IDENTITY DEVELOPMENT ACROSS THE LIFESPAN

Linda L. Louden, M.A.

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

August 2005

APPROVED:

Bert Hayslip, Jr., Major Professor
Pam Flint, Committee Member
Judy McConnell, Committee Member
Barbara Wilhite, Committee Member
Vicki Campbell, Co-Chair of the Counseling Psychology Program
Linda Marshall, Chair of the Department of Psychology
Sandra L. Terrell, Dean of the Robert B. Toulouse School of Graduate Studies

Louden, Linda L., Identity development across the lifespan. Doctor of Philosophy (Counseling Psychology), August 2005, 98 pp. 16 tables, reference list, 142 titles.

In an extension of Louden's work, this study investigated identity development across the lifespan by applying Erickson's and Marcia's identity constructs to two developmental models, the selective optimization and compensation model and a holistic wellness model. Data was gathered from traditionally aged college freshmen and adults older than 60 years of age. Uncommitted identity statuses and work and leisure wellness domains were endorsed across both groups, suggesting that identity for these groups is in a state of fluctuation yet entailing participation as a productive member of society. Emerging adult findings imply that identity diffused and moratorium identity styles are more similar in terms of cognitive, behavioral, and emotional functioning than past literature suggests for this age group. Findings also indicate that identity development is not a process completed by older adulthood, but is an ongoing, lifelong process perhaps driven by contextual factors such as health changes, unpredictable life events, social support group changes, and others. Coping method utilization and overall wellness varied between the two age groups. Conceptually, the SOC model can be viewed as embedded within each of the wellness domains such that selection, optimization, and compensation activities may be carried out within each of the various domains and serve to enhance existing functioning within each domain rather than simply compensating for lost functioning. Possible explanations of the results as well as implications for clinical practice, higher education, and future research are provided.

ACKNOWLEDGMENTS

Thank you to my husband, Greg, who has supported me in innumerable ways throughout our life together. I could not have done this without you, and am looking forward to many, many more years of loving you. You are my partner and my heart.

Thank you to my parents and siblings, Jay, Lori, and Jill, for all of your encouragement, interest, and unwavering belief in me. Mother and Daddy, thank you for making family and education our top priorities growing up. My Doctor "Louden" is for you. Thanks also to my *gatos* for being loving and cuddly paperweights throughout many hours of typing and editing. Midnight would have been much lonelier without my fatties.

Thank you to the WALS, my group of immensely insightful and vibrant women who have been my friends throughout many life milestones and hours of venting, laughing, and crying. A special thank you to Shailagh, who was my sidekick through each of the grueling grad school hoops and invaluable sarcastic support in surviving the ordeal. I'm glad we finally quit missing each other on I-35.

Thank you to my TWU women, who while I was on internship helped me make defending my dissertation a priority, offered down-to-the-wire encouragement, and provided lots of opportunities for that dreaded personal growth. I've learned an immense amount from all six of you and look forward to remaining in connection.

And finally, many thanks to Dr. Bert Hayslip, Jr., who helped me conquer my research procrastination and pushed me through the thesis and dissertation processes. I would not be graduating on time and sane without your support.

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

CHAPTER 1

INTRODUCTION

Finding the answer to what constitutes optimal functioning and best contributes to an overall positive human experience has preoccupied the field of psychology for decades. Within the last ten years, a renewed urgency has been added to this pursuit with the realization of the potential impact of a growing aged population. The Surgeon General's Report on Mental Health (U.S. Department of Health and Human Services, 1999) reports the older adult population (65+ years old) is projected to double in number to 70 million by 2030, and will represent one of the most demographically diverse American age groups. Challenges presented by this growth face not only the health care system, but all aspects of an aging person's life, among them family structures, religious organizations, and local and private resources. Ronch and Goldfield (2003) suggest that this growth entails additional difficulty due to older adults' historical underutilization of mental health services. Underutilization can be accounted for by various factors, including ageist myths, the health care profession's lack of expertise with this age group, barriers to care such as transportation and limited incomes, and the stigma of psychological problems.

A number of approaches have attempted to understand optimal functioning and particularly what it means to age well. It has long been recognized that identity formation is a critical piece to consider when evaluating successful development. Erikson's (1963) epigenetic theory of psychosocial development and Marcia's (1966) expansion of Erikson's theory have made significant contributions to psychology's understanding of identity formation and its impact upon positive functioning.

Holistic wellness models and the selective optimization with compensation (SOC) model (P.B. Baltes, 1987, 1997) are two different attempts to define and understand optimal developmental processes. Holistic wellness has emerged in reaction to the traditional illness based medical models of mental and physical disorders as a new research and treatment paradigm within psychology and counseling (Myers, Sweeney, & Witmer, 2000) that is prevention and strengths based. The wellness concept entails a systems perspective, and addresses the outcome and process of an individual's deliberate, thoughtful effort to integrate mind, body, and spirit domains regardless of the presence of health or illness (Ardell, 1985). In contrast, the SOC model, which was developed in conjunction with the study of the aging process, emphasizes the need for contextually goal driven activity dedicated to prioritizing, or selectively picking and choosing, within life domains. Both of these models recognize that successful development and individual optimal functioning are dynamic processes resulting from an accumulation of efforts across many life domains throughout the lifespan.

Historically, adolescence and young adulthood have been the focus for identity study. However, in light of identity's impact on optimal functioning, benefits of better understanding identity in older adults abound. As Whitbourne (1996) notes, the ongoing aging process involves many inherent changes (e.g. declining physical health and role changes) which can greatly affect an individual's identity. In an effort to extend previous work addressing identity development with a college aged population (Louden, 2003), this study uses a wellness model (Myers, Sweeney, & Witmer, 2001) to quantify various life domains and examines the relationship between adherence to those domains and SOC activity in college aged and older adult samples in an effort to further understand identity development and positive functioning between and within these age groups.

Identity Development

Erik Erikson's (1963) position that adolescence's primary task is to successfully resolve an identity crisis sparked a surge of research conceptualizing adolescent identity development as lying on a continuum between positive (identity achieved) and negative (identity unachieved) poles. This fifth stage, identity versus role confusion, in his epigenetic sequence of personality development over the lifespan emphasizes the importance of successful adolescent ego activity to future functioning. He views later psychosocial crises' successful outcomes as dependent upon the fifth stage's successful resolution. Likewise, identity versus role confusion is dependent upon the successful outcomes of preceding crises. Erikson's definition of identity "includes, but is more than, the sum of all the successive identifications of those earlier years when the child wanted to be, and often was forced to become, like the people he depended on" (Erikson, 1968, p. 87).

Marcia (1966) elaborates upon Erikson's fifth stage and describes four prototypical reactions, which he labels identity statuses, to the late adolescent identity crisis. These reactions differentiate two committed and two uncommitted identity statuses. Identity achievement applies to an individual who has gone through an identity crisis in which various values and lifestyles have been consciously considered. The crisis' resolution comes from committing to choices about values and lifestyles after intentionally contemplating and developing an internal frame of reference. In contrast, identity diffused status individuals have no firm commitments regarding lifestyle or values, and perhaps have not experienced a crisis in which identity has been a foremost concern. Apathy and a lack of commitment characterize this category. Moratorium is similar to identity diffused in that no firm identity commitment exists, but unlike identity diffused, a crisis does exist. This identity status describes an individual who is struggling to

define his or her identity and is susceptible to various outside influences such as family, friends, and society. For an individual in moratorium, identity is transitory and dynamic, shifting with outside influences rather than remaining stable due to a firm internal frame of reference. Foreclosed identity status applies to one who has not experienced a crisis, yet who has a firm identity commitment. In this case, the individual has often accepted without question parents' values and identity without any personal exploration of those values, and rigidly adheres to them. Because of this rigidity, the individual is likely to feel threatened when encountering experiences that challenge or contradict the parental values. The statuses are hierarchically ordered, with the two reflecting an identity crisis considered "more mature" than the two without a crisis in that these individuals are actively exploring and questioning.

Kroger (2000) overviews the scholarship investigating Marcia's four identity statuses, and notes that those individuals with more mature identity statuses, (e.g. moratorium and identity achievement), demonstrate higher levels of moral reasoning, intimacy, ego development, self esteem, and personal autonomy, as well as more adaptive defense mechanisms (Skoe & Marcia, 1991; Orlofsky, Marcia, & Lesser, 1976; Adams & Shea, 1979; Cramer, 1995). Those exhibiting moratorium, a less mature identity status than identity achievement, are not surprisingly associated with the highest levels of anxiety and openness to new experience when compared to the other statuses (Berzonsky & Neimyer, 1994). The foreclosed status is allied with the highest levels of authoritarianism, use of external locus of control, and normative approaches to personal problem solving and decision making (Cramer, 1995; Marcia, 1966; Tesch & Cameron, 1987). Identity diffused individuals tend to rely more on non adaptive defense mechanisms, and have low levels of intimacy, self esteem, personal autonomy, and ego development (Adams & Shea, 1979; Marcia, 1966; Orlofsky, Marcia & Lesser, 1976).

Bluestein and Philips (1990) found differences in decision making strategies among college students according to the students' identity status. College students who endorsed identity achievement reported using rational, systematic decision making strategies. Those in foreclosed tended to rely on dependent strategies utilizing others' guidance as critical to their decision making process. Diffused status was linked with intuitive and dependent decision making or an absence of systematic and internal decision styles, while moratorium status was not consistently associated with any decision making strategy.

The identity research suggests identity status categorization shifts during adolescence and the college years. Three longitudinal studies evaluating vocational identity, religious beliefs, and political ideology have been conducted in this population (Waterman & Waterman, 1971; Waterman, Geary, & Waterman, 1974; Waterman & Goldman, 1976). Across all three studies, college attendance impacted identity development. Vocational identity development appeared to be bolstered, the number of students reaching overall identity achievement increased, and the number of students in overall moratorium status decreased with college attendance. Within the religious identity domain identity development shifted from no crisis to the presence of a crisis, yet few students reached identity achieved in this area at the conclusion of their college years. Political ideology development gains were noted in two of the studies (Waterman & Waterman, 1971; Waterman, Geary, & Waterman, 1974). Kroger (1988) also investigated identity formation according to domains, and her findings further support the notion occupation, religion, and political ideology arenas vary in their developmental speed. Her work added sex role understanding and adherence to the domains, and this area varied in developmental speed as

well. Disparity in identity status across the studies indicates that identity does not develop as a single concept, but instead develops at different rates across separate domains and takes trajectories unique to the individual and his or her contextual requirements.

Research has also demonstrated a linkage between identity development status and various emotional, behavioral, and cognitive functioning domains. It appears that better emotional, behavioral, and cognitive functioning have been associated with the higher identity statuses, specifically with identity achievement. However, more recent work applying identity status to outcome variables demonstrated that there were no differences between identity status endorsement and measures of overall wellness, psychological adjustment, psychological symptoms, and use of effective study habits in a college aged population (Louden, 2003). In this study, seniors were more likely to use effective behavioral, cognitive, and emotional coping strategies than freshmen regardless of identity status endorsement, suggesting emotional and cognitive functioning is associated with age and university standing rather than identity status. These contradictory findings suggest further research is necessary to understand the relationship between identity development and optimal functioning.

Identity in Adolescence and Emerging Adulthood

Adolescence, in addition to being the overwhelmingly favorite period for identity development research, has historically been noted for its potential for intrapersonal and interpersonal difficulty. This turbulence has most notably included tendencies towards increased conflict with parental authority figures, increased experimentation with risky behaviors, and puberty's hormonal upheaval, all which may contribute to the identity development process (Hall, 1904; Arnett, 1999). Despite Erikson and Marcia's emphasis upon adolescence as the

pivotal period for identity development, current research such as that noted above with college students indicates adolescence may mark only the beginning of the identity development process rather than the onset and conclusion of the process.

Arnett (2000) emphasizes that emerging adulthood, (the late teens through the twenties), is qualitatively different than either adolescence or young adulthood and is a hotbed for identity development. For cultures in which adult commitments and responsibilities are delayed, such as in most industrialized Western countries, young people (primarily with middle and upper classes backgrounds) are relatively independent from the pressure of restrictive social roles and normative expectations. This age span for this group reflects great diversity in terms of demographic status (e.g. residential status and school attendance) and instability within demographic status (e.g. moving from college dorm to parents' home to apartment). Due to this flexibility and diversity, Arnett notes emerging adulthood is the period providing the greatest opportunity for identity exploration. For many this period is from adulthood; individuals in this age bracket do not typically "feel" as if they have reached adult status. It seems that in order to proclaim oneself an adult, becoming a self sufficient person (e.g. accepting responsibility for oneself, making independent decisions, and becoming financially independent) is necessary and perhaps chronologically delayed in most contemporary Western societies (Arnett, 1994).

The literature and current research provide a basis for proposing that identity development is not complete towards the end of the college experience, but that the developmental process extends beyond the timeframe many consider to be sufficient for determining who one is and what one wants to become. Louden (2003) found college seniors were more likely to endorse moratorium in comparison to any other status. In fact, in this study none of the college seniors endorsed identity achievement. Kroger's (2000) proposal that identity

development extends beyond late adolescence predicts the absence of identity achievement endorsements within the senior group. College students overall appeared to prioritize activity across many life domains (work, love, friendship, spirituality, and self regulation). These domains mirror and add to the different identity domains previously outlined in the identity research (Waterman & Waterman, 1971; Waterman, Geary, & Waterman, 1974; Waterman & Goldman, 1976; Kroger, 1988). Rather than selectively prioritizing and exploring one or two identity areas, it seems an active, questioning approach to identity was the predominate college student experience. This finding suggests the group is taking advantage of the time period Arnett (1994) considers to offer the most opportunities for exploration by not limiting their exploration to one or two areas. Meanwhile, freshmen were equally likely to endorse either moratorium or diffused status while significantly fewer endorsed foreclosed or identity achieved statuses (Louden, 2003). Freshmen in the college atmosphere have perhaps not yet been exposed to as wide a variety of experiences as their senior counterparts, and therefore a crisis may not yet exist for those freshmen endorsing diffused. These moratorium and diffused freshmen students can be conceptualized as taking in their surroundings, having no firm commitments to a lifestyle or to a set of values, and might be more easily influenced by others and new experiences without active, thoughtful decision making. Some freshmen may enter higher education already in moratorium's active questioning state or be recently coaxed into moratorium due to new challenges in their first year of college. In terms of progression (or regression) in identity status, Waterman et al.'s (1971, 1974, 1976) work supports the notion that identity status shifts occur throughout the college years. Although the study's cross sectional nature does not allow it to address identity status changes specifically, shifts in identity status perhaps explain why significantly more freshmen than seniors endorsed identity achievement (Louden, 2003). It is possible that as

emerging adults progress through their college years, identity commitment turns to uncertainty and questioning with the accumulation of new experiences. This "reversal" from commitment to crisis calls into question linear stage approaches to identity development such as those proposed by Erikson. Emerging adults may often enter college with a worldview they learned and committed to as children and adolescents, but that is abandoned or changed upon introduction to the variety of experiences present in many university environments (Perry, 1999). A student may appear to shift through the identity status in a recursive, non linear fashion.

Identity in Adulthood and Beyond

In its simplest terms, Erikson's identity task involves separation from the family of origin. The individual is no longer socially, economically, and ideologically dependent upon this family group (Erikson, 1968; Valliant, 2003). Erikson assumed this task is either achieved or not in adolescence, and that the remainder of the lifespan is dedicated to succeeding in goals of intimacy, generativity, and integrity. However, the possibility that identity development extends beyond adolescence and emerging adulthood raises the question, "When is identity development truly complete?" Exploration of adulthood and midlife is in its infancy, yet indicators that identity development continues on through the life course abound (e.g. career changes, shifting interpersonal priorities, health changes, deepening spirituality) as researchers learn more about the middle of the lifespan and on (Levinson & Levinson, 1994; Baltes, 1997; Carstensen, Isaacowitz, & Charles, 1999).

Levinson (1978) and Levinson and Levinson (1996) conceptualize human development as an unfolding series of eras linked by transitions, and hints to identity shifts are seen in the descriptions of the eras. The first era, childhood, extends from birth to roughly age 22 and encompasses tasks dedicated to biologically and psychologically separating from parent figures.

The early adult transition follows, and represents a loose time period when both the full maturity of childhood is acknowledged and the infancy of early adulthood begins. The second era, early adulthood, lasts from approximately 17 to 45. This portion of the lifespan is the adult era of great energy, resource abundance, and stress. Tasks involve establishing an identity whose formation was begun in childhood; a career niche is solidified, family life determined, and goals pursued. Mid life transition, from about 40 to 45, brings the adult into an awareness of the start of middle adulthood and end of early adulthood. Middle adulthood, (about ages 40 to 65) addresses a period in which biological capabilities are lessened, but still sufficient for a satisfying and socially valuable way of life. For some, this era is a time of great productivity, social responsibility, and personal growth. For others, Levinson considers this period as one in which progressive decline begins to take hold. Around 60, the late adulthood transition begins. It ends about five years later with entry into late adulthood. This era involves the primary task of finding a new balance between involvement with society and self as the individual begins to experience more fully what Levinson (1978) labels, “the process of dying” (p. 36). Decline and deterioration take center stage during the final eras as the person focuses on finding inner peace and overcoming a sense of despair. While Levinson and Levinson label those who live into their 80s as embarking on late late adulthood, description and theorizing essentially ends with late adulthood.

Kroger and Haslett (1991) report the most common identity status transition during the adult time period is from foreclosure to moratorium to identity achieved. What might account for these shifts and ongoing development as an adult? Relationships between experiencing certain life events and various identity status patterns have been offered as one such explanation (Kroger & Green, 1996). Eight event categories have been associated with these identity status

transitions, including 1) age graded (e.g. first time voting), 2) history graded (e.g., the World Trade Center and Pentagon disasters), 3) non normative critical life (e.g. illness, death, or job loss), 4) family life cycle stage (e.g. birth of first child), 5) exposure to different cultures, social milieus, or sources of knowledge (e.g. travel and higher education), 6) direct influence of a significant other (e.g. romantic partner), 7) internal changes (e.g. increased introspection and self reflection), and 8) lack of opportunity to pursue desired goals (e.g. finding oneself in a dead end job). Experiencing any one or combination of these event categories may initiate identity status fluctuation.

A longitudinal identity study with an adult sample found that certain life events occurring within the last year of the participants' lives were associated with changes in identity activity over a five month time period (Anthis, 2002). A loved one's death and dying predicted increases in identity exploration, while personal financial and economic stressors predicted decreases in identity exploration. Healthcare stressors predicted decreases in identity commitment, and family related stressors predicted increases in identity commitment (Anthis, 2002).

"Possible selves" (Ryff, 1991) provide another vehicle for examining identity across the lifespan. During childhood, children report a wide variety of "ideal self" identity related dreams that may be very disparate from the "real self" identity; one day a child plans to become an astronaut and another day hopes to be a veterinarian without even graduating from elementary school. With age, environmental mastery and cognitive functioning improves while societal pressures set in, and by early adulthood individuals may be more fully capable of distinguishing between realistic and unrealistic self possibilities. Ryff purports that from young to middle to late adulthood, the ideal self image and real self image become more congruent due to linear declines in the ideal self image and goal attainment. By older adulthood, ambitions for the future are more

limited with the reality of physical, time, and other resource constraints and the individual may have become more comfortable with and accepting of him or herself. In older adulthood, Ryff suggests real and ideal selves are most similar; in essence identity is most solidified.

Identity across the lifespan is affected by the unique shifting life context and the individually different reactions to the changes. Whitbourne (1996) conceptualizes the aging process as changes that have separate and cumulative effects on the individual's identity. She views physical and cognitive changes as objective (e.g. loss of mobility due to physical impairment) and subjective (e.g. loss of mobility leading to reduced sense of personal competence). The multiple threshold model of aging acknowledges the complexity of change often apparent in older adult functioning (Whitbourne, 1996). "Multiple" refers to the complexity of the human aging experience in terms of interactive systems; one might feel "old" in one domain (e.g. needing a prescription for reading glasses) while still feeling "young" in other domains (e.g. excellent intellectual and memory function). Originally focused on multiple bodily organ systems, this idea has expanded to incorporate external and psychological domains as well (e.g. feeling competent as a parent, but no longer feeling competent in the workplace). "Threshold" refers to the idiosyncratic point at which the individual recognizes age related change as a sign of personally transitioning into the realm of older adulthood (e.g. needing bifocals for the first time might lead to the realization, "I am an older adult," but memory problems may not). In addition, Whitbourne proposes that change in areas important to one's unique context and sense of competence will have greater potential to affect the identity than changes in relatively unimportant areas. Likewise, areas of great importance are likely to be monitored with vigilance for age related changes. Increased monitoring, in turn, may be accompanied by increased motivation to preserve the attribute. For example, an individual who

highly values physical mobility may be more likely to exercise to avoid muscle loss and preserve endurance (consequently potentially prolonging the life of the highly valued asset) than an individual who highly values memory function and does not exercise but works crossword puzzles instead. However, the exercising individual is also more likely than the puzzle worker to notice early signs of physical decline due to increased attention to that domain. Therefore, the exerciser is perhaps more likely to be negatively impacted by that physical decline than someone less vigilant to that domain.

Holistic Wellness and Successful Aging

Particularly in the last decade, holistic wellness has emerged as a new research and treatment paradigm within psychology and counseling in reaction to the traditional illness based models of mental and physical disorders (Myers, Sweeney, & Witmer, 2000). Concurrent focus on a rapidly growing aging population has spurned a movement focused on optimizing aging rather than decline oriented, pathological aging such as that historically found in disengagement theory (Achenbaum & Bengtson, 1994). “Successful aging,” “positive aging,” “productive aging,” and “optimal aging” are all buzzwords the health, psychology, social policy, and even real estate development industries (focused on this group’s changing housing requirements) use to identify this push (Vaillant, 2002; Rowe & Kahn, 1998; Ronch & Goldfield, 2003). The holistic wellness and successful aging paradigms have developed primarily as separate bodies of literature, however, they share a similar multidimensional, systems approach to optimizing development throughout the lifespan. In addition, they can both be conceptualized as studying discrete activity domains taking place along a chronological age continuum that impact identity function. As a result, the terms will be considered synonymous throughout the remainder of this paper and the literature integrated.

Wellness is considered both an outcome and a process involving the successful assimilation of an individual's deliberate, thoughtful efforts to integrate mind, body, and spirit regardless of the presence of health or illness (Ardell, 1985). It outlines various life domains upon which an individual must focus in order to develop optimally, and in doing so provides a vehicle by which to further explore identity formation across the lifespan. In addition to various physical processes that occur in the body and intellectual, psychological, and emotional processes that occur in the mind, spiritual awareness has come to be considered a necessary component contributing to an individual's wellness (Crose, Nicholas, Gobble, & Frank, 1992). Wellness models emphasize the necessity of balance with respect to their various components; over emphasis on one aspect, even if that aspect is physical health, causes other areas to suffer and ultimately compromises wellness (Greenberg, 1985). While physical health is important, it is not the final determining factor when considering optimal wellness. However, despite the theoretical emphasis on balance among wellness' domains, research has primarily focused on the physical health dimension as 'the' wellness indicator (Hermon & Hazler, 1999).

The wellness concept has a long history rooted in philosophy and psychology. For example, Jung (1958) described the human psyche seeking integration as an instinctual drive to wholeness and health, while Adler (1927) noted the totality of the human being and the importance of one's lifestyle in moving the individual toward optimal development. Maslow (1970) emphasized the importance of growth, self actualization, and the pursuit of health as universal human tendencies. Rogers (1961) theorized that humankind inherently strives towards growth and development. All of these ideas fuel modern psychology's attempts to understand how people develop and how they can develop optimally; wellness models and successful aging are the latest attempts to provide a holistic, comprehensive view of this process.

Wellness as a way of life has enjoyed a particularly high profile position in Western thinking for the past several decades. Most recently, the popular media has brought these ideas to the forefront through such spokespersons as Oprah Winfrey. (Please see www.oprah.com for an example. Entitled “Live Your Best Life,” this webpage refers the reader to sidebar titles outlining her prescription for optimal living. These items reflect categories very similar to those found in many wellness models, including “Spirit and Self,” “Relationships,” “Food and Home,” and “Mind and Body”). Wellness as the means to optimal living can be considered a reflection of Western values focusing on the higher relative value of youth, vitality, and “doing it all” in comparison to old age, decline, and having to give up increasingly more activities. Research has documented that many of us in Western society ascribe to negative stereotypes and prejudices about old age, and that ageism is pervasive in the workplace, medical institutions, and social policy (Zebrowitz & Mortepare, 2000). Continuing the example of the popular media, older adults are more likely that any other age group to appear in television and film as instruments for comic relief involving physical, cognitive, and sexual ineffectiveness (Zebrewitz & Mortepare, 2000). Greenberg, Schimel, and Mertens (2002) suggest that ageism arises from a fear of our own mortality, and perhaps this outlook and value set (in addition to research data) support wellness models’ popularity and their emphasis on being effective in all life domains.

Multiple wellness models have been proposed which imply high positive correlations among dimensions for optimal wellness as well as significance for successful aging. Hettler (1984) describes six dimensions of wellness including intellectual, emotional, physical, social, occupational, and spiritual aspects. Ardell (1988) outlined eight such areas: psychology and spirituality, physical fitness, job satisfaction, relationships, family life, nutrition, leisure time, and stress management. Witmer and Sweeney (1992) conceptualize wellness according to Adlerian

life tasks, and note spirituality, self regulation, work, friendship, and love as areas necessitating attention. The physical, social, psychological, intellectual, emotional, and spiritual are all emphasized by Adams, Bezner, and Steinhardt (1997). For the purposes of this review, all of the areas mentioned above will be considered subsumed under the domains of physical health, mental health, spiritual awareness, social interaction, and work.

While the identity research indicates that identity development plays a significant role in optimal functioning, wellness models have not been used to further understanding of how identity development takes place and how identity development may impact optimal functioning. Wellness' domains lend themselves well to understanding varying identity processes in that they outline different areas and roles that perhaps have personal importance in defining and impacting one's identity. In an effort to define the various areas wellness and successful aging address, a brief summary of each wellness domain is provided below.

Physical Health

Physical health encompasses freedom from illness, the physical ability to perform daily tasks, participation in regular exercise, and proper diet habits (Greenberg, 1985; Witmer & Sweeney, 1992; Adams, Bezner, & Steinhardt, 1997). According to Cooper (1982), exercise contributes to wellness by increasing physical energy, augmenting stress management abilities, decreasing symptoms of depression, improving self image, increasing confidence, and heightening concentration. The quality of one's diet has been linked to loneliness, poor physical health, and a lack of meaningful social contacts across the lifespan (Walker & Beauchene, 1991). Educators of university populations target health behaviors such as alcohol consumption, unsafe sex practices, illegal drug use, and cigarette smoking as contributors to poor physical health (Department of Health and Human Services, 1999). Emphasis on health behaviors is not

unwarranted for the college aged group. Selingo (1995) reports that the Centers for Disease Control and Prevention found 31% of college students smoked cigarettes regularly at some point in their lives, 43.8% of men and 27% of women drank five or more alcoholic drinks on at least one occasion, 50% of men and 47% of women had used marijuana, and 33.2% of men and 22.8% of women admitted to drinking alcohol and driving. In later life, successful aging research (Rowe & Kahn, 1998) contradicts the image of old age as one of weak fragility and inactivity if one is active throughout the lifespan. The literature suggests that physical aging does not begin at 65, but begins in middle age and progresses steadily if not addressed with aerobic exercise and resistance training. Physical exercise decreases the risk of physical ailments often debilitating in later life such as heart disease, high blood pressure, and cancer (Rowe & Kahn, 1998).

Discipline and the ability to self regulate are noted as important contributors to one's ability to maintain physical health (Witmer & Sweeney, 1992). In addition, it appears that health impacts identity. Health status and expectations of future health may be as relevant to individual identity as activities, living conditions, or nationality (Dittmann-Kohli & Westerhof, 2000). In addition, as health status and expectations change, the self concept may need to adapt in order to maintain self esteem and well being (Westerhof, Katzko, Dittmann-Kohli & Hayslip, 2001). Body image has been linked to identity issues as well as quality of life. Cash and Pruzinsky (2002) note that from early childhood on, one's body image affects emotions, thoughts, relationships, and behaviors in everyday life.

Mental Health

Mental health can be considered as falling into two categories: emotional health and cognitive functioning. Myers, Sweeney, and Witmer (2001 a, p. 254) describe healthy emotional functioning as "reflected in rich, varied, and frequent expressions and responses to people and

events within one's daily experiences" and the ability to "positively manage one's emotions." Self esteem, self concept, self worth, and self efficacy are all terms used in the literature to describe mental health. Compton, Smith, Cornish, and Qualls (1996) describe positive self concept, a sense of autonomy, social support, and an internal locus of control or feeling of self efficacy as key factors contributing to mental heath. According to Jex and Bliese (1999), those with strong self efficacy beliefs report fewer negative psychological and physical symptoms than those reporting weaker self efficacy beliefs, despite similar work hours and workload. Mental health has also been linked to physical health and self care. In particular to college students, suicidal ideation, a serious indicator of poor mental health, was correlated with risky behaviors such as not using seat belts, driving after drinking alcohol, carrying weapons, and engaging in physical fights (Barrios, Everett, Simon & Brener, 2000).

Beyond emotional health, cognitive decline is a frequently dreaded phenomenon often associated with mental health in older adulthood. Information processing speed and explicit memory (e.g. finding oneself unable to recall a familiar name or word) are two kinds of cognitive decline associated with this time period, though not universally (Rowe & Kahn, 1998; Salthouse, 1996; Park, 2000). High cognitive function was maintained for those with higher education, a supportive spousal relationship, physical fitness, and high self efficacy who engaged in complex, self directed work (Rowe & Kahn, 1998; Salthouse, 1996).

Wisdom, "the ability to find meaning in life's often adverse experience, openness to experience, generativity, and ego integrity," (Kramer, 2002, p. 131) is a characteristic often attributed to old age. Often considered a hallmark of post formal reasoning and ascribed to extensive life experience, wisdom entails a shift away from dualistic, absolute, and reductive thinking to relativistic awareness of subjectivity and constant change. It entails two different

cognitive processes: 1) insight and 2) awareness of the ambiguous and often uncertain nature of human life (Kramer, 2002). The Max Planck Institute provides the most systematic, extensive study of wisdom. Findings from these studies suggest that wisdom occurred in only 5% of the participants (Baltes & Smith, 1990) and did not demonstrate a generalized age trend favoring older age but instead stable to slight growth across the lifespan (Staudinger, Smith, & Baltes, 1992; Staudinger & Baltes, 1997). However, older adults were among the top wisdom scorers (Baltes & Smith, 1990). Openness to experience appears a critical factor in predicting this kind of reasoning (Staudinger & Baltes, 1997).

Spiritual Awareness

Dunn, a 1960s pioneer in investigating wellness, stated "we can no longer ignore the spirit… as a factor in our medical and health disciplines…" (Dunn, 1966, p. 216). Over the past two decades, theorists have incorporated spirituality as a wellness dimension. Although related ideas, a distinction must be made between spirituality and religiosity. Spirituality can be defined as an overarching positive sense of meaning and purpose in life (Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2000) that may or may not be expressed publicly (Ingersoll, 1994). It is often espoused to include life enhancing beliefs about human dignity, human rights, and reverence for life (Witmer & Sweeney, 1992). Connectedness to the self, the environment, or a higher power has also been emphasized as related to spiritual awareness (Fahlberg & Fahlberg, 1991; Seward, 1995; Goodloe & Arreola, 1991). Religiosity, in contrast, is a narrower idea referring specifically to the public practice of a religion in keeping with the religion's institutional beliefs and values (Ingersoll, 1994). Despite their differences, the two ideas are interrelated. Developing spirituality can add meaning to practicing religion, while practicing religion can deepen spirituality (Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2000). Some

theorists consider spirituality to be the healthy person's core characteristic (Witmer & Sweeney, 1992; Seward, 1995). Spirituality has been linked to positive wellness outcomes (Maher & Hunt, 1993) as well as to life satisfaction (Chumbler, 1996). Fabricatore, Handal, and Fenzel (2000) found that in an undergraduate population, spirituality moderated the effect of stressors and contributed to the preservation of positive life satisfaction appraisals. Among elderly people, those who are involved in and committed to a religious faith are more physically and mentally healthy and endorse more secondary control methods for coping, such as turning worries over to a higher power, than those who are not (Krause, 1997). Depression also appears to be related to spirituality. Low scores on spirituality dimensions correlate with increased depression symptoms (Westgate, 1996). Religiosity appears to bolster coping resources for those who perceive life events as harmful or threatening by affecting how the individuals assess the event and assess their ability to cope with the event (Pargament, 1990). Spilka, Shaver, and Kirkpatrick (1985) defined three roles that spirituality serves in the coping process: it offers a sense of meaning in life, provides the individual with a greater sense of control over his or her situations, and builds self esteem. Richards and Bergin (1997) report that those individuals who have a positive spiritual identity feel connected to a higher being's love, feel a sense of self worth, have meaning and purpose in life, and are better able to fulfill their greatest potential. In contrast, individuals who do not have a positive spiritual identity do not feel a higher power's care in their life and lack purpose and meaning. It seems that having spiritual beliefs are necessary for wellness and contribute specifically to one's mental health regardless of age.

Social Interaction

The desire for interpersonal attachment is a fundamental human desire (Baumeister & Leary, 1995). Extensive research in the area of social support clearly demonstrates that positive

social interactions reduce stress, increase subjective well being, and reduce mortality (Pagel, Erdly & Becker, 1987). In addition, findings suggest that social support is linked to increased self esteem (Diener & Diener, 1995) and there is extensive evidence illustrating that various kinds of social support, (instrumental, emotional, and social), can provide benefits to physical health, mental health, and happiness (Sarason, Sarason, & Pierce, 1990). Particularly with regard to the university student population, negative social support is associated with increased physical symptoms (Edwards, Hershberger, Russell, & Markert, 2001) while other researchers purport both direct and indirect affiliations between positive close interpersonal relationships and stress levels (Reifman & Dunkel-Schetter, 1990). In the college setting, the importance of social interaction extends beyond students' peer friendships to their relationships with instructors and parents. Positive reports of student-teacher rapport is highly associated with college success and adjustment ratings, while reports that supportive and emotionally available parents who also allowed autonomy were related to high student confidence levels (Strange, 2000).

With regard to older adults, those who are connected to others live longer than those who are isolated or report being lonely (Rowe & Khan, 1998) and older adults who are embedded in supportive networks enjoy better physical (Bosworth & Schaie, 1997) and mental health (Krause, 1997) than those who do not have meaningful social outlets. Conceptualized as a convoy of social support (Antonucci, 2001), the network of people with whom an individual has important interactions and reciprocally experiences various types of support changes as a function of the life course. Often, social support networks become more limited; as family and friends pass away with age, increased importance is placed upon relationships with those once considered peripheral to the network. For example, many older adults find themselves relatively isolated; contact with others may be limited to a Meals on Wheels volunteer, doctor, and neighbor.

Shrinking convoys have significant negative implications for the quality of life in the later years (Antonucci, 2001). The relationship between religiosity and health in later life may be in part accounted for by the significant social support network found in religious settings (Ellison & Levin, 1998).

Work

According to Pelletier (1994), work satisfaction, which entails adequate intellectual challenges, financial rewards, positive coworker interactions, and acceptable working conditions, is one of the best predictors of longevity and perceived quality of life. Characteristics of the work environment contribute to wellness. An individual's perceived control, or the amount of control a worker believes he or she has over his or her work environment and tasks, is positively correlated with job satisfaction, career commitment, job involvement, optimal performance, and high motivation (Spector, 1986). In contrast, low levels of perceived control are associated with physical symptoms, emotional distress, and absenteeism. Supportive relationships in the workplace generally enhance job satisfaction and motivation (Parkes, Mendham & Rabenau, 1994). Financial reward and satisfaction with the financial reward are frequently analyzed for their relationship with subjective well being variables happiness and life satisfaction (George, 1992), and research using Census Bureau income data indicates that perceptions of subjective well being are positively related to income (Hagerty, 2000).

Deciding upon a suitable career has been viewed as a late adolescence or early adulthood task, but more recently has been considered an ongoing process that takes place throughout the lifespan (Super, Savickas, & Super, 1996). Among undergraduates, those who decide upon a career and follow through with that chosen career sustain higher levels of mental health than those whose career goals fluctuate over time (Arnold, 1989). However, a more recent study

indicates that career indecision is a necessary part of an ongoing process in which openmindedness is a greater virtue than decisiveness (Krumboltz, 1992). In general, those who see their work as a calling tend to experience greater work and life satisfaction than those who do not (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997).

For older adults the definition of retirement is changing (Rix, 2002). Many adults who have retired are still active and healthy thanks to improving medical technology. These older individuals often are looking for new opportunities in either paid or volunteer work that may represent a means to new successes and feelings of fulfillment. For these people, retirement is likely to represent another life stage that may last as long as 25 years and allows many things to be accomplished (Welch et al. 2003). Older adults who remain engaged in productivity, whether that productivity represents paid or unpaid work, report overall good health, fulfilling social interaction, and strong self efficacy (Rowe & Kahn, 1998).

Holistic Wellness Models and Developmental Change

College populations in particular have been the focus of research regarding the efficacy of wellness programs dedicated to improving lives (Warner, 1984). The emphasis of these studies has been to link overall adherence to the model with positive outcomes, such as high levels of happiness, high GPAs, and physical health. Of the wellness models, only Myers, Witmer, and Sweeney (2001 a.) specifically address the need for wellness to be viewed within a developmental continuum. They acknowledge that “different components of wellness are salient at different points in the lifespan” (p. 3) yet do not elaborate further on how this impacts wellness and development. In fact, within the model a direct contradiction seems to exist as de-emphasizing one domain in order to concentrate on others is not condoned. “In order to be a healthy person, you must strive to achieve wellness in each part” of the model (Myers, Witmer,

& Sweeney, 2001 b. p. 22) regardless of your position across the lifespan. According to the wellness models, individuals can and should demand excellence in all domains rather than selecting domains in which to focus. Additional research, such as this study, should strive to better understand how the wellness domains may have differential salience at different points across the life span and can therefore be used to better understand growth and change processes such as identity development. In addition, the emergence of the selective optimization and compensation (SOC) model (Baltes, 1987, 1997) in the human development literature provides a different view of optimal development. In doing so, it directly contradicts the wellness model emphasis upon equality in selecting all life domains as "the" means for achieving optimal functioning.

Selective Optimization and Compensation (SOC) Model

In contrast to the wellness model's perspective, the human development literature views optimal human functioning as a lifelong, dynamic process of making choices for successful gain maximization and loss minimization across life domains as outlined by the SOC model (P.B. Baltes, 1987, 1997). In other words, successful functioning is an ongoing and changing adaptive process in which some tasks or domains are discarded or deemphasized in favor of others. This view specifically takes into account contextual environmental, cultural, and other external influences that act in concert with the individual to shape development, giving equal emphasis to the individual and context. According to lifespan theory, the individual has plasticity, or the capacity for change that gives meaning to his or her unique choices. A range of behaviors is available to choose from, and as a result, the trade off between gains and losses is not static (Marsiske, Lang, Baltes, & Baltes, 1995). In addition, what constitutes successful development and optimal functioning is unique to the individual as a function of his or her specific attributes

and context. Rather than generalizing that this is achieved by balance and optimization across all domains as does holistic wellness, the SOC model allows success to be defined as goal obtainment within selected domains (P.B. Baltes, 1997).

Freund and Baltes (2002b) argue that the concepts behind the SOC model reflect intuitive, pragmatic life management strategies laypeople use and prefer in everyday life. The model emphasizes it is necessary for three activities to be successfully managed for optimal development to take place. The first activity, selection, captures the notion that each individual has finite resources. In everyday life, this translates into familiar ideas such as limited time, money, skills, and opportunities. With finite resources, it is not possible for the individual to pursue all imaginable paths and goals. Therefore, the individual must select a limited set of roles and activities in a manner that best suits him or her. Freund and Baltes (1998) differentiate between two types of selection. Elective selection refers to selecting from a group of possible alternatives one alternative or subset of alternatives. This type of selection emphasizes that multiple options are available to the individual. For example, as a newly retired person, one might have several choices about how to expend time and energy, (e.g. volunteering, spending time with grandchildren, and traveling) but have only a certain number of hours in the day. On the other hand, loss based selection occurs in response to fewer available resources or means, indicating it is necessary to restructure one's goal hierarchy or search for new goals due to a decline in options. To illustrate, an older individual who has recently suffered a broken hip may necessarily select painting over walking as a recreational activity due to losing physical mobility. Optimization, the second activity, embodies movement towards increased efficacy and higher levels of functioning. It reflects efforts made to maximize the functioning within the domain or task chosen. For example, if "student" is a role or domain selected, optimization would entail

engaging in behaviors to enhance success in that role, such as attending study groups, increasing study efforts, and committing to the role. The final activity, compensation, refers to efforts to counteract loss or decline. If in the student role the individual is not encountering success, he or she might shift the emphasized role to "athlete" (reallocating effort from one domain to another) or seek extra credit points to compensate for less than desired performance in the same student domain. According to the SOC model, these compensation activities would be carried out in an attempt to improve damaged self esteem or prevent a lowered GPA, and as a result compensate for perceived failure or potential for failure.

Self reported use of SOC strategies is correlated with subjective indicators of successful aging, including satisfaction with aging, lack of agitation, positive emotions, and absence of social and emotional loneliness in a sample of adults ranging in age from 72 to 102 (Freund & Baltes, 1998). In this first attempt to quantify predictions derived from the SOC model, optimization and compensation activities (which shared most of the predictive variance) appear to play an especially important role in the subjective experience of successful aging. The authors propose that optimization activity best illustrates plasticity, and suggests its presence indicates the individual is focused on positive functioning. In contrast, compensatory action is theorized to address negative functioning such as decline, which would indicate a threat to one's sense of well being and positive emotion. Therefore, focusing on the positive (optimization efforts) rather than decline (compensatory efforts) may bolster the subjective experience of aging.

Researchers have recently begun to examine how SOC strategies develop over the lifespan (Freund & Baltes, 2002a). Selection appears to be positively correlated with age. Specifically, elective selection seems to increase throughout adulthood and old age. While young adults might benefit from exploration of many trajectories (Louden, 2003; Freund & Baltes,

2002a; Arnett, 2000), in middle and later adulthood, people may become more focused on selected priorities. The remaining optimization and compensation components seem to have nonlinear gradients from young to middle adulthood to older adulthood, with the peak in all three components present in middle adulthood (Freund & Baltes, 2002a). In older age, all three components likely decline and overall SOC activity decreases. Again acknowledging contextual constraints, this is perhaps due to an age related limitation in resources that hamper implementing optimization and compensation activities (Freund & Baltes, 2002a). Determining the behavioral validity of SOC behavior is a new research area. Wiese and Schmitz (in press) demonstrated that students with high SOC scores spent more time studying, were less likely to cancel exams, and used specific learning strategies more than those with lower scores.

SOC Model Applied to Identity Development

Lerner, Freund, DeStefanis, and Habermas (2001) have conceptually applied the SOC model to the regulation of identity development in adolescence. In their work, the SOC model served as a contextual framework for understanding development across different levels (e.g. the individual to the cultural level), across different domains of individual functioning (e.g. cognitive function and interpersonal relationships), and across the lifespan. Lerner et al. suggest identity is in essence a form of self regulation. From this perspective, identity is influenced by individual characteristics, age and experiences, and cultural influences. For example, “I am unattractive” may be an important piece of identity that has been influenced by physical body type (individual level and physical domain) and family and society’s definition of what is physically attractive (cultural level). During the ongoing identity development process, the individual purposefully

selects life goals related to identity (“I want to be attractive”), finds the means to attain and optimize the chosen goals (gyms, clothes, hair styles), and copes with loss or failure in attempts to reach the identity goals (“I don’t need to be attractive; I can be smart”).

A key component of their work is a focus on what is adaptive, and how what is adaptive works within a particular context. For example, Lerner et al. reference Spencer’s (1999) work on the nature of person-context relations among African American adolescent males. A hyper-masculine identity is often associated with this group, and likewise hypermasculinity is linked to this group’s predominately aggressive coping responses to stressors. Despite endorsing values regarding school, religion, and family caring which one would expect to correlate with nonaggressive coping methods, African American adolescent males are more likely to use an aggressive coping style when dealing with an environment at high risk for violence. Lerner et al. emphasize that “social groups and institutions within which a person is embedded can provide the means for either problematic or healthy identity development” (p. 39). This idea is also reflected in the SOC model. The notion of “collective SOC” refers to social groups and institutions within which an individual is embedded influencing individual decisions regarding selection, optimization, and compensation activities (Baltes & Carstensen, 1998). In line with his idea, it appears that this group of adolescent males is embedded in an environment that fosters hypermasculinity, a potentially problematic identity in some settings, as an adaptive identity.

Lerner et al. hypothesize that for middle adolescence in Western cultural settings, optimization and compensation activities may be in competition. For this developmental group compensation may be impacted in several ways. First, it is perhaps difficult for adolescents to recognize that they must compensate; they may believe that their abilities are strong enough that

although others may need to compensate, they do not. Lerner et al. refer to these beliefs as "personal fables" of adolescence. For example, an adolescent may believe he or she can be a top student and a varsity athlete without doing homework or attending additional practice sessions because of personal belief in the adolescent's attributes. He or she may believe he or she is smart enough and talented enough to succeed without taking part in these extra skill building activities. These beliefs may persist despite evidence to the contrary such as dissatisfactory grades and missing football passes. This concept is further supported by Ryff's (1991) "ideal self," an oftentimes unrealistic identity development component she views as characterizing young age groups.

Second, adolescents often suffer very negative consequences for not compensating, as evidenced by a disproportionate amount of risk behavior attributed to adolescence and "burning the candle at both ends." For example, an adolescent may use illegal drugs to have the energy to stay awake to study for an exam as well as perform well athletically in the big game. Consequently, the adolescent may not perform well in either the student or athlete role and "should have" chosen one or the other and/or not used the drugs. High levels of similar risky behavior have also been found in college students, including unprotected sex, alcohol use, illegal drug use, and drinking alcohol and driving (Selingo, 1995).

Finally, compensation may be viewed by an adolescent as a personal failure rather than appropriate strategy for goal attainment. Giving up an activity may carry high negative consequences for the adolescent. For example, he or she may consider quitting a sport to focus on grades something unpopular or untalented adolescents do rather than an activity in support of success.

A common theme regarding choices, personal control, and goal obtainment has emerged when considering the SOC model and its application to identity development. The role of the individual's perceived control over his or her developmental pathway (or in SOC terms, perceived ability to successfully perform the necessary selection, optimization, and compensation activities) has an effect on the individual's emotional experience. Brandtstatler, Krampen, and Greve (1987) indicate that accommodative and assimilative coping takes place in conjunction with levels of perceived control. Low perceived control is related to a depressed outlook on personal development and negative appraisals of both one's distance from personally valued goals and one's ability to reach those goals. Moreover, Brandtstadter etal. suggest that when these negative appraisals are encountered, self corrective tendencies within the individual may be triggered. The self corrective tendencies may be in fact efforts to self regulate in order to cope with problems in development and regain control. This self correction has been documented in older adults. Brandtstadter and Rothermund (1994) found older adults maintain an overall sense of general control through accommodative coping, which deemphasizes the importance of goals that have become difficult to achieve and focuses instead on more obtainable goals. Assimilative coping consists of attempts to regulate the environment rather than shifting cognitive processes within the individual, and is likely less effective than accommodative coping if the situation is one the individual experiences as having little control over.

Bandura (1969) regards self regulation of one's own behavior through manipulation of the environment as the hallmark of human functioning. In his view, individuals progress toward maturity by gaining greater and greater control over their behavior. Schultz and Heckhausen's (1996, 1998) notions concerning control and emotion perhaps provide an explanation for the underlying self corrective processes. They conceptualize emotion as a regulatory device that

provides feedback and optimizes development. They differentiate two types of control. Primary control includes attempts to immediately and directly affect the external environment (e.g. find a new job that provides more flexible hours) while secondary control refers to attempts to achieve change from within the individual (e.g. deemphasize the negative impact of the existing schedule by improving attitude). Emotions provide the feedback that enables individuals to regulate the primary and secondary control attempts. Positive emotions are related to successful control attempts, while negative emotions are associated with control failures. Schultz and Heckhausen have suggested that primary and secondary control are used differently at different ages. They propose that primary control follows an inverted U shaped pattern over the lifespan, with primary control methods peaking between ages 45 and 50 and their use lowest as an infant and in old age. In contrast, secondary control steadily increases over the lifespan and peaks in later life, in parallel with behavioral and cognitive declines during the aging process that negatively impact primary control efforts. According to this explanation, appropriate self regulation efforts, perhaps becoming more effective with age, should positively impact functioning and identity development.

Whitbourne (1996) considers Piaget's description of assimilation and accommodation (which in fact are very similar to Schultz and Heckhausen's ideas) directly applicable to identity development. She coined the term identity assimilation, which refers to an individual applying his or her preexisting framework of self identity onto current experiences. This process provides reassurance to the individual, and helps make the current experience appear to be one that can be understood and dealt with in familiar terms. For example, an older adult with the identity belief "I can cook my own meals" may adaptively adjust to an assisted living facility with a private kitchenette. However, this self identity may also be a form of denial of the impact of the aging

process and lead to distress. In this instance, an older adult in the same scenario may in fact be unable to competently manage his or her own meals and struggle unsuccessfully to do so. Whitbourne suggests that identity accommodation is then necessary to create a changed identity based on the current reality of the individual's person and circumstances. If it is unrealistic that the individual can cook his or her own meals, identity accommodation should then take place (e.g. "I am no longer able to cook my own meals"). Interestingly, this adaptive identity process might also necessarily take place due to the environmental circumstances rather than the individual's personal attributes in order for effective coping to take place. An older adult who must move to a nursing home for health care reasons may not have the option to cook his or her own meals, even if he or she is competent in this area, because the facility does not provide its residents a kitchen. In this case, it may not be in the older adult's best emotional or physical interests to bring in a hot plate and risk removal from the facility; identity assimilation (e.g. "I can no longer cook but I can still garden") may be necessary.

SOC and Wellness in Contradiction

Lerner et al.'s (2001) interpretation of adolescent identity development and the SOC model in general are at odds with the holistic wellness view of development. The SOC model views Lerner et al.'s description of adolescents' difficulties with compensation (failure to recognize the need to compensate, serious negative consequences for not compensating, and compensation equating to personal failure) as negative indicators of healthy development, and therefore as issues to which one must adapt. Wellness models, on the other hand, encourage emphasizing all domains in order to develop optimally. Choosing to focus on one role or domain at the expense of another is not condoned. The wellness models suggest instead that as individuals we can and should be performing as optimally as possible across a wide variety of

domains. In essence, the wellness model instructs us to be all things to ourselves and others: mom/dad, employee, friend, smart, healthy, and spiritual. The SOC model suggests the opposite: failure to recognize the need to limit activity may negatively impact optimal functioning. We risk being low functioning in all areas if we do not actively select domains best suited to our individual characteristics and context.

Further supporting the differentiation of the SOC model and the wellness perspective is Carstensen, Isaacowitz, and Charles' (1999) work with socioemotional selectivity. Socioemotional selectivity theory purports that one's perception of time plays a basic role in selecting and pursuing goals. This theory maintains that when time, and specifically the lifetime, is viewed as unlimited, knowledge related goals are emphasized. Knowledge related goals include activities focused on learning about the social and physical world. This activity is seen in pursing education, a trade, or numerous acquaintance relationships that are not focused on emotional connection. In contrast, when time is seen from an individual's perspective as limited, emotional goals, such as spending "quality time" with one's family, are emphasized instead of the knowledge related goals. Carstensen's (1992) study provides the basis for understanding how socioemotional selectivity functions in adulthood. While gerontologists in general agree that the rates of social interaction decline with old age, Carstensen's findings indicate that a narrowing selection of social partners begins long before later adulthood. This is the SOC model at work again, this time in a social and emotional context. Goal selection takes place to optimize the remaining time and compensate for losses. From this perspective, an individual may decide to reduce the hours spent at work or socializing with acquaintances in favor of optimizing time with those people the individual values most. In this case, the goals may be work related, familial, or interpersonal (e.g. graduating in four years, spending time with an aging parent, or finding a

romantic partner). In contrast, wellness models would consider this narrowing of tasks counterproductive by instead purporting that vocational, social, and family relationships should all receive emphasis.

Purpose of the Present Study

Acknowledging the need for a developmental view of wellness and understanding its implications for the identity development process is important considering the college aged population and aging adult population are likely the most directly impacted by the wellness movement. The often stressful transition to college, increased freedom for experimentation with risky health behaviors such as using illegal drugs and participating in unsafe sex, and challenging life tasks such as identity development continue to warrant justification for studying wellness in the college population. Wellness' striking similarities to the current swell of research investigating successful aging in the older adult years suggests that wellness models have further useful implications throughout the lifespan. However, the SOC model suggests a different route to optimal functioning than the wellness model predictions. While wellness models propose that optimal functioning is obtained by equal emphasis across all domains, the SOC model suggests that optimal functioning is obtained through unequal emphasis across domains. In fact, contradicting the wellness model, the SOC model predicts that without selection, optimization, and compensation skills, development and functioning will be negatively impacted.

Most work with the SOC model has been limited to understanding human development in old age. Sherrod (2001) calls for further research using the model to understand how development takes different paths and can lead to multiple successful outcomes. Emerging adulthood is a period that has begun to be explored using the model (Louden, 2003) and is a promising one in which to do so, especially in light of Lerner et al.'s (2001) application of the

SOC model to identity development and Arnett's (2000) view of emerging adulthood as a time of identity exploration and change. In addition, the variability and exploratory efforts within the emerging adulthood group lend themselves well to Sherrod's call to examine how multiple successful outcomes evolve from disparate life trajectories. In turn, work suggesting that the regulatory processes perhaps inherent in identity development continue and change throughout the lifespan indicates the SOC model's application to older adult identity development is appropriate.

This study addresses adherence to a wellness model and SOC related activities within a college population and older adult population in order to broaden understanding of identity development across the lifespan. In keeping with the work of Arnett (2000) and Louden (2003), it seems that in emerging adulthood identity development is likely fostered by unlimited exploration equally emphasizing the domains of the wellness model. Unequal emphasis across the wellness domains, such as that proposed by the SOC model's suggestion to pick and choose, might in fact limit development. However, in older age, focus on more limited domains of the wellness model may suggest appropriate adaptation and successful aging. It was expected that endorsement of the various domains of the wellness model would differ between college students and older adults, reflecting differing points in identity development as illustrated by Marcia's (1966) identity statuses and differing priority selection.

CHAPTER 2

METHOD

Participants

The participants in this study were 184 traditionally college age freshmen at a state university in the Southwest who were recruited from introductory psychology classes. In addition to the college student data, data was collected from 155 older adults aged 60 and older who attended activities at senior centers in the North Texas area.

Of the total 184 freshmen students, 106 were 18 years old and 78 were 19 years old. The freshmen were primarily Caucasian (57.6%) and female (67.4%). Other ethnicities included African American (17.9%), Asian American (5.4%), and Hispanic (14.1%). “Other” was endorsed by 4.3% of the participants. One participant did not endorse an ethnicity. In terms of employment, 48.9% reported no job, 38% endorsed working part time, and 8.2% stated they were employed full time. Part time volunteer work was indicated by 4.9% of the student sample. The sample was relatively evenly split in terms of participation in some type of romantic relationship. Nearly 30% endorsed committed dating or engaged relationships, while 19% were casually dating and 0.5% were married; 50.5% reported they were single. The students appeared to overall be a healthy group. Excellent, average, or good health was reported by 92.4% of the sample, and 78.3% felt their health did not interfere with their daily activities in any way. In comparison to the health of their peers, 85.3% reported believing their health was the same or better than their peers. The majority of the students endorsed moratorium (44%) and diffused (34.2%) identity statuses, while only 3.8% indicated foreclosed and 3.3% indicated identity achieved.

Older adults ranged in age from 60 to 94 years old (M = 70.63). The older adults were similar to the student group in ethnicity and gender, as the majority were Caucasian (78.7%) and female (67.7%). Other ethnicities included African American (9.7%), Asian American (1.9%), Hispanic (5.8%), and Native American (1.3%). "Other" was endorsed by 1.9% of the participants. In terms of employment, 75.5% identified as retired or not having a job, 6.5% endorsed working part time, and 14.2% stated they were employed full time. Part time or full time volunteer work was indicated by 3.9% of the older adult sample. Marriage was the most commonly endorsed relationship status (60%), while 25.8% reported they were widowed. Casual dating, committed dating or engaged relationships were endorsed by 3.8%, and 10.3% indicated they were single. The older adults' health was predominately average or better than average according to self rankings: excellent health (23.2%), good health (37.4%), average health (15.5%), fair health (21.4%), and poor health (1.9%) were all indicated. Slightly over half the sample (54.8%) related that their heath does not interfere with their daily activity in any way, while 36.8% indicated their health interfered somewhat with their daily activity and 8.4% reported their health interferes greatly with their daily tasks. In comparison to the health of their peers, 85.0% reported believing their health was the same or better than their peers and 14.8% indicated their health was somewhat worse or much worse than their peers. The majority of the older adults endorsed moratorium (30.3%) and diffused (40.6%) identity statuses, while only 10.3% indicated foreclosed and 9.7% indicated identity achieved.

Procedures

Data collection took place from May 2004 to February 2005. Freshmen college student participants were recruited from undergraduate psychology courses at the University of North Texas (UNT) and were given extra credit points for participating in the study. Older adults were

recruited from senior centers, older adult organizations, and family contacts in the North Texas area. Participants completed research packets on the UNT campus or at home if a student, and at the senior centers or at home if an older adult. Each packet included an informed consent cover sheet approved by the UNT Institutional Review Board and the research instruments. The participants were directed upon completion of the packets to keep their informed consent sheet and placed the remainder of the packet in a box. None of the participants' identifying information was linked with the research instruments, and completion of the questionnaire packet served as the participants' consent.

Measures

Participant Demographics

All participants reported demographic information including age, ethnicity, gender, employment status (part time paying job, full time paying job, retired, unpaid part time volunteer, unpaid full time volunteer, no job or volunteer), and relationship status (single, casually dating, committed dating or engaged, widowed). In addition, data was collected on the participants' appraisal of their physical health and the participants' appraisal of their health in comparison to that of their peers.

Identity Status

The Extended Objective Measure of Ego Identity Status-Revised Version (EOM-EIS, Bennion & Adams, 1986) is a pencil and paper instrument measuring the relative prevalence of Marcia's (1966) ego identity statuses and was used to group all the participants into the four identity statuses. Using a six point Likert scale (1 = strongly disagree, 6 = strongly agree), participants indicated the extent to which each of 48 statements reflects their thoughts and feelings regarding topics such as religion, occupation, interpersonal relationships, and politics.

For this measure, internal consistency scores are as follows: diffusion = .68; foreclosure = .90, moratorium = .73, and achievement = .66. The scales' stability coefficients range from .82 to .90 across a two week interval (Servaty, 1997). Construct validity is indicated by the factor structure being relatively consistent with theoretical predictions (Bennion & Adams, 1986). In addition, the EOM-EIS has demonstrated discriminant validity with social desirability and logical relationships with measures of personal identity (Bennion & Adams, 1986).

Wellness

The Wellness Evaluation of Lifestyle-Self Evaluation Questionnaire (WEL-S, Myers, Sweeney, & Witmer, 2001) was developed to assess individuals' adherence to each of five wellness model domains, and was used for this purpose in the present study with both the college student group and the older adult group. According to this model of wellness, there are five domains necessary for optimal functioning: 1) spirituality, 2) self regulation (comprised of sense of worth, sense of control, realistic beliefs, emotional responsiveness and management, intellectual stimulation, problem solving and creativity, sense of humor, nutrition, exercise, self care, stress management, gender identity, and cultural identity), 3) work, recreation, and leisure, 4) love, and 5) friendship. The WEL-S is a 123 item paper and pencil instrument that requires participants to rate each statement on a five point Likert scale (1 = Strongly Agree, 5 = Strongly Disagree). Alpha coefficients for the scales are as follows: spirituality = .76, self regulation = .77, Work = .73, Leisure = .61, Friendship = .87, and Love = .89. Two week test retest stability coefficients range from .89 to .82 (Myers, Sweeney, & Witmer, 2001).

SOC Model

The Selective Optimization and Compensation (SOC) Questionnaire (Baltes, Baltes, Freund, & Lang, 1999) is an exploratory measure is a 48 item pencil and paper instrument which

quantifies respondents' evaluation of whether their behavior typically adheres to SOC related strategies. Both age groups received this measure. For each item two statements are presented, and the forced choice format requires participants to decide which of two statements best describes them. For each item, one statement describes behavior reflecting a selection, optimization, or compensation strategy while the other statement offers a reasonable, non SOC related strategy. The 48 items are equally divided among elective selection, loss based selection, optimization, and compensation behaviors. Internal consistencies of the subscales ranged from low (optimization: alpha = .51) to high (selection: alpha = .83) and test retest stability for the subscales ranged from .71 to .77 over a four week period. According to the authors, confirmatory factor analysis of the measure yields an overall acceptable fit for the four factors (χ^2 (48) = 90.63, p = .0002; RMSEA = .070, 90% CI for RMSEA = 0.048 and 0.092; GFI = .92, AGFI = 0.88).

College Adjustment

The College-Adjustment Rating Scale (CARS, Zitzow, 1984) is a content based, 100 item self report measure assessing stress within academic, social, personal, and family realms. It approximates Russell and Petrie's (1992) tripartite conceptualization of college adjustment. The CARS successfully differentiated between counseling referred and non referred individuals in a normative sample (Zitzow, 1984). Hoyt reliabilities for the domains were reported as academic = .76, social = .87, personal = .90, and family = .85.

The CARS calls for students to report the relative level of stress felt with regard to various negative events. However, it has been suggested that poor adjustment across the four domains may occur regardless of the level of stress felt during the events listed. As a result, a parallel version of the CARS was created using the same items, but requires the participant to

rate on a five point Likert scale, (1 = not at all, 5 = almost all the time), the frequency with which they experienced the event. Both versions of the CARS were administered to freshmen participants.

Study Habits and Attitudes

The Study Habits and Attitudes Inventory (SHAI, Nixon & Frost, 1990) is a 31 item instrument uses a multiple choice format to assess scholastically effective attitudes and behaviors. Internal consistency is .77, test retest reliability is .94, and it is predictive of college GPA (r = .66). This instrument was administered to freshmen participants only to assess their academic functioning.

Psychological Symptoms

The Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, & Covi, 1974) is a 58 item self report inventory was designed to measure psychological symptoms experienced by the participant over the last seven days. Both participant groups rated themselves on five symptom dimensions: somatization, obsessive compulsiveness, interpersonal sensitivity, depression, and anxiety using a Likert scale. Cronbach's alpha coefficients for the dimensions range from .84 to .87.

Coping Strategies

Coping Responses (Billings & Moos, 1981) is a 19 item self report inventory. Participants indicated a recent personal crisis or stressful life event and then answered the 19 yes/no items regarding how they dealt with the event. Responses are grouped into three coping strategy categories (active cognitive, active behavioral, and avoidance) as well as problem focused and emotion focused clusters according to Folkman and Lazarus' (1980) work. The subcategories exhibit moderate internal consistency (alpha = .62). The problem focused and

emotion focused clusters appear to parallel primary (problem) and secondary (emotional) coping responses as well as assimilative (problem) and accommodative (emotional) identity processes. This measure was administered to both groups of participants.

Social Desirability

The Marlow-Crowne Social Desirability Scale (M-C SDS, Crowne & Marlowe, 1960) was designed to measure response bias toward positive self presentation. It consists of 33 items which describe lauded, though unlikely, personal characteristics. A ten item short form of the M-C SDS developed by Strahan and Gerbasi (1972) was used in the present research (SDS-10). The SDS-10 has reliability coefficients of .70 with college aged males and .66 with college aged females (Strahan & Gerbasi, 1972). According to Framboni and Cooper (1989), reliability coefficients for men and women are .70 and .71, respectively. In addition, they found a strong correlation between the SDS-10 and the M-C SDS (r = .91). This instrument was administered to both participant groups.

Stressful Life Events

The Social Readjustment Rating Scale (SRRS, Holmes & Rahe, 1967) was developed as a measure of the frequency of stressful life events. The scale consists of 43 life events that are commonly reported as stressful and have been identified from mental health treatment in clinical psychological settings as potentially impacting healthy functioning. All participants noted which of the events they have experienced in the past year. This measure has consistently shown a low, positive correlation with measures of illness (Kobasa & Puccetti, 1983) and is moderately correlated with measures of anxiety (Justice, McBee, & Allen, 1977).

CHAPTER 3

RESULTS

Hypothesis 1

First, it was hypothesized that on a measure of wellness, college students would endorse an equal emphasis upon all wellness domains while older adults would endorse a greater emphasis upon self regulation and spirituality domains. This hypothesis was not supported. A MANCOVA was used to control for social desirability in comparing the wellness scores of students and those of older adults. This MANCOVA was significant, indicating at the multivariate level that neither of the two groups equally endorsed the various wellness domains, ($F(5, 269) = 176.23$, $p < .01$, $eta^2 = .77$). Means indicated that both groups endorsed the work and leisure domain of the wellness model to a greater extent than the others. A within group repeated measures ANCOVA for each age group was used to confirm this finding and treated each measure of wellness as a level in a within subjects design. The student group ($F(4, 150) = 89.07$, $p < .001$, $eta^2 = .70$) and the older adult ($F(4,116) = 105.52$, $p < .001$, $eta^2 = .78$) multivariate within group within subject MANCOVAs were significant, indicating that the work and leisure domain received more emphasis than the other domains in both groups. As the interaction of self reported work status (full time work, part time work, retired, no job but not retired, full time volunteer, part time volunteer) and wellness domains was not significant, the findings indicate that regardless of whether older subjects were working or not, wellness scores were constant across work status among older adults (Tables 1 and 2).

Table 1

College Student Means and Standard Deviations by Identity Status

	Identity Status			
	Diffused		*Foreclosed*	
Variable	*M*	*SD*	*M*	*SD*
Spirituality	55.61	15.50	39.33	12.88
Self Regulation	43.06	7.71	38.59	7.95
Work/Leisure	102.92	21.32	94.31	26.89
Friendship	41.57	21.48	37.14	11.85
Love	41.47	14.35	35.83	8.76
Total Wellness	49.14	8.81	42.78	9.22
SHAI[1]	27.16	7.77	30.43	7.21
Family Stress	137.35	133.76	109.43	79.45
Personal Stress	227.61	136.56	140.43	94.76
Social Stress	186.69	124.43	112.71	94.90
Academic Stress	142.97	107.24	108.43	67.92
Elective Selection	43.93	21.71	51.39	24.95
Loss Based Selection	57.63	23.69	51.39	29.54
Total Selection	101.55	38.20	102.78	46.15
Optimization	60.03	22.99	68.06	23.22
Compensation	55.36	22.36	56.94	19.31
Somatization	21.46	7.14	18.83	5.34
O C[2]	18.02	5.89	14.17	4.07
Int Sensitive[3]	14.83	5.05	11.83	2.64
Depression	22.34	8.10	16.50	5.17
Anxiety	10.41	4.25	7.50	1.22
Life Events	7.86	3.76	8.83	5.67
EC Health[4]	90.39	12.81	86.84	15.52
PC Health[5]	128.88	26.68	133.33	21.51
EC Work	90.39	13.24	82.46	16.53
PC Work	135.40	22.69	135.71	21.67
EC Romantic	89.58	11.93	86.47	12.10
PC Romantic	142.86	23.39	132.65	15.90
EC Family	87.57	10.51	85.71	9.95
PC Family	140.39	21.93	142.86	24.74
EC Friend	90.35	12.09	88.72	15.91
PC Friend	140.74	24.26	142.86	18.44
EC Spirit	90.88	13.76	90.53	9.42
PC Spirit	140.32	28.62	134.29	25.95

(table continues)

Table 1 (*continued*).

	Identity Status					
	Moratorium		*Achieved*		*Overall*	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
Spirituality	45.62	11.28	32.33	6.98	48.99	14.04
Self Regulation	41.97	5.94	39.38	3.92	42.23	7.20
Work/Leisure	97.43	16.61	91.11	16.70	99.90	19.91
Friendship	37.40	9.80	32.38	6.92	40.06	11.69
Love	39.45	13.07	32.08	6.79	40.89	13.76
Total Wellness	46.36	6.48	41.97	3.30	47.40	8.25
SHAI[1]	29.88	6.54	29.67	9.52	28.81	7.26
Family Stress	113.31	101.09	106.17	85.83	122.48	113.86
Personal Stress	210.48	124.98	197.17	114.10	213.65	128.49
Social Stress	170.60	108.57	182.83	127.23	174.90	115.33
Academic Stress	130.89	79.45	132.83	90.68	134.78	91.14
Elective Selection	47.05	20.06	48.61	29.07	46.06	21.15
Loss Based Selection	56.54	22.83	43.06	33.51	56.22	23.81
Total Selection	103.59	36.83	91.67	60.55	102.28	38.45
Optimization	61.29	28.28	55.56	43.35	60.83	26.63
Compensation	56.75	25.95	51.39	40.97	56.00	24.84
Somatization	20.47	6.46	19.50	5.54	20.75	6.65
O C[2]	15.82	5.02	15.17	3.87	16.59	5.40
Int Sensitive[3]	13.84	4.18	16.17	5.00	14.24	4.56
Depression	20.24	6.71	22.17	7.47	21.00	7.34
Anxiety	9.78	4.08	9.00	3.10	9.91	4.06
Life Events	7.68	4.03	8.17	3.19	7.67	4.16
EC Health[4]	89.75	12.64	89.47	13.59	89.85	12.73
PC Health[5]	129.82	24.78	132.14	27.04	129.71	25.19
EC Work	91.32	13.14	82.46	11.00	90.25	13.34
PC Work	141.19	29.42	133.33	16.50	138.39	26.18
EC Romantic	86.50	10.81	84.21	9.85	87.60	11.29
PC Romantic	147.41	24.92	148.57	32.89	144.91	24.28
EC Family	85.65	11.48	89.47	12.89	86.55	10.99
PC Family	140.70	23.41	128.57	0.00	140.34	22.46
EC Friend	90.07	12.72	85.09	7.75	89.89	12.40
PC Friend	140.24	25.13	150.00	21.67	140.99	24.22
EC Spirit	92.47	13.24	82.46	13.25	91.40	13.26
PC Spirit	140.06	31.17	128.57	14.29	139.56	29.27

[1] Study Habits and Attitudes Inventory
[2] Obsessive Compulsiveness
[3]Interpersonal Sensitivity
[4] Emotion focused Coping
[5] Problem focused Coping

Table 2

Older Adult Means and Standard Deviations by Identity Status

	Identity Status			
	Diffused		*Foreclosed*	
Variable	*M*	*SD*	*M*	*SD*
Spirituality	65.73	13.87	75.33	12.50
Self Regulation	63.29	9.75	62.03	9.49
Work/Leisure	145.78	32.05	147.22	24.70
Friendship	73.52	12.38	73.81	10.90
Love	77.50	11.69	73.75	13.39
Total Wellness	72.22	10.88	72.14	10.76
SHAI[6]	40.79	25.29	51.67	26.01
Family Stress	57.89	22.30	63.89	24.12
Personal Stress	98.68	37.71	115.56	44.31
Social Stress	49.56	31.85	64.44	25.39
Academic Stress	44.74	30.20	66.11	23.46
Elective Selection	23.05	.46	23.20	7.22
Loss Based Selection	17.37	6.28	15.47	4.14
Total Selection	13.79	5.54	11.87	4.37
Optimization	21.42	8.57	18.00	5.28
Compensation	9.68	3.82	9.87	3.52
Somatization	3.13	3.46	9.00	6.69
O C[7]	89.47	5.84	88.30	12.00
Int Sensitive[8]	121.43	25.52	119.05	18.90
Depression	88.52	8.09	90.35	16.78
Anxiety	140.26	25.41	128.10	19.52
Life Events	77.63	5.04	81.58	10.91
EC Health[9]	135.71	27.36	138.10	25.02
PC Health[10]	87.97	11.20	84.69	8.95
EC Work	138.78	23.39	129.87	13.48
PC Work	84.21	10.53	84.21	6.89
EC Romantic	128.57	18.44	141.07	25.82
PC Romantic	89.47	15.49	89.47	11.37
EC Family	150.00	41.24	117.86	13.68

(table continues)

Table 2 (*continued*).

	Moratorium		*Achieved*		*Overall*	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
Spirituality	80.50	13.19	82.57	9.78	79.01	14.07
Self Regulation	68.70	7.36	73.79	6.00	67.84	8.41
Work/Leisure	160.25	22.29	173.33	14.08	157.57	24.76
Friendship	83.70	11.39	88.57	4.67	81.72	12.04
Love	82.24	13.44	88.93	10.09	82.85	12.91
Total Wellness	79.65	8.49	85.16	5.27	78.77	9.35
SHAI[6]	43.55	25.03	30.83	18.02	43.10	24.88
Family Stress	60.22	27.21	45.83	28.40	59.18	26.33
Personal Stress	103.77	45.82	76.67	40.98	102.28	44.55
Social Stress	70.24	28.02	59.17	24.04	65.63	28.72
Academic Stress	59.23	28.43	53.33	27.55	57.42	28.43
Elective Selection	20.58	7.03	15.90	3.48	20.89	7.08
Loss Based Selection	14.98	4.98	12.40	3.75	15.19	5.10
Total Selection	10.78	4.14	9.30	2.83	11.23	4.44
Optimization	16.29	6.00	13.60	2.68	17.04	6.47
Compensation	8.15	3.21	6.30	0.67	8.44	3.33
Somatization	3.12	3.86	3.43	3.10	3.61	4.34
O C[7]	89.37	11.21	86.84	5.52	89.08	10.11
Int Sensitive[8]	119.89	24.76	114.29	15.65	119.64	23.44
Depression	88.68	15.01	82.11	11.53	88.10	13.15
Anxiety	132.86	26.26	117.14	6.39	133.67	23.99
Life Events	83.46	15.43	-	-	82.02	12.98
EC Health[9]	130.61	26.20	-	-	133.33	25.16
PC Health[10]	87.59	11.84	84.21	5.26	87.07	11.00
EC Work	124.83	22.10	109.52	8.25	127.76	21.60
PC Work	81.91	15.49	89.47	0.00	83.59	12.00
EC Romantic	127.68	26.33	119.05	16.50	130.25	24.05
PC Romantic	83.77	15.62	-	-	86.05	14.42
EC Family	122.62	31.92	-	-	127.14	32.08

[6]Study Habits and Attitudes Inventory
[7] Obsessive Compulsiveness
[8]Interpersonal Sensitivity
[9] Emotion focused Coping
[10] Problem focused Coping

Hypothesis 2

Second, it was expected that those college students endorsing identity achieved or moratorium identity status would demonstrate 1) better college adjustment on the College-Adjustment Rating Scale and 2) better study habits according to the Study Habits and Attitudes Inventory than those college students categorized as identity diffused or foreclosed. To determine such differences, a MANCOVA was used to control for social desirability with identity status as the independent variable. This hypothesis was not supported. Although not statistically reliable, at a descriptive level the means for identity diffused and moratorium statuses indicate greater college adjustment in family, personal, and social domains than that of identity achieved and foreclosed statuses (Table 3).

Table 3

Identity Status Means and Standard Deviations

	Identity Status							
	Diffused		*Foreclosed*		*Moratorium*		*Achieved*	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Spirituality	57.91	15.64	57.33	22.36	63.06	21.35	59.38	27.34
Self Reg[11]	47.66	11.80	50.31	14.81	55.33	14.98	57.91	18.53
Wk/Leisure[12]	112.66	29.97	120.76	37.01	128.84	37.11	135.38	45.12
Friendship	48.83	18.30	55.48	22.01	60.55	25.53	62.64	29.68
Love	49.66	20.47	54.79	22.55	60.85	25.20	62.69	30.66
Ttl Wellness[13]	54.38	13.42	57.46	18.06	63.00	18.32	65.23	22.82
El Selection[14]	43.16	22.50	51.59	25.09	45.25	22.76	37.50	23.57
LB Selection[15]	57.69	23.21	60.32	25.67	58.44	25.17	44.79	29.32
Ttl Selection[16]	100.85	37.86	111.90	44.06	103.68	41.57	82.29	47.81
Optimization	57.48	25.61	65.48	24.19	65.90	28.42	57.81	31.25
Compensation	52.78	24.72	63.49	22.28	58.03	27.20	52.60	31.87
Somatization	21.84	7.20	21.95	6.91	20.53	6.74	17.25	4.55
O C[17]	17.86	5.95	15.10	4.06	15.39	5.00	13.44	3.92
Int Snstvty[18]	14.58	5.16	11.86	3.89	12.26	4.42	11.88	4.99
Depression	22.12	8.17	17.57	5.16	18.20	6.64	16.81	6.42
Anxiety	10.23	4.14	9.19	3.20	8.95	3.73	7.31	2.30
Life Events	6.87	3.91	7.83	5.34	5.48	4.48	5.50	3.76
EC Health[19]	90.18	11.53	87.72	13.00	89.57	11.93	87.89	8.96

(table continues)

Table 3 (*continued*).

	Identity Status							
	Diffused		*Foreclosed*		*Moratorium*		*Achieved*	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
PC Health[20]	127.14	26.39	124.76	20.54	125.13	25.15	121.43	21.56
EC Work	90.03	12.37	86.40	16.41	90.66	13.58	82.24	10.50
PC Work	136.34	23.08	136.90	19.70	139.11	28.73	123.21	13.09
EC Romantic	88.71	11.96	84.21	11.37	85.99	11.66	84.21	9.85
PC Romantic	142.34	23.48	135.16	19.88	144.58	25.77	148.57	32.89
EC Family	87.65	10.57	85.09	9.07	86.36	11.60	87.22	10.01
PC Family	140.08	22.06	134.92	19.12	134.90	24.10	120.41	11.24
EC Friend	89.64	12.00	86.32	11.74	88.57	13.55	86.55	6.51
PC Friend	139.34	23.86	141.90	21.91	137.93	25.67	139.68	24.51
EC Spirit	90.76	13.74	90.06	9.65	90.81	14.02	82.46	13.25
PC Spirit	141.11	29.40	126.98	21.95	136.73	31.81	128.57	14.29

[11] Self Regulation
[12] Work/Leisure
[13] Total Wellness
[14] Elective Selection
[15] Loss based Selection
[16] Total Selection
[17] Obsessive Compulsiveness
[18] Interpersonal Sensitivity
[19] Emotion focused Coping
[20] Problem focused Coping

Hypothesis 3

Third, regardless of age group membership, it was expected that those endorsing identity achieved or moratorium statuses would demonstrate: 1) fewer psychological symptoms according to the Hopkins Symptom Checklist, 2) greater use of coping strategies on the Coping Responses measure, and 3) greater selection, optimization, and compensation activity according to the SOC Questionnaire than those categorized as identity diffused or foreclosed statuses. MANCOVAs were used to control for social desirability with identity status as the independent variable to determine such differences. This hypothesis received mixed support. Identity diffused was associated with significantly greater symptomotology on the Hopkins Symptom Checklist

($F(27,791) = 1.62$, $p = .05$, $eta^2 = .05$) than the other identity statuses. Specifically, greater levels of obsessive compulsiveness ($F(3,273) = 4.97$, $p < .01$, $eta^2 = .05$), interpersonal sensitivity ($F(3,273) = 4.17$, $p < .01$, $eta^2 = .04$), depression ($F(3,273) = 5.75$, $p < .01$, $eta^2 = .06$), and anxiety ($F(3,273) = 3.07$, $p < .05$, $eta^2 = .03$) were all more likely to be endorsed by identity diffused than the other identity statuses. For obsessive compulsiveness, scores were lowest for identity achieved status, and for interpersonal sensitivity, scores were lowest for foreclosed and identity achieved statuses. There was no effect of identity status on use of coping strategies when queried for difficulties in family, friend, romantic, work, health, and spirituality domains. Finally, there was no effect of identity status on SOC activity endorsement.

An exploratory chi square test of the relationship between status and age was significant ($\chi^2(3) = 27.37$, $p < .001$), indicating that identity status covaried with age. Identity diffused was three times as likely in the younger sample ($n = 63$) as the older sample ($n = 20$). Commitment to an internal frame of reference in the form of foreclosed (older $n = 15$, younger $n = 7$) and identity achieved (older $n = 15$, younger $n = 6$) was twice as likely for the older adults than the college students. Identity diffused ($n = 63$) was three times as likely in the younger sample in comparison to the older sample ($n = 20$). Moratorium (older $n = 94$, younger $n = 81$) was roughly equally represented in both groups. Due to this covariance, an interaction between age and status was tested using MANCOVAs controlling for social desirability to determine differences with regards to endorsement of psychological symptoms, use of coping strategies, and SOC activity. An interaction between age and status was not significant at the multivariate level for any of these dependent variables.

Hypothesis 4

Fourth, it was expected that older adults would display more effective self regulatory behaviors than college students through a greater propensity for the use of both problem focused (primary control) and emotion focused (secondary control) coping methods, greater emphasis on the self regulation domain of the wellness model, and greater SOC activity. A MANCOVA, using college students versus older adults as the independent variable, was used to determine such differences and to control for social desirability. This hypothesis yielded mixed support. In contrast to what was expected in terms of the coping methods, college students exhibited a significantly greater propensity for problem focused coping methods in the family ($F(1,203) = 5.57$, $p < .02$, $eta^2 = .03$), friend ($F(1,163) = 4.36$, $p < .04$, $eta^2 = .03$), and health ($F(1,184) = 4.03$, $p < .05$, $eta^2 = .02$) domains than the older adults. In addition, the college students demonstrated greater emotion focused coping in the romantic ($F(1,148) = 4.19$, $p < .04$, $eta^2 = .03$) domain than the older adults. At the multivariate level, a main effect for age differences was significant for emphasis on the wellness domains ($F(5, 269) = 176.23$, $p < .001$, $eta^2 = .77$). Self regulation ($F(1,273) = 639.79$, $p < .01$, $eta^2 = .70$), work and leisure ($F(1,273) = 400.48$, $p < .01$, $eta^2 = .60$), love ($F(1,273) = 582.05$, $p < .01$, $eta^2 = .68$), friendship ($F(1,273) = 732.81$, $p < .01$, $eta^2 = .73$), and spirituality ($F(1,273) = 264.13$, $p < .01$, $eta^2 = .50$) domains were all more likely to be endorsed by the older group than the younger group. There were no significant differences in SOC activity between the age groups.

Hypothesis 5

Fifth, it was expected that older adults in poorer health would endorse more loss based selection activity than college students, while college students, (more likely to be in better health), would endorse more elective selection activity than older adults. MANCOVAs using age

group and several measures of health as independent variables were used to determine such differences and control for social desirability. This hypothesis was not supported. Older adults ranking themselves as in poorer health, (fair/poor versus average/good/excellent), on a one item self ranking did not endorse more loss based selection than the college students, and the college students in better health according to their self ranking on an identical item did not endorse more elective selection activity. Additionally, on an item requesting the participant to rank his or her health in comparison to that of his or her peers (same as peers/slightly better than peers/much better than peers versus slightly worse than peers/much worse than peers), again no differences were found between the groups for either loss based selection or elective selection.

Total wellness as measured by the wellness model was used as a dependent variable in an exploratory effort to investigate effects of self ranked health status and age upon total wellness. The interaction between self ranked health and age was significant ($F(1,268) = 23.08$, $p < .01$, $eta^2 = .08$), suggesting that older adults in worse health endorsed greater wellness than the young adults in worse health. Further, older adults irrespective of their self ranked health endorsed greater wellness than the college students.

As an additional exploratory endeavor, *r*s were computed between SOC components and wellness domain scores for each age group. In the college student sample, almost all wellness domains were negatively correlated with the SOC components. Exceptions included elective selection and friendship and loss based selection and work and leisure (Table 4). In the older adult sample, all the wellness domains were positively correlated with the SOC components (Table 5).

Table 4

College Student Pearson's r *Correlations of Wellness Domains and SOC Components*

	Elective Selection	*Loss based Selection*	*Optimization*	*Compensation*
Spirituality	-0.07	0.12	-0.06	-0.09
Self Regulation	-0.09	-0.03	-0.18	-0.15
Work/Leisure	-0.11	0.13	-0.06	-0.05
Friendship	0.01	-0.05	-0.09	-0.09
Love	-0.03	-0.08	-0.10	-0.07

Table 5

Older Adult Pearson's r *Correlations of Wellness Domains and SOC Components*

	Elective Selection	*Loss based Selection*	*Optimization*	*Compensation*
Spirituality	0.15	0.11	0.30	0.29
Self Regulation	0.18	0.17	0.42	0.43
Work/Leisure	0.18	0.13	0.34	0.34
Friendship	0.11	0.10	0.32	0.31
Love	0.13	0.15	0.29	0.39

Hypothesis 6

Sixth, it was expected that there would be a higher negative correlation among wellness domains in older adults as compared to college students if the SOC model was supported and a positive correlation among wellness domains if the wellness model was supported. Pearson *r*s and *Z* tests of the differences between independent correlations across students and older adults were used to test this hypothesis. This hypothesis was not supported in that wellness domains were positively correlated regardless of age group (Tables 6 and 7). *Z* tests of the differences were conducted to determine if one group's positive correlation was greater than the other group's correlation. For the older adults, spirituality and friendship and self regulation and friendship were more highly correlated than for the college students (Table 8).

Table 6

College Student Pearson's r *Wellness Domain Correlations*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*	*Ttl Wellness*
Spirituality	1.00	--	--	--	--	--
Self Regulation	0.61	1.00	--	--	--	--
Work/Leisure	0.44	0.72	1.00	--	--	--
Friendship	0.37	0.57	0.53	1.00	--	--
Love	0.46	0.54	0.47	0.60	1.00	--
Ttl Wellness	0.72	0.96	0.80	0.68	0.68	1.00

Table 7

Older Adult Pearson's r *Wellness Domain Correlations*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*	*Ttl Wellness*
Spirituality	1.00	--	--	--	--	
Self Regulation	0.60	1.00	--	--	--	
Work/Leisure	0.54	0.83	1.00	--	--	
Friendship	0.57	0.77	0.69	1.00	--	
Love	0.45	0.60	0.53	0.59	1.00	
Ttl Wellness	0.71	0.97	0.86	0.82	0.70	1.00

Table 8

Z *Tests of the Differences Between Older Adult and College Student Wellness Domains*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*	*Ttl Wellness*
Spirituality	1.00	--	--	--	--	--
Self Regulation	NS	1.00	--	--	--	--
Work/Leisure	NS	NS	1.00	--	--	--
Friendship	2.38	1.86	NS	1.00	--	--
Love	NS	NS	NS	NS	1.00	--
Ttl Wellness	NS	NS	NS	NS	NS	1.00

Hypothesis 7

Seventh, it was expected that college aged participants with high occurrences of life events as determined by a median split would be more likely to endorse moratorium identity status over any other status than those with low life occurrences, while older adults with high

occurrences of life events would be more likely to endorse identity achieved status over any other status than those with low life occurrences. Chi square tests were used to investigate this hypothesis, and it was not upheld for either group. For the young adults, the chi square ($X^2(3) = .518$, $p > .05$) was not significant, indicating that regardless of the number of life event occurrences, young adults were most likely to endorse moratorium ($n = 81$) or identity diffused ($n = 63$) statuses. For older adults, the chi square ($X^2(3) = 9.246$, $p < .05$) was significant. The findings indicate that regardless of life event occurrences, most older adults (66%) endorsed moratorium ($n = 94$), but older adults with high life event occurrences were more likely to endorse foreclosed ($n = 13$) and identity achieved ($n = 8$), less likely to endorse moratorium ($n = 44$), and equally likely to endorse identity diffused ($n = 10$) that those with low life event occurrences.

Hypothesis 8

Eighth, irrespective of age, identity achieved and moratorium identity statuses were expected to be associated with negative correlations among wellness domains, while identity diffused and foreclosed identity statuses were expected to be associated with a positive correlation among wellness domains. Pearson *r*s and *Z* tests of the differences between independent correlations of identity status groups were used to test this hypothesis. This hypothesis was partially supported. For all four identity statuses, *r*s were positive (Tables 9 and 10).

Table 9

Wellness Domain Pearson's r *Correlations for Identity Achieved and Moratorium Statuses*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*
Spirituality	1.00	--	--	--	--
Self Regulation	0.88	1.00	--	--	--
Work/Leisure	0.82	0.94	1.00	--	--
Friendship	0.86	0.93	0.90	1.00	--
Love	0.84	0.88	0.84	0.90	1.00

Table 10

Wellness Domain Pearson's r *Correlations for Diffused and Foreclosed Statuses*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*
Spirituality	1.00	--	--	--	--
Self Regulation	0.71	1.00	--	--	--
Work/Leisure	0.61	0.90	1.00	--	--
Friendship	0.60	0.89	0.79	1.00	--
Love	0.61	0.86	0.74	0.85	1.00

As an exploratory endeavor, Pearson *r*s between college student and older adult wellness scores were computed by identity statuses. All *r*s were positive (Tables 11-14).

Table 11

Wellness Domain Pearson's r *Correlations for College Student Diffused and Foreclosed Statuses*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*
Spirituality	1.00	--	--	--	--
Self Regulation	0.65	1.00	--	--	--
Work/Leisure	0.52	0.88	1.00	--	--
Friendship	0.51	0.86	0.75	1.00	--
Love	0.53	0.82	0.68	0.82	1.00

Table 12

Wellness Domain Pearson's r *Correlations for College Student Identity Achieved and Moratorium Statuses*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*
Spirituality	1.00	--	--	--	--
Self Regulation	0.88	1.00	--	--	--
Work/Leisure	0.81	0.93	1.00	--	--
Friendship	0.86	0.93	0.90	1.00	--
Love	0.84	0.88	0.84	0.90	1.00

Table 13

Wellness Domain Pearson's r *Correlations for Older Adult Diffused and Foreclosed Statuses*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*
Spirituality	1.00	--	--	--	--
Self Regulation	0.70	1.00	--	--	--
Work/Leisure	0.60	0.90	1.00	--	--
Friendship	0.57	0.89	0.79	1.00	--
Love	0.59	0.86	0.74	0.85	1.00

Table 14

Wellness Domain Pearson's r *Correlations for Older Adult Identity Achieved and Moratorium Statuses*

	Spirituality	*Self Regulation*	*Work/Leisure*	*Friendship*	*Love*
Spirituality	1.00	--	--	--	--
Self Regulation	0.88	1.00	--	--	--
Work/Leisure	0.82	0.93	1.00	--	--
Friendship	0.86	0.93	0.90	1.00	--
Love	0.84	0.88	0.84	0.90	1.00

In keeping with the findings of positively correlated wellness domains, an exploratory factor analysis of the five wellness domains was conducted. A principle axis solution utilizing orthogonal rotation to a terminal solution yielded a single factor which accounted for 69.09% of the common variance among the correlations between wellness domains in the older adult group and 62.91% of such variance in the student group (Table 15).

Table 15

Factor Analysis of the Wellness Domains for Older Adults and College Students

Factor	*Older Adult Loading*	*Student Loading*
Spirituality	0.74	0.73
Self Regulation	0.93	0.76
Work/Leisure	0.86	0.77
Friendship	0.88	0.88
Love	0.73	0.82
Eigenvalue	3.45	3.15
% of common variance	69.09	62.91

Finally, an exploratory factor analysis of the SOC domains was conducted. A principle axis solution utilizing orthogonal rotation to a terminal solution yielded a single factor which accounted for 70.41% of the common variance among the correlations between SOC components in the older adult group and 70.92% of such variance in the student group (Table 16).

Table 16

Factor Analysis of the Wellness Domains for Older Adults and Students

Factor	*Older Adult Loading*	*Student Loading*
Selection	0.72	0.81
Optimization	0.93	0.88
Compensation	0.86	0.83
Eigenvalue	2.11	2.13
% of common variance	70.41	70.92

CHAPTER 4

DISCUSSION

A Work and Leisure Emphasis

It was first hypothesized that on a measure of wellness, college students would endorse an equal emphasis upon all wellness domains while older adults would endorse a greater emphasis upon self regulation and spirituality domains. This hypothesis was not supported. Neither of the two groups equally endorsed the various wellness domains, and means indicated that both groups endorsed the work and leisure domain of the wellness model to a greater extent than the others. Also, the findings indicated that regardless of whether older subjects were working or not, wellness scores were constant. These findings suggest that some type of productive activity, whether defined as paid employment or as a leisure activity that is intrinsically rewarding, is a focus for both college students and older adults. In terms of identity, the emphasis on the work and leisure domain of the wellness model suggests that to some degree, both the students and older adults likely define themselves as "workers" or "active doers," while less emphasis on the other domains indicates that those domains perhaps contribute less to the identity components of the participants.

One more highly endorsed domain supports the selective optimization and compensation (SOC) model (e.g. selecting an identity based on work and leisure activities versus one that equally emphasizes all the domains) and can be explained by Erikson (1963), Logan (1986), and Arnett's (2000) work. Erikson (1963) conceptualizes middle adulthood and his seventh developmental stage as generativity versus stagnation. In this stage, the developmental task is to contribute to the continuity of society from generation to generation. If this task is not fulfilled, stagnation is expressed in self absorption, boredom, and a lack of psychological growth. Perhaps

due to the overall good health of the sample and the activity focused settings in which the data was gathered, this group of older adults is remaining a vigorous part of society and challenging disengagement theory's (Achenbaum & Bengtson, 1994) view of one's later years, redefining the limits of middle adulthood, and extending Erickson's timeframe for generativity. As discussed in Rix (2002) and Welch et al. (2003), many older adults are viewing their later years not as a time for stagnation, but as an opportunity to continue to contribute to the larger society or their own happiness.

Additionally, Logan's (1986) work expanding Erikson's (1963) ideas describes an individual's later years as in fact a repetition of the stages initiative versus guilt and industry versus inferiority. Initiative versus guilt emphasizes the four or five year old child's identification with his or her parents, and describes the resulting shift in perspective to seeing oneself as also an active agent who can be enterprising, set goals, and see them to their fulfillment. Industry versus inferiority, which theoretically lasts from approximately six to puberty, marks the child's entrance into the world through school and peer relationships in a way that hopefully contributes to a sense of competence and mastery. Logan theorizes that both stages' action oriented, purpose driven constructs are not forever left behind when the individual progresses to the next stages, but instead are revisited during generativity versus stagnation. According to Logan, initiative, industry, and generativity, "share a theme of building and preparation, and therefore may be more long term and future oriented than the other stages" (p. 129). This position seems to be supported by the older adults' continued focus on work and leisure activities.

A focus on productive activity is not surprising for the college student population. As college attendance can be considered an all encompassing productive activity for many students,

especially those who are in their first year of adapting to the college environment and likely picking a major, an emphasis on this domain is easily understood. Arnett's (2000) ideas about emerging adulthood cite Erikson's (1968) acknowledgement that "the young adult, through free role experimentation, may find a niche in some section of his society" (p. 156) that can perhaps be seen as indicative of this focus on work and leisure. Additionally, career exploration is a major focus of the university environment and takes many forms during this timeframe. Leisure activities such as those offered in the university setting, volunteering, and paid work may all make contributions to the college students' emphasis on the work and leisure domain.

College Student Identity Status Findings

The second hypothesis expected that those college students endorsing identity achieved or moratorium identity status would demonstrate 1) better college adjustment on the College-Adjustment Rating Scale and 2) better study habits according to the Study Habits and Attitudes Inventory than those college students categorized as identity diffused or foreclosed. This hypothesis was not supported, and the finding is in keeping with Louden's (2003) work that contradicted suggestions that those college students with more developmentally mature identity statuses have better behavioral, emotional, and cognitive functioning than those with less mature statuses (Berzonsky & Neimyer, 1995; Cramer, 19195; Marcia, 1996; Tesch & Cameron, 1987; Bluestein & Philips, 1990). Additionally, the student group consisted of predominately moratorium and diffused students as found in Louden (2003), providing further support for the position that similar levels of functioning between the two identity statuses indicates that they may be more similar than originally proposed for this particular population.

The literature considers moratorium to be more mature and psychologically advanced than diffused (Berzonsky & Neimyer, 1995; Cramer, 19195; Marcia, 1996; Tesch & Cameron,

1987; Bluestein & Philips, 1990); perhaps this judgment is being challenged here for the college student population. If the two groups cannot be distinguished by objective measures of behavioral, emotional, and cognitive functioning, the uncommitted identity statuses may be more alike than previously thought. Berzonsky (2003) discusses how relatively little attention has been paid to the commitment dimension of Marcia's (1966) model in comparison to that examining the differences between the four individual identity statuses. One possibility is that the lack of difference in functioning found in this study could be a factor of these young adults sharing an overall lack of commitment to a given frame of reference as indicated by the endorsement of moratorium and diffused identity styles.

Additionally, the plurality concept in application to developmental paths and potential for multiple successful outcomes (Sherrod, 2001) provides a framework for considering how the uncommitted identity styles may still result in positive behavioral, emotional, and cognitive functioning for the college student group. Plurality suggests successful outcomes can result from various combinations of developmental life events, and that success is relative to the individual's context. Interaction between intra individual change (e.g. development over time) and inter individual differences (e.g. factors that make each person's context unique) create many different developmental paths that can all result in success. This notion contradicts theory such as Erikson's, which proposes a single lock step developmental path. Plurality argues that regardless of if a college student is labeled moratorium or diffused, he or she can still be performing in a successful manner in relation to his or her context.

The inability to differentiate between the two groups may also indicate that successful developmental outcomes are not contingent upon identity status but upon other factors, and both statuses may be quite adaptive given the developmental continuum for emerging adults. On the

other hand, the entire college student was by definition a functioning group in that they were all demonstrating the ability to be college students. Comparing diffused college students to a diffused group functioning less well, such as diffused psychiatric inpatients, would probably provide different results. Overall, however, conclusions with regard to identity status are limited by the small number of participants endorsing foreclosed (n = 7) and identity achieved (n = 6). Due to the small number of foreclosed and identity achieved endorsements, the data does not meet requirements to address whether committed identity styles are more closely related to better functioning than uncommitted identity styles. Of note for future research, however, is the finding that although not statistically reliable, at a descriptive level the means for diffused and moratorium statuses indicate greater college adjustment in family, personal, and social domains than those for identity achieved and foreclosed statuses. Perhaps due to the upheaval in interpersonal realms possible when a young adult leaves home for the new task of university education, flexible and shifting values and lifestyles with regard to these domains contributes to lower college maladjustment rates than those students who are not flexible when contextual demands change.

General Identity Status Findings

Regardless of age group membership, it was expected in the third hypothesis that those endorsing identity achieved or moratorium identity statuses would demonstrate: 1) fewer psychological symptoms according to the Hopkins Symptom Checklist, 2) greater use of emotion and problem focused coping strategies on the Coping Responses measure, and 3) greater SOC activity according to the SOC Questionnaire than those categorized as identity diffused or foreclosed identity statuses. This hypothesis was partially supported. As was expected, identity diffused was associated with significantly greater levels of obsessive compulsiveness,

interpersonal sensitivity, depression, and anxiety than the committed identity statuses. As identity diffused is characterized by no internal frame of reference or firm commitments to a lifestyle or values, it follows that this group may perhaps have more psychological symptoms than others when faced with addressing life stressors. Identity achieved participants endorsed significantly fewer obsessive compulsive behaviors than the other statuses, suggesting less need for this group to cope with maladaptive behavioral or cognitive means to manage life stressors due to their successful resolution of a crisis and a firm internal frame of reference. For interpersonal sensitivity, scores were lowest for foreclosed and identity achieved statuses. Both of these groups have in common commitment to a firm internal frame of reference and differ only on whether or not a personal evaluation of values as applied to the individual has taken place. Conceptually, as both groups endorsing a committed identity style have indicated having a firm internal frame of reference, it is not surprising that they would exhibit less negative emotionality and more security (e.g. feel less threatened) when faced with interpersonal differences than those who are not committed to a set of values or lifestyle.

There was no effect of identity status on use of coping strategies when queried for difficulties in family, friend, romantic, work, health, and spirituality domains and there was no effect of identity status on SOC activity endorsement. When considered in light of the findings with regard to psychological symptoms, this suggests that coping and SOC activity adjustment is taking place regardless of identity status, but that the psychological impact of the coping and SOC activity differs in such a way that those with committed identity styles in general perhaps exhibit fewer symptoms than the uncommitted identity styles due to a firm internal frame of reference.

An exploratory chi square test of the relationship between status and age was significant, indicating that identity status covaried with age. As might be expected when considering the transitions and experiences implied by different points along the life span, identity diffused was three times as likely in the younger sample (n = 63) in comparison to the older sample (n = 20). Commitment to an internal frame of reference in the form of foreclosed (older n = 15, younger n = 7) and identity achieved (older n = 15, younger n = 6) statuses was twice as likely in the older sample as in the younger sample, perhaps due to greater life experience and/or stronger cohort expectations to adhere to parental values in the older group. Moratorium (older n = 94, younger n = 81) was roughly equally represented in both groups, suggesting that identity exploration is not complete towards the end of the lifespan as originally suggested by theorists such as Erikson (1968). This finding supports the growing body of literature (Bosma & Kunnen, 2001; Kroger, 2002; Kroger, 2003) indicating that identity development is an ongoing, lifelong process perhaps driven by contextual factors such as health changes, unpredictable life events, social support group changes, and others.

Due to the covariance between age and status, the interaction between age and status was tested to determine differences with regards to endorsement of psychological symptoms, use of coping strategies, and SOC activity. This interaction was not significant at the multivariate level for any of these dependent variables, implying that although status covaries with age, functioning appears to be similar within each of the identity statuses across the two age groups, furthering arguments that the groups are more similar than originally proposed.

Coping Method Findings

The fourth hypothesis expected that older adults would display more effective self regulatory behaviors than college students through a greater propensity for the use of both

problem focused (primary control) and emotion focused (secondary control) coping methods. In this study, college students exhibited a significantly greater propensity for problem focused (primary control) coping methods in the family, friend, and health domains than the older adults. Additionally, the college students demonstrated greater emotion focused coping in the romantic domain than the older adults. Although in contrast to what was expected in hypothesis four, these coping method findings somewhat support Schultz and Heckhausen's (1996, 1998) proposal that primary control follows an inverted U shaped pattern over the lifespan while secondary control steadily increases and peaks in later life in parallel with behavioral and cognitive declines found during the aging process. With regard to the problem focused coping methods, the finding that college students reported higher coping methods of this type than older adults can be considered a reflection of the types of problematic events that the two groups are likely to encounter as indicated by Schultz and Heckhausen (1996, 1998). Issues in these domains as a college student are perhaps more often resolvable using problem focused methods than for those of older adults. As hypothesized by Arnett (1999), young adults' difficulties in interpersonal domains, such as with family members and friends, likely consist of interpersonal conflicts. Interpersonal conflicts can quite often be effectively addressed using problem focused methods such as discussing a misunderstanding or changing one's behaviors to meet others' expectations (e.g. apologizing or compromising). Additionally, health issues young adults face are typically easier to treat with behavioral changes and more often result in positive outcomes in one's younger, healthier years than in later life.

In contrast, older adults are more likely than college students to suffer greater permanent losses due to their older age. For example, the death of one's family members and peer group

members and irreversible health issues are frequently encountered in this age group. Problem focused coping attempts to immediately and directly effect the external environment are much less effective in dealing with permanent interpersonal and health losses such as these.

The college students demonstrated greater emotion focused coping in the romantic domain than the older adults. In this study, 50.5% of the college student population endorsed no participation in a romantic relationship while only 36.1% of the older adults reported they were single. This demographic difference may provide an explanation as to why the college students endorsed greater emotion focused coping that older adults. As fewer college students were participating in this type of partnership, it is more likely that problems in this domain for these participants consisted of negative emotions about themselves for not having a partner than about interpersonal difficulties with another person that could be addressed with behavior change.

Age Differences in Wellness Endorsement and Similarities in SOC Activity

The fourth hypothesis expected older adults would place greater emphasis on the self regulation domain of the wellness model and report greater SOC activity than the college students. Hypothesis five predicted older adults in poorer health would endorse more loss based selection activity than college students. Neither hypothesis four or five was supported; older adults endorsed all five wellness model domains and total wellness to a greater extent than the college students and the two groups equally endorsed SOC activity components.

The SOC activity findings suggest a caveat to Freund and Baltes' (2002a) position that loss based selection activities are positively correlated with age and related to declines associated with advancing age. "Advancing age" for the population from which this sample was drawn may need to be more specifically defined for their prediction that loss based selection is correlated with age to be upheld. This study consisted of two groups that 1) were predominately Caucasian,

2) were at least healthy enough to attend university classes and senior center activities, 3) endorsed an increased emphasis on the work and leisure wellness domain, 4) likely had access to social support in at least the work and leisure domains, and 5) probably would be characterized in general as middle class and above in terms of their socioeconomic status. As an overall privileged group in terms of many diversity categories, it is possible that neither of the groups were experiencing contextual challenges varied enough so as to create significant differences in their SOC activities despite the older adults' average age of 70 years old. In this case, "advancing age" should perhaps be augmented for this sample with qualifiers about health status, mobility, access to social support, barriers to health care, and other factors more likely to impact the need to utilize loss based selection than simply older age.

Additionally, as found in hypothesis five's exploratory analysis, older adults, irrespective of their self ranked health and that of the college students, endorsed greater wellness than the college students in each of the wellness domains and on measure of overall total wellness. Sherrod (2001) states that, "Since the SOC model is used to predict successful development, one would expect its operation also to improve with age and experience," (p. 52). Despite no differences in SOC component frequency endorsement between the two groups, it is possible that SOC activity embedded within each of the wellness domains is more effective for the older adults than the college students due to more life experience or a practice effect. This may in part account for the older adults' higher endorsement of the wellness domains. For example, despite an older adult's theoretically smaller social convoys of support (Antonucci, 2001), he or she may be more effective at reaching out to others for help and companionship and thus endorse greater

wellness in the friendship domain than a freshman college student who has access to a whole classroom peers, but struggles interpersonally with making new friends in a new setting such as the university environment.

Carstensen, Isaacowitz, and Charles' (1999) work with socioemotional selectivity theory perhaps provides a mechanism for understanding why older adults may be more effective at applying SOC behaviors than college students. These researchers suggest that one's perception of time plays a fundamental role in selecting and pursuing goals and leads to increased effectiveness in doing so as one's perception of remaining time becomes shorter. As a young adult who likely views time as relatively unlimited, learning about the social and physical world is emphasized through activities that are not focused on emotional connection with others. In contrast, older adults, who more typically view time as limited due to their closer proximity to the end of the lifespan, tend to focus on emotional goals such as spending "quality time" with one's family. Keeping in mind the pervasiveness of social support across all five domains of the wellness model used and strong correlations between effective social support and physical health, mental health, and happiness (Sarason, Sarason, & Pierce, 1990), perhaps greater emphasis on emotional goals leads to more effective choices regarding SOC activity, thus contributing to enhanced wellness.

Increased wisdom, which correlates with increased age, may account for some of this difference as well. As defined earlier, wisdom can be considered, "the ability to find meaning in life's often adverse experience, openness to experience, generativity, and ego integrity," (Kramer, 2002, p. 131) and is a characteristic often attributed to older adults. It entails increases in 1) insight and 2) awareness of the ambiguous and often uncertain nature of human life

(Kramer, 2002). Enhanced wisdom may lead to more effective and efficient use of resources such as spirituality and social support, both of which have been linked to positive wellness outcomes (Maher & Hunt, 1993) as well as to life satisfaction (Chumbler, 1996). Particularly in light of the majority of the subjects endorsing uncommitted identity statuses, comfort with ambiguity and uncertainty can be considered an important interpersonal trait.

SOC Activity and Wellness Domain Correlations

Sixth, it was expected that there would be a higher negative correlation among wellness domains in older adults as compared to college students if the SOC model was supported and a positive correlation among wellness domains if the wellness model was supported. Hypothesis 6 was disconfirmed; regardless of age group membership, wellness domains were positively correlated. As applied to identity development, this finding suggests that each of the domains is relevant to the participants' identity to some degree. Keeping in mind that the majority of the sample (70.9% of the older adults and 78.2% of the college students) endorsed an uncommitted identity status, perhaps focus on all of the domains is adaptive and reflects the lack of commitment and/or active exploration evident with these statuses. "Doing it all" during these statuses may in fact propel identity development and limiting experiences may hamper the process; the groups overall may not be negatively affected by a wide focus and outlay of their energy. Successful identity development as an emerging adult or as an older adult who values productive activity as part of his or her identity may require being open to new experiences and participation in a wide range of activity rather than restricting focus to fewer domains.

Conceptually, the SOC model can again be viewed as embedded within each of the wellness domains such that selection, optimization, and compensation activities may be carried out within each of the various domains and serve to enhance existing functioning within each

domain rather than simply compensate for lost functioning. Baltes and Heydens-Gahir (2003) in a study addressing work and family conflict found that SOC activity is related to reduced work and family stress and consequently reduced conflict between the work and family domains. In this manner, overall SOC activity can be regarded as serving an enhancement function rather than simply compensating for a loss. A logical extension of Baltes and Heydens-Gahir's finding is that perhaps the SOC activity allowed participants to demonstrate better performance within each role; similarly, perhaps participants' SOC functioning in this study allowed them to emphasize each of the domains in a manner which promotes identity development for the two groups.

Life Events and Identity Status

It was expected in hypothesis 7 that college aged participants with high occurrences of life events within the past year as determined by a median split would be more likely to endorse moratorium identity status over any other status, while older adults with high occurrences of life events within the past year would be more likely to endorse identity achieved status over any other status. The college student finding will be considered first, followed by the older adult findings.

For the college student group, regardless of the number of life event occurrences, young adults were most likely to endorse moratorium (n = 81) or identity diffused (n = 63) statuses. Consistent with Louden (2003), in which the majority of freshmen (nearly 83%) endorsed either moratorium or diffused status, an active, questioning approach to identity was the predominate freshmen college student experience. This finding provides further evidence to suggest this group is taking advantage of Arnett's (1994) emerging adulthood construct, which considers the late teens and twenties a time period offering the most opportunities for identity exploration.

Also, this finding supports Arnett's assertion that it is no longer normative for those in their late teens to be entering and settling into adult roles. Early experience in the college atmosphere has perhaps not yet availed the freshmen participants to all the experiences they will be introduced to; a crisis may not yet exist for those freshmen endorsing diffused. These students can be conceptualized as taking in their surroundings, having no firm commitments to a lifestyle or to a set of values, and might be more likely to be easily influenced by others and new experiences without active, thoughtful decision making. On the other hand, some freshmen may enter higher education already in moratorium's active questioning state or be coaxed into it by new or different challenges in their first year of college. In terms of progression (or regression) in identity status, Waterman et al.'s (1971, 1974, 1976) work supports the notion that identity status shifts take place throughout the college years.

Contrary to what was expected for the older adults, the findings indicate that regardless of life event occurrences, most older adults (66%) endorsed moratorium (n = 94) status. However, those older adults with high life event occurrences were more likely to endorse foreclosed (n = 13) and identity achieved (n = 8), less likely to endorse moratorium (n = 44), and equally likely to endorse identity diffused (n = 10) in comparison to those endorsing low life event occurrences. Older adults were again more similar to the college students than originally thought, in that their predominate experience was also an active, questioning approach to identity. Considering the contextual factors associated with this aged group, retirement or a career change due to older age would suggest a crisis especially given the group's high endorsement of the work and leisure domain. Exploration of other activities that would fulfill a need to be productive would be consistent with this experience.

In terms of those older adults reporting a relatively high number of life events, this group was more likely to endorse a committed identity status than the low life event group, perhaps suggesting that for the older adults stressful life events may result in a transition in identity status to a more firm internal frame of reference or reaffirm a preexisting internal frame of reference. These findings lend some support to those of a longitudinal identity study with an adult sample which found that certain life events occurring within the last year of the participants' lives were associated with varying changes in identity activity over a five month time period (Anthis, 2002). In that study, a loved one's death and dying predicted increases in identity exploration, while personal financial and economic stressors predicted decreases in identity exploration. Healthcare stressors predicted decreases in identity commitment, and family related stressors predicted increases in identity commitment (Anthis, 2002).

Kroger's (2000) proposal that identity development extends beyond late adolescence is consistent with the few identity Achieved endorsements within the college student and older adult groups in this study and as well as with Louden's (2003) findings in a college student sample. Thus, this body of work provides further support for the proposal that identity is a developmental process that extends beyond the timeframe many consider to be sufficient for determining who one is and what one wants to become. Although this study's cross sectional nature does not allow it to address identity status changes specifically, it is possible that over time, uncertainty, crisis, exploration, and commitment varies with the introduction of additional life experiences. Calling into question a linear approach to identity development such as that proposed by Erikson, individuals may shift in identity status in a nonlinear fashion through the statuses across their lifespan and perhaps spend a majority of their lifespan without commitment to a firm identity but in active search of one.

Identity Status and Wellness Domain Correlations

Irrespective of age, identity achieved and moratorium identity statuses were expected in hypothesis 8 to be associated with negative correlations among wellness domains, while identity diffused and foreclosed identity statuses were expected to be associated with a positive correlation among wellness domains. However, in keeping with the earlier finding that the domains were positively correlated regardless of age, the domains were positively correlated regardless of identity status as well. As an exploratory endeavor, Pearson *r*s between college student and older adult wellness scores were computed by identity statuses. In each case, all *r*s were again positively correlated. It appears that irrespective of age, identity status, SOC activity, or stress within the domain, wellness domains are consistently positively correlated. Again, this finding has implications for understanding how identity development may function in these groups. Considering the SOC model's components as activities which may enhance functioning overall, the various domains may all be benefiting from positive SOC functioning within each domain and may thus contribute to identity.

Wellness and SOC Activity Factor Analyses

In keeping with the findings of positively correlated wellness domains, an exploratory factor analysis of the five wellness domains was conducted. As was found in Louden (2003) for a college student sample, the wellness model consisted of a single underlying factor rather than five different domains. This finding is not surprising considering the overall high correlations found between the different domains for both groups. Keeping in mind the limited sample, perhaps a more diverse population in activity level, ethnic background, or socioeconomic status would reveal a different factor structure. However, wellness may also be a unitary concept

difficult to tease apart. For example, when considering the five domains tested by this model, social support can be considered an important confounding factor found within each of the areas. Social interaction's positive impact upon subjective well being, happiness, identity development, and overall functioning is well documented in the psychology literature (Sarason, Sarason, & Pierce, 1990; Rowe & Khan, 1998).

As an additional exploratory endeavor, a factor analysis of the SOC measure was conducted. This analysis also revealed one factor rather than three separate factors for both age groups. Similar to the wellness model's one factor finding, perhaps a more diverse population in activity level, ethnic background, or socioeconomic status would reveal a different factor structure. On the other hand, selection, optimization, and compensation activities take place in concert, and the process of SOC itself may be a unitary one rather than compartmentalized. For example, a student may select "student" over "athlete" and optimize study time by compensating for attention deficit hyperactivity disorder with Ritalin, thus reinforcing that identity over others. Likewise, an older adult may chose "worker" over "retiree" and optimize employment while compensating for a lack of current computer technology skill by attending night classes at a community college. In doing so, these examples illustrate selecting a domain of functioning and optimizing that domain while compensating for another factor, and all the behaviors have in common the goal of enhancing functioning.

As a final exploratory endeavor, correlations were computed between SOC components and wellness domain scores for each age group. In the college student sample, almost all wellness domains were negatively correlated with the SOC components while in the older adult sample, all the wellness domains were positively correlated with the SOC components. This difference suggests that the adjustments accounted for using the SOC model, originally

developed with older adults in mind, may promote greater wellness in the older adult sample while perhaps limiting college students' wellness with the exceptions of elective selection actions enhancing the friendship domain and loss based selection activities enhancing the work and leisure domain. As theorized above, this difference may be accounted for if the older adults are in fact more effective and efficient at using SOC strategies than the college students due to enhanced wisdom, increased focus on emotional goals, or a practice effect.

Implications for Higher Education and Clinical Practice

According to this study, the majority of freshmen are experiencing a lack of commitment to a lifestyle and values and many are experiencing an active questioning of what lifestyle and values are appropriate for them. As university professors, guidance counselors, and administrators have some of the most regular contact with this population, the university and its staff have a unique opportunity to provide education, understanding, and support during this developmental period. Making available resources such as personal and vocational counseling services, mentors, direct professor student interaction, social and service organizations, and multicultural education may benefit healthy identity development in the university setting.

In addition, given the older adult group's similarity to the college students in terms of identity status, it is perhaps vitally important to be aware that identity development is very likely not solidified during college. Many parents and overall societal norms expect that those in college are also developmentally ready to make firm identity, career, and life decisions. This study found otherwise, and in fact suggests that in accordance with Arnett's ideas, questioning and uncertainty likely extends well beyond college graduation. For this reason, support for identity development needs to occur beyond the college setting. Recent graduates' employers,

parents, mentors, and others may be appropriately positioned to augment identity development by encouraging further exploration, new activities and experiences, and providing emotional support during the transition from the university setting to the "real world."

In terms of the older adults, higher education could benefit this group by decreasing barriers to older adults. As this group appears to be healthy and focused on productivity, it is possible some are returning to participate in ongoing education. Continued education is an excellent way to promote psychological growth, personal exploration, and interpersonal functioning within this group. Increasing the number and availability of informal classes, marketing in senior centers, partnering with senior centers to match older and younger adults with similar interests, and reducing ageism stigma within the university environment by diversifying visual representations of students on brochures are all ideas higher education can incorporate.

Within counseling practice specifically, counselors have the opportunity to have a positive impact on both of the populations discussed in this study. Helping students accurately measure their abilities and performance, set goals, and follow through on those goals or simply supporting students' coping and decision making skills is vital. While this is not unfamiliar territory for a counselor working with a college population, this study reinforces the necessity of keeping in mind the students' developmental needs. In addition, offering to explore various domains and the student's beliefs about them may be beneficial, even if they are not part of the presenting issue in counseling. As demonstrated by the large number of diffused freshmen, active exploration may not be taking place and could be initiated by thoughtful client-counselor interaction.

The findings indicate that supportive mental health services are likely to be in demand for the older adult population as well. Career counseling and therapy services may be very useful for older adults who are contemplating retirement or a second career, or for those who find themselves without a job due to their age but who still highly value productive activity. Further, the older adults' emphasis on work, leisure activity, and productivity in general certainly challenges decline oriented, pathological aging such as that historically found in disengagement theory (Achenbaum & Bengtson, 1994) as well as society's definition of "old" in terms of chronological age expectations for activity, health, and well being. This study provides some evidence that "optimizing aging" (Vaillant, 2002) may be taking place in modern society, and counselors are advised to examine their own assumptions and stereotypes about this group.

The overall lack of identity commitment also bears a warning for mental health professionals. Helpers must be mindful of the power of their influence with these populations. By definition, those in diffused and moratorium statuses are either knowingly or unknowingly without a firm frame of reference. Appropriate boundaries and ethical practices may be even more important for these persons than others.

Limitations

Several important limitations should be noted with regard to this study. The sample overall is highly specific and the findings do not generalize to populations other than a primarily female, Caucasian, active, and likely socioeconomically privileged group. In the student sample in particular, the participants were recruited from introductory level psychology classes, and this further limits the generalizability of the findings to other groups. Additionally, especially in cultures in which emerging adulthood and college attendance is not the norm, the findings most likely do not apply to 18 and 19 year olds.

In terms of the older adults, they were predominately healthy, employed, and relatively active. As such, they most likely do not represent the responses and experience of older adults who are not as healthy, active, and employed. As the SOC model was originally developed for older adults suffering greater and more severe health issues than this study's participants, studying a more diverse sample of older adults may render more diversity of responses to the SOC model and impact the findings. Further, the older adults in this study were all similar in that they were willing to participate in the study without any kind of incentive to do so.

Self report, retrospective measures were used to gather the data and were for the most part relatively brief instruments that were administered to facilitate data collection. More comprehensive measures, such as substituting the Minnesota Multiphasic Personality Inventory-Two (Graham, 1993) for the Hopkins, may provide additional depth of understanding. Reliability and validity concerns call into question any research using self report, retrospective measures. A related design issue is the cross sectional survey method used, which does not address how identity status or the other variables change over time (Baltes, Reese & Nesselroade, 1988). Considering that the focus of the study is the exploration of processes relevant to developmental changes in identity, a longitudinal design would probably yield additional, more thorough understanding of identity status transition across the lifespan.

In terms of the identity status findings, a small minority of the participants endorsed either identity achieved or foreclosed statuses. While this may reflect the two populations accurately, the small cell sizes hamper comparison of the four identity statuses. The manner in which identity status was measured may also explain the lack of foreclosed and identity achieved individuals. The forty eight item EOM-EIS assesses identity within occupational, religious, political, interpersonal, sex role, and recreation content domains. As identity does not develop as

a single concept but instead develops at varying rates across domains (Kroger,1988; Waterman & Waterman, 1971; Waterman, Geary, & Waterman, 1974; Waterman & Goldman, 1976) capturing additional domains such as sexual orientation, family roles such as mother or fatherhood, and racial or ethnic culture may have revealed more foreclosed and identity achieved endorsements.

Other possible limitations of the study are the measures used to assess wellness domains and SOC activity. As the factor analyses for both the Wellness Evaluation of Lifestyle and SOC Questionnaire resulted in a one factor structure rather than five factor and three factor structures, respectively, it is possible the measures do not effectively discriminate between the five wellness domains or selection, optimization, and compensation activities. Further research regarding these two instruments is thus indicated.

Implications for Future Research

The predominance of the moratorium and diffused identity statuses raises the question of whether a cohort effect exists in the timing of identity statuses across the lifespan. For the older adults, they are among the first generations to be able to take advantage of advanced medical technology, increased leisure time, higher education, and a generally prosperous United States economy. In the years that have typically been regarded as a period for decline and little productivity, they are relatively healthy and active. This finding suggests that perhaps later adulthood for this group is a developmental period similar to that labeled emerging adulthood for the college students in which the benefits of their earlier life and current resources afford them the luxury of personal exploration. In terms of the college students, emerging adulthood as a developmental period has only been associated with industrialized countries with a middle class in the last half century (Arnett, 2000), and therefore a cohort effect seems likely for the college

students. Comparison of the two groups to other groups may provide valuable contributions to understanding the identity development process. For example, older adults and those in their late teens and twenties who have not attended college are perhaps less likely to experience a period of relative independence and fewer responsibilities. Also, identity status during the late teens and twenties may vary between those who attend college and those who enter the work force full time during or immediately after high school. Understanding how shifts in identity take place over time and may be driven by contextual factors such as an economic need to work or family emphasis on obtaining higher education would further understanding of the identity development experience. Learning more about college students and older adults who may fall in the identity statuses endorsed least frequently in this study would also expand the perspective on successful developmental experiences.

Extensions to Whitbourne's (1996) identity assimilation and accommodation ideas and Brandtstatler et al.'s (1987) thoughts on accommodative and assimilative coping due to levels of perceived control are also suggested by these findings. Identity may in fact represent a coping mechanism that serves to manage contextual change and support healthy functioning. If one's surroundings change in a manner over which the person has low perceived control (e.g. death of a romantic partner) it would follow that identity accommodation (e.g. "I am a widow") and new behaviors (e.g. grieving and seeking additional social support) would likely be more adaptive than identity assimilation (e.g. "I only know how to be a wife") and a continuation of the behaviors present before the contextual change (e.g. cognitive denial of the death and refusal to accept help or solace). In this manner, identity might respond both proactively and retroactively to contextual demands in a way which allows continued functioning.

Exploration of how identity status may be related to cognitive, emotional, and behavioral functioning across different populations would also be beneficial. It might be that with enough resources (e.g. adequate parenting, intellectual ability, social support, health) a foreclosed or diffused individual might be as successful developmentally and in overall functioning as an identity achieved or moratorium individual. Learning more about what resources are important to identity development and when they should be available may be more important to successful development than the developmental trajectory itself.

Identity measurement would also benefit from further investigation. As identity development has been shown to develop not as a single concept but instead at varying rates across domains (Kroger,1988; Waterman & Waterman, 1971; Waterman, Geary, & Waterman, 1974; Waterman & Goldman, 1976), expanding the number of domains currently measured by identity status instruments may more accurately differentiate between individuals throughout the life course as discussed in this study's limitations section. Further investigation of the committed versus uncommitted dimension in Marcia's identity status designation may also be useful. It is likely that a firm internal frame of reference impacts functioning and may clarify some of the relationships found between outcome variables and identity statuses (Bersonsky, 2003). This study's data provides a basis for proposing that identity development differs for each individual and is likely not ever complete, serving as a call to expand our definition of identity development in terms of domain, course, and successful outcome.

In terms of the wellness concept and SOC activity found in this study, further exploration of the constructs' components, the interaction of the components within and between the two concepts, and how they both might contribute to identity development are indicated in light of this study's findings. Future research using different wellness models and identity measures are

implied to continue addressing the constructs and their relationships to positive functioning across the lifespan. In particular, investigation of the SOC model's potential enhancement effect within wellness domains is warranted. For example, compensation, rather than simply a reactive attempt to counteract a loss, may in fact also be a proactive action closely related to optimization that allows multiple wellness domains to receive emphasis and thus supports healthy identity development in those individuals without a firm internal frame of reference.

REFERENCES

Achenbaum, W.A., & Bengtson, V.L. (1994). Re-engaging the disengagement theory of aging: On the history and assessment of theory development in gerontology. *The Gerontologist, 34*, 756-763.

Adams, G.R., & Shea, J.A. (1979). The relationship between identity status, locus of control, and ego development. *Journal of Youth and Adolescence, 8,* 81-89.

Adams, T., Bezner, J., & Steinhardt, M. (1997). The conceptualization and measurement of perceived wellness: Integrating balance across and within dimensions. *American Journal of Health Promotion, 11,* 208-218.

Adams, T.B., Bezner, J.R., Drabbs, M.E., Zambarano, R.J., & Steinhardt, M.A. (2000). Conceptualization and measurement of spiritual and psychological dimensions of wellness in a college population. *Journal of American College Health, 48*, 165-173.

Adler, A. (1927). *Understanding human nature*. (W.B. Wolf, Trans.). New York: Fawcett Premier.

Anthis, K.S. (2002). On the calamity theory of growth: The relationship between stressful life events and changes in identity over time. *Identity: An International Journal of Theory and Research, 2,* 229-240.

Antonucci, T.C. (2001). Social relations: An examination of social networks, social support, and sense of control. In J.E. Birren & K.W. Schaie (Eds.), *Handbook of the psychology of aging* (5th ed.). San Diego, CA: Academic Press.

Ardell, D.B. (1985). The history and future of wellness. *Health Values, 9,* 37-56.

Ardell, D.B. (1988). The history and future of the wellness movement. In J.P. Opatz (Ed.). *Wellness promotion strategies: Selected proceedings of the eight annual national wellness conference.* Dubuque, IA: Kendall/Hunt.

Arnett, J.J. (1994). Are college students adults? Their conceptions of the transition to adulthood. *Journal of Adult Development, 4,* 213-224.

Arnett, J.J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist, 54,* 317-326.

Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55,* 469-480.

Arnold, J. (1989). Career decidedness and psychological well-being: A two-cohort longitudinal study of undergraduate students and recent graduates. *Journal of Occupational Psychology, 62,* 163-176.

Baltes, B.B., & Heydens-Gahir, H.A. (2003). Reduction of work-family conflict through the use of selection, optimization, and compensation behaviors. *Journal of Applied Psychology, 88,* 1005-1018.

Baltes, M.M., & Carstensen, L.L. (1998). Social-psychological theories and their applications to aging: From individual to collective. In V.L. Bengtson & K.W. Schaie (Eds.), *Handbook of theories of aging*. New York: Springer.

Baltes, P.B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics of between growth and decline. *Developmental Psychology, 23,* 611-696.

Baltes, P.B. (1997). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist, 52,* 366-380.

Baltes, P.B., Baltes, M.M., Freund, A.M., & Lang, F.R. (1999). *The measure of selection, optimization, and compensation (SOC) by self-report*. Berlin: Max Plank Institute for Human Development.

Baltes, P.B., & Smith, J. (1990). Toward a psychology of wisdom and its ontogenesis. In R.J. Sternberg (Ed.), *Wisdom: Its nature, origin, and development*. Cambridge University Press.

Bandura, A. (1969). *Principles of behavior modification.* New York, NY: Holt, Rinehart and Winston.

Barrios, L.C., Everett, S.A., Simon, T.R., & Brener, N.D. (2000). Suicidal ideation among US college students. *Journal of American College Health, 48,* 229-234.

Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117,* 497-529.

Bennion, L.D., & Adams, G.R. (1986). A revision of the extended version of the objective measure of ego identity status: An identity instrument for use with late adolescence. *Journal of Adolescent Research, 1,* 183-198.

Bersonsky, M.D., & Neimyer, G.J. (1994). Ego identity status and identity processing orientation: The moderating role of commitment. *Journal of Research in Personality, 28,* 425-435.

Bersonsky, M.D. (2003). Identity style and well-being: Does commitment matter? *Identity: An International Journal of Theory and Research, 3(2),* 131-142.

Billings, A.G., & Moos, R.H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine, 4,* 139-157.

Bluestein & Phillips. (1990). Relations between ego identity statuses and decision-making styles. In A.E. Ivey, M.B. Ivey, & L. Simek-Morgan (Eds.), *Counseling and psychotherapy: A multicultural perspective*. Boston, MA: Allyn and Bacon.

Bosma, H.A., & Kunnen, E.S. (Eds.). (2001). *Identity and emotion: A self-organizational process*. Cambridge, England: Cambridge University Press.

Bosworth, H.B., & Schaie, K.W. (1997). The relationship of social environment, social networks, and health outcomes in the Seattle longitudinal study: Two analytic approaches. *Journal of Gerontology: Psychological Sciences, 52,* 197-205.

Brandtstatler, J., Krampen, G., & Greve, W. (1987). Personal control over development: Effects on the perception and emotional evaluation of personal development in adulthood. *International Journal of Behavioral Development, 10,* 99-120.

Brandtstatler, J., & Rothermund, K. (1994). Self-percepts of control in middle and later adulthood: Buffering losses by rescaling goals. *Psychology and Aging, 9,* 265-273.

Carstensen, L.L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology and Aging, 7,* 331-338.

Carstensen, L.L., Isaacowitz, D.M., & Charles, S.T. (1999). Taking time seriously. *American Psychologist, 54,* 165-181.

Cash, T.F., & Pruzinsky, T. (2002). *Body image: A handbook of theory, research, and clinical practice*. New York, NY: The Guilford Press.

Chumbler, N.R. (1996). An empirical test of a theory of factors affecting life satisfaction. *Journal of Psychology and Theology, 24,* 220-232.

Compton, W.C., Smith, M.L., Cornish, K.A., & Qualls, D.L. (1996). Factor structure of mental health measures. *Journal of Personality and Social Psychology, 71,* 406-413.

Cooper, K.B. (1982). *The aerobics plan for total well-being*. New York, NY: Bantam.

Cramer, P. (1995). Identity, narcissism, and defense mechanisms in late adolescence. *Journal of Research in Personality, 29,* 341-361.

Crose, R., Nicholas, D.R., Gobble, D.C., & Frank, B. (1992). Gender and wellness: A multidimensional systems model for counseling. *Journal of Counseling and Development, 71,* 149-156.

Crowne, D.P., & Marlow, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349-354.

Department of Health and Human Services. (1999, November). *Progress review: Educational and community-based programs.* Retrieved September 13, 2003 from http://www.health.gov/healthypeople/data/PROGRVW/education/default.htm

Derogatis, L.R., Lipman, R.S., Rickels, R.J., & Covi, L. (1994). The Hopkins Symptom Checklist: A self-report symptom inventory. *Behavioral Science, 19,* 1-15.

Dittmann-Kohli, F., & Westerhof, G.J. (2000). The personal meaning system in a life-span perspective. In Chamberlain, G.T. & Chamberlain, K (Eds.), *Exploring existential meaning: Optimizing human development across the life span*. Thousand Oaks, CA: Sage.

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 68,* 653-663.

Dunn, H.L. (1966). High-level wellness for man and society. In Folta, J.R. & Deck, E.S. (Eds.), *A sociological framework for patient care.* New York, NY: John Wiley & Sons.

Edwards, K.J., Hershberger, P.J., Russell, R.K., & Markert, R.J. (2001). Stress, negative social exchange, and health symptoms in university students. *Journal of American College Health, 50,* 75-80.

Ellison, C.G., & Levin, J.S. (1998). The religion-health connection: Evidence, theory, and future directions. *Health Education & Behavior, 25,* 700-720.

Erikson, E.H. (1963). *Childhood and society*. New York, NY: Norton.

Erikson, E.H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.

Fabricatore, A.N., Handal, P.J., & Fenzel, L.M. (2000). Personal spirituality as a moderator of the relationship between stressors and subjective well-being. *Journal of Psychology and Theology, 28,* 221-231.

Fahlberg, L.L., & Fahlberg, L.A. (1991). Exploring spirituality and consciousness with an expanded science: Beyond the ego with empiricism, phenomenology, and contemplation. *American Journal of Health Promotion, 5,* 273-281.

Folkman, S., & Lazarus, R.S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21,* 219-239.

Framboni, M., & Cooper, D. (1989). Further validation of three short forms of the Marlowe-Crowne Social Desirability Scale. *Psychological Reports, 65,* 595-600.

Freund, A.M., & Baltes, P.B. (1998). Selection, optimization, and compensation as strategies of life management: Correlations with subjective indicators of successful aging. *Psychology and Aging, 13,* 531-543.

Freund, A.M., & Baltes, P.B. (2002a). Life-management strategies of selection, optimization, and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology, 82,* 642-662.

Freund, A.M., & Baltes, P.B. (2002b). The adaptiveness of selection, optimization, and compensation as strategies of life management: Evidence from a preference study on proverbs. *Journal of Gerontology, 57B,* 426-434.

George, L.K. (1992). Economic status and subjective well-being: A review of literature and an agenda for future research. In N. E. Cutler, D.W. Gregg, & M.P. Lawton (Eds.), *Aging, money, and life satisfaction: Aspects of financial gerontology,* New York, NY: Springer.

Goodloe, N.R., & Arreola, P.M. (1991). Spiritual health: Out of the closet. *Journal of Health Education, 23,* 221-226.

Graham, J.R. (1993). *MMPI-2: Assessing personality and psychopathology* (2nd ed.). New York, NY: Oxford University Press.

Greenberg, J.S. (1985). Health and wellness: A conceptual differentiation. *Journal of School Health, 55,* 403-406.

Greenberg, J., Schimel, J., & Martens, A. (2002). Ageism: Denying the face of the future. In T.D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons.* Cambridge, MA: The MIT Press.

Hagerty, M.R. (2000). Social comparisons of income in one's community: Evidence from national surveys of income and happiness. *Journal of Personality and Social Psychology, 78,* 764-771.

Hall, G.S. (1904). *Adolescence: Its psychology and its relation to physiology, anthropology, sociology, sex, crime, religion, and education* (Vols. I & II). Englewood Cliffs, NJ: Prentice-Hall.

Hermon, D.A., & Hazler, R.J. (1999). Adherence to a wellness model and perceptions of psychological well-being. *Journal of Counseling and Development, 77,* 339-343.

Hettler, B. (1984). Wellness: Encouraging a lifetime pursuit of excellence. *Health Values, 8,* 13-17.

Holmes, T.H., & Rahe, R.H. (1967). The Social Readjustment Rating Scale. *Journal of Psychometric Research, 11,* 213-218.

Ingersoll, R.E. (1994). Spirituality, religion, and counseling: Dimensions and relationships. *Counseling and Values, 38,* 98-111.

Jex, S.M., & Bliese, P.D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressors: A multi-level study. *Journal of Applied Psychology, 84,* 349-361.

Jung, C.G. (1958). *The undiscovered self.* New York, NY: Mentor Books.

Justice, B., McBee, G., & Allen, R. (1977). Social dysfunction and anxiety. *The Journal of Psychology, 97,* 37-42.

Kobasa, S.C., Maddi, S.R., & Aolak, M.A. (1983). Type A and hardiness. *Journal of Behavioral Science Medicine, 6,* 41-51.

Kramer, D.A. (2002). The ontogeny of wisdom in its variations. In J. Demick & C. Andreolett (Eds.), *Handbook of adult development.* New York, NY: Plenum Press.

Krause, N. (1997). Anticipated support, received support, and economic stress among older adults. *Journal of Gerontology: Psychological Sciences, 52,* 284-293.

Kroger, J. (1988). A longitudinal study of ego identity status interview domains. *Journal of Adolescence, 11,* 49-64.

Kroger, J. (2000). Ego identity status research in the new millennium. *International Journal of Behavioral Development, 24,* 145-148.

Kroger, J. (2002). Introduction: Identity development through adulthood. *Identity: An International Journal of Theory and Research, 2,* 1-5.

Kroger, J. (2003). What transits in an identity status transition? *Identity: An International Journal of Theory and Research, 3,* 197-220.

Kroger, J., & Green, K.E. (1996). Events associated with identity status change. *Journal of Adolescence, 19,* 477-490.

Kroger, J., & Haslett, S.J. (1991). A comparison of ego identity status transition pathways and change rates across five identity domains. *International Journal of Aging and Human Development, 32,* 303-330.

Krumboltz, J.D. (1992). The wisdom of indecision. *Journal of Vocational Behavior, 41,* 239-244.

Lazarus, A.A. (1981). *The practice of multi-modal therapy.* New York, NY: McGraw-Hill.

Levinson, D.J., Darrow, C.N., Klein, E.B., Levinson, M.H., & McKee, B. (1978). *The seasons of a man's life.* New York, NY: Ballentine Books.

Levinson, D.J. & Levinson, J.D. (1996). *The seasons of a woman's life.* New York, NY: Alfred A. Knopf.

Lerner, R.M., Freund, A.M., DeStefanis, I., & Habermas, T. (2001). Understanding developmental regulation in adolescence: The use of the selection, optimization, and compensation model. *Human Development, 44,* 29-50.

Louden, L.L. (2003). *Identity development in emerging adulthood.* Unpublished masters thesis. The University of North Texas, Denton.

Maher, M.F., & Hunt, T.K. (1993). Spirituality reconsidered. *Counseling and Values, 28,* 21-28.

Maslow, A. (1970). *Motivation and personality* (2nd ed.). New York, NY: Harper & Row.

Marcia, J.E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*, 551-558.

Marsiske, M., Lang, F.R., Baltes, P.B., & Baltes, M.M. (1995). Selective optimization with compensation: Life-span perspectives on successful human development. In Dixon, R.A. & Baeckman, L. (Eds.), *Compensating for psychological deficits and declines: Managing losses and promoting gains.* Mahwah, NJ: L. Erlbaum Associates.

Myers, J.E., Sweeney, T.J., & Witmer, J.M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling and Development, 78*, 251-266.

Myers, J.E., Sweeney, T.J., & Witmer, J.M. (2001a). *Wellness Evaluation of Lifestyle (WEL) workbook: A guide to assessing personal resources for wellness and developing a plan for living life more fully.* Redwood City, CA: Mind Garden, Inc.

Myers, J.E., Sweeney, T.J., & Witmer, J.M. (2001b). *The Wellness Evaluation of Lifestyle: An instrument for assessing and planning wellness lifestyles.* Redwood City, CA: Mind Garden, Inc.

Nixon, C.T., & Frost, A.G. (1990). The study habits and attitudes inventory and its implications for students' success. *Psychological Reports, 66*, 1075-1085.

Orlsfsky, J.L., Marcia, J.E., & Lesser, I.M. (1976). Ego identity status and the intimacy versus isolation crisis of young adulthood. *Journal of Personality and Social Psychology, 27*, 211-219.

Pagel, M.D., Erdly, W.W., & Becker, J. (1987). Social networks: We get by with (and in spite of) a little help from our friends. *Journal of Personality and Social Psychology, 53,* 531-572.

Pargament, K. I. (1990). God help me: Toward a theoretical framework of coping for the psychology of religion. *Research in the Social Scientific Study of Religion, 2,* 195-224.

Park, D.C. (2000). The basic mechanisms accounting for age-related decline in cognitive function. In N. Schwarz (Ed.), *Cognitive aging: A primer*. Philadelphia, PA: Psychology Press.

Parkes, K.R., Mendham, C.A., & Rabenau, C.Y. (1994). Social support and the demand-discretion model of job stress: Tests of additive and interactive effects in two samples. *Journal of Vocational Behavior, 44,* 91-113.

Pelletier, R. (1994). Exploratory analysis of the vocational beliefs of unemployed young adults. *Journal of Counseling and Development, 24*, 95-117.

Perry, W.G. (1999). *Forms of ethical and intellectual development in the college years: A scheme.* San Francisco, CA: Jossey-Bass.

Reifman, A., & Dunkel-Schetter, C. (1990). Stress, structural social support, and well-being in university students. *Journal of American College Health, 38,* 271-277.

Richards, P.S., & Bergin, A.E. (1997). *A spiritual strategy for counseling and psychotherapy.* Washington, DC: American Psychological Association.

Rix, S. E. (2002). The labor market for older workers. *Generations*, *26,* 25-30.

Ronch, J.L., & Goldfield, J.A. (2003). *Mental wellness in aging: Strengths-based approaches.* Baltimore, MD: Health Professions Press.

Rogers, C. (1961). *On becoming a person.* Boston, MA: Houghton Mifflin.

Rowe, J.W., & Kahn, R.L. (1998). *Successful aging.* New York, NY: Random House, Inc.

Russell, R.K., & Petrie, T.A. (1992). Academic adjustment of college students: Assessment and counseling. In S.D. Brown (Ed.), *Handbook of counseling psychology* (2nd ed.). Oxford, England: John Wiley & Sons.

Ryff, C.D. (1991). Possible selves in adulthood and old age: A tale of shifting horizons. *Psychology and Aging, 6,* 286-295.

Salthouse, T.A. (1996). The processing-speed theory of adult age differences in cognition. *Psychological Review, 103,* 403-428.

Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). *Social support: An interactional view.* New York, NY: Wiley.

Schultz, R., & Heckhausen, J. (1996). A life span model of successful aging. *American Psychologist, 51,* 702-714.

Schultz, R., & Heckhausen, J. (1998). Emotion and control: A life-span perspective. In K.W. Schaie & M.P. Lawton (Eds.), *Annual review of gerontology and geriatrics.* New York, NY: Springer.

Selingo, J. (1995). Students engage in behavior posing serious health risks, CDC study finds. *Chronicle of Higher Education, XX,* 28.

Servaty, H.L. (1997). *Identity status and adjustment to loss among adolescents.* Unpublished doctoral dissertation, The University of North Texas.

Seward, B.L. (1995). Reflections on human spirituality for the worksite. *American Journal of Health Promotion, 9,* 165-168.

Sherrod, L.R. (2001). Using the selection, optimization, and compensation model to take us one step further in developmental research. *Human Development, 44,* 51-54.

Skoe, E.E., & Marcia, J.E. (1991). A measure of care-based morality and its relation to ego identity. *Merrill-Palmer Quarterly, 37,* 289-304.

Spector, P.E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations, 39,* 1005-1016.

Spencer, M.B. (1999). Social and cultural influences on school adjustment: The application of an identity focused on cultural ecological perspective. *Educational Psychologist, 34,* 43-57.

Spilka, B., Shaver, P., & Kirkpatrick, L. (1985). A general attribution theory for the psychology of religion. *Journal for the Scientific Study of Religion, 24,* 1-20.

Strange, A. (2000). Predictors of college adjustment and success: Similarities and differences among Southeast Asian American, Hispanic, and White students. *Education, 120,* 731-741.

Strahan, R., & Gerbasi, K.C. (1972). Short, homogeneous versions of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology, 28,* 191-193.

Staudinger, U.M., & Baltes, P.B. (1997). Interactive minds: A facilitative setting for wisdom related performance? *Journal of Personality and Social Psychology, 71,* 746-762.

Staudinger, U.M., Smith, J., & Baltes, P.B. (1992). Wisdom-related knowledge in a life review task: Age differences and the role of professional specialization. *Psychology and Aging, 7,* 271-281.

Super, D.E., Savickas, M.L., & Super, C.M. (1996). The life-span, life-space approach to careers. In D. Brown & L. Brook (Eds.), *Career choice and development* (3rd ed.). San Francisco, CA: Jossey-Bass.

Tesch, S.A., & Cameron, K.A. (1987). Openness to experience and development of adult identity. *Journal of Personality, 55,* 615-630.

United States Department of Health and Human Services. (1999). *Mental health: A report of the surgeon general.* Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

Vaillant, G. (2003). *Aging well: Surprising guideposts to a happier life from the landmark Harvard study of adult development.* New York, NY: Little, Brown, & Co.

Walker, D., & Beauchene, R.E. (1991). The relationship of loneliness, social isolation, and physical health to dietary adequacy of independent living elderly. *Journal of American Dietetic Association, 91,* 300-304.

Warner, M.J. (1984). Wellness promotion in higher education. *NASPA Journal, 21,* 32-39.

Waterman, A.S., & Goldman, J.A. (1976). A longitudinal study of ego identity development at a liberal arts college. *Journal of Youth and Adolescence, 5,* 361-369.

Waterman, A.S., Geary, P.S., & Waterman, C.K. (1974). Longitudinal study of changes in ego identity status from the freshman to the senior year at college. *Developmental Psychology, 10,* 387-392.

Waterman, A.S., & Waterman, C.K. (1971). A longitudinal study of changes in ego identity status during the freshman year at college. *Developmental Psychology, 5,* 167-173.

Welch, N., Schull, D.D., Goggin, J., Schick, C., Borzea, S., Taylor, S., et al. (2003). *Life options blueprint*. San Francisco, CA: Civic Ventures.

Westerhof, G.J., Katzko, M.W., Dittmann-Kohli, F., & Hayslip, B. (2001). Life contexts and health-related selves in old age: Perspectives from the United States, India, and Congo/Zaire. *Journal of Aging Studies, 15,* 105-126.

Westgate, C.E. (1996). Spiritual wellness and depression. *Journal of Counseling and Development, 75,* 26-36.

Whitbourne, S.K. (1996). *The aging individual: Physical and psychological perspectives.* New York, NY: Springer Publishing Co.

Wiese, B.S., & Schmitz, B. (in press). Studienbezogenes handeln im kontext eines entwicklungspsychologischen meta-modells [Study-related activities in the context of a developmental meta-model]. *Zeitschrift fur Entwicklungspsychologie und Padagogische Psychologie.*

Witmer, J.M., & Sweeney, T.J. (1992). A holistic model for wellness and prevention over the life span. *Journal of Counseling and Development, 71,* 140-148.

Wrzesniewski, A., McCauley, C., & Rozin, P. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality, 31,* 21-33.

Zebrowitz, L.A., & Montepare, J.M. (2000). Too young, too old: Stigmatizing adolescents and elders. In T.F. Heatherton, R.E. Kleck, M.R. Hebl, and J.G. Hull (Eds.), *The social psychology of stigma*. New York, NY: Guilford Press.

Zitzow, D. (1984). *The College Adjustment Rating Scale (CARS) manual.* Detroit Lakes, MN: Personal Development Consultants.