while making the most of unplanned opportunities:
**Proposition 1:** The goal of career counseling is to help clients learn to take actions to achieve more satisfying career and personal lives—not to make a single career decision.

**Proposition 2:** Career assessments are used to stimulate learning, not to match personal characteristics with occupational characteristics.

**Proposition 3:** Clients learn to engage in exploratory actions as a way of generating beneficial unplanned events.

**Proposition 4:** The success of counseling is assessed by what the client accomplishes in the real world outside the counseling session.

While Krumboltz (1996, 1999, 2009) emphasizes facilitating client action, he is also realistic about the enormous challenges that often face clients as they explore new possibilities. Creating a satisfying niche in the world of work can be a “long process of trial and error” (Krumboltz, 1996, p. 58). Understandably, some clients are overwhelmed by this process, especially after encountering setbacks or rejection. For these individuals, discouragement may result in fewer attempts to generate opportunities. Hence, Krumboltz (1996, 1999, 2009) posits an important, yet often overlooked, role of career counseling: promoting the development of clients’ psychological resources. As Krumboltz (1996, 1999, 2009) points out, clients can have crystallized career plans, but if they lack the resources to adapt to change and transitions, they’ll be unlikely to achieve personal and career satisfaction. A focus on real-world preparation is reflected in Proposition 4 of HLT: The success of counseling is assessed by what the client accomplishes in the real world outside the counseling session. Consequently, HLT promotes using personal counseling interventions to help clients develop specific
psychological factors that will assist them in remaining proactive and resilient during challenging times.

The real world focus of HLT makes it an ideal theoretical framework for career counselors attempting to help emerging adults who are transitioning from college into today’s depressed work force. Though the economy has shown signs of a weak recovery, economists currently see it as a “jobless recovery.” As a result, not since the years of the Great Depression have there been so few opportunities for graduating college students, and it is questionable whether this situation will change significantly in the foreseeable future. Considering the relative scarcity of job openings, it becomes imperative for career counselors to use an approach which promotes action that creates and capitalizes on opportunities. Proactive individuals who can create their own “luck” are at a distinct advantage over peers who fail to engage in beneficial career behaviors. Thus, the hypothesis is that variables which have been identified in the literature for their effective performance under stressful circumstances will be important psychological resources during the college-to-career transition. The three documented variables chosen for study are human agency, proactive personality, and hardiness.

Human Agency

The construct of human agency was originally described by Bakan (1966) as the condition of being a differentiated individual. It is associated with an individual's striving to separate from other individuals, to master his or her surroundings, and to exert power and influence that enhance this differentiation (Bakan, 1966). Since Bakan’s writings, many social sciences have emphasized human agency. However, because an individual’s internal world is complex, the explanations of personal agency reflect a
range of psychological theories. Examples include theories of action control (Ajzen, 1985), action identification theory (Vallacher & Wegner, 1985, 1987), motivation (Brim, 1993), locus of control reinforcement (Rotter, 1966), learned optimism (Seligman, 1991), and self-efficacy (Bandura, 1997). In sociology, Blau (2001) linked human agency to the concept of “social actor.” The individual is viewed as an autonomous actor in society, distinguishable from other people and from the social context. A fundamental principle in life course theory (Elder & Johnson, 2002) is that human agency shapes people’s lives.

Despite their inherent differences and emphases, each of the theories mentioned above is “concerned with a person’s conviction that he or she can exercise control over events, select or alter situations in desirable ways” (Kush & Cochran, 1993, p. 434). Kush & Cochran (1993) identified agents as individuals “who can decide, plan, act, and in general, make things happen” (p. 434). Hence, “a person with a strong sense of agency is one who experiences the meaningfulness and actuality of his or her capacity to bring about desirable change” (p. 434). Agency includes motives such as autonomy, achievement, and control (Horowitz et al., 2006). Chen (2002) noted that agents focus on utilizing their personal strengths and capacity to achieve results based on individual drives and goals. Also, according to Amundson (1995), agents respond proactively to life’s circumstances and exercise control over their affects. Similarly, Bandura (2006) stated that “to be an agent is to influence intentionally one’s functioning and life circumstances” (p. 164). By contrast, a person with a weak sense of agency fails to exercise agency, nurturing instead a “sense of being a patient who can but react and undergo, yielding to force of circumstance” (p. 434). In layman’s terms, these individuals view themselves as victims of circumstances. Bandura (2002) also noted that
personal agency operates within a broad network of sociostructural influences.
Individuals act, but they often do so with the help and support of others. Hence, Bandura distinguishes among three modes of agency: “direct personal agency, proxy agency that relies on others to act on one’s behest to secure desired outcomes, and collective agency exercised through socially coordinative and interdependent effort” (Bandura, 2002, p. 1).

This last mode of human agency, collective agency, has garnered some attention by Feminist thinkers for its challenge to a traditional Western individualistic understanding of agency (Bruna & Colleen, 1998; Ruiz, 1998). Some feminists have noted that feminism walks a tight rope between espousing the need for personal agency to change society’s institutions in order to create better opportunities for all, with the understanding that social controls powerfully influence individual behavior, as well as, limit opportunities. Hence, feminists find themselves in the unique position of arguing for conceptually conflicting sources of behavioral control, namely, the power of the personal agent to create institutional change versus the power of the institution to oppress the individual (Ruiz, 1998). Collective agency has been looked at to fill in the gap by explaining agency outside of personal locus of power.

Markus and Kitayama (2003) considered cultural differences in models of personal agency. They challenged the notion that Western styles of independence tend to be associated with higher levels of individual agency than non-Western styles of interdependence, and that behaving interdependently stifles individual initiative and the development of personal efficacy. The authors (Markus & Kitayama, 2003) suggest that these assumptions rest on European and middle-class American construals that define agency solely in terms of autonomy, self-expression, freedom, and individual choice.
Other forms of agency, or ways of being an actor in the world, focus more on interpersonal, social, and relational styles. They point out that these other forms of agency are found not only in society’s labeled “collectivist”, but also in working class cultures in the West.

The notion of human agency in the career development context is rooted in, and has grown out of, Bandura’s (1977, 1986) notion of direct personal agency. Specifically, career human agency is a component of one of the key tenets in Bandura’s theory, the concept of self-efficacy. Self-efficacy expectations, according to Bandura (1986), are “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performance” (p. 391). Notable contributions to this notion of self-efficacy were first made by Betz and her colleagues (Betz, 1992; Betz & Fitzgerald, 1987; Betz & Hackett, 1986, 1987; Hackett, 1995) in their research studies on the role and function of self-efficacy in the realm of career development and career counseling.

One of the earliest studies on human agency was conducted by Hackett, Betz, and Doty (1985) in their research on the behavioral competencies important to the career development of professional women. The Hackett et al. (1985) study was the first to denote agency as a separate process domain. Their research revealed that successful women routinely displayed certain career advancement skills; a term that was later more descriptively titled by Hackett (1987) as agentic behaviors. The concept of behavioral agency was deemed to summarize “a constellation of behaviors that described the tendency of the individual to behave in ways that created rather than simply responded to educational and career opportunities” [Italics added] (Betz & Hackett, 1987, p. 300).
These authors proposed certain decisive characteristics, such as being pro-active, taking initiative, being assertive and having persistence, as elements contained within the term *agency*. Each of these represents an individual’s ability to affect his or her environment, relevant to pursuing vocational opportunities. Thus, according to Betz and Hackett (1987), agency plays a critical role in predicting one’s capacity and potential for career development. The higher the level of agentic qualities, or career self-efficacy, the more capable a person will be in handling career tasks and in solving related problems. Betz (2001) suggested that self-efficacy represents a foundational conceptual understanding of the role of agency in career development and counseling.

Since Betz and her colleagues first identified the construct of human agency in the career development context, much interest has been generated to demonstrate just how germane and applicable human agency is to academic and career growth (e.g., Betz, 2001, Betz & Hackett, 1987; Chen, 1999, 2002; Cochran, 1990, 1991, 1997; Cochran & Laub, 1994; Lent, Brown, & Hackett, 1987, 1994; Hackett, Betz, Casas, & Rocha-Singh, 1992; Lent, Larkin, & Brown, 1989). Research since then includes the Hackett et al (1992) study involving engineering students, and whether social cognitive factors predicted their academic achievement. Results of the study indicated that out of factors which include vocational interests, outcome expectations, academic ability, social support and perceived stress, self-efficacy was the strongest indicator of college academic achievement. In a similar study, Brown, Lent and Larkin (1989) discovered that self-efficacy beliefs significantly influenced academic achievement outcomes. A few years earlier, these same authors (Lent, Larkin, & Brown, 1986) found that self-efficacy
contributed significantly to a person’s persistence and self-determination in reaching academic and career goals.

The idea that self-efficacy promotes adaptive strengths is supported by further research linking human agency to psychological well-being and a problem-focused coping style. Studies investigating the relationship of agency to both problem-solving style and psychological distress have found that high-agentic individuals, compared to low-agentic individuals, reported lower scores on depression, anxiety, and strain (Long, 1989; Nezu & Nezu, 1987). These studies also found that high-agentic individuals report greater problem-focused coping, greater preventative coping, and greater self-appraised problem-solving effectiveness than low-agentic individuals. In similar research, self-efficacious individuals were found to be more prone to take actions to overcome perceived barriers than shrink away from them. Though perceived barriers can have a dramatic impact on an individual’s career planning and implementation (Constantine, Wallace, & Kindaichi, 2005; McWhirter, 1997), the degree to which contextual factors influence career development may depend significantly on an individual’s perceptions of his or her ability to overcome those barriers (i.e., self-efficacy) (Bandura, 1997; Hackett & Byars, 1996; Lent et al., 2000; Swanson & Woitke, 1997).

In addition, self-efficacy represents how people judge their capability to organize and execute courses of action (Bandura, 1977, 1982, 2002, 2006). Ultimately, the stronger an individual’s efficacy belief, the more likely the person is to initiate, persist, and perform successful behaviors within a domain. In effect, social cognitive theory (Bandura, 1986) asserts that self-efficacy is the most proximal regulator of human cognitive, motivational, affective, behavioral, and decisional processes. As a result, it
forms the basis of many phenomenological aspects of a person’s life, including their goals, objectives, purposes, values, attitudes, interests, and other cognitive and emotional variables (Bandura, 2002). Therefore, self-efficacy contributes to the subjective foundation upon which human intentionality derives its agenda and focus of action. Intentionality, in turn “shapes and transforms one’s acts and activities in the life course, including vocational and career aspects of life” (Chen, 2006, p. 133).

Though self-efficacy is commonly understood to be domain-specific, some researchers have also conceptualized a general sense of self-efficacy (Choi, 2005; Jerusalem & Schwarzer, 1992; Luszczynska, Gutiérrez-Doña, & Schwarzer, 2005; Tong & Song, 2004). General, or perceived, self-efficacy reflects a global confidence in one’s coping ability across a wide range of challenging or novel situations. According to Tong and Song (2004), “general self-efficacy aims at a broad and stable sense of personal competence to deal effectively with a variety of stressful situations” (p. 637). Judge, Erez, and Bono (1998) described GSE as the “individuals’ perception of their ability to perform across a variety of different situations” (p. 170). Eden (2001) defined it as “one’s belief in one’s overall competence to effect requisite performances across a wide variety of achievement situations”. Chen, Gully, and Eden (2001) argued that “GSE captures differences among individuals in their tendency to view themselves as capable of meeting task demands in a broad array of contexts.” Finally, Schwarzer (2009) described the value of perceived self-efficacy in terms of its positive influence on coping and adaptation to all kinds of stressful life events:

The construct of Perceived Self-Efficacy reflects an optimistic self-belief (Schwarzer, 1992). This is the belief that one can perform a novel or difficult tasks, or cope with adversity -- in various domains of human functioning. Perceived self-efficacy facilitates goal-setting, effort investment,
persistence in face of barriers and recovery from setbacks. It can be regarded as a positive resistance resource factor. [Italics added]

Though some researchers eschew the validity of the GSE construct (e.g., Stajkovich & Luthans, 1998; Stanley & Murphy, 1997), arguing for example that GSE is synonymous with self-esteem (Stanley & Murphy, 1997), research supports it to be a valid and distinct construct related to a general disposition to effectively cope with all kinds of stressful life events (Chen et al., 2001; Choi, 2005; Scholz, U., Gutiérrez-Doña, B., Sud, S., & Schwarzer, R., 2002; Schwarzer, 1992; Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, & Rogers, 1982). Several researchers (e.g., Eden, 1988; Gardner & Pierce, 1998; Judge et al., 1997) have suggested that self-efficacy (SE) is a motivational state and GSE is a motivational trait. While both “denote beliefs about one’s beliefs to achieve desired outcomes… the constructs differ in the scope (i.e., generality or specificity) of the performance domain contemplated” (Chen et al., 2001, p. 63). Therefore, since GSE reflects a global confidence that “facilitates goal-setting, effort investment, persistence in face of barriers and recovery from setbacks” (Schwarzer, 2009) it is often viewed synonymously with human agency (e.g., Boehmer, S., Luszczynska, A., & Schwarzer, R., 2007; Luszczynska, A., Gutiérrez-Doña, B., & Schwarzer, R., 2005; Schwarzer, 2009). In fact, the General Self-Efficacy Scale (GSES) was explicitly designed to measure human agency (Schwarzer, 2009). Schwarzer and Jerusalem (1995) developed the GSES “to assess a general sense of perceived self-efficacy with the aim in mind to predict coping with daily hassles as well as adaptation after experiencing all kinds of stressful life events.” The authors further stated that the GSES reliably predicts successful adaptation after life changes. Nonetheless, based on
social cognitive theory (1976, 1979, 2002), and more recent understandings of a more collectivist notion of agency, general self-efficacy does not encompass the entirety of this construct. It reflects a major component, but the author does not view general self-efficacy to be synonymous with agency. However, based on general self-efficacy theory, and prior research studies supporting its use as an adequate proxy for agency, the author argues that in the absence of a specific agency measurement, general self-efficacy as a single construct and scale, comes the closest to spelling this complex construct.

Proactive Personality

Another potentially important resource in the college-to-career transition is represented by proactive personality or proactivity. Bateman and Crant (1993) defined the construct proactive personality “as a dispositional construct that identifies differences among people in the extent to which they take action to influence their environment” (p. 103). Greguras and Deifendorff (2010) described proactive individuals as “dynamic agents who identify and seize opportunities that bring about change in their environments by either improving their current situations or creating new ones” (p. 540). Thus, proactive personality is perceived as a relatively stable individual disposition towards active behavior (Bateman & Crant, 1993). As a disposition or trait, proactive personality is less likely to be overridden by situational forces (Dweck & Leggett, 1988). Additionally, research affirms that the construct of proactive personality explicitly encompasses the multiple aspects of proactive behavior and initiative (Crant, 2000).

The foundational premise of proactivity is the notion that people can intentionally and directly change their current circumstances, including their social, nonsocial, and physical environments (Bateman & Crant, 1993). A positive correlation has been
discovered between proactivity and extraversion, need for dominance, and need for achievement (Bateman & Crant, 1993). It’s noted that proactive individuals “identify opportunities and act on them; they show initiative, take action, and persevere until they bring about meaningful change” (Bateman & Crant, 1993, p. 532). Bateman and Crant (1993) eloquently described the prototypic proactive personality as:

One who is relatively unconstrained by situational forces, and who effects environmental change. Other people, who would not be so classified, are relatively passive – they react to, adapt to, and are shaped by their environments. Proactive people scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change...They take it upon themselves to have an impact on the world around them. People who are not proactive exhibit the opposite patterns – they fail to identify, let alone seize, opportunities to change things. They show little initiative, and rely on others to be forces for change. They passively adapt to, and even endure, their circumstances. (p. 105)

Proactivity is based on the observation that individuals both impact, and are impacted by, their environments (Bandura, 1977; Bowers, 1973; Schneider, 1983). This interactionist perspective posits that “behavior is both internally and externally controlled and that situations are as much a function of persons as vice versa. Accordingly, individuals can intentionally and directly influence their situations” (Crant, 1995, p. 532). This suggests that individuals are not just “passive recipients of environmental presses” (Buss, 1987, p. 1220), but instead “people create environments and set them in motion as well as rebut them. People are foreactive, not simply counteractive” (Bandura, 1986, p. 22). This idea is a central premise of Bandura’s work, which suggests that human activity is agentic and intentionally driven by people in an attempt to “make things happen” (Bandura, 2001, p. 1). Thus, a proactive personality reflects a general disposition and proclivity to have impact on one’s environment. Accordingly, proactive
individuals possess a greater inclination to initiate and maintain actions to alter their situations than less proactive, more passive people.

According to Schwarzer (1999), “the proactive individual strives for improvement in his or her life and environment instead of mainly reacting to a past or anticipated adversity.” Thus, individuals with a proactive personality are inclined to engage in proactive coping; defined by Schwarzer (1999) as “autonomous and self-determined goal setting and realization of goals; it deals with self-regulatory goal attainment processes and explains what motivates people to strive for ambitious goals and to commit themselves to personal quality management.” Research (e.g., Greenglass, Antoniou, Alexander-Stamatios, & Cooper, 2005) suggests that proactive coping is associated with personal striving, benefit finding, and search for meaning. For example, Greenglass and colleagues (2005) found that proactive coping reduces work-related stress and increases work-related efficacy. In a longitudinal study with hospital in-patients, proactive coping was associated with less functional disability, as well as a greater cognitive orientation in terms of planning and goal setting (Greenglass, Marques, deRidder, & Behl, 2005). A cross-sectional study with older adults revealed that proactive coping was associated with less functional disability, less depression, and greater perceived social support (Greenglass, Fiksenbaum, & Eaton, 2006). In another cross-sectional study with Turkish-Canadian immigrants, proactive coping was associated with greater optimism, greater life satisfaction, and less depression (Uksul & Greenglass, 2005).

In addition to the research on proactive coping, many studies have investigated proactive personality and its impact on career development and career satisfaction. Proactive personality is associated with a dynamic approach towards work (Frese, Kring,
Soose, & Zempel, 1996; Parker, 2000). It incorporates behaviors such as taking charge (Morrison & Phelps, 1999) and personal initiative (Frese et al., 1996) and is closely linked with flexible role orientations (Parker, Wall, & Jackson, 1997). Further studies have explored proactive personality for its impact in various fields, such as job performance (e.g., Ashford & Northcraft, 1992; Crant, 1995), career success (Bell & Staw, 1989; Erdogan & Bauer, 2005; Seibert, Crant, & Kraimer, 1999), feedback seeking (Ashford & Cummings, 1985), entrepreneurship (Becherer & Maurer, 1999), new employee adaptation (Chan & Schmitt, 2000), leadership (Crant & Bateman, 2000; Deluga, 1998) and job search success (Brown, Cober, Kane, Levy, & Shalhoop, 2006). Proactive personality and its influence on work teams (Kirkman & Rosen, 1999) and socialization (Morrison, 1993) has also been studied.

Measurement of proactive personality is dominated by a single instrument. For example, in each of the studies mentioned above, the authors used Bateman and Crant’s (1993) Proactive Personality Scale (PPS) to measure the construct. The wide usage of the scale is supported by its sound conceptual design and good psychometric properties.

Hardiness

Alongside human agency and proactive personality, hardiness may also be an important psychological resource for emerging adults during the college-to-career transition. Hardiness is a personality trait that enhances stress tolerance. This meta-construct is composed of three components (commitment, control, and challenge) that synergistically work together to enhance resilience in the face of stressors. Hence, compared to their less hardy counterparts, hardy individuals are able to perform better both physically and psychologically when they encounter difficult circumstances.
The construct of hardiness was first introduced by Kobasa (1979a, 1979b) and is based on findings from a study of thousands of middle and upper level managers at Illinois Bell. The managers were experiencing high levels of stress due to major organizational changes resulting from the de-regulation of the telecommunications industry, specifically the breakup of AT&T. Kobasa (1979a, 1979b) was interested in identifying a resilient group of employees to determine why they remained healthy when exposed to chronically high levels of stress, while their counterparts became ill. Participants in the study completed an extensive battery of psychological tests. Results revealed significant differences between the managers who became ill and those who remained healthy. Managers who remained healthy demonstrated high levels of commitment (a sense of meaningfulness and full engagement with life’s everyday activities), control (feelings of generalized self-efficacy and internal locus of control), and challenge (considering change and other stressful live events as opportunities for growth rather than threats to be avoided). Kobasa found that existential psychology contains the pertinent theoretical framework for these three productive attributes.

According to existential psychology, the primary goal of humanity is to find meaning in life (Orr & Westman, 1990). Meaning is created as people make decisions in their daily lives. As opposed to being a compilation of static internal traits, existentialism views people as “beings-in-the-world” who continuously and dynamically construct their personalities through the actions they take (Kobasa, 1982). As people live their lives, patterns develop, and “more pervasive meaning systems and general directions emerge” (Maddi, 2002, p. 175). Thus, people develop cognitive schemas that systematically influence their decision making and developmental trajectories (Senge, 1990).
When faced with a decision (and the subsequent actions he or she must take), the individual must often choose between two paths: “the future” path with all of its unknowns, or a continuation of the more familiar path, as represented by “the past.” These opposite choices create developmental trajectories, or paths, that impact personal growth. For the emerging adult, the future path (as opposed to the “comfortable” path from the past) is the expected choice and leads to continual personal development. However, future-oriented decisions inherently involve uncertainty, and as a consequence, arouse anxiety. For example, a college student deciding whether to apply for a summer internship or to resume a job at the mall faces a choice between uncertainty, with its potential for growth, or familiarity. While the comfortable path may fulfill a need for financial compensation, the inherent benefits from a new challenge may be lost. According to Maddi (2002), existential courage provides the necessary motivation to push people toward making the less certain, but more developmentally valuable future-oriented choices. Those with existential courage are seen as having “authenticity” (Maddi, 2002).

People described as having “authenticity” are defined as bold individuals who are passionately engaged with life. Their attitudes and goals are aligned with a sense of personal responsibility and involvement as they pursue the full optimization of their potential (Orr & Westman, 1990). They go after challenges and see changes as opportunities for personal development (Kobasa, 1982; Orr & Westman, 1990). Authenticity gives hardy people the stick-to-itiveness to remain engaged and connected when challenged by life’s trials. Also, because “authentic” individuals believe they exert control over events (both internal and external), they interpret stressful events differently.
than most, seeing them as challenges instead of threats. Because of their developmental histories authentic, or hardy, people are more open to experiencing a variety of situations. They have confidence in themselves and where they fit in their interpersonal world. Thus, when under stress from painful or transitional circumstances, individuals with hardiness feel less threatened or disrupted, demonstrating a greater resilience and ability to overcome obstacles (Bartone, 2000).

The construct of hardiness is defined as a constellation of three attitudes: commitment, control, and challenge (Kobasa, 1979a, 1979b). These attitudes reflect deep-seated cognitive schemata that influence how stressful events are interpreted. Individuals with high levels of commitment "believe in the truth, importance, and interest value of who one is and what one is doing, and thereby the tendency to involve oneself fully in the many situations of life, including work, family, interpersonal relationships, and social institutions" (Kobasa, 1987, p. 6). Because commitment fosters enthusiasm and sense of connection with others, hardy people possess the motivation to remain engaged during tough times (Kobasa, 1982; Kobasa, Maddi, Puccetti, & Zola, 1985).

Control works dynamically in conjunction with commitment and engenders an individual’s motivation to engage in effective coping behaviors. People who demonstrate a high level of control view stressors as changeable (Kobasa, 1982; Maddi, 2002; Maddi & Kobasa, 1984). For this reason, hardy individuals eschew a fatalistic attitude toward life since they believe they can, through their own efforts, change difficult circumstances. "Control allows persons to perceive many stressful life events as predictable consequences of their own activity and, thereby, as subject to their direction and manipulation" (Kobasa, 1982, p. 7). Thus, high control individuals do not take their
situations at face value, but rather look for ways to turn circumstances to their advantage (Maddi & Kobasa, 1984).

Lastly, an attitude that embraces challenge produces a sense of gusto in the midst of life’s difficulties, for problems are seen as opportunities for growth rather than potential threats to security (Maddi & Kobasa, 1984). Accordingly, the successful handling of past trials provides strength and affirmation for individuals who possess a high degree of challenge. They see themselves able to respond effectively when faced with unexpected events. As a result, they are less afraid to explore their environments in search of new possibilities. High challenge people are characterized by cognitive flexibility and tolerance for ambiguity. This trait allows them to adapt more readily to stressful events (Kobasa, 1982; Maddi, 1999).

The essential advantage of hardiness, its essence in effect, is its influence on the appraisal and coping process. As defined in both the hardiness and coping literature, people’s responses to stressful events can be categorized into two groups: active or regressive coping strategies (Florian, Mikulincer, & Tauber, 1995). Regressive coping strategies, or efforts, reflect passivity or avoidance. Examples of regressive responses include “cognitive and behavioral withdrawal and denial, such as avoiding or ignoring the stressor, blaming others, and emotion-focused coping. Indeed, regressive strategies may increase emotional problems and maladjustment” (Eschleman, Bowling, & Alarcon, 2010, p. 282). In contrast active, or transformational, coping includes a realistic appraisal of stressful events which coincides with confidence in one’s resources and the ability to cope effectively (Maddi, 1999). Rather than passively accepting a stressful situation with no attempt to change it, individuals who engage in transformational coping actively
confront stressors. They utilize resources which will enable them to either alter the circumstances or reinterpret the situation to be one they can handle (Maddi, 1999). In other words, they seek solutions to problems in order to lessen their stressful impact (Maddi, 1999).

Maddi and Khoshabi (2005) describe transformational coping as “a proactive mental and behavioral coping style that is fundamental to resiliency” (p. 86). These same authors identify three key steps in transformational coping. The first step is “broadening your perspective”. The transformational coping process originates at the mental level. Stressful circumstances are made more tolerable with a comprehensive analysis of the problem. Gaining perspective, as opposed to feeling subsumed, allows one to grasp the situation more clearly and to search out a solution (Maddi & Khoshabi, 2005). The second step is deepening your understanding. Once perspective has been gained and the situation can be faced more objectively, an individual can then begin the problem-solving process. The goal is to assess ways in which personal and contextual factors are contributing to the stress-inducing circumstance (Maddi & Khoshabi, 2005, p. 87). With a deeper understanding of the situation, the individual is then able to determine which actions can be taken to correct the problem. The third and final step is taking decisive action. “Gaining insight into what stresses you is good, but taking decisive action to solve the problem is even better” (Maddi & Khoshabi, 2005, p. 88). Once the individual has gained perspective and understanding through the mental aspect of the coping process, he or she is finally ready to “map out a strategy” to positively alter the circumstance.
Research on hardiness reveals that hardy people generally implement transformational coping strategies, such as problem-focused coping and social support-seeking. They are less likely to use regressive coping strategies, such as emotion-focused coping and distancing (Mills, 2000; Westman, 1990; Wiebe, 1991). This occurs because hardiness minimizes the level of threat perceived and diminishes the amount of negative arousal experienced by an individual (Kobasa, 1982). Thus, hardy people appraise stressful events as less threatening and more controllable, and they will search to find the “silver lining” in any circumstance (Kobasa, 1979b, 1982; Maddi, 1987; Maddi & Kobasa, 1984). The qualities associated with hardiness suggest that as a construct, hardiness may represent a key psychological resource for emerging adults in the college-to-career transition.

The construct of hardiness is widely measured by the Dispositional Resilience Scale (Bartone, 1989) (e.g., Baldwin, Kennedy, & Armata, 2008; Bartone, 2006, 2009; Bartone, Roland, Picano, & Williams, 2008; Bartone, Spinoza, & Robb, 2009; Bartone, Ursano, Wright, & Ingraham, 1989; Cameron, 2010; Pinquart, 2009; Rossi, Bisconti, & Bergeman, 2007; Quinney & Fouts, 2003). The DRS was developed by Bartone (1989) to assess an individual’s total hardiness, as well as his or her hardiness levels of its three components: commitment, control, and challenge. Funk (1992) concluded after a review of hardiness theory and research that the DRS is conceptually and psychometrically the “most sound hardiness measure available” (Bartone, Roland, Picano, & Williams, 2008, p. 79).
Emerging Adulthood

Over the last decade, there has been a growing interest in the developmental period that covers the late teens to the mid-20s, now widely known as emerging adulthood (Arnett, 2000). The basis for establishing a distinct developmental stage for this age group stems from qualitative changes in industrialized societies, as median ages for entering marriage and parenthood have risen dramatically, and an increasing percentage of young people have pursued post-secondary education into their 20s (Arnett & Eisenberg, 2007). As a result, “for most young people, the years from the late teens through the mid-20s changed from a time of settling into stable, enduring adult roles to a time of instability and independent identity explorations in love and work” (Arnett & Eisenberg, 2007, p. 66). Arnett was influenced by these changes and proposed a new and distinct period in life, emerging adulthood, identified within industrialized societies as the time period between adolescence and young adulthood (Arnett, 2000, 2004).

Arnett (1998, 2000, 2004) contends that society was once able to count on a way of life that seemed unending: young people would grow up and finish school, start careers, make families, and eventually retire to live on pensions supported by the next generation who would finish school, start careers and make families, thus keeping the common pattern intact. This traditional cycle is now off-track, as today more and more emerging adults remain both unmarried and un-tethered to home ownership. They go back to school for better career opportunities. They travel the world, avoid commitments, and bounce from job to job, forestalling the beginning of adulthood. These changes represent what Arnett (1998, 2000) and sociologists refer to as “the changing timetable for adulthood.” The transition to adulthood was traditionally marked by five milestones:
completing school, leaving home, becoming financially independent, marrying, and becoming a parent (Arnett, 1998, 2000). According to data from the 2010 United States Census Bureau, in 1960 a full 77% of women and 65% of men who had reached the age of 30 had passed all five milestones. However, by the year 2000 only half of the women and only one-third of the men who were 30 years old had done so. This cultural phenomenon identifies a new reality; adulthood is reached later in life.

Arnett has led the effort to understand and explain this shifting pattern (1998, 2000, 2004; Arnett & Eisenberg, 2007). He recognized that social and cultural changes have fostered a distinct life stage, and he is given the credit for labeling it *emerging adulthood*. Arnett (2000) contends that what is happening now is analogous to the changes that occurred a century ago, when the adolescent stage was created. Adolescence as a developmental category is widely accepted now, though when it was first proposed it was widely seen as a specious, demographic classification. According to Arnett (2000), similar changes over the last few decades have laid the groundwork for another new stage, positioned between the ages of 18 and the late twenties. There are numerous cultural changes which have led to the establishment of this emerging adult category: the need for more education to succeed in an information-based economy; fewer entry-level jobs; less societal pressure for marriage due to the general acceptance of pre-marital sex and cohabitation; and a wider range of career possibilities which encourages young women to postpone having children (Arnett, 2000, 2004).

Arnett (2000) explained that the emerging adulthood period from the late teens to the late twenties is characterized by five main features: identity exploration, instability, self-focus, feeling in-between, and believing it’s the age of possibility.
Identity exploration. The main characteristic of emerging adulthood is the desire for exploration. In no other phase throughout the course of life do individuals typically seek out and experience the degree of exploration they do during these years, especially in the areas of love, work, and worldviews (Arnett, 2004). Research on identity formation has shown that identity achievement is rarely completed upon high school graduation. The process of identity development continues well into the twenties, as individuals learn about themselves and what they want in life (Arnett, 2004). Arnett (2000) argued that while the exploration process begins in adolescence, the enduring decisions made as a result of exploration do not occur until the late twenties. Hence, while identity exploration is a primary characteristic of emerging adulthood, Arnett (2004) makes clear that identity is not cemented then; only that this phase of the life course contains a notable increase in exploration.

With change and transition dominant factors during this period of time, it is not unusual for these years to be somewhat un-enjoyable due to the instability, confusion and rejection inherent in the emerging experience (Arnett, 2004). Since unsettledness is the general condition, and most have no idea where their explorations will lead them, emerging adults experience intense feelings of excitement, freedom, and optimism on the one hand and extreme stress, fear, and uncertainty on the other (Arnett, 2004). Nonetheless, despite the challenges and emotional swings they face, most individuals remain optimistic about reaching their goals (Arnett, 2000).

Instability. Emerging adulthood is first and foremost a phase of great instability, and today that’s coupled with dramatic changes for the typical 21 year old. As recently as 1970, a 21-year old had achieved certain adult milestones, including marriage or
engagement, parenting an infant or pregnancy, completion of formal education, and working either a full-time job in the workplace or as a full-time mother inside the home (Arnett, 1997, 1998, 2000). Presently, most 21 year olds are still years away from these attainments. Most marry in their late twenties, if ever, and many extend their education through graduate school (Arnett, 2000). Further, it has become common for college-bound high school graduates to hold off attending college for a year or more. Individuals of this age frequently job-hop as they attempt to find meaningful work that also pays well (Arnett, 2004). These demographic changes have altered the nature of normative development in industrialized societies. The types of adult roles that were normative for 21-year olds in 1970 are no longer so today; now the norm is for emerging adults to be involved in change and exploration (Arnett, 1998).

Focus on the self. Arnett (2004) argued that it is healthy for emerging adults to focus on themselves in order to develop skills, gain personal understanding, and to begin crystallizing future goals. Being self-focused, he found, helps emerging adults develop self-sufficiency, a necessary first step before beginning a career or family.

Feeling in-between. Emerging adulthood is characterized by feeling in-between. Though they have left behind the restrictions and limitations of their youth, many emerging adults have not taken on all the responsibilities of adulthood. This is the age of exploration and instability (Arnett, 2004). Although individuals in their late twenties and early thirties typically report feeling like an adult, 30% consider themselves adults in certain areas only (Arnett, 2004). This suggests that adulthood identity development is a non-linear process.
Arnett (2004) attributes this ambiguity to the transitional state and its inherent instability. For the emerging adult today, reaching adulthood status is more than accomplishing demographic milestones (Arnett, 1997, 1998). According to them, what matters most is accepting responsibility for one’s life, being financially independent, and being able to make independent decisions (Arnett, 1998). Since these subjective qualities are reached intermittingly, the process of feeling like an adult is a gradual one.

*The age of possibility.* Emerging adulthood is all about possibilities (Arnett, 1998, 2000, 2004). During this time in their lives individuals view their futures as wide open; very little is set in stone. Theirs is the optimistic feeling that life goals and dreams will eventually be reached. Since emerging adults are in the transition between leaving their parent’s home and putting down roots with a family of their own, they have the unbridled sense that practically any choice or possibility is open to them. During this phase individuals perceive the greatest number of possibilities to change their circumstances (Arnett, 2004). Despite the fact that many emerging adults perceive the world as a grim place and are pessimistic about society’s future (Arnett, 1998), it is clear that “for themselves personally, emerging adults are highly optimistic about ultimately achieving their goals” (Arnett, 2000, p. 474). Hornblower (1997) determined this outlook from a national poll of 18- to 24-year-olds in the United States that found 96% of those surveyed agreeing with the statement, “I am very sure that someday I will get to where I want to be in life”.

*Research on emerging adults in the college-to-career transition*

Despite all the optimism, however, not everyone achieves the life he or she has dreamed of. Helping emerging adults successfully accomplish their goals is a challenge
for career counselors and other helping professionals (Arnett, 2000). Leaving college and successfully navigating into the world of work is not a uniform achievement. Murphy and colleagues (2010) described distinct outcomes facing emerging adults in this transitional state:

With the increase in opportunities and the decrease of immediate responsibilities, many emerging adults hit the ground running as they exit college, viewing the multitude of options as exciting and empowering. Others seemingly become psychologically paralyzed, listless, and in more extreme cases, depressed as they leave college in search of their identity, which is often most clearly manifested in the exploration of a meaningful career (Kenny & Sirin, 2006; Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002) (p. 174).

In recent years, there have been only a limited number of studies done on the challenges associated with the college-to-career transition (e.g., Kenny & Sirin, 2006). Research in this area is sparse (Arnett, 2000; Murphy et al., 2010; Galambos et al., 2006). This fact prompted Murphy and colleagues (2010) to call for more research in order “to begin to shed light on the most common and relevant themes that characterize adaptive transitions” (p. 175). The few studies already completed have focused primarily on two themes concerning emerging adults in transition. The first theme, illustrated by a number of longitudinal studies (Arnett, 2000; Galambos et al., 2006; Mortimer et al., 2002; Polach, 2004; Schulenberg et al., 2004), has examined how emerging adults’ well-being is impacted by the college-to-career transition. These studies have discovered that social support significantly facilitates healthy adaptation, while the lack of support has been linked to a decline in well-being, self-esteem, and overall adjustment. Another line of research in the literature has been on the degree of variability among emerging adults in transition (Arnett, 2000; Schulenberg et al., 2004). While some emerging adults manage the challenges of transition successfully, others seem to flounder (Schulenberg et al.,
2004). Galambos and colleagues (2006) confirmed this harsh reality in their longitudinal study, concluding that “emerging adulthood is not a positive experience for everyone as there is great interindividual variability in intraindividual change” (p. 362). Mortimer and colleagues (2002) found in their mixed-methods study that emerging adults’ experiences were marked by postponed decisions and unfulfilled expectations. Likewise Polach (2004), in qualitative research, identified challenging factors associated with the college-to-career transition; the list included moving to a new city, making friends, finding a place of worship, and fitting into a social group.

Conclusion

Research on the role of work and career development in the transition of emerging adults has not been fully explored (Murphy et al., 2010). Specifically, few studies have identified which psychological factors serve as resources during this transitional and stressful time of life (e.g., Heppner, 1991, 1998; Heppner et al., 1994). Based on HLT and its foundational premise that taking action is beneficial during transitions in order to generate and capitalize on unplanned opportunities; it seems probable that the action- and resilience-oriented constructs of human agency, proactive personality, and hardiness represent important inner resources for emerging adults. Thus, this study could provide career counselors and counselor educators with a clearer understanding of how to set new graduates on a positive and productive trajectory into adulthood.
CHAPTER III
METHODOLOGY

The purpose of this study is to investigate whether human agency, proactive personality, and hardiness represent psychological resources for emerging adults in the college-to-career transition. Identifying factors related to a successful transition is important since it could provide career counselors and counselor educators with greater knowledge of how to prepare emerging adults for their transition into the world-of-work. This chapter outlines a description of the research design, participants, instruments, procedures, data analysis, limitations, and significance of the study.

Research Design

Specifically, this study utilized a correlation and regression analysis to determine whether human agency, proactive personality, and hardiness predict the psychological resources associated with a successful college-to-career transition. According to Gall, Gall, and Borg (2003), correlational designed studies are ideal for educational research because several variables can be studied at once, and the degree of the relationship can be examined.

The research questions of this study dictated the use of a quantitative research methodology. A quantitative methodology uses numbers to establish relationships and to compare variables across such relationships (Fraenkel & Wallen, 2003). The research questions for this investigation were:

1. Does hardiness predict the psychological resources of Readiness and Confidence as measured by the CTI?
2. Does proactive personality predict the psychological resources of Readiness and Confidence as measured by the CTI?

3. Does human agency predict the psychological resources of Readiness and Confidence as measured by the CTI?

4. What is the relationship between hardiness, proactive personality, human agency, and the psychological resources of Readiness and Confidence as measured by the Career Transition Inventory (CTI)?

Participants

The intended target population for this study is emerging adults between the ages of 18 and 25 who are transitioning from college into the work force. Graduating seniors from a large Mid-western university served as potential participants in a convenient sample. The principal investigator received permission and assistance from the director of the career counseling center (Appendix A) to send the invitation email (Appendix G) to all seniors graduating in the Spring 2011 semester, with individuals outside the age parameters excluded. The university’s population setting represents an urban (small city) residential campus. The student enrollment demographics for the 2011 spring semester are as follows: African American: 2%; American-Indian: 1%; Asian American: 4%; Hispanic: 3%; White: 87%; International: 4%. The number of bachelor’s degrees awarded in May 2010 was 4,097. Based on this number, the approximate number of graduating seniors emailed in the current study was 4,000.

Response rates to web-based surveys can vary dramatically depending on key variables which include survey length, follow-up contact, issue salience, design issues, and compensation (Sheehan, 2001). Alreck and Settle (1995) reported that response rates
which exceed 30% are rare. However, in a meta-analysis conducted by Cook, Heath, and Thompson (2000), the mean response rate reported in 49 studies was 39%; 34% reported no missing data. Kittelson (1997) maintained that “one can expect between a 25 and 30% response rate from an email survey when no follow-up takes place. Follow-up reminders will approximately double the response rate for e-mail surveys” (p. 196). Nevertheless, response rates to email surveys have been trending down since the mid-1990s (Sheehan, 2001). Further, the response rates among university students are typically lower than among non-academics because of the number of requests they receive to be participants in studies (Porter, 2004; Coates, 2006). For example, in a recent study at a large Midwestern university, Lampe, Ellison, and Steinfeld (2006) sent an email invitation to 7,200 students requesting participation in their survey. Only 1,440 participants responded, a response rate of 20%. In a second invitation to participate in a follow-up survey six months later, 15% of the students responded. Thus, it was anticipated that sending the survey to roughly 4,000 potential participants would yield at least 100 usable surveys. After career services sent two invitation emails, 97 usable surveys were attained. Based on a power calculation using a medium effect size of .15 (Cohen, 1988) and an alpha of .05, the number of participants needed to reach a power level of .90 was 84 participants.

**Demographic and Transition Variables**

The demographic variables used in the study are gender, race/ethnicity, and age. In addition, participants were asked transition-related items: Do you plan to work full-time in a job that requires a college degree in the fall of 2011? Do you plan to attend graduate or professional school in the fall of 2011? Have you already been offered a job
following graduation that requires a college degree? Of the 138 that agreed to participate in the study, 97 study participants completed all the items, and of these, 27 (28%) were men and 69 (71%) were women. One study participant did not list their gender. The average age of the participants was 21.6 (SD = 1.2). Racial/ethnic demographics were 88 (90.7%) White, six (6.2%) Asian American, two (2.1%) Hispanic, and one (1%) African American. In response to the question about the participants’ intention to work in the fall, 54 (55.7%) said they planned to work, while 43 (44.3%) said they did not plan to work. Regarding their immediate plans for graduate school, the majority, 79 (81.4%), do not plan to attend graduate or professional school in the fall, while 17 (17.5%) do plan on attending. One participant did not answer this question. Lastly, 75 (77.3%) of the participants had not been offered a full-time job that requires a college degree; 21 had been offered a job. Three participants did not answer this question.

**Instruments**

*Demographic Information Sheet*

The demographic information sheet is designed to obtain demographic information from each participant: gender, race/ethnicity, and age. In addition, participants will be asked: Do you plan to work full-time in the fall of 2011? Do you plan to attend graduate or professional school in the fall of 2011? Have you already been offered a job following graduation that requires a college degree? Items for this demographic information sheet can be found in Appendix B. In addition to the demographic information sheet, four instruments will be used in the current study. Permission from the instruments’ authors has been granted (Appendix H).
Career Transition Inventory

Heppner (1991) and Heppner and colleagues (1994) developed the career transition inventory (CTI) to measure psychological resources used in the career transition. The CTI consists of 40 items that are rated on a 6-point Likert-type scale, ranging from strongly agree (1) to strongly disagree (6). The CTI includes Readiness, Confidence, Control, Support, and Decision Independence subscales. Readiness (13 items) focuses on self-appraised motivation for making a career transition. Confidence (11 items) measures the respondent’s sense of efficacy that he or she can perform tasks necessary to make a successful career transition. Control (6 items) represents the perception of self-control in impacting the outcome of the career transition. Support (5 items) measures the participant’s perceived social support in making a career transition. Lastly, Decision Independence (5 items) represents the respondent’s perception that a career choice is made independently of relational influences, such as family, friends, partners, or other significant individuals who may be impacted by the decision. Typical items include the following: “I feel as though I have a driving force within me to work on this career transition right now” (Readiness subscale); “The number of unknowns involved in making a career transition bothers me” (Reverse scored) (Confidence subscale). For the purposes of the present study, the psychological resources of Readiness and Confidence have been selected as the dependent variables. These constructs focus on an individual’s sense of efficacy to perform transition-related tasks (Confidence) and motivation to do what is necessary in the process (Readiness). The description of these constructs seems to share a similar focus with each of the study’s independent variables (i.e., agency, proactive personality, and hardiness).
Since the CTI was originally created to measure unemployed adults, the current study included an adapted definition of career transition (Yang & Gysbers, 2007) as the *college-to-career transition*, in order to make the CTI more relevant to graduating college students:

Career transition means any career-related event or nonevent (i.e., an event that was supposed to happen, but did not happen) resulting in changes in roles, relationships, routines, or assumptions. Some examples are:
(a) Change of a career goal or a college major; (b) attainment, change, or loss of a part-time/full-time job; (c) change of the course of action to achieve a career goal; or (d) graduation from school/college.

Directions: While reading the following items, recall some of your experiences that you consider as a career transition based on the above description and respond to each item accordingly (Yang & Gysbers, 2007, p. 159).

Heppner (1998) and Heppner and colleagues (1994) reported that the test-retest reliability of the total CTI was .84 and, for the individual subscales, was .74 for Readiness, .79 for Confidence, .55 for Control, .77 for Support, and .83 for Decision Independence. Cronbach’s alphas were .85 to .90 for the total CTI (Heppner et al., 1994; Heppner, 1998), .87 for Readiness, .83 for Confidence, .69 for Control, .66 for Support, and .66 for Decision Independence (Heppner et al., 1994). The CTI showed a strong correlation with other vocational measures, such as the My Vocational Situation (Holland, Daiger, & Power, 1980). In addition, the CTI was found to be strongly correlated with part of the Hope Scale (Snyder, Harris, Anderson, Holleran, Irving, & Sigmon, 1991). These correlations indicate that the CTI is reasonably reliable and valid. The CTI produces an overall score ranging from 40 to 240; ranges for each subscale are 13 to 78 points for Readiness, 11 to 66 points for Confidence, 6 to 36 for Control, 5 to 30 for Support, and 5 to 30 for Independence. Items for the Readiness and Confidence subscales can be found in Appendix C.
General Self-Efficacy Scale

In the current study, human agency was measured with the General Self-Efficacy Scale (GSES). As a construct, general self-efficacy (GSE) reflects a motivational trait related to “one’s beliefs in one’s overall competence to effect requisite performance across a wide range of achievement situations” (Eden). Individuals with a high level of GSE possess a general disposition and global confidence to initiate, persist, and perform successful behaviors across multiple domains. GSE is viewed by some theorists (e.g., Schwarzer, 2009) to be synonymous with human agency. Schwarzer and Jerusalem (1995) developed the GSES “to assess a general sense of perceived self-efficacy with the aim in mind to predict coping with daily hassles as well as adaptation after experiencing all kinds of stressful life events.” Examples of items include, “I can always manage to solve difficult problems if I try hard enough”, “It is easy for me to stick to my aims and accomplish my goals”, and “Thanks to my resourcefulness, I know how to handle unforeseen situations”. The GSE consists of 10 items that are rated on a 4-point Likert-type scale, ranging from not at all true (1) to exactly true (4), yielding a total score between 10 and 40.

In a study measuring the GSES across samples from 23 nations (Luszczynska, Scholz, & Schwarzer, 2005), Cronbach’s alphas ranged from .76 to .90, with the majority in the high .80s. Criterion-related validity is documented in numerous correlation studies where “positive coefficients were found with favorable emotions, dispositional optimism, and work satisfaction. Negative coefficients were found with depression, anxiety, stress, burnout, and health complaints” (Schwarzer, 2009). The scale is unidimensional (Luszczynska et al., 2005). Items for the GSES can be found in Appendix D.
Proactive Personality Scale

Proactive personality was measured using the shortened version of Bateman and Crant’s (1993) 17-item Proactive Personality Scale (PPS) created by Seibert, Crant, and Kraimer (1999). The shortened version consists of 10-items. These items were selected because they had the highest average factor loadings across the three studies conducted by Bateman and Crant (1993). The results of the three studies presented evidence for the scale’s reliability. Cronbach’s alpha for the three samples ranged from .87 to .89, and the test-retest reliability coefficient over a three month period was .72. Convergent, discriminant, and criterion validity was also provided in these studies. The deletion of seven items from the original scale did not result in a major effect on the reliability (17-item alpha coefficient = .88; 10-item = .86) (Seibert et al., 1999). Items on the scale are summed to arrive at a proactive personality score. Responses are indicated on a 7-point Likert-type scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). Examples of items include “No matter what the odds, if I believe in something I will make it happen” and “I excel at identifying opportunities.” Items for the PPS can be found in Appendix E.

Dispositional Resilience Scale - 15

The Dispositional Resilience Scale – 15 (DRS-15) is a shortened version of Bartone’s (1989) 45-item hardiness measure [the Dispositional Resilience Scale (DRS)]. The shortened version consists of 15-items. Funk (1992) concluded after a review of hardiness theory and research that the DRS is conceptually and psychometrically the “most sound hardiness measure available” (Bartone, Roland, Picano, & Williams, 2008, p. 79). The DRS-15 hardiness scale has demonstrated a strong correlation with the
original DRS (Bartone et al., 2008), showing good psychometric properties and criterion-related validity across multiple samples (Bartone, 1991, 1995). There are five-items each to measure the hardiness facets of Commitment, Control, and Challenge. Cronbach’s alpha reliability coefficients for the DRS-15 have been reported at .82 for the total hardiness scale, and for the hardiness facets, Commitment = .77, Control = .68, and Challenge = .69 (Bartone, 1999). Bartone (2007), in a 3-week study on West Point cadets, demonstrated a test-retest reliability coefficient of .78, indicating high reliability for the DRS-15. Items for the DRS-15 can be found in Appendix F.

Procedures

Approval from the Institutional Review Board was obtained before conducting the study. All seniors graduating in the spring of 2011 were contacted via an email sent from the university counseling center inviting them to participate in the study. A follow-up reminder was sent to participants one week after the initial email request. The invitation email stated the study’s purpose to investigate psychological resources associated with the college-to-career transition, and that the completion of the questionnaires will take approximately 20 minutes. The email included a web link to access Survey Monkey. After accessing the web link, potential participants saw a web page that described the study’s informed consent (Appendix I). Potential participants could choose “yes” to the informed consent and become participants in the study, or decline by choosing “no.” For incentive purposes, participants were given the opportunity to enter their email at the end of the study for inclusion in a random drawing for three $100 Visa gift cards. Once all the data was collected, the emails were put into a hat and a random drawing drew four emails to receive the gift cards.
Data Analysis

*Research Question #1*

Research Question 1 was intended to investigate whether participants with higher levels of hardiness (as scored by the DRS-15), proactive personality (as scored by the PPS), and human agency (as scored by the GSE), reported higher levels of Readiness and Confidence, as measured by the Career Transition Inventory (CTI). The relationship among these variables was examined using a multiple linear regression analysis. The independent variables are hardiness, proactive personality, and agency, and the independent variables are the Readiness and Confidence subscales on the CTI.

*Research Question #2*

Research Question 2 investigated whether participants with higher levels of hardiness (as scored by the DRS-15) reported higher levels of Readiness and Confidence, as measured by the CTI. This question was measured using a multiple linear regression analysis.

*Research Question #3*

Research Question 3 investigated whether participants with higher levels of proactive personality (as scored by the PPS) reported higher levels of Readiness and Confidence, as measured by the CTI. This question was measured using a multiple linear regression analysis.

*Research Question #4*

Research Question 4 investigated whether participants with higher levels of human agency (as scored by the GSE) reported higher levels of Readiness and
Confidence, as measured by the CTI. This question was measured using a multiple linear regression analysis.

Significance of the Study

Recent changes in the world-of-work mandate that career counselors and counselor educators stay abreast of how to most effectively intervene in the lives of emerging adults. Continual allegiance by career counselors to the dominant trait-and-factor model has fostered too little attention toward equipping emerging adults with the psychological resources needed to successfully navigate these difficult times (Krumboltz, 2009; Mitchell, Levin, & Krumboltz, 1999; Murphy et al., 2010). As such, there is a pressing need to identify psychological resources associated with a successful college-to-career transition. This study was intended to add to the emerging adults and college-to-career transition literature by providing information for training, practice, and future research on how to prepare emerging adults to transition successfully from college into the world-of-work.
CHAPTER IV
RESULTS

Chapter 1 of this dissertation included an overview of the career-related challenges created by the Great Recession and why Krumboltz’s (2009) Happenstance Learning Theory may represent a useful theoretical framework to guide career counselors in assisting students in the college-to-career transition. The chapter introduced research on the benefits of proactivity and resilience when individuals are faced with stressful obstacles in their path. Chapter 2 included a review of the literature and addressed the research questions and key issues relative to identifying factors that could potentially assist emerging adults with their college-to-career transition. The chapter ended with both a description of the emerging adult population and an overview of the literature outlining their challenges and resources as they transition from college into the world of work. Chapter 3 contained a description of the methodology employed to answer the research questions and introduced the data collection and analysis procedures. Chapter 4 will present an analysis of the data collected (i.e., an analysis of the responses given to the survey items included in the survey instruments).

Data Collection and Analysis

The data from this study was collected via SurveyMonkey.com. The university’s career counseling center emailed an invitation to all Spring, 2011, graduating college seniors, inviting them to participate in the study. Respondent data were electronically collected to promote both anonymity and a randomized sampling of graduating seniors. Of the 138 that agreed to participate in the study, 97 fully completed all the survey items.
The remaining students neglected to answer enough of the items to be reliably counted for inclusion.

The usual measure of correlation is Pearson’s $r$, which is a measure of association that varies from -1 to +1, with 1 indicating a perfect relationship and 0 indicating no relationship or a random pairing of values (Draper & Smith, 1981). Positive correlations range from 0 to 1 and describe scatter plots in which a high value for one variable is associated with a high value for the other variable. Negative correlations range from 0 to -1 and describe scatter plots in which a high value for one variable is associated with a low value for the other variable. The larger the magnitude of the correlation, the greater the association between the two variables. Zero correlations occur when there is no association, and the scatter plot looks like buckshot. Though some researchers believe that a correlation must exceed 0.8 to be considered strong, and a correlation less than 0.5 is generally described as weak (Draper & Smith, 1981), other social science researchers contend that a correlation of 0.3 is worth taking seriously (e.g., Peterson, 1992). In describing the magnitude of correlation coefficients, researchers often use labels to describe the strength of the correlation. A “small” correlation is between 0 and +/-0.2; a “moderate” correlation is roughly +/-0.3; and a “large” correlation exceeds +/-0.5. However, in the social sciences, a moderate correlation is usually as robust as it gets (Peterson, 2006). In regression, the coefficient of determination, $R^2$, is a statistical measure of how well the regression line approximates the real data points (Draper & Smith, 1981). $R^2$ is the square of the sample correlation coefficient ($r$) between the actual values and their predicted values. The coefficient of determination is useful because it gives the proportion of the variance of one variable that is predictable from the other
variable. It is a measure that allows one to determine how certain one can be in making predictions from a certain model or graph. The coefficient of determination is the ratio of the explained variation to the total variation (Draper & Smith, 1981). The coefficient of determination is such that $0 < R^2 < 1$ and denotes the strength of the linear association between $x$ and $y$. An $R^2$ of 1.0 indicates that the regression line perfectly fits the data and .0 indicates no relationship (Draper & Smith, 1981). If the regression line passes exactly through every point on the scatter plot, it would be able to explain all of the variation. The further the line is away from the points, the less it is able to explain.

**Research Question 1**

For Research Question 1, whether agency (GSE) predicts the readiness factor of the CTI, the regression results indicate that the null hypothesis could be rejected in favor of the alternative hypothesis because the $p$ value is less than the alpha of .05 ($F = 32.841$, $p$ value = .000; see Table 1). The Pearson correlation coefficient was .507. Thus, it was concluded that a significant relationship exists between the general self-efficacy score and the readiness factor score. The regression equation was

\[
\text{Readiness} = 26.466 + 1.056(\text{GSE})
\]

The relationship is positive, such that as the general self-efficacy score increases, the readiness scores increases. The $R^2$ value for the relationship between general self-efficacy and readiness was .257 (see Table 1); therefore, 25.7% of the variability in the readiness score was explained by the general self-efficacy score, which indicates that the majority (74.3%) of the variability was unexplained by this model. In sum, a significant positive relationship existed between general self-efficacy and the readiness resource of
the CTI. The GSE score explained approximately 26% of the variability in the readiness score.

Table 1

Linear Regression with General Self-Efficacy Predicting the Readiness Resource

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>p</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>97</td>
<td>.507**</td>
<td>.257</td>
<td>.249</td>
<td>32.841</td>
<td>.000</td>
<td>1, 95</td>
<td>5.731</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

For the second part of Research Question 1, whether agency predicts the confidence factor of the CTI, the regression results indicate the null hypothesis could be rejected in favor of the alternative hypothesis because the p value is less than the alpha of .05 ($F = 25.532$, $p$ value = .000; see Table 2). Hence, it was determined that a significant relationship exists between the general self-efficacy score and the confidence score of the CTI. The regression equation was

$$\text{Confidence} = 15.871 + .836(\text{GSE})$$

The positive relationship between general self-efficacy and confidence indicates that as general self-efficacy increases, the confidence score increases as well. The Pearson correlation coefficient was .460 and has an associated $p$ value of .000 (see Table 2), indicating the relationship is a significant positive relationship. The $R^2$ value for this relationship was .212 (see Table 1); therefore, 21.2% of the variability in the confidence score was explained by the general self-efficacy score, which indicates that 78.8% of the
variability was unexplained by this model. Thus, a significant positive relationship exists between general self-efficacy and the confidence resource of the CTI, and the GSE score explained approximately 31% of the variability in the confidence score.

### Table 2

Linear Regression with General Self-Efficacy Predicting the Confidence Resource

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>p</th>
<th>df</th>
<th>t</th>
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<tbody>
<tr>
<td>97</td>
<td>.460**</td>
<td>.212</td>
<td>.204</td>
<td>43.257</td>
<td>.000</td>
<td>1, 95</td>
<td>5.053</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

**Research Question 2**

For Research Question 2, whether proactive personality (PP) predicts the readiness factor of the CTI, the regression results indicate that the null hypothesis could be rejected in favor of the alternative hypothesis because the p value is less than the alpha of .05 ($F = 43.257; p\text{ value} = .000$; see Table 3). Thus, it was concluded that a significant relationship exists between the proactive personality score and the readiness factor score. The regression equation was

$$\text{Readiness} = 31.373 + .555(\text{PP})$$

The relationship is positive, such that as the proactive personality score increases, the readiness scores increases. The Pearson correlation coefficient was .559 and has an associated $p$ value of .000 (see Table 1), indicating the relationship is a significant positive relationship. The $R^2$ value for this relationship was .312 (see Table 3); therefore,
31.2% of the variability in the readiness score was explained by the proactive personality score, which indicates that the majority (68.8%) of the variability was unexplained by this model. However, a significant positive relationship existed between proactive personality and the readiness resource of the CTI, and the PP score explained approximately 31% of the variability in the readiness score.

Table 3
Linear Regression with Proactive Personality Predicting the Readiness Resource

<table>
<thead>
<tr>
<th>N</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>F</th>
<th>p</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>97</td>
<td>.559**</td>
<td>.313</td>
<td>.306</td>
<td>43.258</td>
<td>.000</td>
<td>1, 95</td>
<td>6.577</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

For the second part of Research Question 2, whether proactive personality predicts the confidence factor of the CTI, the regression results indicate that the null hypothesis could be rejected in favor of the alternative hypothesis because the p value is less than the alpha of .05 (F = 9.357; p value = .003; see Table 4). Thus, it was concluded that a significant relationship exists between the proactive personality score and the confidence factor score. The regression equation was

\[
\text{Confidence} = 29.487 + .259(PP)
\]

The relationship is positive, such that when the proactive personality score increases, the confidence scores increases. The Pearson correlation coefficient was .299 and has an associated p value of .003 (see Table 1), indicating the relationship is a
significant positive relationship. The $R^2$ value for this relationship was .089 (see Table 1); therefore, 8.9% of the variability in the readiness score was explained by the proactive personality score, which indicates that the majority (91.1%) of the variability was unexplained by this model. Thus, a significant positive relationship existed between proactive personality and the readiness resource of the CTI, but the PP score explained only 9% of the variability in the readiness score.

Table 4
Linear Regression with Proactive Personality Predicting the Confidence Resource

<table>
<thead>
<tr>
<th>N</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>$F$</th>
<th>$p$</th>
<th>$df$</th>
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<td>.080</td>
<td>9.360</td>
<td>.003</td>
<td>1, 95</td>
<td>6.577</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Research Question 3

For Research Question 3, whether hardiness (H) predicts the readiness factor of the CTI, the regression results indicate that the null hypothesis could be rejected in favor of the alternative hypothesis because the $p$ value is less than the alpha of .05 ($F = 31.148; p$ value = .000; see Table 5). Thus, it was concluded that a significant relationship exists between the hardiness score and the readiness factor score of the CTI. The regression equation was

$$\text{Readiness} = 40.179 + .676(H)$$
The relationship between these variables is positive, such that when the hardiness score increases, the readiness score increases. The Pearson correlation coefficient was .497 and has an associated p value of .000 (see Table 5), indicating that the relationship is a significant positive relationship. The $R^2$ value for this relationship was .247 (see Table 5); therefore, 24.7% of the variability in the readiness score was explained by the hardiness score, which indicates that the majority (75.3%) of the variability was unexplained by this model. Nonetheless, a significant positive relationship was discovered between hardiness and the readiness resource of the CTI.

Table 5

Linear Regression with Hardiness Predicting the Readiness Resource

<table>
<thead>
<tr>
<th>N</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>$F$</th>
<th>$p$</th>
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<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.239</td>
<td>31.146</td>
<td>.000</td>
<td>1, 95</td>
<td>5.581</td>
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</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

For the second half of Research Question 3, whether hardiness predicts the confidence factor of the CTI, the regression results indicate that the null hypothesis could be rejected in favor of the alternative hypothesis because the p value is less than the alpha of .05 ($F = 30.162$; $p$ value = .000; see Table 6). Thus, it was concluded that a significant relationship exists between the hardiness score and the confidence factor score. The regression equation was

$$\text{Confidence} = 25.260 + .583(H)$$
The relationship is positive, such that when the hardiness score increases, the confidence scores increases. The Pearson correlation coefficient was .491 and has an associated $p$ value of .000 (see Table 6), indicating the relationship is a significant positive relationship. The $R^2$ value for this relationship was .241 (see Table 6); therefore, 24.1% of the variability in the confidence score was explained by the hardiness score, which indicates that the majority (75.9%) of the variability was unexplained by this model. Hence, a significant positive relationship existed between hardiness and the readiness resource of the CTI, and the hardiness score explained approximately 24% of the variability in the confidence score.

Table 6

Linear Regression with Hardiness Predicting the Confidence Resource

<table>
<thead>
<tr>
<th>N</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>$F$</th>
<th>$p$</th>
<th>df</th>
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<td>30.158</td>
<td>.000</td>
<td>1, 95</td>
<td>5.492</td>
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</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Research Question 4

For research question 4, stepwise multiple regression analysis was used to examine the relationship among the three predictor variables and the two criterion variables. Stepwise selection was chosen because Howell (1997) argues that it allows for the best prediction equation, and there was no theoretical basis for ordering predictors or entering predictors as sets. As shown in Table 7, in the first analysis with readiness as
the dependent variable, the stepwise analysis selected proactive personality as the strongest predictor of readiness. The \( R^2 \) was .313 with a \( p \) value of .000 (\( F = 43.258 \); see Table 7). With proactive personality in the model, the stepwise analysis chose hardiness as the next strongest predictor of readiness with a \( R^2 \) change of .069 (\( F = 10.560 \); \( p \) value of .002; see Table 7). Proactive personality and hardiness together explained 38.2% of the variance for readiness. It was determined from correlational analysis, as well as from collinearity diagnostics, that multicollinearity was not a problem. General self-efficacy was not selected in the stepwise analysis because it did not add significantly to the variance of the model. The prediction equation was

\[
\text{Readiness} = 26.235 + .415(\text{PP}) + .407(\text{H})
\]

Table 7

<table>
<thead>
<tr>
<th>Model</th>
<th>( R )</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>( R^2 ) Change</th>
<th>( F ) Change</th>
<th>( p )</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.559a</td>
<td>.313</td>
<td>.306</td>
<td>.313</td>
<td>43.258</td>
<td>.000</td>
<td>1, 95</td>
</tr>
<tr>
<td>2</td>
<td>.618b</td>
<td>.382</td>
<td>.369</td>
<td>.069</td>
<td>10.560</td>
<td>.002</td>
<td>1, 94</td>
</tr>
</tbody>
</table>

a. Predictors: Proactive Personality  
b. Predictors: Proactive Personality, Hardiness

When a stepwise analysis was run with the three independent variables and confidence as the dependent variable, hardiness was selected as the strongest predictor of confidence. The \( R^2 \) was .241 with a \( p \) value of .000 (\( F = 30.158 \); see Table 8). With hardiness in the model, the stepwise analysis chose general self-efficacy as the next
strongest predictor of readiness with a $R^2$ change of .04 ($F = 5.257; p$ value of .024; see Table 8). Hardiness and general self-efficacy together explained 28.1% of the variance for confidence. It was determined from correlational analysis, as well as from collinearity diagnostics, that multicollinearity was not a problem. Proactive personality was not selected in the stepwise analysis because it did not add significantly to the variance of the model. The prediction equation was

$$\text{Confidence} = 15.816 + .397(H) + .462(GSE)$$

Table 8

Stepwise Multiple Regression with Independent Variables Predicting the Confidence Resource

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>$R$ Square Change</th>
<th>$F$</th>
<th>$p$</th>
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<td>.233</td>
<td>.241</td>
<td>30.158</td>
<td>.000</td>
<td>1, 95</td>
</tr>
<tr>
<td>2</td>
<td>.530b</td>
<td>.281</td>
<td>.266</td>
<td>.040</td>
<td>5.257</td>
<td>.024</td>
<td>1, 94</td>
</tr>
</tbody>
</table>

a. Predictors: Hardiness  
b. Predictors: Hardiness, General Self-Efficacy

Summary

In this investigation, the data found that each of the study’s independent variables (i.e., proactive personality, general self-efficacy and hardiness) predicted readiness and confidence. Research questions one to three sought to examine whether human agency, proactive personality, and hardiness, respectively, predict the career transition resources of readiness and confidence. The data revealed that individuals in the current sample who demonstrated high levels of each independent variable were more prepared to
engage in career transition. Likewise, these same individuals had greater confidence in
their ability to successfully navigate the transition from college into the world of work.
Research question 4 sought to explore which of the independent variables was a better
predictor and explained more of the variance of readiness and confidence. In the case of
readiness, proactive personality was the strongest predictor, with hardiness adding a
slight, yet statistically significant increase in variance. For confidence, hardiness was the
strongest predictor variable, with general self-efficacy adding a small, but statistically
significant increase in variance.

In chapter 5, results of the present study will be discussed further, limitations will
be identified, and implications for training and practice given.
CHAPTER V

DISCUSSION

The overall pattern of results indicates support for the value of human agency, proactive personality, and hardiness as college-to-career transition resources. Emerging adults who possess these personality characteristics perceive that they are more ready and confident for the transition into the world of work. However, when the relationship between readiness and confidence and the effect of all three variables was analyzed together, proactive personality and hardiness emerged as the strongest predictors of readiness and confidence respectively.

The first research question – whether human agency predicts the psychological resources of readiness and confidence – obtained support, with general self-efficacy predicting both of the study’s dependent variables. The correlation with readiness \( r = .507, p = .000 \) was the second highest among the predictor variables when analyzed separately through linear regression analysis. The \( R^2 \) of .257 means approximately 25\% of the variance of readiness can be predicted by human agency. These results suggest that human agency represents a significant component of an individual’s overall sense of readiness for career transition. Support was also found for the second part of research question one (whether agency predicts confidence). The correlation with confidence \( r = .460, p = .000 \) was also the second highest among the predictor variables when analyzed separately. The \( R^2 \) of .212 suggests that approximately 21\% of the variance of confidence can be accounted for by human agency.

The second research question – whether proactive personality predicts the psychological resources of readiness and confidence – obtained support as well, with
proactive personality representing a clear resource in the college-to-career transition. The correlation with readiness \((r = .559, p = .000)\) and confidence \((r = .299, p = .001)\) was significant. Interestingly, proactive personality was the strongest predictor of readiness and the weakest predictor of confidence when analyzed independently through linear regression analysis. Its \(R^2\) of .312 suggests that approximately 31% of the variance of readiness can be accounted for by proactive personality. By comparison, an \(R^2\) of .089 means that proactive personality was found to explain 9% of the variance of confidence.

For research question three – whether hardiness predicts the psychological resources of readiness and confidence – support was found for hardiness representing an important factor in the career transition process. Hardiness significantly correlated with readiness \((r = .497, p = .000)\) and confidence \((r = .491, p = .000)\). When analyzed through linear regression, hardiness was the weakest predictor of readiness among the study’s three independent variables. However, its \(R^2\) of .247 still explains that roughly 24% of the variance of readiness is accounted for by hardiness. In the second part of question three, linear regression analysis found that hardiness was the strongest predictor of confidence. An \(R^2\) of .241 suggests that hardiness explains approximately 24% of the variance of confidence.

In light of the high correlations and F scores among the study’s variables, it can be asserted that each of the study’s independent variables represent meaningful psychological resources in the college-to-career transition. Findings suggest that strengthening each of these variables in the career counseling context could have beneficial consequences for students’ transition into the world of work. However, the results from linear regression did not show which variables, when analyzed together,
have the greatest predictive power and explain most of the variance of the study’s dependent variables. In this respect, research question four revealed the study’s more interesting findings and, perhaps, the clearer implications for training and practice. When a stepwise multiple regression analysis was performed to identify the contribution of each independent variable to the readiness factor, the stepwise analysis chose proactive personality as the study’s strongest predictor of readiness. Proactive personality explained approximately 31% of the variance of readiness. The stepwise analysis further selected hardiness as a second significant contributor to readiness. However, hardiness was found to only contribute an additional 6.9% of the variance for readiness. Both variables combined accounted for roughly 38% of the variance. General self-efficacy was found to not significantly contribute to the model. These results suggest a general overlap among the variables, i.e., they tend to explain roughly the same personality traits. This is not totally unexpected; in fact, each variable was chosen because of its connotation with proactive behavior.

Thus, this study adds to the growing body of research demonstrating the benefits of proactivity in achieving career satisfaction. Considering that individuals with a proactive personality have been defined as “dynamic agents who identify and seize opportunities that bring about change in their environments by either improving their current situations or creating new ones” [italics added] (Greguras & Diefendorff, 2010, p. 540), there is perhaps little surprise that being proactive along with being ready for career transition would be so closely related. Conceptually, individuals geared towards taking action would also be ready for action. It would seem their proactive nature spells a general level of readiness to engage in the career transition process.
Using Krumboltz’s (2009) Happenstance Learning Theory as a theoretical framework for identifying psychological resources in the college-to-career transition, the author selected variables to study that are associated with action, initiative, and persistence in the face of obstacles. The benefit of a stepwise regression analysis of these variables and their relationship to readiness is that we now have a statistical model prioritizing which variables possess greater predictive power. In this respect, based on proactive personality’s strength in predicting readiness to engage in the college-to-career transition, this study lends further support to the importance of being proactive in the career transition process. In fact, it could be argued in light of the study’s findings on proactive personality and the research supporting the benefits of proactive career behaviors (Claes & Ruiz-Quintanilla, 1998; King, 2004; Sturges, Conway, Guest, & Liefooghe, 2005; Sturges, Guest, Conway, & Mackenzie Davey, 2002), that career counselors should be spending a meaningful portion of their time assessing and strengthening their students’ proactivity. Since proactive personality is strongly associated with readiness for career transition, college career counselors can help their students become psychologically and emotionally ready for the inherent difficulties of the college-to-career transition by designing interventions that help students learn to be proactive in their daily lives. These implications will be discussed at greater length later in the chapter under implications for training and practice.

When a stepwise multiple regression analysis was performed to identify the contribution of each independent variable to the confidence factor, the stepwise analysis chose hardiness as the study’s strongest predictor of confidence. Hardiness explained 24% of the variance of confidence. General self-efficacy was also selected, yet it only
added an additional 4% to the variance. Proactive personality was not selected because it did not add significantly to the model. The fact that each variable was found to significantly predict confidence through linear regression analysis speaks once again to the general conceptual overlap among the variables. Each could be the focus of assessment and intervention by career counselors working to help students develop confidence in their ability to successfully navigate the college-to-career transition. Nonetheless, the stepwise analysis clarifies the relative predictive strength when each variable is compared with and against each other in relationship to readiness and confidence. And based on the current analysis, hardiness would be the best choice for counseling interventions designed to help students develop their sense of confidence for the college-to-career transition.

The selection of hardiness as the strongest predictor of confidence fits with the construct’s affiliation with existential courage. Individuals high in existential courage look at life’s difficulties as opportunities for growth. Change is not feared, but viewed as a normal aspect of living (Orr & Westman, 1990). These individuals go after challenges and see change as opportunities for personal development (Kobasa, 1982; Orr & Westman, 1990). One possible explanation for this is based on the defining qualities of hardiness, with subjects in the current study who scored highest in hardiness considered the most ready for career transition because they view their upcoming transition as an opportunity for their development. Similarly, those high in general self-efficacy possess the confidence to handle whatever life throws at them. In the case of a college-to-career transition, they have the perceived self-efficacy which allows them to successfully adapt to the challenges of transition. Thus, hardiness and agency share a common attitudinal
component—each highlights the self-belief that one can handle a difficult situation with confidence. With hardiness and general self-efficacy in the model, proactive personality did not offer any further explanatory or predictive power.

Implications for Practice and Future Research

There are a number of implications for clinical practice, counselor training, and future research. Considering the current and future economic challenges facing the emerging adult, HLT becomes an even more important tool for the career counselor. Krumboltz (2009) created HLT to provide counselors with strategies to guide them in helping clients adapt and thrive in the midst of shifting circumstances, believing that career adaptation is greatly facilitated by engaging in proactive career behaviors. Accordingly, “the goal of counseling needs to be expanded so that whatever unexpected changes in the workplace occur, clients will be prepared to adapt to them and benefit from them” (Feller et al., 2001, p. 221). Helping clients prepare for “unexpected changes” and how to “benefit from them” is at the heart of Happenstance Learning Theory (Krumboltz, 2009).

One implication from this study is that it lends support to HLT and its four fundamental propositions:

1. The goal of career counseling is to help clients learn to take actions to achieve more satisfying career and personal lives—not to make a single career decision. [italics added]

2. Career assessments are used to stimulate learning, not to match personal characteristics with occupational characteristics.
3. Clients learn to engage in exploratory actions as a way of generating beneficial unplanned events. [italics added]

4. The success of counseling is assessed by what the client accomplishes in the real world, outside the counseling session. [italics added]

Krumboltz (2009) believes that creating and capitalizing on unexpected events is often a major catalyst in an individual’s career transition. Hence, HLT is a particularly well-suited career theory for college career counselors to use with emerging adults in transition. Since recent college graduates have fewer opportunities before them, proactive emerging adults who are able to create and capitalize on unforeseen opportunities are at a distinct advantage over their less proactive peers (Krumboltz, 2001, 2009). The results of this study support the assertion that variables associated with proaction and performance under stressful circumstances represent key resources during transition.

Implications for Career Counseling

There are a number of other potentially important implications from the current findings. First, the ability to identify or measure the traits associated with a successful college-to-career transition would be useful to college career counselors, counselor educators, and students alike. For example, the knowledge that personal traits associated with proactivity represent psychological resources for emerging adults in transition provides career counseling professionals with a better understanding of how to implement HLT into practice. In other words, while HLT provides the theoretical framework, this study provides a roadmap for how to help students and clients learn to take actions. The identification of psychological resources that promote engagement in
proactive career behaviors provides career counselors with useful information on which specific psychological factors are meaningful to assess and strengthen through counseling interventions.

A person low in these characteristics could be helped in their college-to-career transition with interventions designed to strengthen these psychological resources. For example, a college career counselor seeking to help a student become more emotionally and psychologically ready for their upcoming transition into the world of work could use a proactive personality scale to assess a student’s proactivity level. Students scoring low to medium in proactive personality could be given support or services with the goal of helping the student become more proactive. Though the author was unable to find explicit models or strategies for enhancing the specific construct of proactive personality, a number of interventions could be designed to assist an individual in becoming more proactive with their daily decisions. More specifically, students could be encouraged to engage in a variety of proactive career behaviors. For example, based on De Vos and colleagues’ (2009) research on the career benefits of networking, counselors could help students design specific strategies for expanding their list of contacts and referrals.

Networking strategies could take a number of forms, including joining professional associations, as well as attending career fairs, professional conferences, and informational interviews. In addition, students can be encouraged to talk with friends, business associates, former co-workers and others in their personal and professional lives about potential opportunities. Though people in their direct network may not have a job to offer, chances are these people will offer valuable referrals to pursue. Hence, an
important intervention for career counselors is to assist students in organizing and following up with their list of referrals.

In addition, this study provides college career counselors with a clearer picture of how, along with demonstrating the all-important why, students with a greater sense of confidence in their abilities to navigate the college-to-career transition are more successful. For example, career counselors can assess their students’ hardiness level through the use of a hardiness scale such as the DRS-15. Those students scoring low to medium in hardiness can be given support or services with the goal of improving their hardiness attitudes (i.e., control, challenge, and commitment). Unlike proactive personality, there already exists empirically supported hardiness training methods (Khoshabi & Maddi, 1998) that career counselors could use to help students become hardier in their outlook on life in general, and the college-to-career transition in particular. For example, hardiness training procedures include narratives on hardiness, inspirational examples, exercises, and periodic checkpoints (Maddi et al., 2009). “Its emphasis is on exercising and developing the hardy skills of coping, social support, and self-care, and using the feedback obtained through these efforts to deepen the hardy attitudes of commitment, control, and challenge” (Maddi et al., 2009, p. 568). More specifically, students could be taught proactive coping using situational reconstruction to develop a broader perspective and deeper understanding of the stressful challenges associated with the college-to-career transition. The use of this imaginative procedure, in conjunction with a specific action plan, could facilitate the development of the hardy attitudes (Maddi et al., 2009), and by extension, strengthen a student’s confidence that he or she can successfully navigate into the world of work. These interventions could have
the positive effect of helping a student become more confident in their perceived capacity to successfully navigate their upcoming transition into the world of work. Such interventions could focus on a person’s attitude and problem-solving skills, especially since hardiness involves a proactive coping approach to handling difficulties and is based on a person’s perceptions of the situation (Maddi & Kobasa, 1984).

**Implications for Counselor Education**

In addition to the implications for college career counselors, counselor educators can use the information provided from this study to guide counselor training. For example, career counseling educators could highlight HLT in their lectures on career theory and emphasize to their students the need for proaction during career transitions. They can base this on the results of the current study which add to the growing research on the benefits of engaging in proactive career behaviors: taking action facilitates career satisfaction and adaptability.

Further, career counselor educators could emphasize the significance of assessing and building clients’ strengths. A strength-based approach to career counseling blurs the line between personal and career counseling, making the individual’s development of key strengths a significant goal for career counseling. The focus on positive growth, and not on merely matching personal with environmental characteristics, addresses the whole individual and is based on the supported assumption that the exercise of personal strengths (e.g., agency, hardiness, and proactivity) facilitates personal *and* career development (Seligman, 2002; Smith, 2006). Though the author was unable to find research on the methods and foci of the typical CACREP career counseling course, it is probable that career counseling educators could place more of an emphasis on the
assessment and augmentation of clients’ strengths. This study highlights particular strengths that may be helpful in the college-to-career transition.

Research Implications

The results of this study suggest certain possibilities for additional research. One idea is to develop a college-to-career transition scale. The use of the CTI in the current study had to be adapted to reflect the transition from college into the working world. Though students were offered an altered definition of career transition (one that reflects changing a college major, or transitioning from college into the world of work), a new scale, one specifically created for emerging adults, would be useful for researchers working exclusively with this population. In addition, a new college-to-career transition inventory could include the proactive variables identified in the current study. Since career counselors could use the scale to identify areas to emphasize in assisting students, a logical line of research is to see how well human agency, proactive personality, and hardiness can be assessed and then used in clinical situations.

Additional research on career transitions could be done to identify other resources emerging adults use during the college-to-career transition. While Heppner and her colleagues found support for five resources (Heppner, 1998; Heppner et al., 1994), and the current study found support for an additional three (agency, proactive personality, and hardiness), other resources are conceptually possible. For example, potential transitional resources include interpersonal skills, wellness, spirituality, hope, optimism, and perseverance, among other possibilities. These possible resources could be tested in ways similar to the current study, or tested in a qualitative design to see if they are considered useful or helpful to people undergoing a transition. Alternatively, researchers
could study those who made the transition successfully and those who did not, in order to identify the differences and the presence of transition-related resources.

Another line of research could be conducted to test whether being proactive creates career-related “luck.” This idea represents a major emphasis of HLT (Krumboltz, 2009) and is ultimately the basis of its four foundational propositions. A study could be done which measures whether proactive individuals actually experience more serendipity in their career lives than others. The implications from this research emphasis could be far-reaching for career counselors, since fostering proactivity may help students and clients create opportunities in their lives. Finally, research is needed to identify the psychometric properties of a human agency scale. The use of general self-efficacy, or any other construct, as a proxy for agency is rife with issues. Human agency, according to Bandura’s (2001) definition, is more complex than self-efficacy alone and reflects a collectivist component difficult to measure by any existing scale. Moreover, Chen’s (2006) theory of agency includes multiple aspects of agency that extend beyond self-efficacy. Though Chen (2006) supports the notion of self-efficacy as a “core foundation and mechanism that enables people to exercise human agency” (p. 132), he contends that human agency represents a “complex and dynamic psychological interaction that is intentional and purposeful” (Chen, 2006, p. 132). Thus, Chen (2006) argues, the key feature of human agency is the intertwining nature of human intention and action. A scale that incorporates this more sophisticated notion of agency would have obvious benefits for those seeking to study the characteristics of this elusive trait.

Another area that needs to be addressed in future research is whether psychological resources, including human agency, are as relevant for individuals from
non-Western cultures. For example, if this study had been done with international students, a more collectivist style of thinking may have decreased the significance of individual level factors. In other words, other factors such as social norms and cultural expectations may have equal or greater emphasis than intrapersonal factors on career transition success. In addition, this research could potentially shed light on the implicit bias that exists in Western styles of independence that define agency solely in terms of autonomy, self-expression, and freedom (Markus & Kitayama, 2003). The result could be a richer understanding of agency, one in keeping with Bandura’s (2001) notion of collectivist agency.

Limitations

This study has limitations. One limitation is that socioeconomic status was not measured, so its effect could not be measured on participants’ test scores. A second limitation is the general racial/ethnic homogeneity of the participant pool, as well as the use of data from one specific region of the country (Iowa). The data was collected at a large, Midwestern university which is predominantly White (87%), and while a handful of people from other ethnic backgrounds participated in the study, these participants constituted less than 20% of the sample. Therefore, the results of the study cannot be generalized to the national population. To test the results of this study, and to expand its implications to potentially a wider population, this study should be duplicated with a more demographically diverse range of participants from multiple regions of the country. A third limitation involves the demographic questionnaire, where there is a lack of uniformity with the answers to the transition questions. For example, 81% did not plan to attend graduate school in the fall semester, and 77% had not been offered a job requiring
a college degree. This “lopsided” frequency distribution could potentially have affected the results of the study.

A fourth limitation is the relatively small response rate. It was expected that with the use of monetary incentives and a follow up invitation that the study could garner a 10% response rate. Instead, approximately 2% responded. This low response rate is a concern since answers from the survey respondents may differ substantially from those of nonrespondents, resulting in a biased estimate of the characteristics of the population (Bean & Roszkowski, 1995). However, there have been a number of challenges to the prevailing wisdom that lower response rates indicate lower survey accuracy (Holbrook, Allyson, Krosnick & Pfent, 2007; Keeter, Scott, Kennedy, Dimock, Best, & Craighill, 2006; Visser, Krosnick, Marquette, & Curtin, 1996). For example, in a meta-analysis of 81 national surveys ranging from a 5% to 54% response rate, Holbrook and colleagues (2007) found only a minimal difference in accuracy. A fifth limitation is the use of the general self-efficacy (GSE) scale as a proxy for human agency. Though precedence exists for using the GSE to measure agency (e.g., Boehmer, S., Luszczynska, A., & Schwarzer, R., 2007; Luszczynska, A., Gutiérrez-Doña, B., & Schwarzer, R., 2005; Schwarzer, 2009), and despite the fact that agency theorists (e.g., Bandura, 2001; Chen, 2006) consider self-efficacy to be the “core foundation and mechanism that enables people to exercise human agency” (Chen, 2006, p. 132), GSE is not synonymous with agency. This fact speaks to the need for the development of an agency scale.

Conclusion

The insight gleaned from this research provides useful information that adds to the body of knowledge on career counseling in general and college-to-career counseling
specifically. There have been few studies identifying additional psychological resources since Heppner (1991, 1998) and Heppner and colleagues (1994) identified their original five resources (i.e., readiness, confidence, control, support, and decision independence). Research dedicated to emerging adults is limited. This study added to the body of literature on college-to-career transition by providing more information concerning the characteristics of adaptive and resilient emerging adults. This further operationalized the construct of psychological resources. Career counselors and counselor educators can only benefit from better understanding the traits associated with a successful transition from college into the world of work. Therefore, the results of this study make a meaningful contribution to the field of career counseling.
APPENDIX A

PERMISSION FROM UNIVERSITY OF IOWA CAREER COUNSELING DIRECTOR

Actions

Inbox

Tuesday, January 25, 2011 11:23 AM

To: Greenleaf, Arie T

Arie,

Yes, I am starting to feel better. You have the green light from our office. Let me know what the next step is.

Thanks,

D. Allan Boettger
Director, Career Services
Pomerantz Career Center, The University of Iowa
319-335-1023
allan-boettger@uiowa.edu
www.careers.uiowa.edu
APPENDIX B

DEMOGRAPHICS QUESTIONNAIRE

Demographic questions:

1. Please fill out the following items:

   Race:  Gender:  Age:

Transition questions:

1. Do you plan to work full-time in a job that requires a college degree in the fall of 2011?
2. Do you plan to attend graduate or professional school in the fall of 2011?
3. Have you already been offered a job following graduation that requires a college degree?
APPENDIX C
CAREER TRANSITION INVENTORY

Career transition means any career-related event or nonevent (i.e., an event that was supposed to happen, but did not happen) resulting in changes in roles, relationships, routines, or assumptions. Some examples are:

(b) Change of a career goal or a college major; (b) attainment, change, or loss of a part-time/full-time job; (c) change of the course of action to achieve a career goal; or (d) graduation from school/college.

While reading the following items, recall some of your experiences that you consider as a career transition based on the above description and respond to each item accordingly (Yang & Gysbers, 2007, p. 159).

1 = Strongly disagree  2 = Disagree  3 = Disagree a little  4 = Agree a little  5 = Agree  6 = Strongly agree

Readiness Factor

| 1 | I feel as though I have a driving force within me to work on this career transition right now.* |
| 2 | Even though there are risks, I think there is a realistic hope of finding a better career choice.* |
| 3 | At this point in my life, I really feel the need for meaning in my work, that need keeps me moving at this process.* |
| 4 | I am feeling challenged by this career transition process and this knowledge keeps me motivated.* |
| 5 | I believe I am ready to risk some of the security I now have in my current career in order to gain something better.* |
| 6 | Even though this may not be the best time for other people in my life, I feel the need to go for it.* |
| 7 | I don’t feel much internal “push” to work hard at this career transition. |
| 8 | Recent events in my life have given me the shove I need for this career transition.* |
| 9 | This isn’t one of those time in my life when I really feel propelled to make a career transition.* |
| 10 | Even though the solution to this career transition is not readily apparent, I believe I |
105

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
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<tbody>
<tr>
<td>11</td>
<td>My effort, creativity, and motivation will lead me to a new career.*</td>
</tr>
<tr>
<td>12</td>
<td>The risks of this career transition are high but I am willing to take the chance.*</td>
</tr>
<tr>
<td>13</td>
<td>Each day I do something on this career transition process, I would say I’m motivated.*</td>
</tr>
</tbody>
</table>

Confidence Factor

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<tbody>
<tr>
<td>14</td>
<td>In dealing with aspects of this career transition, I am unsure whether I can handle it.</td>
</tr>
<tr>
<td>15</td>
<td>I never have been able to go through career transition very easily. I doubt I will this time.</td>
</tr>
<tr>
<td>16</td>
<td>I feel confident in my ability to do well in this career transition process.*</td>
</tr>
<tr>
<td>17</td>
<td>The magnitude of this career transition is impossible to deal with.</td>
</tr>
<tr>
<td>18</td>
<td>This career transition process may be too complex for me to work through.</td>
</tr>
<tr>
<td>19</td>
<td>The number of unknowns involved in making a career transition is a risky venture, but the risk doesn’t bother me.</td>
</tr>
<tr>
<td>20</td>
<td>It seems natural as something as scary as a career transition, I would be preoccupied with worry about it.</td>
</tr>
<tr>
<td>21</td>
<td>The risk of changing careers seems serious to me.</td>
</tr>
<tr>
<td>22</td>
<td>I am not one of those people who was brought up to believe I could be anything I wanted to be.</td>
</tr>
<tr>
<td>23</td>
<td>I don’t feel that I have the talent to make a career transition that I will feel good about.</td>
</tr>
</tbody>
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* These items are reverse-scored
APPENDIX D

GENERAL SELF-EFFICACY SCALE

1 = Not at all true  2 = Hardly true  3 = Moderately true  4 = Exactly true

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<table>
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<tbody>
<tr>
<td>1</td>
<td>I can always manage to solve difficult problems if I try hard enough.</td>
</tr>
<tr>
<td>2</td>
<td>If someone opposes me, I can find the means and ways to get what I want.</td>
</tr>
<tr>
<td>3</td>
<td>It is easy for me to stick to my aims and accomplish my goals.</td>
</tr>
<tr>
<td>4</td>
<td>I am confident that I could deal efficiently with unexpected events.</td>
</tr>
<tr>
<td>5</td>
<td>Thanks to my resourcefulness, I know how to handle unforeseen situations.</td>
</tr>
<tr>
<td>6</td>
<td>I can solve most problems if I invest the necessary effort.</td>
</tr>
<tr>
<td>7</td>
<td>I can remain calm when facing difficulties because I can rely on my coping abilities.</td>
</tr>
<tr>
<td>8</td>
<td>When I am confronted with a problem, I can usually find several solutions.</td>
</tr>
<tr>
<td>9</td>
<td>If I am in trouble, I can usually think of a solution.</td>
</tr>
<tr>
<td>10</td>
<td>I can usually handle whatever comes my way.</td>
</tr>
</tbody>
</table>
APPENDIX E

ABBREVIATED VERSION OF PROACTIVE PERSONALITY SCALE

1 = Strongly disagree  2 = Disagree  3 = Disagree a little  4 = Neither agree nor disagree  
5 = Agree a little  6 = Agree  7 = Strongly agree

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>I am constantly on the lookout for new ways to improve my life.</td>
</tr>
<tr>
<td>2</td>
<td>Wherever I have been, I have been a powerful force for constructive change.</td>
</tr>
<tr>
<td>3</td>
<td>Nothing is more exciting than seeing my ideas turn into reality.</td>
</tr>
<tr>
<td>4</td>
<td>If I see something I don’t like, I fix it.</td>
</tr>
<tr>
<td>5</td>
<td>No matter what the odds, if I believe in something, I will make it happen.</td>
</tr>
<tr>
<td>6</td>
<td>I love being a champion for my ideas, even against others’ opposition.</td>
</tr>
<tr>
<td>7</td>
<td>I excel at identifying opportunities.</td>
</tr>
<tr>
<td>8</td>
<td>I am always looking for better ways to do things.</td>
</tr>
<tr>
<td>9</td>
<td>If I believe in an idea, no obstacle will prevent me from making it happen.</td>
</tr>
<tr>
<td>10</td>
<td>I can spot a good opportunity long before others can.</td>
</tr>
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APPENDIX F
DISPOSITIONAL RESILIANCE SCALE - 15

0 = Not at all true  1 = A little true  2 = Quite true  3 = Completely true

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Most of my life gets spent doing things that are meaningful.</td>
</tr>
<tr>
<td>2</td>
<td>By working hard you can nearly always achieve your goals.</td>
</tr>
<tr>
<td>3</td>
<td>I don’t like to make changes in my regular activities.</td>
</tr>
<tr>
<td>4</td>
<td>I feel that my life is somewhat empty of meaning.</td>
</tr>
<tr>
<td>5</td>
<td>Changes in routine are interesting to me.</td>
</tr>
<tr>
<td>6</td>
<td>How things go in my life depends on my own actions.</td>
</tr>
<tr>
<td>7</td>
<td>I really look forward to my work activities.</td>
</tr>
<tr>
<td>8</td>
<td>I don’t think there is much I can do to influence my own future</td>
</tr>
<tr>
<td>9</td>
<td>I enjoy the challenge when I have to do more than one thing at a time</td>
</tr>
<tr>
<td>10</td>
<td>Most days, life is really interesting and exciting for me.</td>
</tr>
<tr>
<td>11</td>
<td>It bothers me when my daily routine gets interrupted.</td>
</tr>
<tr>
<td>12</td>
<td>It is up to me to decide how the rest of my life will be.</td>
</tr>
<tr>
<td>13</td>
<td>Life in general is boring for me.</td>
</tr>
<tr>
<td>14</td>
<td>I like having a daily schedule that doesn’t change very much.</td>
</tr>
<tr>
<td>15</td>
<td>My choices make a real difference in how things turn out in the end.</td>
</tr>
</tbody>
</table>
APPENDIX G

INVITATION EMAIL

Dear College Senior,

In an effort to better understand the personal qualities that assist emerging adults to make a successful college-to-career transition, I am conducting a research study with college seniors between the ages of 18 and 25 graduating in May. I hope that my study can help shed light on ways that career counselors can assist students in successfully making the transition into the world-of-work.

If you agree to participate in the study, I will ask you to complete an online survey. To access the survey, copy and paste the entire URL into your browser to access the survey.

https://www.surveymonkey.com/s/college-to-career

You will be asked to read additional information about the study before starting the survey. I would appreciate your response within the next two weeks.

Your responses will be kept strictly confidential (used only for the purposes of research for this project).

You will have the option of entering a drawing at the end of the survey. You should be able to complete the survey within 20 minutes or less.

If you have any questions email me at arie-greenleaf@uiowa.edu

Thank you for your consideration of my study.

Sincerely,

Arie Greenleaf, A.B.D., NCC
Doctoral Candidate and Instructor
Counselor Education and Supervision
Department of Rehabilitation and Counselor Education
University of Iowa
APPENDIX H

AUTHOR’S PERMISSION TO USE INSTRUMENT

Career Transition Inventory:

Heppner, Mary [HeppnerM@missouri.edu]
Inbox
Tuesday, January 04, 2011 8:18 PM
You replied on 1/5/2011 9:33 PM.
Yes, you have my permission to use the CTI. Mary

Greenleaf, Arie T
Actions

Sent Items
Tuesday, January 04, 2011 1:36 PM
To:
M
HeppnerM@missouri.edu
Dear Dr. Heppner,

My name is Arie Greenleaf and I'm a doctoral candidate at the University of Iowa. I'm currently working on my dissertation to identify psychological resources for emerging adults in the college-to-career transition. I respectfully ask for your permission to use the CTI in my study. I'm happy to share with you the results of my research and any other information you request.

Thank you in advance.

Best wishes,

Arie T. Greenleaf, ABD, NCC
Doctoral Student and Instructor
Counselor Education and Supervision
The University of Iowa
Proactive Personality Scale:

J Michael Crant [jcrant@nd.edu]
Inbox
Wednesday, January 05, 2011 8:56 PM
Hi Arie,

This will be fine, please feel free to use the scale whenever you wish for research purposes.

Mike Crant

Greenleaf, Arie T
Actions

Sent Items
Wednesday, January 05, 2011 7:57 PM
To: M
jcrant@nd.edu
Dear Dr. Crant,

My name is Arie Greenleaf and I'm a doctoral candidate at the University of Iowa. I'm currently working on my dissertation to identify psychological resources for emerging adults in the college-to-career transition. I respectfully ask for your permission to use the Proactive Personality Scale in my study. I'm happy to share with you the results of my research and any other information you request.

Thank you in advance.

Best wishes,

Arie T. Greenleaf, ABD, NCC
Doctoral Student and Instructor
Counselor Education and Supervision
The University of Iowa
DRS END USER LICENSE AGREEMENT – ACADEMIC
The DRS instrument(s) may be used by academic students and faculty for research projects and activities related to their academic programs, subject to the following terms. This is an Agreement between you and the author (Paul T. Bartone, Ph.D.) which governs your access to and non-commercial use of the Dispositional Resilience Scale (DRS) and supporting copyrighted materials.
General Self-Efficacy Scale:

The purpose of this FAQ is to assist the users of the scales published at the author's web pages http://www.ralfschwarzer.de/

**Do I need permission to use the general perceived self-efficacy (GSE) scale?**

You do not need our explicit permission to utilize the scale in your research studies. We hereby grant you permission to use and reproduce the General Self-Efficacy Scale for your study, given that appropriate recognition of the source of the scale is made in the write-up of your study.

The international source is:
APPENDIX I

CONSENT INFORMATION

Project Title: Human Agency, Hardiness, and Proactive Personality: Potential Resources for Emerging Adults in the College-to-Career Transition

Principal Investigator: Arie T. Greenleaf

I invite you to participate in a research study. The purpose of this study is to identify potential psychological resources that might assist emerging adults to make a successful college-to-career transition. No study, to date has examined whether human agency, hardiness, and proactive personality represent personal strengths when transitioning from college into the world-of-work. The data extracted from this research study may inform career counseling professionals on how to better prepare college students for the inherent challenges of leaving college and making a successful transition into the work force.

I am inviting you to participate in this research study because you are a college senior graduating in May from the University of Iowa.

If you agree to take part in this study, the expected study duration is approximately 15 to 20 minutes. You will be asked to complete a set of questionnaires.

You will be asked to complete a demographic questionnaire that asks for your age, sex, and race/ethnicity. It will take approximately 1 minute to complete this section of the questionnaires. You will then be asked to complete the Career Transition Inventory (CTI) which asks you to identify your beliefs about your readiness and confidence in regards to making a college-to-career transition. It will take approximately 5 minutes to complete this section of the questionnaire. You will then be asked to complete the General Self-Efficacy Scale (GSES) which asks you to identify your confidence to perform successful behaviors across a wide range of situations. It will take approximately 3 to 5 minutes to complete this section. Next you will be asked to complete the Proactive Personality Scale (PPS) which asks you to identify your attitude about being proactive. It will take approximately 3 to 5 to complete this section. Finally, you will be asked to complete the Dispositional Resilience Scale-15 (DRS-15) which asks you to identify your level of hardiness. It will take approximately 3 to 5 minutes to complete this last section of the questionnaire. You are free to skip any questions you prefer not to answer on the questionnaires during the study.

After you have completed the questionnaires, you will be asked whether you wish to enter the drawing for one of three $100 Visa gift cards. Please enter your email to participate in the drawing.
After all participants have filled out the questionnaires, the emails will be placed in a box and four emails will be randomly drawn. If your email is randomly selected, you will receive the gift card in an email from the principal investigator of the study.

To help protect your confidentiality, all questionnaires will be kept strictly confidential and used only for the purposes of research for this project. I will not be able to link you to your responses on the questionnaires. I will store the study questionnaires in a locked file cabinet in a locked office at the University of Iowa; I will be the only one able to access these data.

Taking part in this research study is completely voluntary. You may decide at any time to stop participating in the study. Your decision whether or not to participate in this study will not affect your grades for courses or your standing at the University.

If you have any questions about the research study itself, please contact: Arie Greenleaf at 319-541-8987. If you have questions about the rights of research subjects, please contact the Human Subjects Office, 300 College of Medicine Administration Building, The University of Iowa, Iowa City, IA 52242, (319) 335-6564, or e-mail irb@uiowa.edu. To offer input about your experiences as a research subject or to speak to someone other than the research staff, call the Human Subjects Office at the number above.

If you agree to participate in the study, please indicate “yes” to this informed consent page and complete the questionnaires. If you do not wish to participate in the study, please indicate “no” to this informed consent. Thank you very much for your consideration.
REFERENCES


Beckman (Eds.), Action control: From cognitions to behavior (pp. 11-39). New York: Springer-Verlag.


