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# An Exploration of the Relationships Among Individual and Interpersonal Goal Pursuit and Hedonic and Eudaimonic Well-being

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UNIVERSITY OF MIAMI

AN EXPLORATION OF THE RELATIONSHIPS AMONG INDIVIDUAL AND  
INTERPERSONAL GOAL PURSUIT AND HEDONIC AND  
EUDAIMONIC WELL-BEING

By

Erin Nicole Procacci

A DISSERTATION

Submitted to the Faculty  
of the University of Miami  
in partial fulfillment of the requirements for  
the degree of Doctor of Philosophy

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December 2008

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An Exploration of the Relationships Among  
Individual and Interpersonal Goal Pursuit and  
Hedonic and Eudaimonic Well-being.

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Studies in the areas of goal pursuit and well-being suggest that the goals people work toward in their daily lives are important contributors of well-being. However, research to date has focused primarily on aspects of the individual in goal pursuit even though goals are not pursued in isolation. In fact, there is evidence that this emphasis on the individual, particularly salient in Western cultures, has negative consequences at both the individual and community levels. With regard to well-being, data have indicated that it is best represented as two dimensional, including hedonic and eudaimonic well-being. However, the research on personal goals has primarily focused on hedonic well-being of the individual. Overall, hedonic well-being appears to be more related to affective experience, whereas eudaimonic well-being appears to be more comprehensive and related to topics like purpose in life, self-acceptance, and positive relations with others. The theoretical framework of Virtue Ethics posits that social affiliations are essential for human beings to flourish and experience eudaimonia, and this study examines that premise. A two-step approach to structural equation modeling was used to contribute to the extant literature on goal pursuit and well-being by 1) exploring the individual and interpersonal dimensions of goal pursuit and their relationships to hedonic and eudaimonic well-being and 2) exploring the

interpersonal dimensions of goal pursuit as a mediator of the relationship between individual dimensions of goal pursuit and eudaimonic well-being. The retained structural model from the two-step approach included Efficacy (an Individual Dimension of Goal Pursuit) and Generativity (an Interpersonal Dimension of Goal Pursuit). Results demonstrated that Efficacy and Generativity were both significantly related to Hedonic and Eudaimonic Well-being; however, Generativity was more strongly related to Eudaimonic than Hedonic Well-being. These findings were consistent with the premise of Virtue theory, that those engaged in goal pursuit with or on behalf of others are more likely to experience higher levels of eudaimonic well-being. Future research should include further exploration of the Interpersonal Dimensions of Goal Pursuit and well-being specifically by focusing on improving measurement for the Interpersonal Dimensions of Goal Pursuit, Hedonic, and Eudaimonic Well-being.

To Josh, Dad, Mom, and Mark--  
whose love, support, and inspiration I am most grateful for.



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## CHAPTER ONE

### INTRODUCTION

The correlates of happiness, well-being and the good life have been recurrent topics in the literature across disciplines. In recent years, psychologists have become increasingly interested as well (e.g., Ackerman, Zuroff, & Moskowitz, 2000; DeNeve & Cooper, 1998; Diener, 2000; Emmons, 2003; Fowers, 2005). One method that psychologists have used to examine these topics has been through research on personal goals, which are meaningful ambitions that people work toward in their daily lives (e.g., Emmons, 2003). Studies in the area of goal pursuit and well-being suggest that the goals people work toward in their daily lives are important contributors to well-being (e.g., Brunstein, 1993; Emmons, 1986; Wiese, 2007).

Researchers have approached the relationship between goal pursuit and well-being from many perspectives. Some have found that attainment of goals makes for happiness, regardless of what those goals are. For example, Carver and Scheier's control theory (1990) suggests that positive affect ensues when individuals make 'fast-enough' progress toward their goals. Other psychological theories highlight quality of life goals and presume that "*what* goals one pursues, or *why* one pursues them, is at least as important as how *well* one pursues them" (Schmuck & Sheldon, 2001, p. 6). Still other researchers have found that well-being is high and increases when individuals choose life goals that are in concord with their values and interests (e.g., Sheldon, 2001; Stromberg & Boehnke, 2001; Zeleski, Cycoń, & Kurc, 2001). Numerous researchers (e.g.,

Brunstein, 1993; Brunstein et al., 1998; Carver & Scheier, 1999; Csikszentmihalyi & Csikszentmihalyi, 1988; Elliot & Sheldon, 1997; Emmons, 1999; McGregor & Little, 1998; Sheldon & Elliott, 1999) have found that “feeling competent and confident with respect to valued goals is associated with enhanced well-being” (Ryan & Deci, 2001, p. 156).

It is clear that there is an important relationship between goal pursuit and well-being. Research has demonstrated that the types of goals one pursues, the purpose of those goals, and how congruent one feels with one’s goals are all significantly related to well-being. However, these studies are narrowly focused on the internal experience of the individual and largely on the individual as separate from others. That is, the study of goal pursuit has been narrowly focused on the exploration of individual perceptions and characteristics in goal pursuit.

#### Focus on the Individual

The literature on goal pursuit focuses on goal characteristics such as individual goal commitment, integrity, progress, efficacy, challenge, control, importance, fun, competence, autonomy, coherence, congruence, achievement, and power (e.g., Deci & Ryan, 2000; Emmons, 1991; Little, 1983, 1989; McGregor & Little, 1998; Sheldon & Kasser, 1995). All of these aspects of goal pursuit are perceptions or characteristics of the individual pursuing the goal. In contrast to researchers’ focus on individual characteristics, people rarely pursue their goals in isolation. Moreover, it is reasonable to believe that the individual variables that have been studied are affected by social dynamics. For instance,

how committed one is to a goal might be affected by how much one's partner, friends, or family supports one in the pursuit of that goal. Additionally, the integrity one experiences relative to goal pursuit might be affected by whether this goal benefits one's family or community. How competent individuals perceive themselves to be in pursuing goals might be relative to who is involved with them in accomplishing that goal or how much encouragement they receive. Being able to achieve a goal is also affected by external factors such as how others perceive the importance of the goal and support the progress of the goal. It is evident that these and many other factors outside of the individual may affect goal pursuit and the relative experience of well-being. It is surprising then, that interpersonal dimensions of goal pursuit have been largely ignored.

#### Interpersonal Dimension of Goal Pursuit

The importance of connectedness to others is not a new concept. Research from a variety of disciplines supports the idea that how people are socially situated makes a difference in terms of psychological health, physical health, success, and happiness (e.g., Baumeister & Leary, 1995; Brim, Ryff, & Kessler, 2004; Brunstein, Dangelmayer, & Schultheiss, 1996; Cohen, 2004; Ryff & Singer, 2006). Relative to goal pursuit and well-being, there is an emerging body of research which examines the interpersonal dimensions of goal pursuit. In particular, the emerging literature on goal support indicates that many goals are *pursued largely with others or require the support of others* (e.g., Brunstein, Dangelmayer, & Schultheiss, 1996; Kaplan & Maddux, 2002; Shah, 2003;

Fowers, 2005). This research also indicates that joint goal pursuit and support adds to well-being beyond individual characteristics alone.

#### Individualism and Negative Individual and Social Consequences

This exclusive focus on the individual in goal pursuit is misguided in two ways. As previously described, the extent to which goals are formulated and pursued in an interpersonal context has been widely ignored. In addition, the focus on individual goal pursuit reflects and may contribute to a disturbing trend toward isolation. Numerous authors have argued that an excessive emphasis on the pursuit of individually oriented endeavors in American society has negative individual and social consequences (e.g., Bell, 1978; Bellah et al., 1985; Fowers, 2005; Lasch, 1978; Putnam, 2000; Sandel, 1996; Selznick, 1992). Bellah et al. (1985) argued that many Western cultural traditions “leave the individual suspended in glorious, but terrifying isolation” (p. 6). Selznick (1992) maintained that the emphasis on the individual, taken to the extreme, could move beyond narcissism and egoism and lead to social disorder or the breakdown of social moral standards. Similarly, Putnam (2000) argued that the degree to which an individual functions in a largely self-serving manner, the individual suffers the inability to recognize and join in rich social activities and connectedness. Twenge (2000, 2002) presented specific evidence for a historical decrease in the sense of belonging and solidarity in America which was correlated with increases in anxiety and depression. And finally, Fowers (2005) argued that “the net outcome of excessive individualism may be isolation as much as freedom, meaningless as much as self-definition, anxiety as much as self-direction, emptiness as much as



possibility” (p. 83). To the extent that psychology perpetuates the focus on the individual, it may contribute to these negative trends. Consequently, the importance of examining interpersonal and social aspects of goal pursuit and well-being is unambiguous.

Taken together, these two points make it clear that further exploration of the interpersonal dimensions of goal pursuit is necessary. Highlighting the benefits of pursuing goals in concert with others may contribute to a more complete understanding of goal pursuit. In addition, it may add to our understanding of how to ameliorate existing negative trends (i.e., isolation, lack of solidarity, depression, anxiety) and illuminate how a greater sense of connection, belonging, harmony and ultimately psychological well-being can be developed via pursuing jointly held aims (Fowers, 2005).

#### Well-being: Hedonic vs. Eudaimonic

Well-being researchers have recently separated two distinct forms of well-being: the hedonic approach and the eudaimonic approach (e.g., Fowers, 2005; Ryan & Deci, 2001; Ryff & Singer, 2006). The assessment of subjective well-being is, by and large, associated with the hedonic approach and generally consists of elements such as life satisfaction and mood valence (e.g., Diener & Lucas, 1999; Ryan & Deci, 2001). Though hedonic positivity has often been likened to psychological well-being, there has been much dispute over this claim, especially with regard to whether the hedonic outcomes adequately encompass well-being (e.g., Ryff & Singer, 1998). Nonetheless, there is still a strong emphasis in the current literature on the hedonic aspects of well-being.

While the hedonic approach “focuses on happiness and defines well-being in terms of pleasure attainment and pain avoidance,” the eudaimonic approach “focuses on meaning and self-realization and defines well-being in terms of the degree to which a person is fully functioning” (Ryan & Deci, 2001, p. 141). Eudaimonic theories suggest that there is more to well-being than subjective happiness (e.g., Ryff & Singer, 1998; Waterman, 1993). The research also suggests that hedonic and eudaimonic well-being are related. Despite this association, factor analytic studies have demonstrated that hedonic and eudaimonic well-being are indeed, distinct factors (e.g., Compton, Smith, Cornish, & Qualls, 1996; Keyes, Ryff, & Shmotkin, 2002). Studies have also found that eudaimonic well-being surpasses hedonic well-being by providing a deeper and more comprehensive understanding of living well (e.g., Ryan & Deci, 2001; Ryff & Singer, 2006; Waterman, 1993). Indicators of eudaimonic well-being include autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, self-acceptance, meaningfulness, self-actualization, vitality, personal expressiveness, and self-realization. The sheer breadth of these indicators suggests the rich domain of eudaimonic well-being (e.g., Ryff, 1989; McGregor & Little, 1998; Ryan & Deci, 2000; Waterman, 2007). This suggests that the emphasis on hedonic outcomes relative to eudaimonic outcomes is a deficiency in the research on goal pursuit and well-being.

#### Purposes of the Study

Though the literature on psychological well-being has demonstrated that “well-being, construed as growth and human fulfillment, is profoundly influenced

by the surrounding contexts of people's lives" (Ryff & Singer, 2008, p. 14), studies on personal goals to date have focused primarily on exploring individual perceptions and characteristics of goal pursuit. Therefore, including the interpersonal dimensions of goal pursuit as factors related to a deeper sense of well-being can strengthen an otherwise limited area in the literature. In addition, the majority of the literature on goal pursuit and well-being has used hedonic, not eudaimonic indicators. Incorporating hedonic *and* eudaimonic indicators will offer a deeper, more comprehensive approach to examining the relationship between goal pursuit and well-being. Adding to the literature in the aforementioned ways could have positive implications at both the individual and community levels. Exploring the benefits of engaging in shared endeavors may indicate how people can enhance their experience of well-being, minimize the negative effects of an individualistic focus (e.g., anxiety and depression), and improve the sense of interconnectedness and solidarity experienced with family, friends, colleagues, and the community at large.

This study will contribute to the extant literature on goal pursuit and psychological well-being by exploring the individual *and* interpersonal dimensions of goal pursuit. In addition, this study will move beyond hedonic indicators of well-being and bring attention to the more comprehensive eudaimonic indicators of well-being. In sum, this study will explore whether a sense of connectedness and shared experiences in goal pursuit contributes to experiencing a deeper sense of well-being and human flourishing.

## CHAPTER TWO

### LITERATURE REVIEW

The review will begin with an introduction to virtue ethics, the theoretical framework guiding this study. The next section includes a review of the literature on hedonic and eudaimonic well-being. This is followed by a review of the literature on individual and interpersonal dimensions of goal pursuit. Finally, the chapter concludes with a summary of the literature and a presentation of the research hypotheses guiding this study.

#### Virtue Ethics

*Virtue ethics* is a philosophical tradition which emphasizes character and human flourishing. Fowers (2005) explained that “virtue ethics is communal in nature because it begins with the premise that humans are by nature social beings, and the social affiliations we have are essential to our capacity to flourish as humans” (p. 92). While most authors talk about particular virtues, *character* is a fundamental aspect of virtue ethics which is concerned with the individual as a whole. Fowers offered that “virtues are the character strengths that make [the pursuit of what is good] possible” (p. 11). This pursuit of what is good (*eudaimonia*) is central to virtue ethics. Aristotle (trans. 1998) utilized *eudaimonia* to describe the highest achievable good for humans. Though some have translated *eudaimonia* as happiness, many consider it better understood as flourishing. Flourishing can be defined as active engagement in living a complete life, full of vitality, purpose, and balance (e.g., Fowers, 2005; Keyes, 2003).

Fowers (2005) clarified from a virtue ethics perspective that “we seek many goods, from pleasure, honor, and wealth to good relationships, community, and beauty” and “if the overall aim is to embody the best in one’s human nature, then all of the other goals we seek are valuable to the degree which they contribute to the overall good” (p. 35). Fowers suggested that individuals are not self-sufficient in experiencing well-being and therefore require the participation of others in the process. The virtue ethics perspective can help us understand how different types of goods (goals) might be more conducive to living well, and how we can move beyond the individual focus and ultimately strive toward eudaimonic well-being through meaningful connections with others.

The study of what is good has been explored in psychology through investigations of goals, goal pursuit, and hedonic (subjective) well-being (e.g., Ackerman, Zuroff, & Moskowitz, 2000; DeNeve & Cooper, 1998; Diener, 2000; Emmons, 2003; Fowers, 2005). Fowers (2005) suggested that humanistic and positive psychology have also made contributions to exploring what is good. He outlined the following. The humanistic psychologists have examined creativity (Arons & Richards, 2001), self-actualization (Privete, 2001), self-determination (Maslow, 1971; Ryan & Deci, 2000) and meaning (Kasser & Ryan, 1993; McGregor & Little, 1998; Sheldon & Kasser, 1998). In addition, positive psychologists have examined topics such as: optimal living (Seligman & Csikszentmihalyi, 2000), human flourishing (Keyes & Haidt, 2003), virtue (McCullough & Snyder, 2000; Peterson & Seligman, 2004; Sandage & Hill, 2001), flow (Csikszentmihalyi & Csikszentmihalyi, 1994), optimism (Peterson &

Chang, 2003; Snyder, 2000), creativity (Cassandro & Simonton, 2003), elevation (Haidt, 2003) and wisdom (Baltes & Straudinger, 2000; Sternberg, 1990, 1998). In the main, these lines of research emphasize the positive subjective experiences of the individual. Though positive emotional experiences certainly play a part in the good life, there is much more to living well than the presence of positive affect and absence of negative affect (e.g., Emmons, 2003; Fowers, 2005; McGregor & Little, 1998; Oishi, Diener, Suh & Lucas, 1999).

One of the key distinctions in virtue ethics is between goods or goals that can be pursued individually and goals that require the participation of others. Individual goals (e.g., wealth, power, success) tend to have outcomes which are divided up amongst individuals, whereas shared goals (e.g., friendship or justice) tend to benefit all and go beyond the individual (Fowers, 2005; McIntyre, 1981). “The idea of shared goods makes it clear that in some crucial respects what is good for me is inseparable from what is good for others” (Fowers, p. 86). As Fowers illustrates:

Virtue ethics puts us back in touch with modes of living well as human beings through a sense of belonging and wholehearted participation in shared endeavors, and with the ways that genuine involvement with others contributes to rather than detracts from our identities and capacities, gives shape to our choices, and provides an essential arena for our deepest fulfillments (p. 85).

In the literature on goal pursuit and well-being, this shared/interpersonal dimension, a fundamental element of a flourishing life, has largely been unseen

as a result of the strong emphasis placed on the individual (as separate from others). “Virtue ethics highlights the ways in which the social world helps to constitute the individual and provides an ongoing and essential context for the possibility of individual pursuits and flourishing” and “suggests that we must enlarge our discipline to encompass a more complete understanding of the kinds of goods that are held in common with others” (Fowers, 2005, p. 103).

One of the primary purposes of this study is to include the interpersonal dimensions of goal pursuit and demonstrate how shared endeavors might contribute to achieving a deeper sense of well-being and human flourishing.

### Well-being

The study of human flourishing also includes the literature on well-being. Research on well-being has developed out of two perspectives: the hedonic approach and the eudaimonic approach. Though most of the research on well-being has focused on hedonic outcomes, virtue theory incorporates both hedonic *and* eudaimonic outcomes. The hedonic approach “focuses on happiness and defines well-being in terms of pleasure attainment and pain avoidance” and the eudaimonic approach “focuses on meaning and self-realization and defines well-being in terms of the degree to which a person is fully functioning” (Ryan & Deci, 2001, p. 141). The eudaimonic approach is consistent with virtue theory and suggests that an individual cannot experience eudaimonic well-being without genuine participation in shared endeavors.

Many researchers, including Ryff and Singer (1998), have contended that models of hedonic well-being are limited with regard to measuring positive

functioning and that hedonic well-being measures are often weak indicators of healthy living. Data from numerous investigators have suggested that well-being is perhaps best represented as multifaceted and includes aspects of both hedonic and eudaimonic well-being. More specifically, Compton, Smith, Cornish, and Qualls (1996) examined eighteen markers of well-being and mental health using factor analysis. They reported that though these factors were moderately correlated, the two distinct factors found were consistent with eudaimonia and hedonia. Similarly, McGregor and Little (1998) evaluated a large set of mental health indicators and also identified two factors. Additionally, they found that feeling happy may be separate from living the good life. Taken as a whole, studies support that though hedonic and eudaimonic well-being may be related, they appear to be distinct factors (Keyes, Ryan, & Deci, 2001; Ryff & Shmotkin, 2002).

The following review of the literature on hedonic and eudaimonic well-being demonstrates the emphasis on hedonic well-being relative to eudaimonic well-being and differentiates the two approaches.

#### *Hedonic (Subjective) Well-being and Goals*

Hedonic well-being is a widely studied phenomenon across disciplines that focuses primarily on what they term subjective well-being (e.g., Diener & Lucas, 1999; Diener et al., 2002). Diener et al. (1999, 2002) present a commonly used conceptualization, which includes three aspects of hedonic well-being: negative affect, positive affect, and global life satisfaction. Diener, Suh, Lucas, and Smith (1999) offer a review of the research on hedonic well-being and reveal



that daily experiences of pleasurable events, the personality trait of extraversion, self-esteem, and optimism are all related to hedonic well-being (e.g., Lucas, Diener, Grob, Suh, & Shao, 1998; Kwan, Bond, & Singelis, 1997; Scheier, & Carver, 1985; Stallings, Dunham, Gatz, Baker, & Bengtson, 1997). In addition, they explain that people who hold positive illusions tend to report increased hedonic well-being (e.g., Taylor & Armor, 1996). Those who are religious, married, report job satisfaction, and are educated also tend to experience increased hedonic well-being (e.g., Diener, Sandvik, Seidlitz, & Diener, 1993; Gartner, Larson, & Allen, 1991; Mastekaasa, 1992; Weiss, & Cropanzano, 1996). Income and wealth have also been explored and the research suggests a weak link between these variables and hedonic well-being (e.g., Diener et al., 1993). In fact, there is evidence to suggest that individuals who value materialism over other things report less hedonic well-being (e.g., Richins & Dawson, 1992).

Another area of well-being research is on goals and hedonic well-being. Several authors have reported that participating in goal pursuit leads to hedonic well-being (e.g., Brunstein, 1993; Emmons, 1986; Lent, 2004; Locke & Latham, 2002). Research has shown that perceived progress toward goals is also related to hedonic well-being (e.g., Little, 1989; Ryan & Deci, 2001). Diener and Lucas (1999) reported that the perception of goal progress might be more gratifying than actually accomplishing the goal. In addition, “people who are involved in the pursuit of subjectively important goals indicate higher well-being than individuals who lack a sense of goal-directedness” (Wiese, 2007, p. 301). Longitudinal data further corroborates this relationship between goal progress and hedonic well-

being (e.g., Brunstein, 1993; Brunstein, Schultheiss, Grässmann, 1998; Elliot & Sheldon, 1997; Elliot, Sheldon & Church, 1997; Sheldon & Kasser, 1998; Sheldon, Ryan, & Reis, 1996).

Separate from goal progress, Diener et al. (1999) indicate that “the types of goals one has, the structure of one’s goals, the success with which one is able to attain one’s goals, and the rate of progress toward one’s goals can all potentially affect one’s emotions and life satisfaction” (p. 284). With regard to type of goal, Elliot, Sheldon, and Church (1997) found that participants who engage in avoidance (vs. approach) goals, report less hedonic well-being “both retrospectively and longitudinally” (p. 915). In terms of success, Oatley and Johnson-Laird (1996) established that positive emotion is linked to accomplishing ‘subgoals’ which ultimately affects whether the individual chooses to pursue the main goal. Carver and Scheier (1990) examined rate of goal progress and well-being and found that positive affect (a hedonic outcome) arises only if the goal is attained quicker than anticipated. Goal difficulty is another variable that has been investigated. For example, Wiese and Freund (2005) reported that goal difficulty moderates the relationship between goal success and hedonic well-being. Oatley and Johnson-Laird (1996) explained that negative emotion (a hedonic outcome) occurs due to difficulty with the goals being pursued.

The relationship between culture, hedonic well-being, and goals has also received attention. Cantor and Sanderson (1999) reported that commitment to one’s goals can not only increase satisfaction with life, but can improve stress and coping abilities. They also found that commitment to goals is more likely to

lead to hedonic well-being when the goals the individual pursues are prized by his or her culture. Asakawa and Csikszentmihalyi (1998) compared Asian American students to Caucasian students and found difference in terms of the activities being pursued which led to increases in hedonic well-being. They reported that Asian American students experience an increase in hedonic well-being when working toward significant future goals (e.g., academic achievement), while Caucasian students reported an increase in hedonic well-being while working toward something that was significant to them in the present. Caucasian students actually reported less hedonic well-being when engaging in future oriented goals. Oishi and Diener (2001) also researched cultural differences between European Americans and Asian Americans. They demonstrated that European Americans reported increases in hedonic well-being for goals based on 'fun and enjoyment,' while Asian Americans reported the increase in hedonic well-being for goals based on 'making others happy.' Another group of researchers also have explored differences in goals and hedonic well-being across cultures (Chirkov & Ryan, 2001; Deci, Ryan, Gagne et al., 2002; Ryan, Chirkov, Little, et al., 1999; Schmuck, Kasser & Ryan, 2000; Sheldon, Elliot, Kim, & Kasser, 2001). They reported a significant relationship between the pursuit of intrinsic goals (i.e., autonomy, competence, relatedness) and hedonic well-being in Bulgaria, Germany, Russia, South Korea, and the United States.

In sum, there are well-demonstrated associations between goals and hedonic (subjective) well-being. However, Diener and Lucas (2000) found that most people report having positive affect (a hedonic outcome), most of the time.

In addition, positive affect is transitory in nature and therefore, a less stable and comprehensive indicator of quality of life. As such, measures of hedonic well-being have been thought to lack the depth required to capture psychological well-being in its totality (e.g., Ryan & Deci, 2001). Therefore, it is important to include indicators of both hedonic and eudaimonic well-being. Indicators of eudaimonic well-being tap into the depth and comprehensive nature of psychological well-being and human flourishing.

### *Eudaimonic Well-being and Goals: Three Approaches*

Though the eudaimonic approach has received less attention in the goals literature, the following review of the literature brings to light the multifaceted and comprehensive nature of the eudaimonic approach to well-being.

#### *Ryff's (1989) Approach*

Many researchers have argued that the most common definitions of well-being have been flawed in the sense that well-being is more than the presence or absence of pathology and should address deeper and richer questions such as: What constitutes a good life? or What is the nature of human flourishing? (e.g., Lent, 2004; Ryff, 1998; Ryff & Singer, 1998). Ryff (1989) developed an approach to well-being to include such questions. She argued that “the literature on psychological well-being was not, in its inception, strongly theory guided” and “instruments were developed for other purposes, and these then became the standard bearers for defining positive functioning” (p. 1070).

Ryff's (1989) model of psychological well-being was guided by *Aristotle's Nicomachean Ethics* (trans. 1998) and has been used to more comprehensively

measure well-being from the eudaimonic perspective (e.g., Ahrens & Ryff, 2006; Friedman, Hayney, Love, Singer, & Ryff, 2007; Ryff et al., 2006; Ryff & Singer, 2006; Ryff, Singer, & Love, 2004). Ryff's (1989) model includes six dimensions: Self-Acceptance, Positive Relations with Others, Autonomy, Environmental Mastery, Purpose in Life, and Personal Growth. When comparing this measure to previous measures, Ryff (1989) found that "self-acceptance and environmental mastery were strongly associated with measures of life satisfaction, affect balance, self-esteem and morale," whereas "positive relations with others, autonomy, purpose in life and personal growth were not as closely tied to these earlier measures" (p. 1077).

Beyond psychological well-being, Ryff and Singer (2000) also presented evidence that eudaimonic living is related to improvements in physical health. More specifically, they demonstrated that multiple dimensions of eudaimonic well-being are related to lower allostatic load and better autoimmune functioning, thereby supporting that eudaimonic living is vital to promoting good health.

#### *Waterman's (1993) Approach*

Another approach to eudaimonic well-being is offered by Waterman. He explained that "eudaimonism is an ethical theory that calls people to recognize and to live in accordance with the *daimon* or true self" and explained that "efforts to live in accordance with the daimon, to realize these potentials (self-realization), give rise to a condition termed *eudaimonia*" (p. 678). Waterman (1990, 1993) termed these eudaimonic efforts as "personally expressive." He investigated hedonic enjoyment and personal expressiveness and found that these concepts

were related but distinguishable and that personal expressiveness, but not hedonic enjoyment, was an indicator of success in the process of self-realization (Waterman, 1993).

However, Waterman (1993) noted distinctions with regard to hedonic measures and personal expressiveness. Personal expressiveness was more strongly correlated with personal growth, development, being challenged, and exerting effort. Hedonic enjoyment was more strongly correlated with being relaxed, away from problems, and happy (Waterman, 1993; Ryan & Deci, 2001).

#### *Self-Determination Theory Approach*

Ryan and Deci (2000) presented another perspective called Self-Determination Theory (SDT) which is related to the concept of eudaimonic well-being. "SDT posits three basic psychological needs - autonomy, competence, and relatedness - and theorizes that fulfillment of these needs is essential for growth (e.g. intrinsic motivation), integrity (e.g. internalization and assimilation of cultural practices), and well-being (e.g. life satisfaction and psychological health) as well as experiences of vitality and self-congruence" (p. 147).

Research out of the SDT perspective has offered several conclusions. For example, the impact of goal progress on well-being appears to be moderated by how congruent the goals are for the individual (Sheldon & Elliot, 1999; Sheldon & Kasser, 1998). In addition, goals that are pursued autonomously tend to be predictive of well-being (Ryan & Deci, 2000; Ryan & Frederick, 1997; Sheldon & Elliot, 1999). Sheldon, Ryan, and Reis (1996) found that feelings of autonomy, competence, and fulfillment predicted happiness and vitality. Similarly, Nix, Ryan,

Manly, and Deci (1999) offered that only when successful goal pursuits are autonomous do they lead to happiness and vitality. In addition, they found that accomplishing an activity while feeling pressured was associated with hedonic outcomes but not eudaimonic outcomes (led to happiness but not vitality). Reis et al. (2000) also demonstrated that experiences of autonomy, competence, and relatedness each played a unique role in predicting happiness and vitality.

Researchers out of the SDT perspective have also found evidence for an association between eudaimonic well-being and physical health. Ryan and Frederick (1997) found that vitality (an indicator of eudaimonic well-being) correlated with factors such as autonomy and relatedness and also covaried with physical symptoms.

Though these three eudaimonic approaches provide the beginnings of the investigation of eudaimonic well-being, there is a great deal more to learn about the distinction between hedonic and eudaimonic well-being and its relationship to goal pursuit. Given the important role that goal pursuit has for well-being, it is important to examine the literature on it more closely.

### Goal Pursuit

As previously mentioned, research in the area of goal pursuit and well-being suggests that the goals people work toward in their daily lives are important contributors to well-being (e.g., Brunstein, 1993; Emmons, 1986; Wiese, 2007). The large body of research on goal pursuit that is focused narrowly on the internal experience of the individual and on the individual as separate from others will be reviewed below (individual dimensions of goal

pursuit). This will be followed by a review of the smaller body of research which addresses the effect of others on goal pursuit (interpersonal dimensions of goal pursuit). Though individual and interpersonal dimensions of goal pursuit are reviewed separately for the purposes of this literature review, virtue theory suggests that one cannot experience eudaimonic well-being through goal pursuit without genuine shared endeavors.

### *Individual Dimensions of Goal Pursuit*

There is a large body of research on the individual characteristics of goal pursuit. Research has demonstrated that progress toward goals, the types of goals one pursues (intrinsic and approach goals), the purpose of those goals, how congruent one feels with their goals, and experiencing efficacy and integrity with respect to one's goals are all significantly related to well-being. However, the majority of well-being indicators used in this research are hedonic rather than eudaimonic in nature.

### *Goal Type*

*Extrinsic vs. intrinsic goals.* Much research has been conducted on extrinsic and intrinsic goals. Intrinsic goals are said to be those which are motivated by satisfying innate psychological needs. Examples include things like personal growth, physical fitness, and contributing to the community. Extrinsic goals are described as motivated by extrinsic factors like praise or reward and often serve as a 'means to another end.' Examples include things like acquiring wealth, becoming popular, or attractive. Sheldon and Kasser (1995) reported that engaging in intrinsic ambitions tends to be predictive of increased life satisfaction



and positive affect (hedonic outcomes). Deci, Kasser, and Ryan (2001) demonstrated that successfully achieving intrinsic goals facilitates growth and well-being (eudaimonic outcomes).

Sheldon and Kasser (1995) found that working toward goals associated with extrinsic ambitions is more predictive of negative outcomes (hedonic outcomes). Kasser and Ryan (2001) suggested that successfully achieving extrinsic goals is either unrelated to people's basic needs, or, when individuals focus excessively on extrinsic goals, this can disturb meeting basic needs, and thus lead to unhappiness and poor well-being (hedonic outcomes). Ryan, Chirkov, Little, and Sheldon (1999) found that lower self-esteem, lower self-actualization, and lower life satisfaction were each associated with a greater emphasis on extrinsic goals (hedonic & eudaimonic outcomes).

*Approach vs. avoidance goals.* Approach goals are goals set in order to accomplish or move toward something (e.g., graduation), whereas, the purpose of avoidance goals is to avoid or prevent a negative outcome (e.g., exercising in order to prevent weight gain). Numerous studies have established that avoidant goal striving is associated with less favorable psychological (hedonic) outcomes in contrast to approach goal strivings (Emmons, 1999). Data also indicate that avoidance striving is related to poorer perceived physical health. For example, Elliott and Sheldon (1998) found that avoidant personal goals are associated with reports of physical symptoms and an increase in symptoms over time. They also examined the generalizability of these findings between US, South Korean, and Russian participants. Elliot et al. (2001) found that avoidance goals were

negatively related to hedonic well-being among participants from the U.S., but not related to hedonic well-being in the South Korean participants. This was consistent with the outcome of the U.S. and Russian study in which avoidance goals were negatively related to hedonic well-being for the participants from the U.S., but not for the Russian participants (Elliot et al., 2001).

In terms of longitudinal findings, Elliot and Church (2002) explored approach and avoidance goals longitudinally within the context of therapy. They found that those who had a higher ratio of avoidance therapy goals tended to demonstrate less increases in hedonic well-being in the course of therapy.

### *Goal Progress*

Koestner, Lekes, Powers, and Chicoine (2002) presented a meta-analysis of the relation between goal progress and well-being and found a strong overall effect of  $d = .61$ . A more recent review by Wiese (2007) indicated further evidence for the connection between successful goal pursuit and well-being. Many researchers, including Little (1989) have found that working toward personal goals brings structure to a person's life (hedonic outcomes). In addition, people who engage in pursuing goals that are important to them report higher hedonic well-being than those who do not possess goal directedness (e.g., Emmons, 1986; Freund & Baltes, 2002). Carver and Scheier (1990) found a direct relationship between goal progress and positive affect, specifically when one achieves a goal faster than one had expected (hedonic outcomes). With

regard to physical health, Affleck et al. (1998) found that perceived progress toward personal goals reduced the effect of pain on well-being in women with fibromyalgia (hedonic outcomes).

### *Self-concordance*

The self-concordance model stems from self-determination theory (SDT; Deci & Ryan, 1985, 1991). Self-concordant goal pursuit is defined as pursuing goals which represent one's values and interests. In a longitudinal study, Sheldon and Kasser (1998) found that individuals who accomplished their goals reported increases in general positive mood and life satisfaction, decreases in negative mood, and the more self-concordant the projects were, the more they benefited when the goals were accomplished (hedonic outcomes).

Sheldon and Elliot (1999) demonstrated (via path modeling) that goal pursuit which is self-concordant leads to prolonged effort over time, greater goal progress, more daily life satisfaction, and increases overall in well-being (hedonic outcomes). They also demonstrated that working toward goals for 'authentic' and 'self-concordant' purposes leads to progress, attainment and positive increases in well-being (Sheldon & Elliot, 1999; Sheldon & Kasser, 1998, 2001).

Sheldon and Houser-Marko (2001) examined "the motivational processes by which people can increase their level of well-being during a period of time and then maintain the gain or perhaps increase it even further during the next period of time" (p. 152). They demonstrated that previous goal attainment can positively affect later goal attainment. These authors found that students with more self-concordant motivation did better at accomplishing their goals in the 1<sup>st</sup> semester

and found that this was predictive of better adjustment (hedonic outcome) and increased self-concordance in the 2<sup>nd</sup> semester goals. However, they also reported that continued goal success was necessary in order to maintain prior gains (measured in terms of adjustment and ego identity development).

### *Personal Projects*

Little (1998) conducted a factor analysis on thirty-five dimensions participants used to describe their personal projects (goals). Two of the factors retained were efficacy and integrity. In Little's study, these factors were explored relative to happiness (a hedonic outcome) and meaning (eudaimonic outcome). Little reported efficacy as significantly correlated with happiness ( $r = .37$ ), but not meaning, and integrity as significantly correlated with meaning ( $r = .22$ ), but not happiness. Happiness was measured using a depression scale (CES-D; Radloff, 1977) and affect scale (Affect Balance Scale; Bradburn, 1969) and meaning was measured by a purpose in life scale (PIL; Crumbaugh & Maholick, 1964). Much research has been conducted on the dimensions of efficacy and integrity which will be reviewed below.

*Efficacy.* Little (1998) defined efficacy as "how likely one's projects are to be successful" (p. 495). Little (1989, 1999a, 1999b, 2000a, 2000b) has investigated efficacy in the goal pursuit literature via variables including difficulty, challenge, stress, time pressure, outcome, and control. Research supports that hedonic well-being is related to the degree to which people participate in goals which they perceive themselves likely to attain.

Little (1999) found that well-being is associated with pursuits that are high in efficacy and low in stress (hedonic outcomes). Relative to difficulty, Weise and Freund (2005) demonstrated that establishing difficult goals promotes performance as well as heightened positive emotional experiences (hedonic outcomes) when progress occurs. In terms of control, Phillips et al. (1997) found that a sense of control over work related projects was associated with satisfaction at work (hedonic outcomes). Sheldon and Kasser (1998) suggested that “participants with high initial efficacy expectancies regarding their goals, or who had high efficacy in conjunction with high commitment, made more progress in their goals” (p. 1329). These findings overlap with the next individual dimension of goal pursuit in that commitment is a variable which loads on integrity.

*Integrity.* Little (1998) defined integrity as “how consistent one’s projects are with core aspects of the self” (p. 495). Researchers have investigated integrity in the goal pursuit literature via variables including importance, commitment, self-identity and value congruency. In terms of commitment, Brunstein (1993) demonstrated that commitment promoted personal goal progress (hedonic outcome). McGregor and Little (1998) found that integrity was associated with meaning as measured by a purpose in life scale (eudaimonic outcome). They summarized that “participants whose personal projects were consistent with core elements of their self-identity reported higher levels of meaning than did those whose projects were less reflective of self-identity” (p. 505).

Again, though the relationship between individual characteristics of goal pursuit and well-being is well-established, little attention has been given to the effect that the presence of an 'other' might have on goal pursuit and well-being.

### *Interpersonal Dimensions of Goal Pursuit*

As demonstrated by the aforementioned review of the literature on individual dimensions of goal pursuit, the theme which emerges is a narrow focus on the individual as separate from others. The following review of the literature on interpersonal dimensions of goal pursuit includes research which addresses the presence of an 'other' in goal pursuit and well-being. As virtue theory predicts, the involvement of others in goal pursuit is necessary to fully experience eudaimonic well-being through goal pursuit. The types of interpersonal involvement in goal pursuit can be divided into two separate categories: the interpersonal endeavors that occur *with* others and the interpersonal endeavors that emerge *for* others.

#### *Interpersonal Dimension of Goal Pursuit: With Others*

Researchers have examined the effects of how supported one feels in their personal goal pursuit, shared goals pursued within a close relationship, and one's sense of interpersonal connectedness. This 'with others' category consists of the effects that shared endeavors with others have on goal pursuit.

*Goal support.* Ruchman and Wolchik (1988) suggested that social support and hindrance may facilitate or impede the pursuit of personal goals and thereby affect an individual's well-being. Similarly, Robbins, Lee, and Wan (1994)

and Diener and Fujita (1995) established that social resources and social networks promote an individual's mental health because personal goal setting and support in achieving them is encouraged by such social relations.

Brunstein (1993, 1996) went further and examined how being supported by a partner and engaging in goals shared with a partner affect well-being. Brunstein (1993) found that 'support of personal goals by significant others' was the greatest predictor of subjective well-being (hedonic outcome). He proposed that being supported in the pursuit of individual goals plays a major role in preserving high levels of well-being. Brunstein et al. (1996) examined personal goal pursuit by intimate partners in relation to satisfaction within that relationship (hedonic outcome). However, they differentiated two types of personal goals: "relationship goals (goals pursued within a close relationship) and individual goals (goals pursued outside a close relationship)" (p. 1007). Additionally, Brunstein et al. (1996) explained that a limitation to their research as "it is not clear how partners' goals depend on each other and how the personal goals each partner pursues become incorporated into shared relationship projects" (p. 1016). Though this study demonstrates evidence for the importance of interpersonal support in the pursuit of goals, outcome measures of positive and negative affect and marital satisfaction (hedonic outcomes) were used. Eudaimonic outcomes were not assessed.

Laurenceau, Kaczynski, Avivi, Llabre, and McCullough (2008) also researched goal support in terms of marital satisfaction and found that "feeling your spouse supports your goals is associated with increases in marital

satisfaction independent of the degree to which life goals are achieved” (p.10). In Kaplan and Maddux’s (2002) research on married couples, they also found that support for goals was an important factor with regard to marital satisfaction. In addition, they indicated that beliefs about being capable as a couple (collective efficacy) to pursue couples goals (collective goals) was also related to marital satisfaction. Zaleski (2006) also examined the influence of a close relationship with a partner on goals. This author found that a “partner’s support influences goal related-activity in two ways, directly through enhancing persistence and satisfaction and indirectly by increasing individuals’ expectancy of successful goal attainment” (p. 191). Again, all of these studies focused on hedonic outcomes.

Feeney (2004) also examined goal support in the context of intimate relationships. However, this study was unique in that attachment theory was the guiding framework and support interactions by partners were observed in an experimental setting. In both phases of her study (phase 1-no experimental manipulation; phase 2-experimental manipulation of support), the results demonstrated that individuals who perceive being supported by their partners report increased self esteem and positive mood (hedonic outcomes) and perceive their goals as more achievable.

Shah (2004) also researched goal support but did so across five studies which explored how the “mere activation of one’s internal representation of a close other” affects goal pursuit (p. 661). This author hypothesized that close others are so closely associated with one’s self-concept that “invoking mental



representations of these individuals should increase the salience of the goals to which they are closely associated” (p. 663). The five studies differ in terms of which close other the participant was primed with. Presentation of the primes ranged from a mere 10ms to 50 ms. In study five, approximately 10 minutes of filler questions were used to lessen accessibility of the names previously used. The primes included: mother, father, friend, and significant other. Interestingly, the sheer presence of primes were related to positive effects of significant others on the participants’ goal commitment, goal accessibility, goal pursuit, confidence, effort, and goal attainment ratings in the experimental group as compared to the control group.

*Interconnectedness.* Aron, Aron, and Smollan (1992) were also interested in researching close relationships. These authors examined the sense of interconnectedness that people feel with others and demonstrated “predictive validity for whether romantic relationships were intact 3 months later” as well as “convergent and construct validity with marital satisfaction and commitment” (p. 596). Across three studies, the authors reported that the majority of subjects understood their measure as representing “interconnectedness” and therefore it can be used to measure how connected an individual feels toward others.

Deci, La Guardia, Moller, Scheiner, and Ryan (2006) found that “people can experience significant others as being part of their integrated self, that is, of their autonomous self” (p. 315). Aron et al.’s measure of interconnectedness can

be considered an indirect measure of shared goals in the sense that when one integrates an 'other' into themselves, the pursuit of goals is likely experienced as a shared endeavor.

*Shared goals.* Shared goals refer to those goals which can only be pursued and achieved with others. As an individual, one cannot pursue or possess these goals independently because they are communal in nature. Common examples of shared goals are harmony, friendship, and democracy. From a virtue ethics perspective, shared goals are among the most important aims for humans. Additionally, virtue theory suggests that one cannot experience eudaimonic well-being without engagement in genuine shared endeavors (Fowers, 2005).

#### *Interpersonal Dimensions of Goal Pursuit: For Others*

In contrast to the aforementioned interpersonal dimensions of goal pursuit that tend to occur *with* others, researchers have also examined aspects of goal pursuit that occur *for* or *on behalf of* others.

*Communal strength.* Communal strength "refers to a person's degree of motivation to respond to a communal partner's needs" (Mills, Ford & Johnson, 2004, p. 213). Communal relationships are those in which "members feel a responsibility for meeting the needs of communal partners and in which benefits are given noncontingently in response to partners' needs" (Mills et al., 2004, p. 213). These authors explain that communal relationships can include partners, friends, family relationships, etc. In addition, they revealed that when one experiences greater receptivity to one's communal partner's needs, one

experiences greater communal strength toward his or her communal partner. Mills et al. (2004) examined communal strength relative to 'liking' and found that communal strength was more than just a measure of 'liking.' They also examined communal strength relative to 'help given and help received' in friendships. In the friendships examined, those who obtained higher scores on the communal strength measure (answered 2 months earlier) were associated with giving more help and receiving more help from that friend in the past 8 days.

Lastly, Mills et al. (2004) examined marital satisfaction as it relates to communal strength and found significant correlations between an individual's communal strength toward the spouse and the spouse's marital satisfaction (hedonic outcome). Furthermore, this correlation between communal strength and marital satisfaction was maintained when the respondent's own communal orientation and marital satisfaction were controlled for.

*Generativity.* Erikson (1963) defined generativity as "primarily the concern in establishing and guiding the next generation" (p. 267). Multiple researchers have found a relationship between generativity and the well-being of the individual engaging in generative pursuits. McAdams and de St. Aubin (1992) explained that an individual can be generative across settings including work, volunteer, organizations, community, friendships, and leisure activities.

McAdams, de St. Aubin, and Logan (1993) found that generative interest was related to both greater reported happiness and life satisfaction. Kasser and Ryan (1996) established that participants who possessed the generative goals of personal growth and community contribution reported higher levels of hedonic

well-being. In addition, Keyes and Ryff (1998) found that higher levels of generative intentions, actions, and qualities each added to increased levels of psychological and social well-being after controlling for age and education. All of these studies assessed hedonic outcomes.

Ackerman, Zuroff, and Moskowitz (2000) offered more specifics about the process of generativity and explained that generative qualities likely play a role in well-being by supporting behaviors and commitments that make and maintain positive interpersonal and transgenerational relations. Stewart, Ostrove, and Helson (2001) reported that both generative concern and achievement were associated with satisfaction with life. Huta and Zuroff (2008) reported “positive correlations between generativity and the satisfaction of symbolic immortality, feeling needed, and meeting societal expectations” (p. 51). [Symbolic immortality refers to “leaving behind a personal legacy, some expression of oneself, that persists beyond one’s lifetime” (p. 48).]

Vallient’s (1993) research differed from the aforementioned studies in that it reported longitudinal data on generativity with a group of women who were tracked from grade school to age seventy-seven. This study is particularly interesting in that women were rated on generativity at age sixty and were rated again at age seventy-seven by independent raters. Those rated at age sixty as generative were rated at age seventy-seven as ‘better adapted to’ aging. This study suggests the possibility of a more causal link between generativity and well-being.

## Summary of the Literature

The link between goals and well-being has been demonstrated repeatedly (e.g., Brunstein, 1993; Emmons, 1986; Wiese, 2007). Data from numerous investigators have supported that well-being is perhaps best represented as two dimensional, including hedonic and eudaimonic well-being. Overall, hedonic well-being appears to be more related to the affective experience of the individual (e.g., Diener et al., 1999, 2002), whereas eudaimonic well-being appears to be more comprehensive and related to topics like purpose in life, personal growth, self-realization, vitality, self-acceptance, mastery, and positive relations with others (e.g., Ryff & Singer, 1998).

There are many factors which help to explain the relationship between goal pursuit and well-being. Goal progress has been linked to well-being though it appears to be moderated by how congruent the goal being pursued is (e.g., Sheldon & Elliot, 1999; Sheldon & Kasser, 1998). Successfully achieving intrinsic goals has been connected to psychological growth and well-being (e.g., Kasser & Ryan, 2001), whereas, the pursuit and emphasis on extrinsic goals has been demonstrated as negatively related to several measures of well-being (e.g., Kasser & Ryan, 2001). Researchers have also demonstrated that as goals increase in meaningfulness, people report more satisfaction with their lives (e.g., Emmons, 2003).

Though the majority of research focuses on aspects of individual goal pursuit, there is research to indicate that the interpersonal dimension of goal

pursuit deserves further attention. Support of personal goals by significant others was found to be a significant predictor of hedonic well-being (e.g., Brunstein et al., 1996) and goal strivings related to intimacy and generativity (shared in nature) are consistently linked to well-being (e.g., Emmons, 2003; Huta & Zuroff, 2008).

As the research suggests, goal pursuit is both an individual and interpersonal process and well-being is a two dimensional construct which includes components of hedonia and eudaimonia. This proposed research addresses the relative lack of attention given to the interpersonal dimensions of goal pursuit and eudaimonic well-being in the goals literature. In addition, the relationship between goal pursuit and well-being will be examined using virtue theory which suggests that engagement in interpersonal endeavors is necessary for an individual to experience eudaimonic well-being. As such, interpersonal dimensions of goal pursuit will be explored as a mediator of the relationship between individual goal pursuit and eudaimonic well-being.

#### Research Hypotheses

1. Individual dimensions of goal pursuit will be significantly related to hedonic and eudaimonic well-being.
2. Interpersonal dimensions of goal pursuit will be significantly related to hedonic and eudaimonic well-being.
3. Individual dimensions of goal pursuit will be more strongly related to hedonic well-being than eudaimonic well-being.

4. Interpersonal dimensions of goal pursuit will be strongly related to eudaimonic well-being than hedonic well-being.
5. The relationship between individual dimensions of goal pursuit and eudaimonic well-being will be mediated by interpersonal dimensions of goal pursuit.

## CHAPTER THREE

### METHODS

This section provides background of the methods used for this study including participants, data collection, measures, data analytic procedure, and limitations of the study.

#### Participants

The sample ( $N = 163$ ) consisted of undergraduate students at a private southeastern university. The average age was 20, ( $SD = 2.19$ ; range = 18-39). Two participants declined to indicate their age. There were 69 male (42.3 %) and 93 female (57.1%) participants. One participant declined to indicate their sex. In terms of ethnicity, 58.9% of the sample identified as White, 24.5% as Hispanic, 4.9% Black, non-Caribbean, 2.5% Black, Caribbean, 2.5% Biracial 1.2% Asian, and 5.5% of the sample as Other. The participants were also asked to indicate their relationship status. The majority (57.7%) indicated they were single, not in a committed relationship, 36.2% single, in a committed relationship, 3.1% single, cohabitating with a partner, and 3.1% engaged.

#### Measures

##### *Individual Dimensions of Goal Pursuit*

##### *Goal Worksheet*

We created a Goal Worksheet for this study to measure Individual Goal Orientation and Shared Goal Orientation. Participants were requested to write



five important goals that they have. As part of an idiographic approach to goal assessment (e.g., Emmons, 1986; Sheldon & Elliot, 1999), participants read the following set of directions:

“We would like you to list 5 of your most important personal goals. Goals are projects or strivings that you think about, plan for, carry out, and sometimes (though not always) complete and succeed at. They can be something that you are trying to do or something that you are trying to avoid. Some examples of personal goals are: trying to seek new and exciting experiences, trying to stay healthy, or trying to avoid getting into arguments with others.”

*Personal Project System Rating Scale (PPRS)*

I used an adapted version of the Personal Project System Rating Scale (PPRS; Little, 1983), which assesses the way in which people structure and approach their goal pursuits on 13 dimensions. McGregor and Little (1998) conducted a principal components analysis on 35 goal characteristic items which yielded 5 retained factors. The two factors included in our study are Efficacy and Integrity. The other 3 factors (Enjoy, Fun, and Pleasurable) were not included in the analysis due to overlap with the Hedonic factors. The items in the Efficacy factor include: Difficulty, Challenge, Stress, Time pressure, Outcome, and Control. The items in the Integrity factor include: Importance, Commitment, Self-identity, and Value congruency. Consistent with past personal projects research

(Little, 1989; Wilson, 1990), McGregor and Little reported that in this (1998) study, the efficacy and integrity factors (and associated items) emerged as they had expected.

Participants in my study rated each of their five goals using the efficacy and integrity factors of the PPRS on a 10-point Likert scale ranging from “not at all” to “extremely.” Examples of questions include: “How difficult do you find it to carry out this goal?”; “How successful do you think you will be at this goal?”; “How committed are you in the completion of this goal?”; and “To what extent is this goal consistent with the values that guide your life?”.

#### *Self-Concordance Scale*

Self-Concordance is described as “the feelings of ownership people have (or do not have) regarding their self-initiated goals” (Sheldon & Houser-Marko, 2001, p. 152). People with high self-concordance perceive a higher correlation between their goals and their long term values and enjoy the goal pursuit more. Participants rated the degree to which they perceived the five personal goals they listed as self-initiated (Sheldon & Houser-Marko, 2001). Each goal is rated on four items, which reflect external, introjected, identified, or intrinsic reasons for pursuing the goal. The items are rated on a 9-point Likert scale. An example of external pursuit is, “You strive for this goal because somebody else wants you to, or because the situation seems to compel it” whereas an example of an intrinsic pursuit is, “You strive for this goal because of the enjoyment or stimulation which that goal provides you.” The self-concordance score is determined from a sum of the ratings with the external and introjected ratings reverse scored. Sheldon and

Houser-Marko reported Cronbach's alphas of .78 and .75 with the same sample across an academic year. The construct validity of this scale has received support across various studies (e.g., Sheldon & Elliot, 1999; Sheldon & Kasser, 1995, 1998, 2001). In my study, the items were summed across the five reported goals to obtain self concordance scores.

### *Interpersonal Dimensions of Goal Pursuit*

#### *Goal Support Scale*

Goal support is described as the extent to which one feels supported by close others in their goal pursuits. Brunstein, Dangelmayer, and Schultheiss (1996) developed six goal support items adapted from the goal attainability scales used by Brunstein (1993). Participants were first asked to "select two people with whom you are very close." It was noted that "the people you choose can be family members, friends, romantic partners, or spouses, teachers, and so forth." Next, they were asked to "indicate how you see them influencing you in seeking your goals" by answering six questions. The participants rated each person on six items which reflect support with regard to opportunity, responsiveness, and assistance. This process was repeated for each of the five goals the participants listed on Individual/Shared Goals Worksheet.

The items were rated on a 7-point Likert scale with endpoints labeled *completely disagree* (1) and *completely agree* (7). An example of opportunity is, "\_\_\_\_ gives me many opportunities to work on this goal" whereas an example of responsiveness is, "\_\_\_\_ shows me that she or he has a lot of understanding for this goal." An example of assistance is "\_\_\_\_ reliably assists my attempts to

accomplish this goal when I ask him or her to do so.” Three out of six of the goal support questions are reverse scored (e.g., “ \_\_\_\_\_ scarcely leaves me any opportunities to work on this goal”). On the 1 to 7 scale, higher scores indicate greater goal support.

Brunstein (1993) reported 10 week stability coefficients to be satisfactorily high for the goal attainability scales ( $r = .85$ ). Brunstein et al. (1998) found that “in addition to receiving relationship-goal support from partners, perceiving them as also being supportive of individual goals (i.e., goals in which partners are not directly involved) substantially promotes feelings of relationship satisfaction” (p. 1011).

In my study, the participants were asked to provide two persons with whom they are very close. To determine whether to include the scores from both person 1 and person 2, I examined the correlations between person 1 and person 2 across participants. Due to the fact that the correlations were  $< .6$ , I only used scores from person 1 in order to reduce error.

#### *Inclusion of Other in the Self*

The Inclusion of Other in the Self (IOS) is “a single-item pictorial measure intended to tap directly people’s sense of interpersonal interconnectedness” (Aron, Aron, & Smollan, 1992, p. 1). The measure contains seven pictures similar to Venn diagrams which represent different degrees of overlap of two circles. One circle represents the self, the other circle represents the other person. In our study, participants were asked to choose the picture that best represents their relationship with each of the two persons they listed on the goal support scale.

Aron et al. (1992) reported alternate form reliability of  $\alpha = .93$  and test-retest reliability of  $\alpha = .83$ . The construct validity of the IOS has been demonstrated across at least five studies (Aron, Aron, Melinat, & Vallone, 1991; Aron, Aron, Tudor, & Nelson, 1991; Griffin, 1990; McKenna, 1989; Melinat, 1991).

The IOS was also adapted to create the Inclusion of the Other in One's Goal. The directions for this measure stated: "Sometimes people have goals that they pursue completely independently and sometimes they have goals that they pursue together with other people. Please choose the picture that best describes the degree to which you pursue this goal independently of this person or together with this person." The same pictorial representations were used for this measure as with the IOS. This process was repeated with each of the two persons listed on the Goal Support Scale and each of the five goals listed in the Individual/Shared Goals Worksheet. A one-person version of this measure was used as a result of the correlational procedure described above (see Goal Support measure).

#### *Shared Goal Orientation*

Each of the goals listed in the Goal Worksheet was assessed with an expert rating system that we developed to measure the degree of individual and shared goal orientation on a single dimension. Trained raters evaluated the degree to which each goal was individually possessed or must be held in common with others. This rating system results in a rating from 1 to 6, with lower ratings indicating a stronger Individual Goal Orientation, and higher ratings indicating a stronger Shared Goal Orientation. Because the Individual/Shared

Goal Worksheet is an expert rating scale, rater training was conducted with lists of goals gleaned from the goal seeking literature. Raters developed substantial interrater reliability, with rater pairs attaining linear weighted kappas ranging from .88 to .97. The ratings from each individual's goals are summed to obtain the Shared Goal Orientation score.

### *Communal Strength Measure*

Mills, Clark, Ford, and Johnson (2004) developed the Communal Strength Measure in order to measure "a person's degree of motivation to respond to a communal partner's needs" (p. 213). They explain that communal relationships are distinct from exchange or exploitative relationships in that "communal relationships are relationships in which members feel a responsibility for meeting the needs of communal partners and in which benefits are given noncontingently in response to partner's needs" (Mills et al., 2004, p. 213). Participants were asked to name "two persons with whom you are very close" and asked to keep those persons in mind while answering ten questions on the communal strength measure. For each question, a scale from 0=not at all to 10=extremely was used. Mills et al. reported that alpha coefficients for the 10-item measure when answered by women ranged from .83 to .94 and ranged from .91 to .95 when answered by men. The construct validity of this measure is strong. These authors also found that communal strength was distinct from communal orientation, relationship closeness, romantic love, and liking (Mills et al., 2004). Again, the correlational procedure used in the Goal Support Scale with regard to the two close others was also used for the Communal Strength Measure (see above).

### *Loyola Generativity Scale*

Erickson defined generativity as “primarily the concern in establishing and guiding the next generation” (1963, p. 267). McAdams and de St. Aubin (1992) described generativity as “a configuration of seven psychosocial features constellated around the personal (individual) and cultural (societal) goal of providing for the next generation” (p. 1004). These features include: cultural demand, inner desire, concern, belief, commitment, action, and narration. These authors developed the Loyola Generativity Scale (LGS) which is a 20 item self-report measure. It was constructed to tap into three features of generativity - concern, action, and narration. Participants are asked to respond to the twenty questions using a 0 (never) to 3 (very often) Likert scale which assesses how applicable each question is to the participant. Sample items include “I have made and created things that have had an impact on other people” and “I try to pass along the knowledge that I have gained through my experiences.” The two studies which addressed the development of the scale offered Cronbach’s  $\alpha = .84$  for the college sample and  $\alpha = .83$  for the adult sample (McAdams & de St. Aubin, 1992). The authors also reported moderately high retest reliability (.73,  $p < .001$ ) over a three week time period. In terms of construct validity, McAdams & de St. Aubin demonstrated that three different measures of generativity (including the LGS) converge on the construct of generativity and the LGS in particular significantly predicted generative acts.

## *Hedonic Outcomes*

### *Satisfaction with Life Scale*

The Satisfaction with Life Scale (SWLS) assesses global life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). The measure ( $\alpha = .87$  to  $.91$ ) consists of five items with a seven-point Likert scale with a response set ranging from “strongly disagree to strongly agree.” Sample items include: “In most ways my life is close to my ideal” and “The conditions of my life are excellent.” Diener et al. report a factor analysis that indicates a single factor solution that explains 66% of the variance. Further, scores on the SWLS showed moderate to high correlations with other measures of hedonic well being and personality indicators of well-being.

### *Center for Epidemiologic Studies-Depression Scale*

The Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977) is a twenty-item self-report instrument that asks respondents to describe their mood over the past week on a three-point frequency scale ranging from “rarely or none of the time” to “most or all of the time.” The CES-D is an accepted screening instrument for depression in nonclinical populations. Radloff reported an internal consistency level of  $.84$  and test-retest reliability ranging from  $.49$  (12 months) to  $.67$  (4 weeks). Devins and Orme (1985) report that the CES-D demonstrated good convergent validity with other depressive symptom measures, such as the Hamilton Rating Scale of Depression ( $r > .50$ ).



### *Affect Balance Scale*

The Affect Balance Scale (ABS) was developed by Bradburn (1963) and used extensively in a variety of settings and populations. The ABS is a ten-item rating scale containing five statements reflecting positive feelings and five statements reflecting negative feelings. The questions are presented in a yes/no format. The negative affect score is obtained by summing the ratings for the five negative affect questions. An example of a negative affect score is “Did you feel depressed or very unhappy?” The positive affect score is obtained by summing ratings for the five positive affect questions. An example of a positive affect question is “Did you feel particularly excited or interested in something?” Van Schuur and Kruijtbosch (1995) reported Cronbach’s  $\alpha$  levels of .36 to .64 among adult samples in Western European nations. Several researchers (e.g., Baker, Cesa, Gatz, & Mellins, 1992; Kim & Mueller, 2001) found support for the two factor theory of subjective well-being. In addition, positive affect appears to be more related to situational factors and negative affect more related to dispositional factors. The instrument has satisfactory convergent validity, as well as a good test–retest correlation (e.g., Bradburn, 1969; Harding, 1982; Lewis, McCollam, & Joseph, 2000), though its internal consistency is less adequate. Lewis et al. (2000) reported alpha coefficients of .67 for the positive affect subscale and .50 for the negative affect subscale.

## *Eudaimonic Outcomes*

### *Psychological Well-Being Inventory*

Ryff (1985, 1989) developed a theory-based, comprehensive measure of Psychological Well-Being (PWB). Ryff and Singer (2006) describe this measure as a eudaimonic approach to well-being. The six factor model includes: Environmental Mastery, Autonomy, Positive Relations with Others, Purpose in Life, Personal Growth, and Self-Acceptance. Each of the six subscales consists of fourteen items with six-point Likert scale responses ranging from “completely disagree” to “completely agree.” Five studies have used confirmatory factor analysis and demonstrated that the best-fitting model is this theory-guided, six-factor model (Cheng & Chan, 2005; Clark, Marshall, Ryff, & Rosenthal, 2000; Ryff & Keyes, 1995; Spring & Hauser, 2005; Van Dierendonck, 2004). Urry et al. (2004) reported that Cronbach alphas range from .82 to .92 across the scales. The internal consistency of the total PWB score was also high ( $\alpha = .97$ ). Alpha coefficients for the fourteen item PWB scale ranged from .77 to .91 (Ryff et al., 2006; van Dierendonck, 2004).

### *Vitality Scale*

Vitality is considered characteristic of eudaimonic well-being (Ryan & Deci, 2001). Being vital and energetic is part of what it means to be fully functioning and psychologically well. Subjective vitality refers to the state of feeling alive and alert – to having energy available to the self. Ryan and Frederick (1997) developed a seven item scale of subjective vitality. Responses are based on a 1 to 7 Likert scale, with endpoints of not at all true (1) and very

true (7). Examples of questions include: “I feel alive and vital” and “I look forward to each new day.” Confirmatory factor analyses by Bostic, Rubio, and Hood (2000) indicated further validation for vitality as a single latent factor.

#### Procedure

The participants were recruited on a volunteer basis from psychology and education undergraduate courses. Subjects who participated in this research were given a detailed informed consent form that described the current research, its purpose, as well as its possible future use. Participants were instructed that taking part in the study was completely voluntary and were informed of the right to withdraw from the study at any time. In addition, the participants were guaranteed anonymity and therefore none of the data and information gathered can be traced to any of the participants. The order of the administration of the measures was consistent for all participants. All participants completed the questionnaire on personal computers in the same computer classroom and were monitored by a graduate assistant familiar with the computer administered questionnaire. Participants were asked to answer a series of goals inventories using the computer administered questionnaire which was created using FileMaker Pro. The participants were only required to enter their five goals and two persons once. To create ease in answering questions, the FileMaker Pro program was set to automatically populate the screen with the relevant goal or person the participant initially entered. All data entered by the participants was set to automatically transfer from FileMaker Pro to an SPSS file which reduced the likelihood of input errors.

## Proposed Design and Analysis

Testing the hypothesized models called for the use of structural equation modeling (SEM) due to the multiple indicators for each latent variable. The statistical program I used to test the models was AMOS 7.0 (Arbuckle, 2006), which uses maximum-likelihood estimation. Anderson and Gerbing's (1988) two-step approach to structural equation modeling was utilized to guide the model specification. These authors suggested that a sample size of 150 is usually adequate for models with at least three indicators per factor. The data for this study met these criteria in the hypothesized model.

I first tested how well the measurement model fits the data. Anderson and Gerbing (1988) explain that this first step "specifies the posited relations of the observed variables to the underlying constructs, with the constructs allowed to intercorrelate freely" (p. 414). (See Figure 3.1.) After estimating the measurement model, adjustments were made to enhance the fit of the structural model. (See Figure 3.2.) Respecification of the structural model was based on model fit criterion (described below) as well as theory as Anderson and Gerbing (1988) suggest. The authors recommend four solutions to respecification of the structural model: "relate the indicator to a different factor, delete the indicator from the model, relate the indicator to multiple factors, or use correlated measurement errors" (p. 417). These were applied as appropriate. Several criteria were used to examine the overall fit of the models to the data. These criteria included: chi-square ( $\chi^2$ ) and  $\Delta\chi^2$  (with  $p$ -values  $>.05$  indicative of good fit); TLI (with values  $>.90$  indicative of good fit); RMSEA (with values  $<.08$

indicative of better fit); AIC (with smaller values indicative of better fit); and SRMR (with values  $\leq .08$  indicative of good fit).

I predicted significant associations between individual and interpersonal dimensions of goal pursuit and hedonic and eudaimonic well-being. To analyze the link between individual dimensions of goal pursuit and hedonic well-being, I estimated the path between them (see Figure 3.2, path D). Similarly, I analyzed the link between interpersonal dimensions of goal pursuit and hedonic well-being by estimating the path between them (see Figure 3.2, Path E). I also estimated the association between individual goal pursuit and eudaimonic well-being (see Figure 3.2, path C). Associations between interpersonal goal pursuit and eudaimonic well-being were also estimated (see Figure 3.2, path B). To analyze the link between individual dimensions of goal pursuit and interpersonal dimensions of goal pursuit, I estimated the path between them (see Figure 3.2, path A). Statistically significant coefficients of the paths were predicted for hypotheses 1-4.

Hypothesis 5 was tested via a mediational model (see Figure 3.3). The bootstrapping method in structural equation modeling suggested by Shrout and Bolger (2002) was followed to test for mediation. The criterion for concluding that there is mediation is that the bias-corrected bootstrap 95% confidence interval of the standardized indirect effect of path  $A \rightarrow B \rightarrow C$  does not include zero. The bias-corrected interval method was used, because Shrout and Bolger (2002) point out that, "the application of the bias-corrected interval method tends to

improve the power of the test of the indirect effect" (p. 436). They also recommended examining "the strength of the mediation effect...using the ratio of the indirect effect to the total effect" (p. 439).

## CHAPTER FOUR

### RESULTS

#### *Preliminary Analyses*

##### *Power*

Based on power estimates ( $\alpha = .05$ ) presented by MacCallum, Browne, and Sugawara (1996), the original model with  $df = 345$ ,  $N = 163$ , suggests power in excess of .80. Using the same table, the retained model with  $df = 22$  and  $N = 163$ , suggests a power estimate of  $\sim .454$ . Therefore, it is likely that there might be underestimation of the statistical significance of the relationships in the outcome data (Type II Error).

##### *Missing Data*

The original sample ( $N = 184$ ) contained missing data and therefore a missing data analysis was performed. The mean item score was imputed for those participants with less than 10% of missing data for a scale. Participants with greater than 10% of missing data for a scale were removed. Lastly, participants with meaningless data were removed (e.g., all zeros for responses). This led to the current sample, ( $N = 163$ ) which does not contain missing data.

##### *Sample Size*

It should be noted that this sample size is appropriate for testing the hypothesized measurement model. The sample size ( $N = 163$ ) fits the recommendation for testing a structural equation model ( $> 150$  observations) offered by Anderson and Gerbing (1988) and the baseline measurement model

did have three or more indicators per factor. However, in the retained model, two of the four latent factors do not have three or more indicators as is recommended by Anderson and Gerbing (1988). However, this reduction in indicators was necessary to obtain model fit and will be described below.

### *Descriptive Statistics*

Means, standard deviations, and zero-order correlations for the retained model can be found in Table 4.1.

Multivariate normality was tested using AMOS 7.0. See Table 4.2 for skew, kurtosis, and their associated criterion ratios (z-scores). Based on the sample size ( $N = 163$ ), z-scores for skew and kurtosis  $> |3.29|$  were identified as non-normal according to Fife-Schaw (2008). Though some variables were non-normal based on this criterion, maximum likelihood estimation was used. Among others, McDonald and Ho (2002) argue that “ML estimation and its associated statistics seem fairly robust against violations of nonnormality” (p. 70).

### *Primary Analyses*

#### *Identification and Specification*

To ensure model identification, I placed equal constraints (value = 1.0) on the error variances of the indicators as well as fixed a pattern coefficient for one indicator of each factor at 1.0 as recommended by Anderson and Gerbing (1988). Both the hypothesized and retained models were recursive in that no variable in the model had an effect on itself.



### *Convergent and Discriminant Validity*

Convergent and discriminant validity were assessed as suggested by Anderson and Gerbing (1988). Convergent validity was examined in the measurement model by “determining whether each indicator’s estimated pattern coefficient on its posited underlying construct factor is significant (greater than twice its standard error)” (p. 416). All indicators met these criteria with the exception of the Inclusion of the Other in the Self (an indicator of Interpersonal Dimensions of Goal Pursuit; see Table 4.3).

Discriminant validity between Individual Dimensions of Goal Pursuit vs. Interpersonal Dimensions of Goal Pursuit and Hedonic Well-being vs. Eudaimonic Well-being was also assessed as suggested by Anderson and Gerbing (1988). This was obtained by “constraining the estimated correlation parameter between the two latent variables to 1.0 and then performing a chi-square difference test on the values obtained for the constrained and unconstrained models” (Anderson & Gerbing, 1998, p. 416). When comparing the constrained vs. unconstrained models for Individual Dimensions of Goal Pursuit and Interpersonal Dimensions of Goal Pursuit,  $\Delta\chi^2(1, N = 163) = 3.7, p > .05$ . When comparing the constrained vs. unconstrained models for Hedonic Well-being and Eudaimonic Well-being,  $\Delta\chi^2(1, N = 163) = 14.3, p < .05$ .

As a result of the  $\Delta\chi^2$  not being significant for Individual Dimensions of Goal Pursuit vs. Interpersonal Dimensions of Goal Pursuit, discriminant validity was not demonstrated ( $p = .05, 3.84$ ). However, the significant  $\Delta\chi^2$  for Hedonic Well-being vs. Eudaimonic Well-being did demonstrate that these are best seen

as separate dimensions ( $p = .05$ , 3.84). Thus, convergent validity was supported in the measurement model and discriminant validity was supported between the two well-being dimensions in the measurement model.

#### *Measurement Model Assessment of Fit*

As suggested by Anderson and Gerbing (1988), the first step in assessment of fit was to test measurement model fit to the data by allowing all latent variables to covary freely. The first model tested was the baseline measurement model. In this study, the measurement model was tested by the AMOS 7.0 program with the maximum likelihood method. Six indices were used to determine the goodness of fit for the model: Chi-square ( $\chi^2$ ) (with  $p$ -values  $>.05$  indicative of good fit);  $\Delta\chi^2$  (with  $p$ -values  $< .05$  indicative of an effect); TLI (with values  $> .90$  indicative of good fit); RMSEA (with values  $< .08$  indicative of better fit); AIC (with smaller values indicative of better fit); and SRMR (with values  $\leq .08$  indicative of good fit).

Fit indices indicated poor fit of the hypothesized baseline model,  $\chi^2$  (345,  $N = 163$ ) = 1218.056,  $p = .000$ ; TLI = .563; CFI = .601; RMSEA = .125 (90% confidence interval = .117, .133); AIC = 1396.056; SRMR = .182. (See Figure 4.1.)

#### *Measurement Model Respecification*

As per Anderson and Gerbing (1988), to improve measurement model fit, modification indices, regression weights, global fit indices, and theory were used to guide model respecification. Some general issues were observed with the hypothesized measurement model. There was covariation among the indicators

and some indicators were related to more than one latent factor. In addition, it appeared that some measures were not strong indicators of their latent construct. Model respecification included indicators being modified and/or removed one by one through a series of twelve steps.

Toward the end of this process, fit indices improved only marginally. At that point in the process, the respecified model contained solid Hedonic and Eudaimonic Well-being dimensions; however, the number of indicators for the Individual and Interpersonal Dimensions were greatly reduced. Therefore, the respecification strategy shifted to choosing the best representative indicators for Individual and Interpersonal Dimensions of Goal Pursuit. A summary of the model respecification process is outlined below.

Environmental Mastery, an indicator for Eudaimonic Well-being, was one of the initial variables removed from the model because it loaded substantially on other latent factors in the model. Other indicators of Eudaimonic Well-being (Vitality, Autonomy, and Personal Growth) were removed for the same reasons. With regard to the latent factor Hedonic Well-being, the Satisfaction with Life Scale was removed as an indicator which produced a significant improvement to  $\chi^2$ ; however, this was not enough to improve overall model fit. In addition, for the latent factor Hedonic Well-being, Affect Balance Positive and Affect Balance Negative were set to covary as these are two components of one scale which improved model fit as well.

The indicators for the latent factors, Individual and Interpersonal Dimensions of Goal Pursuit, also demonstrated covariation issues. Inclusion of

Other in the Self and Inclusion of Other in One's Goal (Interpersonal Dimensions of Goal Pursuit) were the first to be removed from the model as they appeared most problematic in terms of covariation with other latent variables. However, this was not enough to improve the measurement of the latent construct, Interpersonal Dimensions of Goal Pursuit. Therefore, Communal Strength and Generativity (two indicators of the same construct) were set to covary. This was both data and theory guided as these indicators had the interpersonal characteristic of pursuit on the behalf of others in common (e.g., McAdams et al., 1992; Mills et al., 2004). However, due to the persistence of the covariation in the indicators of Interpersonal Dimensions of Goal Pursuit, the indicators Communal Strength, Goal Support, and Shared Goal Orientation were removed one by one. Generativity was the only indicator retained for Interpersonal Dimensions of Goal Pursuit as it consistently had the strongest factor loading and did not present the extent of covariation seen in the other indicators.

For the Individual Dimensions of Goal Pursuit, the indicators Self-concordance and Integrity demonstrated significant covariation with other latent factors and therefore, were removed from the model. Another indicator of Individual Dimensions of Goal Pursuit, Efficacy, which originated as a six-factor latent, was split into two latent factors due to low cohesion within the original latent factor. This improved fit minimally; however, one of these two factors was completely removed which improved fit substantially. This was unique to the current study; however, was both supported by the data and theoretically logical in that the latent Efficacy factor which was removed (having four indicators)

covaried substantially with the Hedonic Well-being indicators. These four indicators of Efficacy which were removed included Difficulty, Stress, Challenge, and Time Pressure.

Therefore, the retained model included one latent factor, Efficacy, with two indicators which were Outcome and Control. For Outcome and Control, the participants in the current study rated themselves on how much they felt in control of their goals as well as how successful they perceived they would be at their goals.

In summary, the final model included a two factor version of Efficacy (indicator for Individual Dimensions of Goal Pursuit), Generativity (indicator for Interpersonal Dimensions of Goal Pursuit), the CES-Depression Scale, Affect Balance Positive, and Affect Balance Negative (indicators for Hedonic Well-being), and the Positive Relationships Scale, Purpose in Life Scale, and Self-Acceptance Scale (indicators for Eudaimonic Well-being). Upon model respecification based on the aforementioned issues, the resulting measurement model evidenced adequate fit and this respecified measurement model was tested. (See Figure 4.2.)

The results of the analysis for the respecified measurement model indicated acceptable fit to the data,  $\chi^2(22, N = 163) = 54.313, p = .000$ ; TLI = .912; CFI = .946; RMSEA = .095 (90% confidence interval = .064, .172); AIC = 100.313; SRMR = .057. Separate from the overall fit of the respecified measurement model, the factor loadings of the observed variables for the latent variables were all significant at  $p < .001$ . (See Table 4.4.) This indicated that the

latent variables were appropriately measured by the observed variables. Further, all of the latent variables were significantly correlated. (See Table 4.5.) Lastly, a test of discriminant validity was performed on the reduced Hedonic and Eudaimonic Well-being latent variables. Due to the  $\Delta\chi^2$  being significant, this test of discriminant validity indicates that Hedonic Well-being and Eudaimonic Well-being continue to be best seen as separate dimensions even after the reduction in the number of their indicators.  $\Delta\chi^2(1, N = 163) = 20.255, p < .05$ .

#### *Structural Model Assessment of Fit*

The results of the analysis for the retained structural model indicated good fit to the data,  $\chi^2(19, N = 163) = 29.414, p = .060$ ; TLI = .967; CFI = .983; RMSEA = .058 (90% confidence interval = .000, .097); AIC = 81.414; SRMR = .0452. (See Figure 4.3 and Table 4.6.) The retained structural model also remained recursive per AMOS 7.0 (Arbuckle, 2006). However, Kline (2005) explains that the classification of such models within SEM is inconsistent in the literature. He termed this type of model “partially recursive” due to the fact that “correlated disturbances are restricted to pairs of endogenous variables *without* direct effects between them” (p. 104).

With regard to the research hypotheses, Hypothesis 1, Individual Dimensions of Goal Pursuit will be significantly related to Hedonic and Eudaimonic Well-being, was supported. The relationship between Efficacy and Hedonic Well-being was statistically significant ( $p = .037$ ). The standardized direct effect of Efficacy on Hedonic Well-being was .239 (small; Cohen, 1988). That is, due to the direct effect of Efficacy on Hedonic Well-being, when Efficacy

increases by 1 standard deviation, Hedonic Well-being increases by .239 standard deviations. The relationship between Efficacy and Eudaimonic Well-being was also statistically significant ( $p < .001$ ). The direct effect of Efficacy on Eudaimonic Well-being was .432 (medium; Cohen, 1988). That is, due to the direct effect of Efficacy on Eudaimonic Well-being, when Efficacy increases by 1 standard deviation, Eudaimonic Well-being increases by .432 standard deviations.

Hypothesis 2, Interpersonal Dimensions of Goal Pursuit will be significantly related to Hedonic and Eudaimonic Well-being was partially supported. The relationship between Generativity (only remaining indicator for Interpersonal Dimensions of Goal Pursuit) and Hedonic Well-being was statistically significant ( $p < .001$ ). The standardized direct effect of Generativity on Hedonic Well-being was .352 (medium; Cohen, 1988). That is, due to the direct effect of Generativity on Hedonic Well-being, when Generativity increases by 1 standard deviation, Hedonic Well-being increases by .352 standard deviations. The relationship between Generativity and Eudaimonic Well-being was also statistically significant ( $p < .001$ ). The standardized direct effect of Generativity on Eudaimonic Well-being was .530 (medium to large; Cohen, 1988). That is, due to the direct effect of Generativity on Eudaimonic Well-being, when Generativity increases by 1 standard deviation, Eudaimonic Well-being increases by .530 standard deviations.

Though the original hypothesis was that the Interpersonal Dimensions of Goal Pursuit will be significantly related to Hedonic and Eudaimonic Well-being,

Generativity was the only retained factor of that latent construct. Generativity was a strong indicator from the original hypothesized model to the respecified model and therefore can be considered a reasonable representation of the latent factor. However, interpretations are limited to Generativity as opposed to the latent factor, Interpersonal Dimensions of Goal Pursuit.

Hypothesis 3, Individual Dimensions of Goal Pursuit will be more strongly related to Hedonic Well-being than Eudaimonic Well-being, was not supported. The standardized direct effect of Efficacy on Hedonic Well-being was .239 (small; Cohen, 1988), whereas the direct effect of Efficacy on Eudaimonic Well-being was .432 (medium; Cohen, 1988).

Hypothesis 4, Interpersonal Dimensions of Goal Pursuit will be more strongly related to Eudaimonic Well-being than to Hedonic Well-being was supported to the extent that it could be with the single indicator Generativity. The standardized direct effect of Generativity on Hedonic Well-being was .352 (medium; Cohen, 1988), whereas the standardized direct effect of Generativity on Eudaimonic Well-being was .530 (medium to large; Cohen, 1988).

Lastly, Hypothesis 5, the relationship between Individual Dimensions of Goal Pursuit and Eudaimonic Well-being will be mediated by Interpersonal Dimensions of Goal Pursuit, was testable using Efficacy (as the indicator for Individual Dimensions of Goal Pursuit) and Generativity (as the indicator for Interpersonal Dimensions of Goal Pursuit). These were the factors retained in the respecification process and therefore embedded within the original mediational hypothesis.



Hypothesis 5 is demonstrated via a mediational model (see Figure 4.4). The bootstrapping method in structural equation modeling suggested by Shrout and Bolger (2002) was followed to test for mediation. The standardized indirect effect of Efficacy on Eudaimonic Well-being was .155. The bootstrap estimate of the standard error of the standardized indirect effect of Efficacy on Eudaimonic Well-being was .053. The lower endpoint of a two-sided bias-corrected bootstrap 95% confidence interval for the standardized indirect effect of Efficacy on Eudaimonic Well-being was .043. The upper endpoint of a two-sided bias-corrected bootstrap 95% confidence interval for the standardized indirect effect of Efficacy on Eudaimonic Well-being was .254. The standardized indirect effect of Efficacy on Eudaimonic Well-being was significantly different from zero ( $p = .008$ ). Lastly, the strength of the mediation effect ( $P_M$ ) was estimated using the ratio of the indirect effect to the total effect (Shrout & Bolger, 2002). The ratio  $P_M = .264$ .

## CHAPTER FIVE

### DISCUSSION

This study examined the relationships between Individual and Interpersonal Dimensions of Goal Pursuit and Hedonic and Eudaimonic Well-being in an ethnically diverse university student sample of men and women. Although past research has focused on Individual Dimensions of Goal Pursuit, few studies have considered Interpersonal Dimensions of Goal Pursuit. This led to an exploratory approach for capturing Interpersonal Dimensions of Goal Pursuit by creating a goal rating measure with my research team (the Individual/Shared Goals Worksheet). In addition, measures that have not been used in the goal pursuit literature before (i.e., the Communal Strength measure, Generativity measure, and Inclusion of Other in the Self and in One's Goal) were utilized as a result of the lack of specific instrumentation available to capture the Interpersonal Dimensions of Goal Pursuit. Though the Goal Support measure has been used in the research on goals, it has been limited to goal support within the marital relationship literature.

In the research on goal pursuit, there has been an emphasis on the use of Hedonic indicators of well-being relative to Eudaimonic indicators of well-being (e.g., Brunstein, 1993; Emmons, 1986; Lent, 2004; Locke & Latham, 2002; Wiese, 2007). The current study added to the literature by incorporating commonly used Hedonic measures (i.e., the Satisfaction with Life Scale, CES-Depression Scale, and Affect Balance Scale) with the less commonly used Eudaimonic well-being measures of Vitality (Ryan & Deci, 2001) and Ryff's

(1989) six factor Psychological Well-being scale. Thus, the current study contributes to the literature by examining Interpersonal Dimensions of Goal Pursuit as well as indicators of Eudaimonic Well-being in the context of the goal pursuit. Moreover, the current study includes a replication and extension of previous research. Consistent with virtue theory (Fowers, 2005) and past research, (e.g., Keyes, Ryff, & Shmotkin, 2002; Ryan & Deci, 2001), the test of discriminant validity and model fit indices in the current study support that Hedonic and Eudaimonic Well-being are distinct, but related factors. However, this study also expanded upon the research in that no studies to date have attempted to examine Hedonic Well-being and Eudaimonic Well-being, simultaneously, using multiple indicators, in the context of goal pursuit research.

The two-step structural equation modeling process used in the current study included substantial model respecification which was anticipated as a result of the exploratory nature of examining the Individual/Interpersonal distinction and lack of past research using both Hedonic and Eudaimonic indicators of well-being in the context of goal pursuit. One of the main issues was that many of the indicators for the Individual and Interpersonal Dimensions of Goal Pursuit were related to more than one latent variable. As such, there was a good deal of covariation across latent factors, cross latent loading of indicators, and poor convergence of the indicators particular to a latent factor which led to many indicators being removed from the model to obtain model fit. As a result of the model reduction, Individual Dimensions of Goal Pursuit was represented as a two indicator version of Efficacy and Interpersonal Dimensions of Goal Pursuit

was represented by the indicator Generativity. These retained factors are, however, embedded in the originally hypothesized measurement model, and therefore offer interesting and interpretable results.

When comparing the relationship between Efficacy and Eudaimonic Well-being and Generativity and Eudaimonic Well-being, Generativity was more strongly related to Eudaimonic Well-being than was Efficacy. Therefore, though the constructs Efficacy (represented by Outcome and Control) and Generativity do appear to be related, the significance of Generativity as a mediator of the relationship between Efficacy and Eudaimonic Well-being suggests the significance of feeling efficacious *and* engaging in interpersonal acts on behalf of others with regard to experiencing higher levels of Eudaimonic Well-being.

In the current study, the latent factor, Eudaimonic Well-being was measured in the final retained model by three indicators from Ryff's (1989) Psychological Well-being scale and included: Positive Relations with Others, Purpose in Life, and Self-Acceptance. Ryff (1989) explained that a person high in Positive Relations with Others "has warm, satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; and understands give and take of human relationships;" a person high in Purpose in Life has "goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; and has aims and objectives for living;" and a person high in Self-Acceptance "possesses a positive attitude toward the self; acknowledges and

accepts multiple aspects of self including good and bad qualities; feels positive about past life” (p. 1072). The content of these scales reflects the concept of eudaimonia well.

Eudaimonic Well-being includes the concept of other-benefit which is consistent with Generativity. However, the mediational relationship demonstrated in the current study reflects that perceiving oneself as efficacious actually influences how generative one perceives oneself to be and in turn, experiences Eudaimonic Well-being. Therefore, Generativity serves to clarify and explain the underlying relationship between Efficacy and Eudaimonic Well-being—that an individual is more likely to experience Eudaimonic Well-being when there is an also an emphasis on other-benefit. This is central to Virtue Ethics and Eudaimonic Well-being in that the theory suggests that engaging in activities with or on behalf of others is necessary to experience this deeper sense of well-being.

A closer examination of the content items in the Efficacy and Generativity measures also helped to explain this relationship. Many of the items in the Generativity scale actually exhibited questions consistent with how efficacious one perceives oneself to be. These include items such as “I have important skills I try to teach others;” “I have made and created things that have had an impact on people;” and “I feel as though I have made a difference to many people.” McAdams and de St. Aubin (1992) described generativity as “a configuration of seven psychosocial features constellated around the personal (individual) and cultural (societal) goal of providing for the next generation” (p. 1004). These features include: “cultural demand, inner desire, concern, belief, commitment,

action, and narration.” It is logical that individuals who are generative are also likely to perceive themselves as efficacious. The overlap in the content of the Efficacy and Generativity scales demonstrates that one could be Generative, but without also having Efficacy, part of the path to experiencing eudaimonia might be missing. Further, this stands to reason that one has to be efficacious about both individual *and* interpersonal goals.

In sum, the current study was consistent with the current literature in that Hedonic and Eudaimonic Well-being were best represented as distinct, but related factors. The current study also supplied an extension to the research by examining both Individual and Interpersonal Dimensions of Goal Pursuit with multiple indicators of both Hedonic and Eudaimonic Well-being. Although the retained model was reduced to Efficacy (represented by Outcome and Control) as the Individual Dimension of Goal Pursuit, and Generativity, the Interpersonal Dimensions of Goal Pursuit, the retained model did exhibit good fit to the data and as such the outcomes offered both replication and extension of the current research on goal pursuit and well-being.

#### *Efficacy and Well-being*

One of the initial research hypotheses was not supported with the retained model. Though the relationship between Individual Dimensions of Goal Pursuit and Hedonic Well-being was statistically significant, which is consistent with past research (e.g., Little 1999; Phillips et al., 1997; Sheldon & Kasser, 1998), Individual Dimensions of Goal Pursuit were not more strongly related to Hedonic Well-being than Eudaimonic Well-being in the retained model. However, this

might be explained by the fact that Efficacy was reduced to a two instead of six indicator latent factor and the indicators, Outcome and Control, were less tied to respondents' affective state (as measured by Hedonic Well-being) than the four indicators which were removed in the respecification process. The four indicators that were removed from the Efficacy latent factor included Difficulty, Stress, Challenge, and Time Pressure. These were removed as a result of their strong relationships with other latent factors.

These are indicators which research has demonstrated account for an impact on affective states (hedonic outcomes; e.g., Little, 1999). Further support from post-hoc analyses in the current study revealed that when the four indicators of Efficacy (Difficulty, Stress, Challenge, and Time Pressure) were re-introduced into the model, the relationship between Efficacy and Hedonic Well-being increased substantially (standardized path coefficient increased from .24 to .43) which is supplementary evidence that the four factors removed from the retained model significantly reduced the relationship among the indicators of Efficacy and Hedonic Well-being.

Additional post-hoc analyses in the current study confirmed that the retained Efficacy indicators, Outcome and Control, were more consistent with Eudaimonic indicators (Positive Relations with Others, Purpose in Life, and Self-Acceptance) (standardized path coefficient = .54) than Hedonic indicators (standardized path coefficient = .21) and the Efficacy indicators, Difficulty, Stress, Challenge, and Time Pressure were more consistent with Hedonic outcomes (standardized path coefficient = .21) than Eudaimonic outcomes (standardized

path coefficient = .12). Lastly, when the full model was considered (all six Efficacy indicators with the retained Hedonic and Eudaimonic Well-being indicators), Efficacy was related about equally to Hedonic Well-being (standardized path coefficient = .34) and Eudaimonic Well-being (standardized path coefficient = .33).

Therefore, it is likely that the discrepancy between my original hypothesis and this finding can be partially explained by the fact that the retained Efficacy factor was only a two indicator version and the indicators retained were more consistent with Eudaimonic Well-being than Hedonic Well-being compared to those Efficacy indicators which were removed. The results from the current study reveal that the original latent factor, Efficacy might best be represented as a two factor latent variable; however, it should also be taken into consideration that model reduction (and the reduced Efficacy factor) was necessary to control for the covariation across latent variables and obtain model fit and may be unique to the current study and/or sample.

#### *Integration of Significant Findings*

Fowers (2005) suggested that individuals are not self-sufficient in experiencing well-being and therefore require the participation of others in the process. This assertion received modest support by the findings in the current study as demonstrated by the relationships between Efficacy, Generativity, and Hedonic and Eudaimonic Well-being. Consistent with previous research, which demonstrated that generative interest is related to both greater reported



happiness and life satisfaction (e.g., Ackerman et al., 2000; Kasser & Ryan, 1996; Keyes & Ryff, 1998; McAdams et al., 1993), the present study demonstrated a significant relationship between Generativity and Hedonic Well-being.

The present study also demonstrated a significant relationship between Generativity and Eudaimonic Well-being which is consistent with Ackerman et al.'s (2000) research. Ackerman et al. explained that generative qualities likely play a role in well-being by supporting behaviors and commitments that make and maintain positive interpersonal and transgenerational relationships. Therefore, it is not surprising that in the present study, the relationship between Generativity and Eudaimonic Well-being was stronger than that of Generativity and Hedonic Well-being. Thus, incorporating the measures of Eudaimonic Well-being appeared to capture the qualities that maintain a deeper sense of well-being (i.e., Positive Relations with Others, Purpose in Life, and Self-Acceptance).

With regard to the research specific to Efficacy, Little (1998) conducted a factor analysis on dimensions that participants used to describe their goals and one of those retained factors was Efficacy. Little (1998) reported Efficacy as significantly correlated with happiness, but not meaning (as measured by a Purpose in Life Scale; Crumbaugh & Maholick, 1964). In contrast to Little's findings, the retained Efficacy factor in the current study was related to Eudaimonic Well-being. There are two possible explanations for this: Little having a less comprehensive assessment of Eudaimonic Well-being or the current study having a more restricted representation of Efficacy. Post-hoc analyses showed

that the relationship between Efficacy and Eudaimonic Well-being remained statistically significant even with all six Efficacy factors (as was used in the aforementioned Little study). Therefore, it is most plausible that the current study used a more comprehensive assessment of Eudaimonic Well-being than was used in Little's study which accounts for the significant relationship found in the current study and not found in Little's (1998) study.

The results of the present study indicate that Efficacy can be conceptualized as a two-factor construct. Efficacy (represented by Outcome and Control) was significantly related to both Hedonic Well-being and Eudaimonic Well-being, and in fact, more strongly related to Eudaimonic Well-being. This is further support that incorporating a more comprehensive measure of Eudaimonic Well-being contributes to better understanding of both individual and interpersonal dimensions of goal pursuit. Therefore, though the relationship between Efficacy and Hedonic Well-being is well-demonstrated, the results of the present study show that the relationship between Efficacy and Eudaimonic Well-being should receive further attention.

Through the use of both Hedonic and Eudaimonic Well-being measures, as guided by the Virtue Ethics perspective, the current study demonstrates how we can move beyond the individual focus in research and practice and ultimately strive toward a deeper understanding of goal pursuit and well-being through exploring the effects of meaningful connections with others and more comprehensive measures of well-being.

### *Limitations*

Several limitations exist in the current study. The study utilized measures of self-report and as such, the data could have been affected by response bias. In addition, those who participated in the current study were only English-speaking college students from a private Southeastern university and therefore, this may limit the generalizability of the findings. Further, measures were only taken at one time point, and therefore causality cannot be inferred.

Another limitation is that structural equation modeling assumes a normal distribution, and several of the variables in the study (as common in social science research) were deemed non-normal as per tests of multivariate normality (see Table 4.2). Though the maximum likelihood method that was employed in the current study is thought to be robust to non-normal distributions, (e.g., McDonald & Ho, 2002), this may have reduced the statistical significance of the relationships among the variables. In addition, though power in the hypothesized measurement model was estimated in excess of .80, power in the retained model was estimated at  $\sim .45$ . Therefore, there is potential for Type II error and consequently, the model fit and statistical significance of relationships may be underestimated in the retained model.

Though the sample size was acceptable for the retained model ( $N = 163$ ), a larger sample with fewer parameters per observation might have been preferable to test the originally hypothesized measurement model. In addition, there was much covariation in the indicators across latent constructs. As a result, unique measurement of each latent construct was challenging to obtain. Though

the retained model did exhibit good fit to the data, Individual and Interpersonal Dimensions of Goal Pursuit were not measured by at least three indicators and as such, the generalizability of the results are limited to the actual factors and indicators retained in the model.

In addition, the fit of the model might have capitalized on this particular sample. It is possible that the variables retained in this model (based on fit indices, etc.) were unique to this sample and may not be replicable in other sample groups.

Another limitation of the research is the restricted range of scores obtained in the Shared Goals measure. Most goals obtained from the college sample in the current study were individual in nature and therefore the ratings on the Shared Goals measure were disproportionately representative of individual as opposed to shared goals. Obtaining more shared goals may have improved this measure and allowed it to be a more robust factor in the Interpersonal Dimensions of Goal Pursuit.

### *Conclusions and Directions for Future Research*

Studies in the area of goal pursuit and well-being suggest that the goals people work toward in their daily lives are important contributors to well-being (e.g., Brunstein, 1993; Emmons, 1986; Wiese, 2007). Some researchers have argued that “*what* goals one pursues, or *why* one pursues them, is at least as important as how *well* one pursues them” (Schmuck & Sheldon, 2001, p. 6). The current study suggests that individuals who perceived themselves as efficacious

in the pursuit of their listed goals and generative (a general goal to benefit others), might also experience a deeper sense of well-being.

As previous research suggests, goal pursuit is both an individual and interpersonal process and well-being is a two dimensional construct which includes components of hedonia and eudaimonia. This is consistent with the findings of the current study in that those individuals who rated themselves as efficacious with regard to their goals *and* generative also experienced more positive relationships with others, increased purpose and meaning in their lives, and greater self-acceptance (components of Eudaimonic Well-being).

The significant mediational relationship between Efficacy, Generativity, and Eudaimonic Well-being was unique to the current study. Generativity (an Interpersonal Dimension of Goal Pursuit) as a mediator helped to explain the relationship between Efficacy (an Individual Dimension of Goal Pursuit) and Eudaimonic Well-being. Without consideration for this mediational relationship, studies would likely draw a partial conclusion as to the relationship between this Individual Dimension of Goal Pursuit and Well-being. The significance of the mediational relationship demonstrates that although there is a direct relationship between Efficacy and Eudaimonic Well-being, Efficacy partially influences Eudaimonic Well-being through Generativity. Without consideration for the presence of an other, someone perceiving themselves as efficacious, for example, might not also experience more positive relations with others, increased purpose and meaning in their lives, and greater self-acceptance.

This finding indicates that future research should further examine the variables that mediate the relationship between Individual Dimensions of Goal Pursuit and Eudaimonic Well-being.

Without ongoing consideration for the interpersonal aspects of goal pursuit and more comprehensive measurement of well-being, studies will continue to narrowly focus on the internal experience of the individual and on the individual as separate from others, and neglect the other factors outside of the individual which may affect goal pursuit and the relative experience of well-being and human flourishing.

Virtue theory afforded a guide by which to conceptualize goal pursuit and well-being in a unique and distinctive way. The current study supplied some encouragement for the premise that engagement in interpersonal endeavors is related to enhanced experiences of eudaimonic well-being. However, future research is necessary in order to better capture the Interpersonal Dimensions of Goal Pursuit and expand upon the theory which guided the development of the Individual/Shared Goal Worksheet created for this study—that there are both individual and shared aspects of goal pursuit which may contribute to hedonic and eudaimonic well-being in unique and important ways.

In doing so, future research on the individual vs. interpersonal dimensions of goal pursuit might ask respondents directly to provide both individual and interpersonal goals, rather than using a general prompt as was employed in the current study which led to a preponderance of individually oriented goals. Another possibility may be to attempt an approach similar to Little's (1998)

Personal Project Analysis (PPA) in which he examined (primarily individually oriented) dimensions participants use to describe their goals and then developed factors to measure aspects of goal pursuit. Little used questions such as “How proud are you to be engaged in each project” and “How competent are you at each project” to probe for goal characteristics. This approach might be expanded to 1) include a prompt that calls for interpersonal goals, (e.g., “We are interested in studying the kinds of activities and concerns that people can *only* pursue with or on behalf of others.”) and 2) to include dimensions consistent with interpersonal dimensions of goal pursuit such as: “To what extent do you believe that accomplishing this goal would benefit both you *and* someone else?” or “To what extent is your success at completing this goal contingent upon the involvement of another?” Such an approach would likely move the research closer to capturing the otherwise overlooked interpersonal dimensions of goal pursuit.

It might also be interesting to replicate the current study with an older population and with those of different (possibly more collectivistic) cultural backgrounds, as interpersonal connectedness and in particular, generativity, may vary within the context of goal pursuit and well-being across different age and cultural groups. Additional valuable knowledge about the individual/interpersonal distinction and more comprehensive conceptualization of well-being may be obtained.

In conclusion, incorporating goals pursued in concert with or on behalf of others and the measurement of both hedonic and eudaimonic well-being into the

goal pursuit literature may offer a more complete understanding of goal pursuit and well-being. This may shed light on how a greater sense of connection, belonging, meaning, and purpose (ultimately a deeper sense of psychological well-being) might be realized through pursuing goals with or on behalf of others.



FIGURES

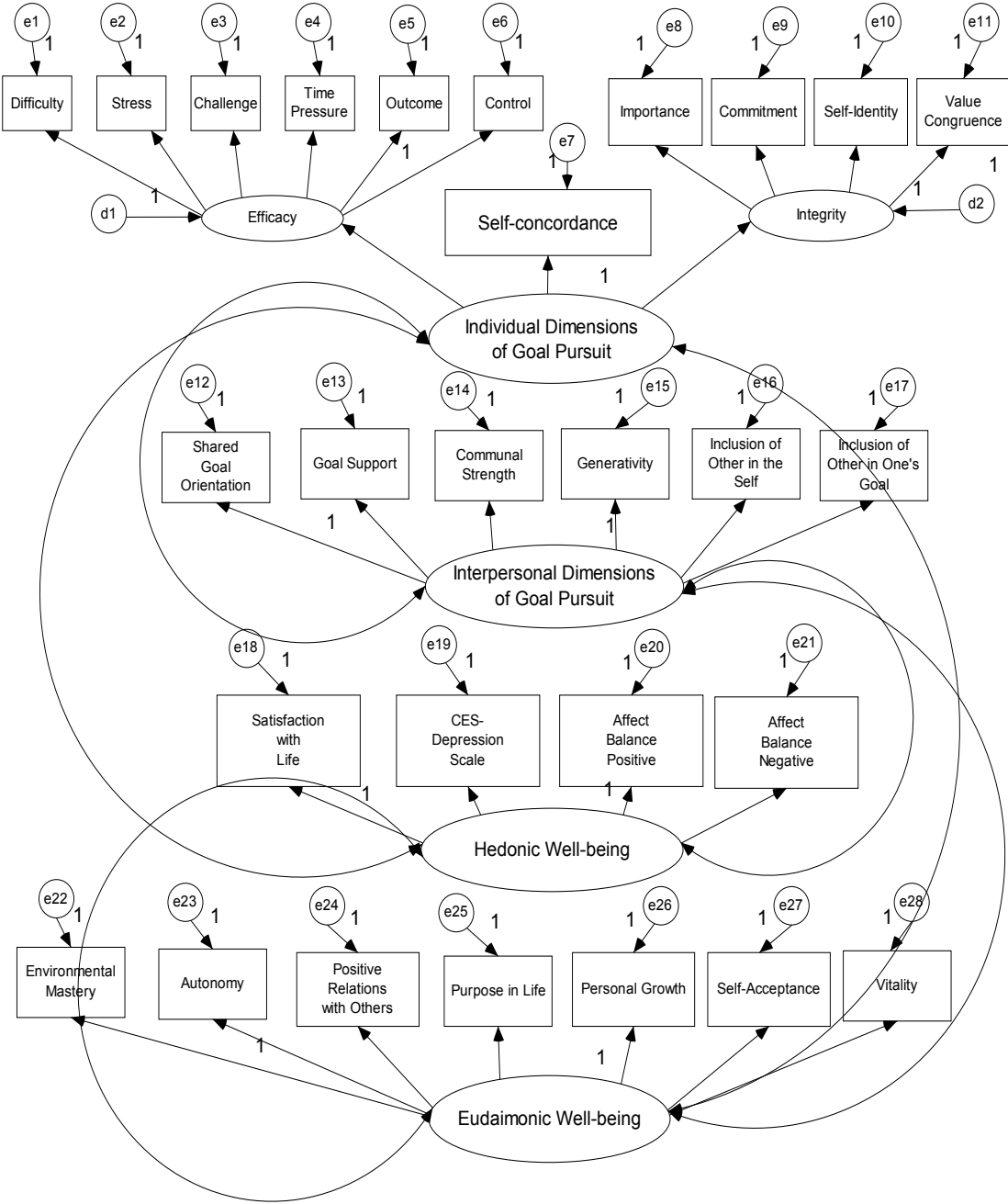


Figure 3.1: Hypothesized Measurement Model.

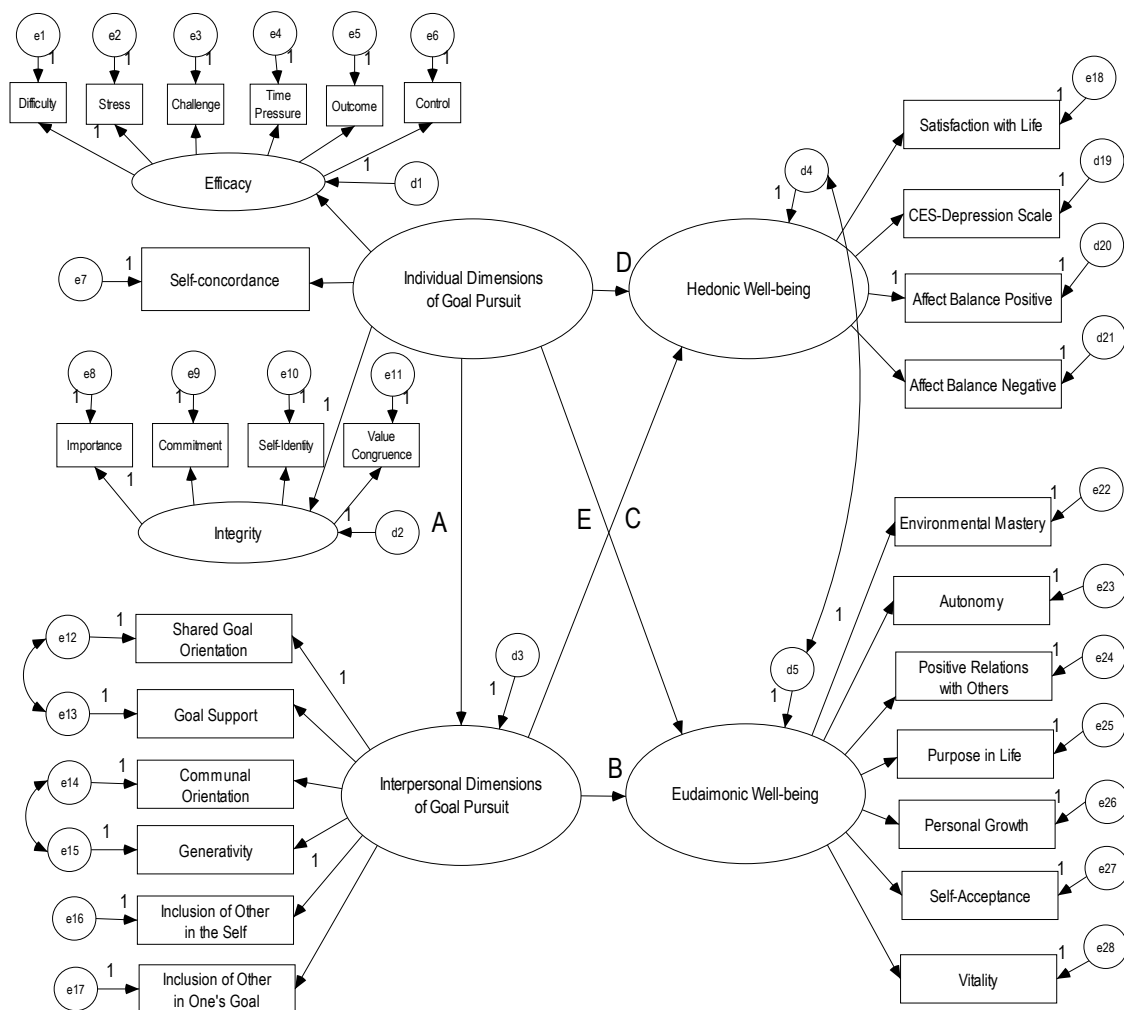


Figure 3.2: Hypothesized Structural Model.

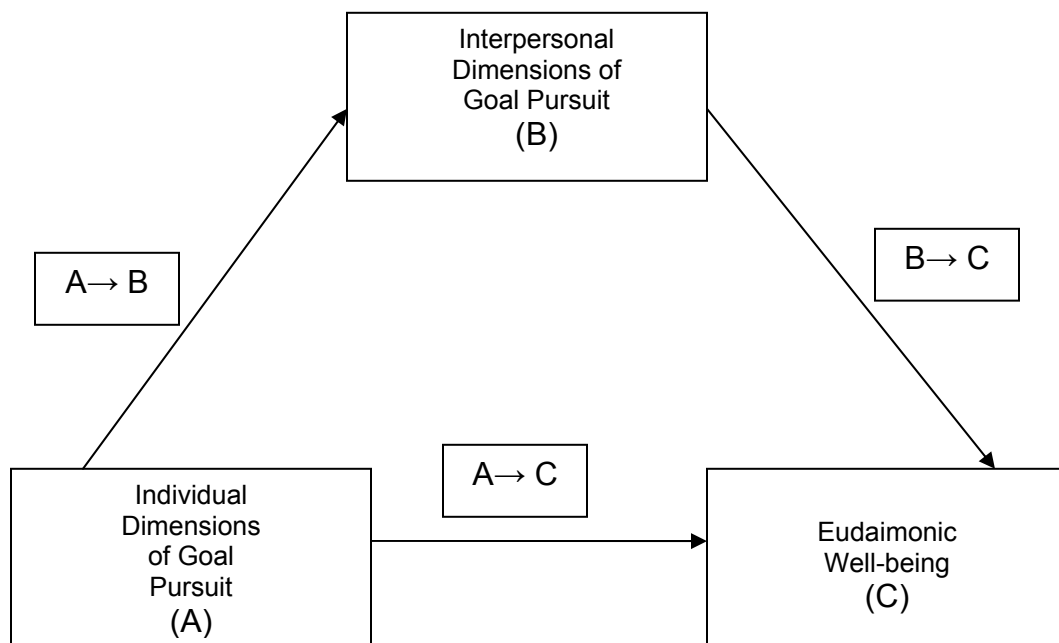


Figure 3.3: Hypothesized Mediation Model.

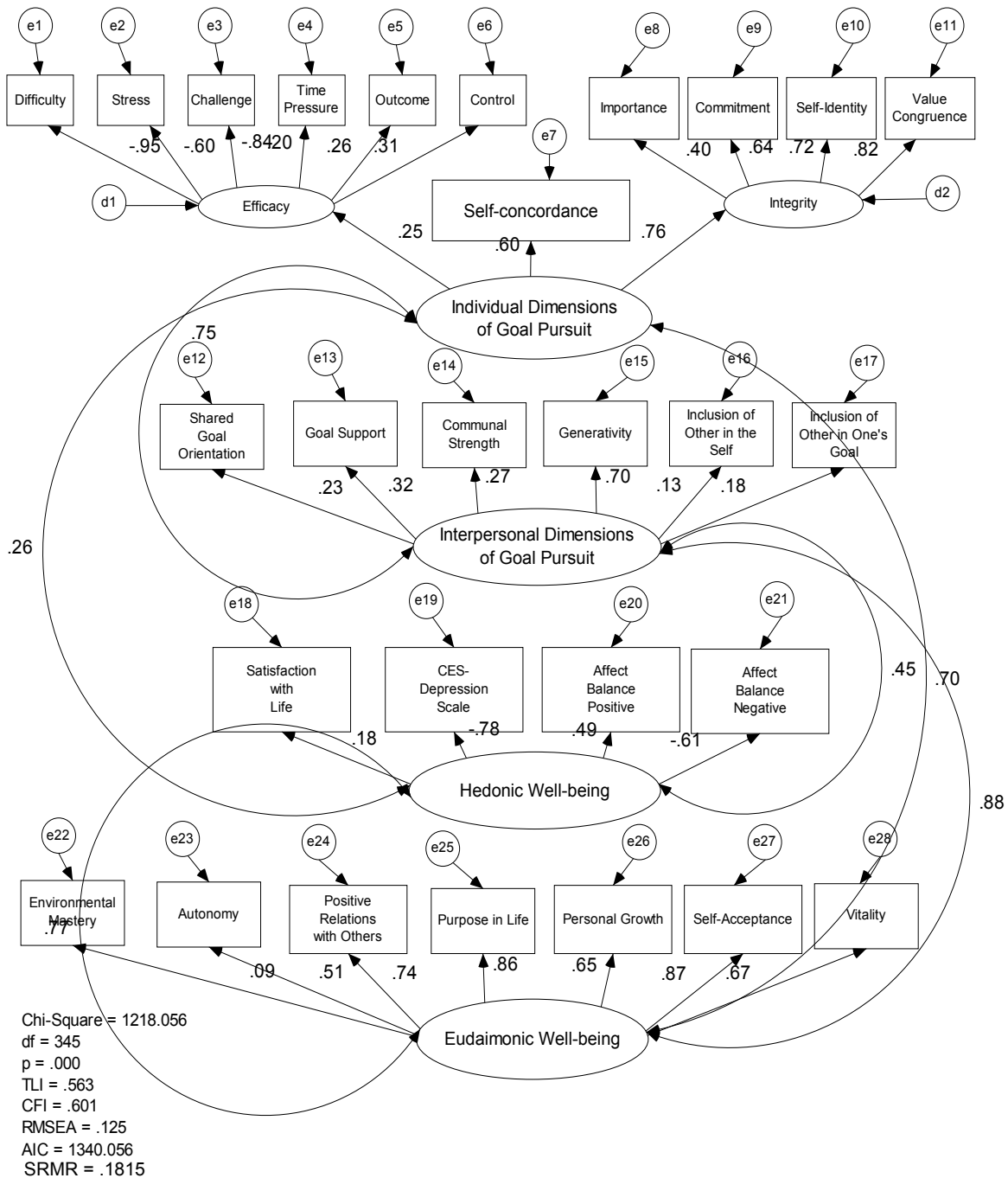


Figure 4.1: Baseline Measurement Model.

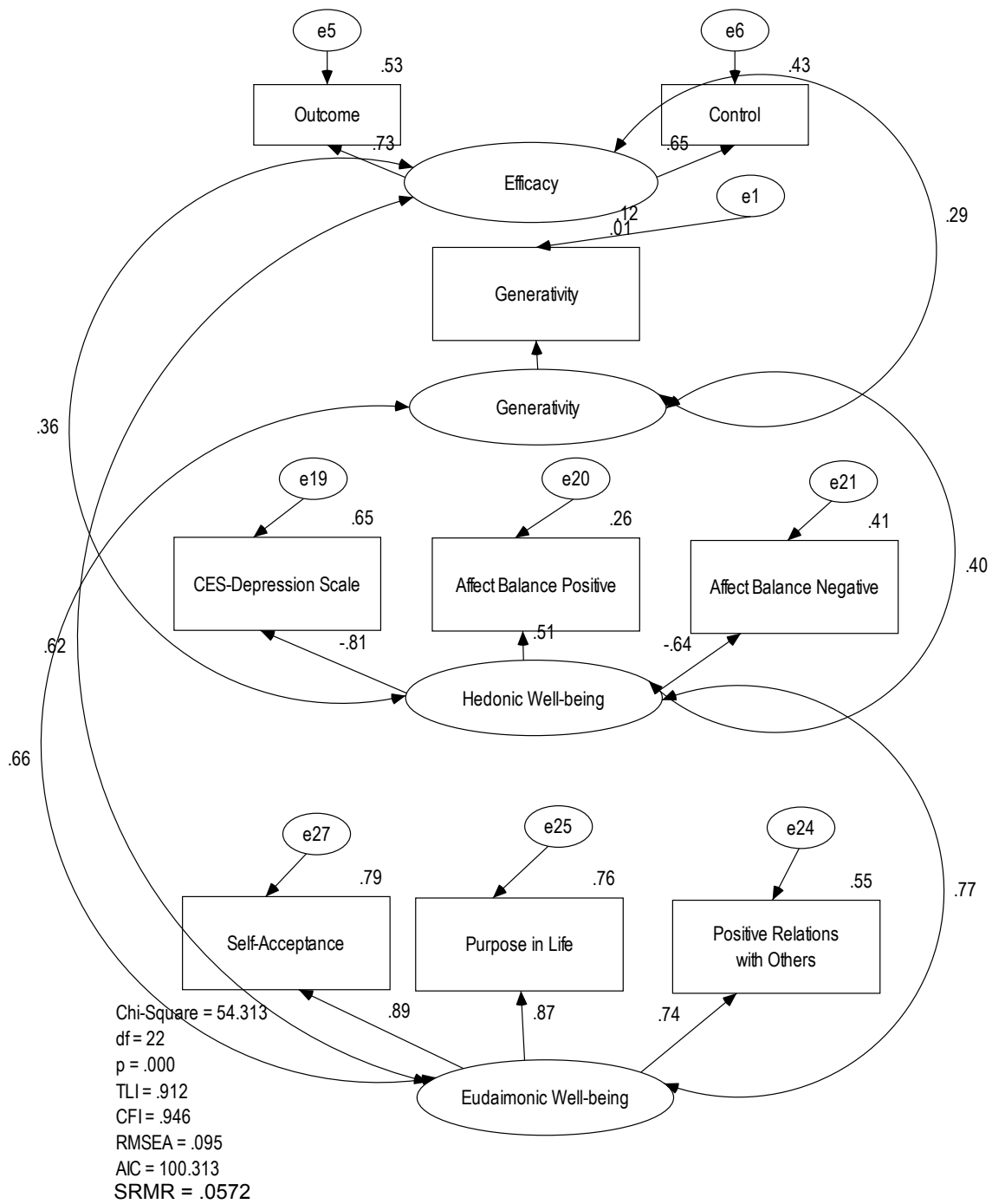


Figure 4.2: Respecified Measurement Model.

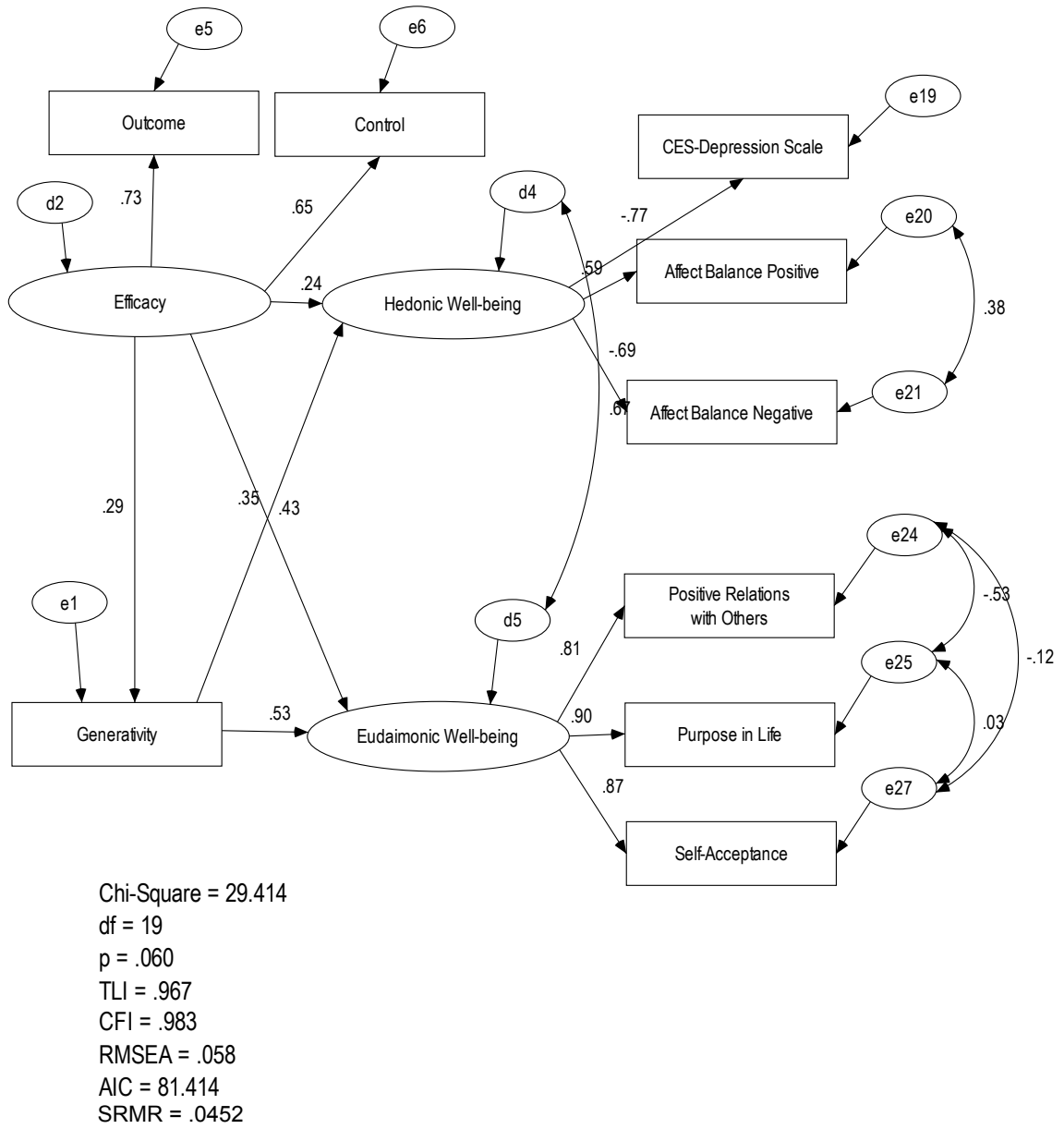


Figure 4.3: Retained Structural Model.

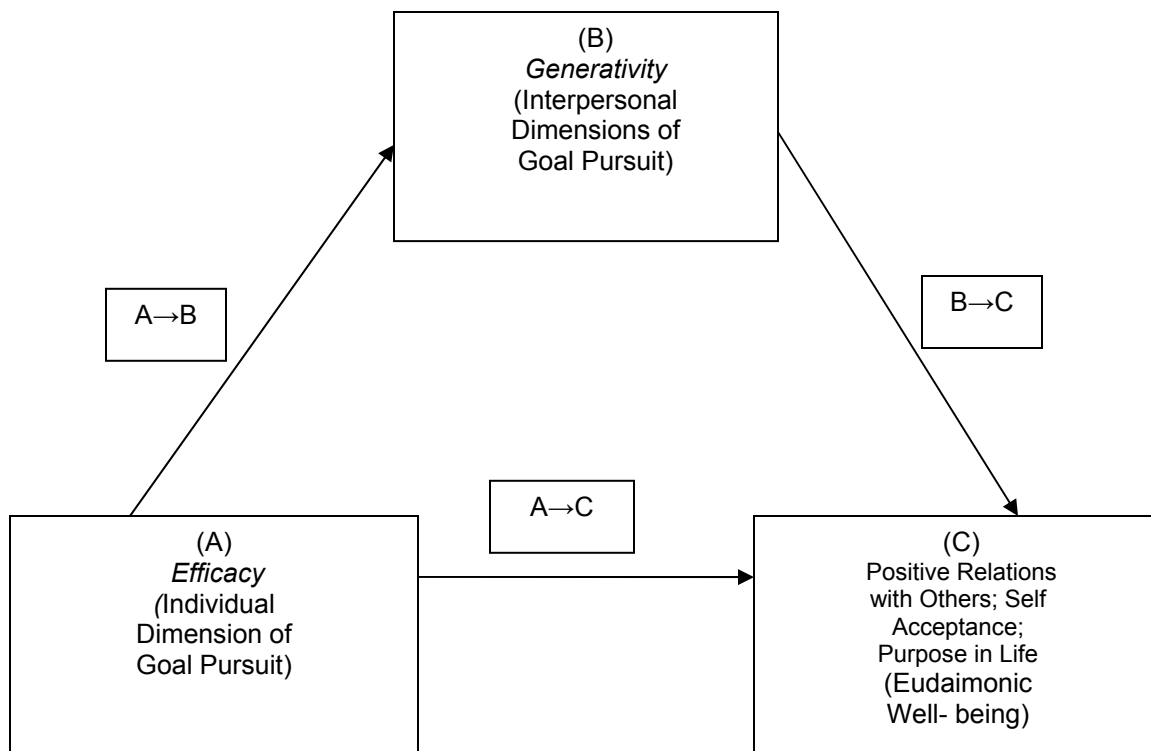


Figure 4.4: Retained Mediation Model.

Table 4.1  
*Means, Standard Deviations, and Pearson Correlations for Retained Model*

| Subscale                                       | 1 | 2      | 3      | 4       | 5       | 6      | 7       | 8       | 9       | Mean   | S.D.   | Range         |
|--|---|--------|--------|---------|---------|--------|---------|---------|---------|--------|--------|---------------|
| 1. Outcome                                     | — | .475** | .270** | -.177*  | .253**  | -.076  | .322**  | .399**  | .407**  | 41.067 | 5.198  | 28-50         |
| 2. Control                                     |   | —      | .113   | -.268** | .130    | -.099  | .261**  | .344**  | .364**  | 37.763 | 6.823  | 21-59         |
| 3. Generativity                                |   |        | —      | -.291** | .409**  | -.198* | .567**  | .581**  | .541**  | 48.302 | 8.671  | 19-66         |
| 4. CESD  |   |        |        | —       | -.440** | .543** | -.474** | -.511** | -.504** | 35.098 | 9.237  | 23-69<br>5-10 |
| 5. Affect<br>Balance<br>Positive               |   |        |        |         | —       | -.181* | .376**  | .441**  | .398**  | 9.104  | 1.063  |               |
| 6. Affect<br>Balance<br>Negative               |   |        |        |         |         | —      | -.373** | -.436** | -.450** | 7.062  | 1.529  | 5-10          |
| 7. PWB<br>Positive<br>Relations With<br>Others |   |        |        |         |         |        | —       | .595**  | .674**  | 66.238 | 11.721 | 30-84         |
| 8. PWB<br>Purpose in Life<br>Scale             |   |        |        |         |         |        |         | —       | .791**  | 66.347 | 11.771 | 31-84         |
| 9. PWB Self-<br>Acceptance<br>Scale            |   |        |        |         |         |        |         |         | —       | 65.11  | 13.431 | 20-84         |

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

\* . Correlation is significant at the 0.05 level (2-tailed).



Table 4.2  
*Multivariate Normality*

| Variable                         | Skew   | Z-Score | Kurtosis | Z-Score | >  3.29 |
|----------------------------------|--------|---------|----------|---------|---------|
| Value Congruence                 | -.619  | -3.225  | -.243    | -0.632  |         |
| Self-Identity                    | -.732  | -3.818  | .654     | 1.704   | x       |
| Commitment                       | -.677  | -3.531  | .108     | 0.280   | x       |
| Importance                       | -.220  | -1.146  | -.655    | -1.706  |         |
| Control                          | -.256  | -1.332  | -.376    | -.980   |         |
| Outcome                          | -.403  | -2.102  | -.335    | -.872   |         |
| Time Pressure                    | -.519  | -2.707  | .093     | .244    |         |
| Challenge                        | -.403  | -2.102  | -.224    | -.583   |         |
| Stress                           | -.180  | -0.940  | .262     | .684    |         |
| Difficulty                       | -.332  | -1.730  | -.014    | -.036   |         |
| Inclusion of Other in One's Goal | -.079  | -0.414  | -.724    | -1.888  |         |
| Self-Concordance                 | -.070  | -0.364  | -.504    | -1.312  |         |
| Vitality                         | -1.057 | -5.507  | 1.372    | 3.576   | x       |
| Self-Acceptance                  | -.856  | -4.463  | .219     | .570    | x       |
| Personal Growth                  | -.606  | -3.161  | .016     | .042    |         |
| Purpose in Life                  | -.720  | -3.751  | -.150    | -.391   | x       |
| Positive Relations with Others   | -.548  | -2.855  | -.168    | -.437   |         |
| Autonomy                         | -.214  | -1.113  | -.071    | -.186   |         |
| Environmental Mastery            | -.498  | -2.595  | -.107    | -.280   |         |
| Affect Balance Negative          | .351   | 1.832   | -.839    | -2.187  |         |
| Affect Balance Positive          | -1.197 | -6.238  | 1.108    | 2.887   | x       |
| CES-D                            | 1.374  | 7.161   | 1.681    | 4.382   | x       |
| Satisfaction with Life           | -.580  | -3.025  | -.311    | -.812   |         |
| Inclusion of Other in the Self   | -.633  | -3.302  | .237     | .618    | x       |
| Generativity                     | -.323  | -1.682  | .082     | .214    |         |
| Communal Orientation             | -.845  | -4.407  | .746     | 1.944   | x       |
| Goal Support                     | -1.018 | -5.303  | .722     | 1.882   | x       |
| Shared Goal Orientation          | .362   | 1.886   | -.387    | -1.009  |         |

Table 4.3

*Convergent Validity*

| Indicator                        |   | Latent Factor                            | Estimate | S.E.  | S.E.<br>x2 | Estimate<br>>2x S.E. |
|----------------------------------|---|--|----------|-------|------------|----------------------|
| Efficacy                         | ← | Individual Dimensions of Goal Pursuit    | .536     | .242  | .484       | x                    |
| Difficulty                       | ← | Efficacy                                 | -3.183   | .805  | 1.610      | x                    |
| Stress                           | ← | Efficacy                                 | -2.141   | .577  | 1.154      | x                    |
| Challenge                        | ← | Efficacy                                 | -2.956   | .748  | 1.496      | x                    |
| Time Pressure                    | ← | Efficacy                                 | .817     | .386  | .772       | x                    |
| Outcome Control                  | ← | Efficacy                                 | .642     | .248  | .496       | x                    |
| Self-concordance                 | ← | Individual Dimensions of Goal Pursuit    | 11.039   | 1.612 | 3.224      | x                    |
| Integrity                        | ← | Individual Dimensions of Goal Pursuit    | 1.173    | .282  | .564       | x                    |
| Importance                       | ← | Integrity                                | 1.576    | .382  | .806       | x                    |
| Commitment                       | ← | Integrity                                | 2.307    | .403  | .804       | x                    |
| Self-Identity                    | ← | Integrity                                | 3.769    | .622  | 1.244      | x                    |
| Value Congruence                 | ← | Integrity                                | 3.359    | .536  | 1.072      | x                    |
| Shared Goal                      | ← | Interpersonal Dimensions of Goal Pursuit | 1.000    |       |            |                      |
| Communal Strength                | ← | Interpersonal Dimensions of Goal Pursuit | 2.621    | .851  | 1.702      | x                    |
| Generativity                     | ← | Interpersonal Dimensions of Goal Pursuit | 5.904    | .769  | 1.538      | x                    |
| Inclusion of Other in the Self   | ← | Interpersonal Dimensions of Goal Pursuit | .168     | .117  | .234       | x                    |
| Inclusion of Other in One's Goal | ← | Interpersonal Dimensions of Goal Pursuit | 1.320    | .622  | 1.244      | x                    |
| Satisfaction with Life           | ← | Hedonic Well-being                       | 1.000    |       |            |                      |
| CES-D                            | ← | Hedonic Well-being                       | -6.854   | .687  | 1.374      | x                    |
| Affect Balance Positive          | ← | Hedonic Well-being                       | .506     | .086  | .172       | x                    |
| Affect Balance Negative          | ← | Hedonic Well-being                       | -.901    | .119  | .238       | x                    |
| Environmental Mastery            | ← | Eudaimonic Well-being                    | 1.000    |       |            |                      |
| Autonomy                         | ← | Eudaimonic Well-being                    | 5.259    | .778  | 1.556      | x                    |
| Positive Relations with Others   | ← | Eudaimonic Well-being                    | 8.381    | .772  | 1.544      | x                    |
| Purpose in Life                  | ← | Eudaimonic Well-being                    | 9.598    | .712  | 1.424      | x                    |
| Personal Growth                  | ← | Eudaimonic Well-being                    | 5.830    | .644  | 1.288      | x                    |
| Self-Acceptance                  | ← | Eudaimonic Well-being                    | 11.049   | .807  | 1.614      | x                    |
| Vitality                         | ← | Eudaimonic Well-being                    | 5.267    | .566  | 1.132      | x                    |

Table 4.4  
*Factor Loadings for the Retained Measurement Model*

| Indicators and Latent Variables           |                            | Unstandardized<br>Factor loading | Standard<br>Error | Critical<br>Ratio<br>(Z) | <i>p</i> | Standardized<br>Factor<br>Loading |
|---|----------------------------|----------------------------------|-------------------|--------------------------|----------|-----------------------------------|
| PWB Self<br>Acceptance<br>Scale           | ← Eudaimonic<br>Well-being | 1.164                            | .077              | 15.073                   | ***      | .889                              |
| PWB<br>Positive<br>Relationships<br>Scale | ← Eudaimonic<br>Well-being | .849                             | .078              | 10.945                   | ***      | .744                              |
| PWB<br>Purpose in<br>Life Scale           | ← Eudaimonic<br>Well-being | 1.000                            |                   |                          |          | .872                              |
| CESD                                      | ← Hedonic<br>Well-being    | -13.687                          | 2.418             | -5.661                   | ***      | -.805                             |
| Affect<br>Balance<br>Negative             | ← Hedonic<br>Well-being    | -1.807                           | .362              | -4.997                   | ***      | -.642                             |
| Affect<br>Balance<br>Positive             | ← Hedonic<br>Well-being    | 1.000                            |                   |                          |          | .511                              |
| Outcome                                   | ← Efficacy                 | 1.000                            |                   |                          |          | .727                              |
| Control                                   | ← Efficacy                 | 1.179                            | .248              | 4.748                    | ***      | .653                              |
| Generativity                              | ← Generativity             | 1.000                            |                   |                          |          | .116                              |

\*\*\*0.001 significance level (two-tailed).

Table 4.5  
*Latent Variable Correlations for the Retained Measurement Model*

| Variable Name            |                            | Unstandardized<br>Factor Loading | Standard<br>Error | Critical<br>Ratio<br>(Z) | <i>p</i> | Standardized<br>Factor<br>Loading |
|--------------------------|----------------------------|----------------------------------|-------------------|--------------------------|----------|-----------------------------------|
| Hedonic<br>Well-being    | ↔ Efficacy                 | .735                             | .270              | 2.723                    | .006     | .360                              |
| Eudaimonic<br>Well-being | ↔ Efficacy                 | 23.769                           | 4.951             | 4.801                    | ***      | .616                              |
| Eudaimonic<br>Well-being | ↔ Hedonic<br>Well-being    | 4.247                            | .939              | 4.521                    | ***      | .766                              |
| Generativity             | ↔ Efficacy                 | 9.524                            | 3.627             | 2.626                    | .009     | .294                              |
| Generativity             | ↔ Hedonic<br>Well-being    | 1.882                            | .567              | 3.322                    | ***      | .405                              |
| Generativity             | ↔ Eudaimonic<br>Well-being | 57.845                           | 8.969             | 6.449                    | ***      | .658                              |

\*\*\*0.001 significance level (two-tailed).

Table 4.6  
*Factor Loadings for the Retained Structural Model*

| Indicators and Latent Variables                            | Unstandardized<br>Factor loading | Standard<br>Error | Critical<br>Ratio<br>(Z) | <i>p</i> | Standardized<br>Factor<br>Loading |
|--|----------------------------------|-------------------|--------------------------|----------|-----------------------------------|
| Generativity ← Efficacy                                    | .569                             | .198              | 2.870                    | .004     | .292                              |
| Hedonic Well-being ← Efficacy                              | .034                             | .016              | 2.090                    | .037     | .239                              |
| Eudaimonic Well-being ← Efficacy                           | .921                             | .209              | 4.398                    | ***      | .432                              |
| Eudaimonic Well-being ← Generativity                       | .581                             | .079              | 7.329                    | ***      | .530                              |
| Hedonic Well-being ← Generativity                          | .025                             | .007              | 3.636                    | ***      | .352                              |
| CESD ← Hedonic Well-being                                  | -11.415                          | 1.821             | -6.269                   | ***      | -.772                             |
| Affect Balance Positive ← Hedonic Well-being               | 1.000                            |                   |                          |          | .587                              |
| Affect Balance Negative ← Hedonic Well-being               | -1.691                           | .316              | -5.343                   | ***      | -.690                             |
| Outcome ← Efficacy   | .848                             | .170              | 4.972                    | ***      | .727                              |
| Control ← Efficacy   | 1.000                            |                   |                          |          | .653                              |
| PWB Positive Relations with Others ← Eudaimonic Well-being | 1.000                            |                   |                          |          | .811                              |
| PWB Purpose in Life ← Eudaimonic Well-being                | 1.113                            | .111              | 10.006                   | ***      | .899                              |
| PWB Self Acceptance ← Eudaimonic Well-being                | 1.232                            | .112              | 11.026                   | ***      | .873                              |

\*\*\*0.001 significance level (two-tailed).

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