CHARACTER STRENGTHS AND WELL-BEING:

DIFFERENCES IN SOCIAL ACTIVITY AMONG

COLLEGE STUDENTS

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"Gratitude can transform common days into thanksgivings, turn routine jobs into joy, and change ordinary opportunities into blessings." William Arthur Ward

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Abstract: There has been an increase in students seeking counseling services in universities, with depression and anxiety being the most prevalent presenting concerns. Previous research indicates that the use of character strengths has been effective in reducing symptoms of depression and anxiety. Many of the interventions used to develop character strengths and improve well-being involve a social component, yet no research has investigated how social activity relates to the link between character strengths and well-being. In this study, relationships between the following variables were explored: character strengths (love, hope, curiosity, zest), subjective well-being, social activity, and social group participation. Social activity as a mediator of character strengths and well-being was also explored. Data were collected from 254 college-age students, ranging from 18 to 24 years of age ($M = 20.60$). One outlier was removed from the data, ending with 253 total participants, with 67% female (n=169) and 33% male (n=84). Descriptive statistics, frequency statistics, Pearson product-moment correlations, independent samples t-tests, and hierarchical multiple regression were used. Males endorsed higher levels of social activity ($M = 24.67$, $SD = 4.93$) than female participants ($M = 23.07$, $SD = 4.01$). Additionally, there were statistically significant differences in subjective well-being and endorsement of love scores, with females scoring higher than male participants. Consistent with previous research, results show a moderate positive correlation between subjective well-being and love ($r(250) = .467$, $p < .01$), hope ($r(250) = .357$, $p < .01$), curiosity ($r(250) = .387$, $p < .01$), zest ($r(250) = .429$, $p < .01$). Inconsistent with previous research, a significant relationship between social activity and well-being was not found. A positive significant relationship between social group participation and well-being was found $r(250) = .197$, $p < .01$ as well as between social group participation and love $r(250) = .127$, $p < .05$, curiosity $r(250) = .159$, $p < .05$, and zest $r(250) = .184$, $p < .05$. No significant relationship was found for hope. Results of the Sobel test suggest that mediation was not present. Implications of these findings as well as limitations and directions for future research are discussed.

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INTRODUCTION

Counseling services on college campuses are designed to meet the mental health needs of the student body. Many counseling centers offer a variety of services to their students and help students with a range of presenting concerns. Recently, there has been an increase in students seeking services. The American College Counseling Association (ACCA, 2012) stated that 88% of college counseling center directors reported a growing trend in the number of students with severe psychological problems on college campuses, with 73% of those directors stating that crises requiring immediate response had increased. Depression and anxiety remain the most frequent reason for seeking counseling (ACCA, 2012). Additionally, because of the high number of students needing services, directors commonly reported that non-critical clients are seen less frequently (ACCA, 2012). In other words, students who request services may not have the opportunity to receive services due to this high demand.

Research indicates that the traditional-age college population (ages 18-25) undergoes several developmental changes during the college years (Justice & Dornan, 2001). These include both biological and psychological changes, and many of these changes can contribute to increased psychological distress in college students (Blimling, 2010). The human brain does not reach full maturity until at least the mid-20s, meaning that emotional regulation, problem-solving

and risk-taking processes are still developing during the college years (Giedd, 2004).

Biologically, men and women of college age reach their physical prime, or the time where their bodies develop full muscular potential including speed, dexterity, and overall strength (Blimling, 2010). However, maturation develops at different paces for different people, and people tend to compare themselves to peers as a way of normalizing these changes. Comparison can affect how students feel about themselves and how they socialize with others. Maturation has been shown to psychologically affect self-concept and early identity formation (Blimling, 2010). The college age is also a prime time for early identity development (e.g. character and moral development), yet many students tend to conform to societal standards rather than become independent thinkers (Clinchy, 1990). Additionally, social development is impacted during the college years. Chickerling and Reisser (1993) identified interactions with diverse peer groups as one source of influence within the college environment that impacts student development. Interactions with peers and fostering diverse, positive relationships have been found to be key ingredients in influencing college student development (Chickering & Reisser, 1993). College students also tend to develop on a variety of other psychological dimensions including: character, values, attitudes, knowledge, beliefs, self-concept, competences, and personality (Astin, 1993; Hamrick, Evans, & Schuh, 2002; Pascarella & Terenzini, 1991).

One way college student mental health could be addressed is through positive psychology. One of the central components of the field of positive psychology is investigating what makes life most worth living (Park, Peterson, & Seligman, 2004). In essence, positive psychology seeks to understand how character strengths relate to happiness and well-being. However, this relationship alters at different points during an individual's lifespan (Isaacowitz, Vaillant, & Seligman, 2003). Further exploring these concepts could shed light on ways to

improve student mental health and target symptoms of depression and anxiety. The high demand

of students seeking university counseling services, and some of the preliminary links between

character strengths and well-being, indicate a need for further exploration of these concepts with

this population. Moreover, a need exists for more research on how social activity relates to these

factors, specifically for a population in which identity formation is so important. Future research

could be invaluable to the field of psychology and contribute to the efficacy of university

counseling center services.

CHAPTER II

REVIEW OF LITERATURE

The Field of Positive Psychology

For years, a focus on pathology has dominated much of the discipline of psychology (Seligman & Csikszentmihalyi, 2000). Seligman, Parks and Steen (2004) discussed how the field of psychology has been largely devoted to understanding suffering and repairing weakness instead of focusing on everyday well-being. Counseling psychology has placed an emphasis on fostering human capacities, satisfaction, and well-being and continues to be one of the few disciplines that highlights a positive psychology approach (American Psychological Association, n.d). Similarly, through the works of Martin E. P. Seligman and Mihaly Csikszentmihalyi, the field of positive psychology emerged as an approach to viewing positive subjective experiences, improving quality of life, and finding meaning (Seligman & Csikszentmihaly, 2000).

The field of positive psychology is defined as "the study of positive emotion, positive character, and positive institutions" (Seligman, Steen, Park, & Peterson, 2005, p. 410). Positive psychology is about exploring concepts relating to the past (well-being, contentment, and satisfaction); present (flow and happiness); and future (hope and optimism) of the lives of individuals (Seligman & Csikszentmihaly, 2000). Additionally, Gable and Haidt (2005) define positive psychology as "the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions" (p. 103).

The field of positive psychology is also not without its criticisms. Gable and Haidt (2005) discussed that one major criticism of this movement is the assumption that if there is a positive psychology, then the rest of psychology must be negative. Additionally, if positive psychology has become a necessity in this field, this must mean that "negative psychology" has taught very little (Gable and Haidt, 2005). Seligman et al. (2005) stated that research findings from positive psychology are intended to supplement what is already known about the human experience, not replace it. In fact, the goal is to have a balanced and complete outlook, including peaks and valleys, suffering and happiness (Seligman et al., 2005). Gable and Haidt (2005) stated that the aim of positive psychology is to complement an existing knowledge base and to build up what we already know about resilience and strength.

Therefore, the future of this field is looking bright. The field of psychology is striving for balance. By equalizing the focus of remedying deficits with nurturing strengths, positive psychologists are optimistic for the future (Seligman et al., 2004). Gable and Haidt (2005) stated that the future task of positive psychology is to "understand the factors that build strengths, outline the contexts of resilience, ascertain the role of positive experiences, and delineate the function of positive relationships with others" (p. 108). The hope is that positive psychology will help psychologists to understand and help to nurture elements that allow individuals, societies and communities to flourish (Seligman & Csikszentmihalyi, 2000).

Well-being and positivity prior to positive psychology. Although the field of psychology has primarily focused on repairing weakness (Seligman et al, 2004), others prior to Seligman and Csikzentmihaly (2000) have also looked to explore the concepts of well-being and positivity. For instance, counseling psychology, developmental psychology and humanistic psychology have all focused on optimal development (APA, n.d.). Ryff and Keyes (1995)

developed a multidimensional model of psychological well-being known as the "Ryff Scales." Ryff and Keyes (1995) found that six dimensions of psychological wellness (Autonomy, Environmental Mastery, Personal Growth, Positive Relations With Others, Purpose in Life, Self-Acceptance) were found to be significant predictors of well-being (Ryff & Keyes, 1995). Additionally, Andrews and McKennel (1980) found that life satisfaction, as a key indicator of well-being, complemented happiness.

Others in the field of developmental psychology have also contributed to the knowledge base of well-being prior to the emergence of positive psychology. A theory of intrinsic human motivation, personality development and well-being known as Self Determination Theory (SDT) was developed by Deci and Ryan (1985). Self Determination Theory has added information about human tendencies toward psychological growth and optimal functioning, stating that when a person's three basic needs of autonomy, relatedness and competence are met within a social context, that person tends to experience higher levels of motivation and well-being (Ryan, 1995).

The VIA Classification of Strengths

The creation of the VIA. Many scholarly articles and books are being published through the positive psychology movement, including one of the most influential books for the field of positive psychology entitled *Character Strengths and Virtues: A Handbook and Classification* (CSV; Peterson & Seligman, 2004). This handbook provides a complete description of a new classification system, termed the VIA Classification of Strengths. It includes the definition of strength from a behavioral perspective, theoretical and research background of strength, and correlates of strength, as well as individual difference measures (LaFollette, 2010). Seligman et al. (2005) discussed how this classification system represents the most ambitious project undertaken to date in the field of positive psychology. The purpose of

developing a classification system for strengths and virtues was to provide psychologists with a better understanding of psychological well-being as the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* of the American Psychiatric Association (2000) does for psychological disorders (Seligman et al., 2005). It is intended to be a positive complement to the DSM. Supported by the field of positive psychology and initiated by the Values in Action (VIA) Institute, the VIA Classification of Strengths is one of the first attempts to operationalize character for the purpose of empirical research (Karris & Craighead, 2012).

The general scheme of the VIA Classification of Strengths relies on six overarching virtues, which are cross-culturally endorsed: wisdom, courage, humanity, justice, temperance, and transcendence (Seligman et al., 2005). Organized under these broad virtues are 24 character strengths: creativity, curiosity, open-mindedness, love of learning, perspective, authenticity, bravery, persistence, zest, kindness, love, social intelligence, fairness, leadership, teamwork, forgiveness, modesty, prudence, self-regulation, appreciation of beauty and excellence, gratitude, hope, humor, and religiousness (Karris & Craighead, 2012). Table 1 lays out the order of these strengths and virtues and provides definitions of each.

How character strengths are defined. Scholars including Cskikzsentmihalyi, Diener, Seligman, Vaillant, and Peterson examined previous literature and historical and contemporary figures to compile a list of potential character strengths for the VIA (Karris & Craighead, 2012). The list of potential strengths was then narrowed to the final 24 after screening for the following criteria. All VIA character strengths: (a) are recognizable across cultures, (b) contribute to individual fulfillment, satisfaction, and happiness, (c) contain moral value, (d) produce admiration, not jealousy, (e) contain obvious antonyms that are "negative," (f) are trait-like in nature, (g) are measurable, (h) lack redundancy with other character strengths, (i) are embodied

in some individuals, (j) are demonstrated by some children or youth, (k) lack presence in some individuals, and (l) are a deliberate target of societal practices that try to cultivate it (Seligman et al., 2005).

The strengths included in the VIA classification system are measured by individual differences and are approached as dimensional, not categorical like DSM mental disorders (McGrath, Rashid, Park, & Peterson, 2010; Karris & Craighead, 2012). They are reflected in a person's thoughts, feelings, and behaviors and exist in degrees (Parks, Peterson, & Seligman, 2004). VIA strengths are also "trait-like" in nature, meaning that they remain stable across situations (Karris & Craighead, 2012). Scholars hypothesize that a genetic component exists and that these strengths are grounded through an evolutionary process, being defined as "predispositions for moral excellence" (Parks, Peterson, & Seligman, 2004). However, they may also be amenable to change, as character can be developed and nurtured (Kerris and Craighead, 2012).

How character strengths are used. Linley and Harrington (2006) stated, "strengths are natural, they come from within, and we are urged to use them, develop them, and play to them by an inner, energizing desire. Further, when we use our strengths, we feel good about ourselves, we are better able to achieve things, and we are working toward fulfilling our potential" (p. 41). Research indicates that character strengths can be developed and nurtured through the use, or endorsement, of strengths. VIA strengths are used through purposeful positive interventions, developed to use and enhance character strengths and cultivate positive feelings, behaviors, or cognitions (Sin & Lyubomirsky, 2009). These positive interventions are also intended to positively impact a person's satisfaction with life, or subjective well-being (Proyer, Ruch and Buschor, 2012).

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Initially, Seligman et al. (2006) found that the use of positive psychotherapy was effective in reducing symptoms of depression and anxiety in children and adults. It was found that character strengths embodied 60-70% of the interventions that make up positive psychotherapy, and therefore future interventions were purposefully constructed to utilize a person's signature strengths (their highest endorsed strengths). These interventions sought to increase engagement, meaning and positive emotion through the use and development of character strengths (Seligman et al., 2006).

More recently, the Zurich Strengths Program was constructed by Proyer, Ruch and Buschor (2012) as a character strengths-based positive intervention model in which participants were assigned to interventions relating to the character strengths most highly related to subjective well-being (curiosity, hope, gratitude, and zest), based on the work of Park et al. (2004). These interventions were created for the purpose of using and enhancing the character strengths of curiosity, hope, gratitude, and zest. For *curiosity,* participants were asked to engage in four activities that were new to them. For *hope,* participants conducted what is known as the "one door closes, one door opens" activity, reflecting on how a major loss in a person's life could generate another opportunity. For *gratitude,* participants were asked to write a thankful letter to another person. Finally, for *zest*, participants were asked to add other challenging tasks to their daily routine in the areas of physical activity/sport and social contact. Participants who participated in the program revealed an increase in life satisfaction at the conclusion of the interventions (Proyer, Ruch & Buschor, 2012).

Correlates and outcomes among character strengths. Through the use of the Values in Action Inventory of Strengths (VIA-IS), interesting empirical findings have surfaced. One of these findings includes the discovery of the most commonly endorsed strengths worldwide.

Park, Peterson & Seligman (2006)discovered that the most commonly endorsed strengths in the

U.S. are: kindness, fairness, authenticity, gratitude, and open-mindedness. The least endorsed

strengths include: prudence, modesty, and self-regulation. These endorsements also converged

with the profiles of respondents in other countries (Park et al., 2006). There has also been a

substantial volume of literature in the past decade devoted to the relationship of character

strengths to mental health, including depression and anxiety, stress and trauma, and happiness.

Depression and anxiety. Huta and Hawley (2010) explored correlations between

character strengths, vulnerabilities, and forms of well-being. One of the most remarkable

findings in this study was the predictive role that strengths, in particular hope, appreciation of

beauty and excellence, and spirituality, play in the recovery of depressive symptoms. Park and

Peterson (2008) discovered that the specific character strengths of zest, leadership and hope were

heavily related to fewer problems with anxiety and depression. These specific character

strengths were also consistently correlated with higher levels of life satisfaction.

Similarly, using one's signature strengths decreased depression and increased happiness

in another study (Gander, Proyer, Ruch and Wyss, 2012). By using and cultivating signature

strengths in one's own life, the experience of positive emotions was facilitated. It was also found

that the relationship between character strengths and health was mediated by the use of positive

coping mechanisms (Gander et al., 2012). Additionally, McCullough et al. (2002) found

evidence that gratitude is related to lower levels of negative emotions, such as anxiety,

depression, and envy.

Stress and trauma. Rich, Dooley, and Florell (2006) investigated the relationships

among adolescent students' levels of hope and various academic and psychological indicators of

school adjustment. The researchers found that hope is negatively correlated with psychological

distress and school maladjustment. In another study, researchers investigated how character strengths are related to posttraumatic growth in adults (Peterson, Park, Pole, D'Andrea, & Seligman, 2008). Posttraumatic growth has been defined to include improved relationships with others, greater appreciation of life, openness to new possibilities, spiritual development, and enhanced personal strength (Peterson, Park, Pole, D'Andrea, & Seligman, 2008). Researchers found that posttraumatic growth may entail the strengthening of character, as two of the factors (interpersonal – humor, kindness, leadership, love, social intelligence, teamwork; and cognitive – beauty, creativity, curiosity, and learning) were positively associated with the number of potentially traumatic events (Peterson, Park, Pole, D'Andrea, & Seligman, 2008).

Happiness. Park and Peterson (2006) found that among children as young as 3 years old, associations between certain strengths of character and happiness exist. Seligman et al. (2005) found that using one's signature strengths increases happiness levels and decreases depressive symptoms. Other researchers have also confirmed this (Gander et al., 2012; Mongrain & Anselmo-Matthews, 2012). Many researchers have focused on specific character strengths' relationship to happiness. Polak and McCullough (2006) found that gratitude may lead to a reduction in materialism, and thus an increase in happiness. Otake, Shimai, Tanaka-Matsumi, Otsui, and Fredrickson (2006) found that an intervention to increase kindness in turn also increased happiness.

Research on character strengths among college students. Some research has recently emerged investigating character strengths in the population of college students. One of the early works is that of Govindji and Linley (2007), who found that students who used their strengths more reported higher levels of subjective and psychological well-being, confidence, self-esteem, and psychological vitality. Lounsbury, Fisher, Levy and Welsh (2009) examined character

strengths in relation to academic success in college students. They examined character strengths in relation to two indicators of academic success: student satisfaction and grade point average (GPA). Researchers found that all 24 character strengths were positively and significantly related to General Life Satisfaction; 22 to College Satisfaction; and 16 to GPA. More specifically, they also found that specific character strengths (hope, social intelligence, self-regulation and fairness) were predictors of college satisfaction, meaning that students who use and develop the strengths of hope, social intelligence, self-regulation and fairness are more likely to become more satisfied with their college experience. Additionally, the strengths perseverance, love of learning, humor, fairness, and kindness also predicted GPA (Lounsbury, et al., 2009) and perseverance, love, gratitude, and hope predicted academic achievement in college students (Park & Peterson, 2009).

More recently, Karris and Craighead (2012) explored endorsement of strengths among college students. Researchers found that students favorably reported possessing all 24 character strengths. The most frequently endorsed were: humor, love, kindness, integrity, and social intelligence. Students least often endorsed modesty/humility, self-regulation, spirituality, love of learning, and prudence. Gender differences were also found for 11 of the 24 character strengths, as females scored higher than males on kindness, love, gratitude, forgiveness, appreciation of beauty and excellence, prudence, fairness, and leadership whereas males scored significantly higher than females on creativity, bravery, and self-regulation.

The relationship between character strengths and well-being continues to be heavily explored. The goal of positive psychology is well-being (Seligman, 2011) and one of the primary criteria for character strengths is that they must contribute to individual fulfillment,

satisfaction, and happiness (Seligman et al., 2005). Positive psychology focuses on fostering and improving everyday well-being, and therefore, well-being should also be highlighted.

Subjective Well-being

  History and conceptualization of subjective well-being. Throughout history, there has been some debate as to what defines a good life or fulfilled existence. Philosophers believed happiness to be the ultimate motivation and highest good for human action (Diener, 1984). In the book *Correlates of Avowed Happiness* in 1957, Wilson was one of the first to give a broad review of subjective well-being, stating that a happy person is a "young, healthy, well-educated, well-paid, extroverted, optimistic, worry-free, religious, married person with high self-esteem, job morale, modest aspirations, of either sex and of a wide range of intelligence" (as cited in Diener, Suh, Lucas, and Smith, 1999). Other comparable terms such as happiness, life satisfaction, and positive affect have ben used interchangeably with subjective well-being, although some debate how similar these concepts are. Since then, scholars have focused less on the demographic characteristics of subjective well-being and more on the underlying components (Diener, et al., 1999).

  Diener (2009) discussed how research has identified two broad aspects of subjective well-being: an affective component that includes both pleasant and unpleasant affect and a cognitive component, also commonly referred to as life satisfaction. These two components are moderately correlated (Chamberlain, 1988). However, many researchers choose to measure these components separately as they can provide complementary information. The affective component of subjective well-being has been a popular topic to measure for many researchers (Diener, 2009). The cognitive component, also referred to as life satisfaction, refers to a

conscious cognitive judgment in which an individual evaluates his or her life based on the individual's own set of standards (Diener, 2009).

The general concept of well-being refers to experience and optimal psychological functioning and is not the mere absence of mental illness (Ryan & Deci, 2001). In other words, it is something humans strive to improve and is not just a static state of being. Diener, Oishi, and Lucas (2002) defined subjective well-being as "a person's cognitive and affective evaluations of his or her life" (p. 63). The affective element of subjective well-being includes both experiencing high levels of pleasant emotions and moods, and low levels of negative emotions and moods. The cognitive aspect of subjective well-being is life satisfaction (Synder & Lopez, 2002). Similarly, Diener (2009) stated that subjective well-being is mainly concerned with why and how people experience their lives in positive ways, including both affective reactions and cognitive judgments.

Differences in happiness and well-being. Many researchers have used the terms happiness and well-being interchangeably, as if differences do not exist. Many early measures of subjective well-being polled people about their happiness and life satisfaction using simple global surveys, implying that subjective well-being can be directly measured by levels of happiness (Snyder & Lopez, 2002). However, Raibley (2012) stated that happiness and well-being differ fundamentally as well as conceptually, metaphysically, and empirically. In other words, happiness is a necessary, but not sufficient component for higher levels of well-being. The cognitive component of well-being is a more stable indicator of well-being, however the affective component of well-being describes emotional states that are more susceptible to fluctuate (Ryan & Deci, 2001). Additionally, subjective well-being involves desirable personal characteristics beyond whether a person is happy (Ryan & Deci, 2001). In his book *Flourish: A*

Visionary New Understanding of Happiness and Wellbeing, Seligman (2011) stated that

happiness is a thing and well-being is a construct; well-being has several real, measurable

elements, whereas no single measure can operationalize it. Yet happiness is a real thing that is

felt, but is only measured through another comparable construct (e.g. life satisfaction). Further,

Diener et al. (1999) stated that the construct subjective well-being entails several components

including people's emotional responses, domain satisfactions, and global judgments of life

satisfaction. Raibley (2012) critiqued two conceptual connections that have been accepted as

fact, stating: (a) happiness and well-being do not have the same fundamental determinants, and

(b) a person's degree of happiness does not assess his or her degree of well-being. He further

argued that happiness is not a sufficient condition for high levels of well-being because

happiness is only beneficial when it is valued.

     Well-being theory. Around 2011, well-being became the new goal and topic of positive

psychology, replacing happiness and the authentic happiness theory. Well-being theory

(Seligman, 2011) was constructed from five measureable elements. These five elements include:

positive emotion, engagement, relationships, meaning and purpose, and accomplishment

(Seligman, 2011). Unlike happiness, no one element defines well-being, but each of these five

elements contributes to it. In other words, with authentic happiness theory the topic was

happiness, the measure for happiness was life satisfaction, and the goal for the theory was to

increase life satisfaction. However, well-being theory is not so linear and simplified. With well-

being theory, the topic is well-being, the measures include positive emotion, engagement,

positive relationships, meaning, and accomplishment, and the goal is to increase flourishing by

increasing those five measures (Seligman, 2011). Flourishing is defined as living in an optimal

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range of human functioning that brings goodness, generativity, resilience, and growth. It is also one overall measure of well-being (Fredrickson & Losada, 2005).

Subjective well-being, health, and longevity. Several researchers have indicated a link between higher levels of subjective well-being and better health and longevity. Early research showed a correlation between subjective well-being and health, yet no causal direction was determined (Diener & Chan, 2011). However, more recently the relationship has been investigated through some longitudinal studies. Lyubormirsky, King, and Diener (2005) conducted a meta-analysis of longitudinal studies and found that subjective well-being is positively correlated with high levels of mental and physical health. More specifically, subjective well-being plays a role in health including its effects on social relationships, stress, accident and suicide rates, coping, healthy behavior, and even immune function.

Additionally, Chida and Steptoe (2008) investigated the relationship between positive well-being and mortality in both healthy and diseased populations. The researchers found that positive moods (e.g. joy, energy, and happiness) and positive characteristics (e.g. hopefulness, optimism, sense of humor, and life satisfaction) were related with a reduced risk of mortality and predicted longevity in healthy populations. Well-being was also related to lowered mortality rates in participants with HIV and renal failure.

Well-being and character strengths. The relationship between character strengths and well-being has been heavily researched in the positive psychology movement (Peterson, 2006). Researchers have found that five positive character strengths (love, hope, gratitude, curiosity, and zest) often correlate quite highly with well-being (Park et al., 2004). Park et al. (2004) also found that the use of signature strengths at work increased workers' well-being and optimal functioning. In another study, Lounsbury (2009) found that general life satisfaction was highly

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correlated to the character strengths love, zest, hope, self-regulation, and curiosity in a college population.

Researchers have also investigated well-being in adolescents and children. Garcia and Moradi (2012) performed a longitudinal study examining the relationships between temperament, character, and subjective well-being at two points in time over a one year period. They found that temperament and character predicted subjective well-being. Rashid et al. (2013) found that the character strengths love, zest, and hope were significantly correlated with well-being in children and adolescents. Govindji and Linley (2007), as mentioned earlier, also discovered some significant findings relating character strengths to well-being in college students. They found that students who used their signature strengths more reported higher levels of subjective well-being, psychological well-being, confidence, self-esteem, and psychological vitality (i.e. having feelings of positive energy).

Character strengths with highest correlations to well-being. Researchers investigated which strengths were most highly correlated with well-being and found that love, hope, zest and curiosity were found to be the most correlated (Park et al., 2004; Lounsbury, 2009).

Love. Love is correlated with well being. (Park et al., 2004) in a college sample (Lounsbury, 2009). The character strength *love* is defined as "valuing close relations with others" (Park et al., 2004). Peterson and Seligman (2004) also described love in three forms: love for individuals who protect and care for us, love for individuals who depend on us for safety and care, and passionate desire for sexual, physical and emotional closeness. Love has also been defined as "trait-like" across time and situation, from attachment in infancy through adulthood (Peterson & Seligman, 2004).

Hope. Hope, described as future-mindedness and optimism (Park et al., 2004), represents the goodness that the future might hold and acting in ways to fulfill those outcomes (Peterson & Seligman, 2004). Hope is also significantly correlated with well being (Park et al., 2004; Lounsbury, 2009). The character strength hope has also been described as "trait-like" and individual differences in hope are stable across decades (Peterson & Seligman, 2004).

Zest. Similarly, zest is correlated with well being (Park et al., 2004; Lounsbury, 2009). Zest, also described as approaching life with energy and excitement, is related to the personality trait extraversion and highly correlated with life satisfaction (Park et al., 2004). Ryan and Frederick (1997) describe zest as a dynamic aspect of well being revealed through feeling alive and energized.

Curiosity. Described as "one's intrinsic interest in ongoing experience" (Peterson & Seligman, 2004, p. 98), curiosity is highly correlated to well being (Parks et al., 2004; Lounsbury, 2009). Curiosity emerges in infancy and is suspected to have a biological basis and be stable across a person's lifetime, meaning that children who are curious become adults who remain curious (Peterson & Seligman, 2004).

Social Activity

Humans are social creatures, and social bonding is present throughout the lifespan (e.g. caretakers, romantic relationships, connection to a larger society) (Cartensen, 1991). However, changes in social activity occur with age. Participating in social activities appears to be more prevalent in younger individuals and tends to diminish from mid-life to older adulthood (Cartensen, 1991). For college students, participating in social activities increases a student's level of social integration, but requires an investment of time and energy (Braxton, Hirschy, & McClendon, 2004). Yet, many students feel as though participating in social activities is worth

that investment. In a sample of college students, 70 percent admitted that participating in social activities in college is more important than academics (Grigsby, 2009). Milem and Berger (1997) found that students who participated in college social activities (e.g. fraternities/sororities, dating) experienced greater levels of social integration and were more likely to be academically involved (e.g. attending classes, completing coursework).

Colleges and universities provide students with many different organizations, clubs, and social gatherings to fit aspects of students' identities (e.g. racial/ethnic groups, LGBT identity, religious/faith based organizations, athletic clubs). Although college students may choose to participate in a variety of social activities, not all types of social interactions foster a sense of belonging (Strayhorn, 2012). Experiencing a sense of inclusiveness and belonging is seen as a basic psychological need (Osterman, 2000). Furthermore, students' sense of belonging is highly correlated with happiness, college completion, and academic success (Strayhorn, 2012).

Social Activity and Well-being.

Substantial research has indicated a relationship between social activity and well-being exists. In fact, Cooper, Okamura, and Gurka (1992) identified social activity as one of the most consistent predictors of people's subjective reports of happiness. Tkach and Lyubomirsky (2006) investigated how people pursue happiness, finding that intentional behaviors such as maintaining relationships and helping others accounted for more variance (52%) than the Big Five personality traits (46%) in individual differences in happiness. Additionally, these intentional behaviors were also found to partially mediate the relationship between personality traits and levels of happiness.

A person's biological disposition towards social activity also appears to be correlated with well-being. The Big Five personality trait of extraversion has been positively correlated

20

with higher levels of well-being, but this relationship is less direct than originally predicted as social affiliation mediates this relationship. In other words, extraversion is related to social affiliation, such as maintaining relationships with others, which is then related to happiness (Tkach & Lyubomirsky, 2006). Additionally, there are several variables which have been suspected to influence the relationship between social activity and well-being. Education and health were suspected to moderate this relationship, but researchers did not find evidence to confirm this (Diener, 1984). Socioeconomic status was found to minimize the relationship between social activity and well-being (Okun, Stock, Haring, & Witter, 1984).

Rationale

There has been a large increase in college students seeking university counseling services (ACCA, 2012). The rise in mental health issues on college campuses can be addressed through positive psychology, and more specifically, through further exploration of character strengths and well-being. Although much research has been conducted on the relationship between character strengths and well-being, few have investigated *how* these strengths improve people's well-being.

Researchers have found that character strengths can be developed and nurtured through the use of these strengths (Karris & Craighead, 2012). The use of character strengths has been found to be a significant, intentional way to increase one's well-being (Linley & Harrington (2006), yet, much of the focus has been on the individual's biological predisposition of character and use of signature strengths, neglecting other environmental variables (such as a person's level of social activity) that could impact well-being. Therefore, more research is needed to investigate how these strengths are used and in what ways the "use" of signature strengths is contributing to increased well-being. Additionally, other demographic variables (e.g. race,

student status, age, gender) have not been heavily researched for character strengths. More research is necessary to further evaluate differences between groups. Social activity has also been highly correlated with well-being, however no research has investigated how social activity specifically relates to character strengths despite the importance that is placed on social engagement in the field of positive psychology. It is evident that social activity is interwoven into the ultimate goal of how an individual flourishes; yet researchers have not directly studied its value to the relationship between character strengths and well being.

With this study, I sought to explore between group differences in males and females relating to character strengths, subjective well-being, social activity, and social group participation, as limited research exists. The character strengths (love, hope, zest, and curiosity) were found to be most highly correlated with well-being (Park et al, 2004; Rashid et al., 2013; Lounsbury, 2009). Therefore, I sought to confirm that relationships between these four character strengths and well-being exist. I also sought to explore the relationship between social activity and well-being. Additionally, I sought to investigate whether social activity mediates the relationship between the character strengths love, hope, zest, and curiosity and well-being. In other words, looking at whether social activity is the mechanism by which character strengths relate to subjective well-being. *Figure 1* highlights this relationship.

Figure 1. Social Activity as a mediator of character strengths and well being.
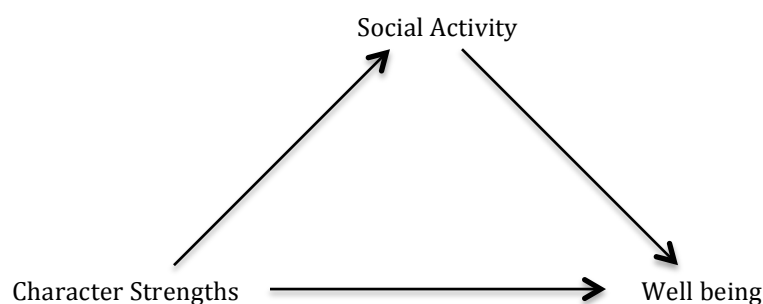
Research Questions

The research questions were as follows:

1. Do differences exist between males and females in:

   a. the character strengths love, hope, zest, and curiosity

   b. subjective well-being

   c. social activity

   d. social group participation

2. Does a relationship exist between the character strengths love, hope, zest, and curiosity and well-being?

3. Does a relationship exist between overall social activity and well-being?

4. Does social activity mediate the relationship between the character strengths love, hope, zest, curiosity and well-being?

Hypotheses

1. Differences between males and females will exist in all four character strengths, in subjective well-being, in social activity, and in social group participation.

2. Consistent with previous research, a relationship will exist between the character strengths love, hope, zest, and curiosity and well-being.

3. Consistent with previous research, a relationship will exist between overall social activity and well-being.

4. Social activity will mediate the relationship between the character strengths love, hope, zest, and curiosity and well-being.

CHAPTER III

METHOD

Participants

All students, ages 18-24, enrolled in college were eligible to participate. No other

eligibility requirements were set. Participants were recruited using three different methods. The

first was through the SONA System at a large Midwestern university. This computerized online

system allows researchers to post studies for recruitment, instructors to encourage participation,

and subjects to voluntarily sign up for participation. Secondly, participants were recruited by

snowball sampling. Finally, participants were recruited through the primary investigator's

personal contacts via email and Facebook. Data was collected from 254 college-age students,

ranging from 18 to 24 years of age ($M = 20.60$). One outlier was removed from the data, ending

with 253 total participants, with 67% female (n=169) and 33% male (n=84). See Table 2 for

demographic information regarding this sample.

Table 2.

Participants' age, gender, race, and student status (n=253).

Characteristics	N	%	Mean	Total N
Age			20.6	253
18	9	3.6		
19	65	25.7		
20	62	24.5		

21	48	19.0		
22	34	13.4		
23	22	8.7		
24	13	5.1		
Gender			-	253
Male	84	33.2		
Female	169	66.8		
Other	0	0		
Race			-	251
European/White	190	75.1		
Black	14	5.5		
Hispanic	9	3.6		
Asian	4	1.6		
Biracial/Multiracial	14	5.5		
Other	20	7.9		
Unknown	2	0.8		
Student Status			-	251
Freshman	24	9.5		
Sophomore	72	28.5		
Junior	73	28.9		
Senior	56	22.1		
Graduate Studies	26	10.3		
Unknown	2	0.8		

Procedure

Participants were provided informed consent information (see Appendix E) and were directed to an online survey. Completion of the survey reflected their agreement to participate. Participants were recruited either through the use of the SONA, snowball sampling, or word of mouth. The possibility of extra credit was offered as an incentive for some students using the SONA system. Participation was voluntary and students had the right to opt out by exiting the survey at any time. All participants completed several questionnaires: a brief demographic form, items related to social activity, items related to social group participation, the VIA Inventory of Strengths (VIA-IS) (Peterson & Seligman, 2004), and the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985).

Instruments

Demographic form. Participants responded to a standard demographic questionnaire (see Appendix E) that asked about age, gender, race, and student status.

Social activity. Items related to social activity were modified and adapted from a study by Watson, Clark, McIntyre & Hamaker (1992), originally designed to evaluate a large range of interpersonal behaviors to comprehensively assess social activity (See Appendix E). Participants were asked to indicate the frequency of engagement in the following activities during the past week: romantic activity, going to a social gathering, playing games (video, board), going out to lunch/dinner, going to a movie/play, exercising/sports, having a serious discussion, studying, running errands, and other. Participants were asked to only indicate times that involved a significant level of social interaction with another person(s). Social activity was measured using a Likert-type scale from 0 (not at all) to 3 (three or more times).

Social group participation. Items relating to the participants' involvement in university and community social groups were designed to measure social group participation (See Appendix E). Participants were asked to indicate all current involvement in the following groups: (a) university clubs, societies, leadership, and engagement, (b) fraternity/sorority affiliation, (c) NCAA Division I athletics, (d) intermural activities, (e) student government, (f) religious/spiritual organizations, (g) community organizations, and (h) other. The items were developed based on typical social group offerings on college campuses, as evidenced by activities listed on the main website of a large, Midwestern university. Responses to the individual items were summed to yield an index of overall social group participation.

VIA inventory of strengths (VIA-IS). The VIA Inventory of Strengths (VIA-IS) (Peterson & Seligman, 2004) is a 240 item self-report questionnaire that measures the degree to

which participants possess 24 character strengths. The items are scored on a 5-point Likert-style scale with 1 = "very much unlike me" through 5 = "very much like me." There are ten items for each of the 24 character strengths. Scores are formed by averaging the relevant items on each subscale. Higher numbers on a scale reflect more character strength in that area whereas lower scores reflect less character strength. A participant's character strengths are recorded in rank order, starting with a participant's top five scales, which are known as his or her "signature strengths." The psychometric properties of this questionnaire are strong. All scales show internal consistency with Cronbach's alphas greater than .70 and test-retest correlations for all scales are greater than .70 (LaFollette, 2010). The authors of the measure have also made a conscious effort to make the instrument cross-culturally valid by evaluating the VIA-IS in 54 different nations, finding that character strengths are rank ordered in a similar fashion around the world (LaFollette, 2010). More recently, the VIA-IS was also normed on a sample of 759 undergraduate college students (Karris & Craighead, 2012).

Satisfaction with life scale (SWLS). The Satisfaction with Life Scale (Diener et al., 1985) is a 5-item scale designed to measure the global cognitive judgments of one's subjective well-being. Participants indicate their responses for each of the five items on a 7-point Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree (Diener et al., 1985). Overall scores on this scale range from 5-35, with higher scores indicating higher levels of subjective well-being. This measure has been shown to be both valid and reliable around the world with a wide variety of age groups and applications (Pavot, Diener, Colvin, & Sandvik, 1991). Normative data show good convergent validity with other scales and other assessments of subjective well-being as well as good discriminant validity from emotional well-being measures (Pavot & Diener, 1993). There is also a strong negative correlation between the SWLS and other

clinical measures of distress, for instance, the Beck Depression Inventory ($r = -.72$, $p = .001$) (Pavot & Diener, 1993). The scale shows internal consistency with Cronbach's alpha of .87 and test-retest correlation of .82 (Pavot, Diener, Colvin, & Sandvik, 1991). Changes in life satisfaction over time also highlighted the sensitivity of the SWLS, indicating that the test-retest stability decreased to an alpha of .54 (Pavot & Diener, 1993). In other words, life events were found to be predictive of changes in life satisfaction.

Data Analysis

SPSS software 22.0 version (IBM, 2013) was used to conduct data analyses. This included: descriptive statistics, frequency statistics, Pearson product-moment correlations, independent samples t-tests, and hierarchical multiple regression. Descriptive and frequency statistics were used to describe demographic characteristics (e.g. gender) as well as participants' involvement in social groups. All assumptions underlying these statistical techniques were met.

In order to compute Pearson's product-moment correlations, the following three assumptions were tested: (a) two variables were measured at the interval or ratio level (e.g. they are continuous), (b) there was a linear relationship between the two variables (as identified through a scatterplot), (c) there were no significant outliers, and (d) the variables were normally distributed (as tested by the Shapiro-Wilk test). The second assumption was checked using a scatterplot on SPSS. For the third assumption, all significant outliers were removed from the data. The fourth assumption was checked using a Shapiro-Wilk test, identifying that the two variables were normally distributed.

In order to compute independent samples t-tests, assumptions were tested, including: (a) one dependent variable measured at the continuous level, (b) one independent variable consisting of two categorical, independent groups (e.g. a dichotomous variable), and (c) independence of

observations. There were also three additional assumptions that were met relating to the characteristics of the data. These three assumptions included: (a) no significant outliers in the two groups of the independent variable in terms of the dependent variable, (b) the dependent variable was approximately normally distributed for each group of the independent variable, and (c) homogeneity of variances (e.g. the variance of the dependent variable was equal in each group of the independent variable). For the first assumption, all significant outliers were removed from the data. The second assumption was checked using a Shapiro-Wilk test, identifying that the dependent variable was normally distributed. For the third assumption, SPSS was used to run the Levene's test for equality of variances.

Finally, in order to compute a hierarchical regression, the following eight assumptions were tested: (a) the dependent variable is measured at the continuous level, (b) two (or more) independent variables are either continuous (e.g. interval or ratio) or categorical, (c) there is independence of observation, as assessed by the Durbin-Watson statistic, (d) there is a linear relationship between the dependent variable and each of the independent variables as well as the dependent variable and the independent variables collectively (as identified through a scatterplot), (e) the data shows homoscedasticity, as tested through the use of a scatterplot, (f) no multicollinearity, as assessed through the inspection of correlation coefficients and Tolerance/VIF values, (g) no significant outliers, and (h) the residuals (errors) are approximately normally distributed through the use of a histogram.

CHAPTER IV

RESULTS

Research Question One

1. Do differences exist between males and females in:

    a. the character strengths love, hope, zest, and curiosity

    b. subjective well-being

    c. social activity

    d. social group participation

Independent-samples t-tests were run to determine if there were differences between males and females for the following variables: endorsement of character strengths (love, hope, zest, curiosity), subjective well-being, social activity, and social group participation. There were 83 male and 169 female participants, which could increase the likelihood for Type II error due to unequal group sizes. There were no outliers in the data, as assessed by inspection of a boxplot. Variable scores for each level of gender were normally distributed, as assessed by Shapiro-Wilk's test ($p < .05$), and there was homogeneity of variances, as assessed by Levene's test for equality of variances for the following variables: social group participation (p = .066), subjective well-being (p =.638), love (p =.101), curiosity (p =.145). The assumption of homogeneity of variances was violated for social activity, hope, and zest, as determined by the Levene's test for equality of variances. To correct for this, the t-value associated with heterogeneity of variances

was used and adjustments were also made to the degrees of freedom using the Welch-

Satterthwaite method. Males endorsed higher levels of social activity ($M = 24.67$, $SD = 4.93$)

than female participants ($M = 23.07$, $SD = 4.01$), a statistically significant difference, $M = 1.60$,

95% CI [0.37, 2.84], t (136.76) = 2.573, $p = .011$. Additionally, there were statistically

significant differences in subjective well-being and endorsement of love scores, with females

scoring higher than male participants: well-being $M = -3.16$, 95% CI [-0.62, -0.14], t (250) = -

3.10, $p = .002$, love $M = -0.40$, 95% CI [-0.39, -0.09], t (250) = -3.10, $p = .002$. *Table 3*

illustrates these findings.

Table 3.

Independent-samples t-test for social activity, subjective well-being and love, comparing differences in gender (male, female).

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SA_total	Equal variances assumed	4.166	.042	2.761	250	.006	1.60369	.58087	.45966	2.74772
	Equal variances not assumed			2.573	136.759	.011	1.60369	.62319	.37135	2.83603
SWB	Equal variances assumed	.221	.638	-3.100	250	.002	-.37642	.12141	-.61553	-.13730
	Equal variances not assumed			-3.044	155.575	.003	-.37642	.12365	-.62066	-.13217
Love	Equal variances assumed	2.708	.101	-3.096	250	.002	-.24217	.07821	-.39621	-.08813
	Equal variances not assumed			-2.875	135.504	.005	-.24217	.08424	-.40876	-.07558

Research Question Two

Does a relationship exist between the character strengths love, hope, zest, and curiosity and well-

being?

To answer research question one, a Pearson product-moment correlation was computed to assess the relationship between the character strengths love, hope, zest, and curiosity and subjective well-being. Preliminary analysis showed the relationship to be linear with both variables normally distributed, as assessed by the Shapiro-Wilk test ($p > .05$). There were no outliers. Consistent with previous research, it was hypothesized that a positive relationship exists between the character strengths love, hope, zest, and curiosity and well-being. Results show a moderate positive correlation between subjective well-being and love ($r(250) = .467$, $p < .01$), with love explaining 22% of the variation in well-being; a moderate positive correlation between subjective well-being and hope ($r(250) = .357$, $p < .01$), with hope explaining 13% of the variation in well-being; a moderate positive correlation between subjective well-being and curiosity ($r(250) = .387$, $p < .01$), with curiosity explaining 15% of the variation in well-being; and a moderate positive correlation between subjective well-being and zest ($r(250) = .429$, $p < .01$), with zest explaining 18% of the variation in well-being. *Table 4* reflects these results.

Table 4.

Correlations between character strengths (love, hope, curiosity, and zest) and subjective well-being.

		Love	Curiosity	Hope	Zest	SWB
Love	Pearson Correlation	1	.650**	.766**	.671**	.467**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	252	252	252	252	252
Curiosity	Pearson Correlation	.650**	1	.730**	.785**	.387**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	252	252	252	252	252
Hope	Pearson Correlation	.766**	.730**	1	.808**	.357**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	252	252	252	252	252
Zest	Pearson Correlation	.671**	.785**	.808**	1	.429**
	Sig. (2-tailed)	.000	.000	.000		.000

	N	252	252	252	252	252
SWB	Pearson Correlation	.467**	.387**	.357**	.429**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	252	252	252	252	252

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

Exploratory analyses. Due to the significant differences between males and females in the preliminary analysis, separate Pearson product-moment correlations were conducted for male and female participants exploring the relationship between love, hope, curiosity, and zest with subjective well-being. For males only, there is a medium positive correlation between subjective well-being and love ($r(81) = .482$, $p < .01$), hope ($r(81) = .390$, $p < .01$), curiosity ($r(81) = .355$, $p < .01$), and zest ($r(81) = .422$, $p < .01$). For females only, there is also a medium positive correlation between subjective well-being and love ($r(169) = .418$, $p < .01$), hope ($r(81) = .316$, $p < .01$), curiosity ($r(81) = .412$, $p < .01$), and zest ($r(81) = .427$, $p < .01$).

Research Question Three

Does a relationship exist between overall social activity and well-being?

To answer research question three, a Pearson product-moment correlation was computed to assess the relationship between the overall social activity and subjective well-being. Similar to research question one, preliminary analysis showed this relationship to be linear with both variables normally distributed, as assessed by Shapiro-Wilk test ($p > .05$). There were also no outliers. It was hypothesized that overall social activity is correlated with well-being. However, inconsistent with previous research, a significant relationship between social activity and well-being was not found. Due to this inconsistency, further exploratory analyses were conducted.

Exploratory analyses. Consistent with previous research questions, separate Pearson product-moment correlations were conducted for male and female participants. However, a significant relationship between overall social activity and well-being was not found for males or

females. Based on the inconsistent results, overall social activity was then divided into three

sub-categories based on the work of Watson et al. (1992). These sub-categories include: *social*

entertainment (e.g. going to a movie, playing games, playing sports), *active participation*

(romantic activity, going to a party, going out to lunch), and *social responsibilities* (having a

serious discussion, studying, and running errands). The subscales and items chosen were

originally designed to assess a wide range of interpersonal behavior.   Additionally, these three

subscales jointly accounted for 43.9% of the total variance in affect (Watson et al., 1992),

making them an important piece to look at in this study. Therefore, three separate Pearson

product-moment correlations were computed (all participants, males only, females only) to

assess the relationships between social entertainment, active participations, social

responsibilities, and subjective well-being. No significant correlations were found.

An independent samples t-test was then run to determine if there were differences in

subjective well-being between individuals who engaged in high versus low levels of social

activity. In order to examine this, participants were categorized according to their scores on the

social activity measure. Via visible inspection of a bar graph, 37 participants who scored at the

mean were removed from the analysis to create more separation between the two groups. Those

who scored above the mean were considered high social activity (n=145). Those who scored

below the mean were considered low social activity (n=71). The unequal sample sizes may

increase the likelihood of Type II error. Before conducting the t-test, all assumptions were

tested. More specifically, it was determined that there were no outliers in the data, via visual

inspection of a boxplot. Subjective well-being scores for both levels of social activity were

normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$). The assumption of

homogeneity of variances was violated, as determined by the Levene's test for equality of

variances (p= .011). To correct for this, the t-value associated with heterogeneity of variances was used and adjustments were also made to the degrees of freedom using the Welch-Satterthwaite method. No statistically significant differences between means were found between the two conditions.

Although no relationship was found between the general level of social activity and subjective well-being, it was determined that the number or social groups one is involved with was associated with subjective well-being. Preliminary analysis showed this relationship to be linear with both variables normally distributed, as assessed by Shapiro-Wilk test ($p > .05$). There were also no outliers. A positive significant relationship between social group participation and well-being was found r(250) = .197, p < .01. *Table 5* illustrates this finding. The correlation was run again for males and females separately. A positive significant relationship for females r(169) = .219, p < .01, but no significant relationship was found for males.

Table 5.

Correlation between social group participation and subjective well-being for all participants.

		SWB
SG	Pearson Correlation	.197**
	Sig. (2-tailed)	.002
	N	252

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

A Pearson correlation was then run assessing the relationship between character strengths (love, hope, zest, curiosity) and social group participation, given the significant relationship between social group participation and subjective well-being. A positive significant relationship was found between social group participation and love r(250) = .127, p < .05, curiosity r(250) = .159, p < .05, and zest r(250) = .184, p < .05. No significant relationship was found for hope. *Table 6* illustrates these findings. Based on the positive findings, two separate correlations were

conducted for males and females. For males only, no significant relationships were found. For

females only, positive significant relationships were found for curiosity $r(169) = .224$, $p < .01$,

and zest $r(169) = .249$, $p < .01$, but not for love and hope.

Table 6.

Correlations between social group participation and character strengths (love, hope, curiosity, zest).

		Love	Curiosity	Hope	Zest	SG
Love	Pearson Correlation	1	.650**	.766**	.671**	.127*
	Sig. (2-tailed)		.000	.000	.000	.044
	N	252	252	252	252	252
Curiosity	Pearson Correlation	.650**	1	.730**	.785**	.159*
	Sig. (2-tailed)	.000		.000	.000	.011
	N	252	252	252	252	252
Hope	Pearson Correlation	.766**	.730**	1	.808**	.112
	Sig. (2-tailed)	.000	.000		.000	.076
	N	252	252	252	252	252
Zest	Pearson Correlation	.671**	.785**	.808**	1	.184*
	Sig. (2-tailed)	.000	.000	.000		.003
	N	252	252	252	252	252
SG	Pearson Correlation	.127*	.159*	.112	.184*	1
	Sig. (2-tailed)	.044	.011	.076	.003	
	N	252	252	252	252	252

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Research Question Four

Does social activity (as measured by social group participation) mediate the relationship

between character strengths (love, hope, zest, curiosity) and well-being?

To answer this question, Baron and Kenny's (1986) model for testing mediation was

used. This model includes the following four conditions: (a) the IV (character strengths of love,

hope, zest, and curiosity) is significantly related to the DV (well-being), (b) the IV (character

strengths of love, hope, zest, and curiosity) is significantly related to the MV (social group participation), (c) the MV (social group participation) is significantly related to the DV (well-being), and (d) when controlling for the effects of the MV on the DV, the effect of the IV (character strengths of love, hope, zest, and curiosity) on the DV (well being) is no longer significant for full mediation. For partial mediation, the regression coefficient is still significant, but must be substantially reduced (Baron & Kenny, 1986).

Part (a) of Baron and Kenny's (1986) model was conducted in research question two, indicating that a moderate positive relationship existed between well-being and all four character strengths: love ($r(250) = .467$, $p < .01$), with love explaining 22% of the variation in well-being; hope ($r(250) = .357$, $p < .01$), with hope explaining 13% of the variation in well-being; curiosity ($r(250) = .387$, $p < .01$), with curiosity explaining 15% of the variation in well-being; and zest ($r(250) = .429$, $p < .01$), with zest explaining 18% of the variation in well-being. Part (b) of the model was conducted in the exploratory analyses of research question three, indicating that a positive relationship existed between three of the four character strengths and social group participation: love ($r(250) = .127$, $p < .05$), curiosity ($r(250) = .159$, $p < .05$), and zest ($r(250) = .184$, $p < .05$). No significant relationship was found for hope. Part (c) of the model was also conducted in the exploratory analyses of research question three, finding a positive relationship between social group participation and well-being ($r(250) = .197$, $p < .01$).

Part (d) of the model was conducted using a hierarchical regression analysis. Before conducting the regression analysis, all assumptions were met. More specifically, it was determined that there is independence of observation, as checked by the Durbin-Watson statistic, and a linear relationship exists between the dependent variable (well being) and each of the independent variables, via visual inspection of a scatterplot. Further, the data showed

homoscedasticity through the use of a scatterplot, and all significant outliers were removed from the data. Finally, the residuals were appropriately normally distributed as inspected by the use of a histogram. Due to the insignificant relationship between social group participation and hope, hope was not used in this analysis. Love, curiosity, and zest were all still significantly related to well-being after controlling for social group participation, indicating that full mediation is not present. However, partial mediation could be present as all Beta values were reduced after controlling for the mediating variable. The results of the mediation regression analysis are highlighted in Tables 7, 8, and 9. Figure 3 also represents the regression coefficients.

Love. For analysis one, love was significantly related to well-being, (b = .467, $t(250)$ = 8.34, $p < .001$). Love also explained 21.8% of the variance in well-being scores, R^2 = .218, $F(250)$ = 69.54, $p < .001$. Comparatively for analysis three, love was still significantly related to well-being (b = .448, $t(250)$ = 8.03, $p < .001$) after controlling for social group participation.

Table 7.

Hierarchical regression analysis for love.

	R	R^2	R^2 Change	Beta
Analysis One:				
Love on SWB	.467**	.218		.467**
Analysis Two:				
SG on SWB	.204**	.042		.204**
Analysis Three:				
Step One: SWB on SG	.204**	.042		.148**
Step Two: SWB on Love	.489**	.239	.197	.448**
Note *=$p <.05$; **=$p<.01$				

Curiosity. For analysis one, curiosity was significantly related to well-being, (b = .387, $t(250) = 6.63$, $p < .001$). Curiosity also explained 15% of the variance in well-being scores, $R^2 = .150$, $F(250) = 44.01$, $p < .001$. Comparatively, for analysis three, curiosity was still significantly related to well-being (b = .364, $t(250) = 6.22$, $p < .001$) after controlling for social group participation.

Table 8.

Hierarchical regression analysis for curiosity.

	R	R^2	R^2 Change	Beta
Analysis One:				
Curiosity on SWB	.387	.150**		.387**
Analysis Two:				
SG on SWB	.204	.042**		.204**
Analysis Three:				
Step One: SWB on SG	.204	.042**		.146*
Step Two: SWB on Curiosity	.413	.171**	.129	.364**

Note *=$p <.05$; **=$p<.01$

Zest. For analysis one, zest was significantly related to well-being, (b = .429, $t(250) = 7.52$, $p < .001$). Zest also explained 18.4% of the variance in well-being scores, $R^2 = .184$, $F(250) = 56.49$, $p < .001$. Comparatively, for analysis three, zest was still significantly related to well-being (b = .405, $t(250) = 7.03$, $p < .001$) after controlling for social group participation.

Table 9.

Hierarchical regression analysis for zest.

	R	R^2	R^2 Change	Beta
Analysis One:				
Zest on SWB	.429	.184**		.429**
Analysis Two:				
SG on SWB	.204	.042**		.204**
Analysis Three:				
Step One: Zest on SG	.204	.042**		.130*
Step Two: Zest on SWB	.448	.201**	.159	.405**
Note *=*p* <.05; **=*p*<.01				

Figure 2.

Regression coefficients for hierarchical regression analysis.

Social Group Participation

Love .148**
Curiosity .146*
Zest .130*

.204**

Character Strengths

Love .467** (.448**)
Curiosity .387** (.364**)
Zest .429** (.405**)

Well-being
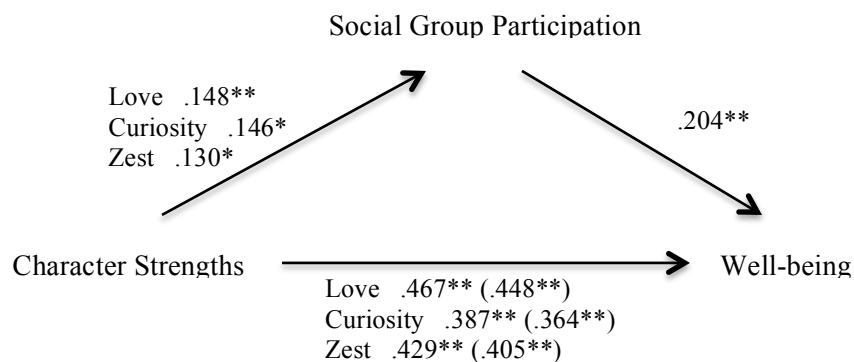
To find out whether the partial mediation effect is significant, Sobel tests were conducted for love, curiosity, and zest. Results of the Sobel test suggest that the associations between the character strengths of love, curiosity and zest and subjective well-being is not significantly mediated by social group participation.

CHAPTER V

DISCUSSION

The purpose of this study was to advance an understanding of how the following variables relate with one another: character strengths (love, hope, curiosity, zest), subjective well-being, and social activity (as also measured by social group participation). Further, the analyses: (a) explored gender differences between males and females in the character strengths of love, hope, curiosity, and zest, subjective well-being, social activity, and social group participation, (b) explored the relationships between the character strengths love, hope, curiosity, and zest and well-being, (c) explored the relationship between social activity and well-being, and (d) investigated whether social activity is the mechanism by which character strengths relate to subjective well-being   In this study, 254 college-age males and females were recruited to complete a set of three online questionnaires including: a demographic form (e.g. age, race, gender, student status, social activity (Watson, et al., 1992), social group participation), the Satisfaction with Life Scale **(**Diener, et al., 1985**)**, and the VIA Inventory of Strengths (Peterson & Seligman, 2004).

Research Question One: Differences in Gender

Very little literature has previously explored differences in gender related to character strengths. Therefore, exploratory analyses were conducted by gender to see if differences exist

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between groups. Other demographic information was gathered (e.g. race, age, student status), however sample sizes would have been too small for significance. Further, this highlights an area for future research.

In the current findings, there were significant differences between males and females. Females had higher scores than males of *love* and subjective well-being whereas males had higher scores than females for social activity.   Females having higher scores than males for *love* are also consistent with previous research (Karris and Craighead, 2012). It might be likely that females value close interpersonal relationships more than males, thus additionally improving levels of subjective well-being. Govindji and Linley (2007) found that using and enhancing the strength love improves levels of subjective well-being. The findings from this study are congruent as females scored higher than males for both love and well-being. Additionally, males scored higher than females for social activity, implying that males are involved in more social behaviors (e.g studying with friends, playing video games, going to a party).

There also tended to be more significant relationships for females rather than males. For example, the relationship between social activity and character strengths produced a significant relationship for *zest* for females, but not males. One hypothesis for this is that females might filter their excitement and energy for life interpersonally (e.g. reconnecting with an old friend), whereas males may invest more intrapersonal (e.g. individualistic rigorous activity). There were also significant relationships between *zest* and *curiosity* and social group participation for females, but not males. Linley, Maltby, Wood, Joseph, Harrington, Peterson and Seligman (2007) found that females demonstrate higher scores for interpersonal character strengths than men. Therefore, it is plausible that females are more likely to use their strengths (e.g. zest) in more social ways.

Research Question Two: Character Strengths and Well-Being

Previous research has indicated a relationship between character strengths and subjective well-being, identifying love, hope, curiosity, and zest as the highest endorsed strengths (Park et al, 2004; Rashid et al., 2013; Lounsbury, 2009). Consistent with previous research, this result was replicated in the present analyses; finding a positive significant correlation between love and well-being, hope and well-being, curiosity and well-being, and zest and well-being, with love revealing the strongest correlation.

The VIA Inventory of Strengths (VIA-IS) (Peterson & Seligman, 2004) was used to assess participants' endorsement of strengths. Individuals who endorse *love* as a signature strength value close relations with others and engage in reciprocated relationships. Individuals who endorse *hope* expect the best out of life and work to achieve it. *Curiosity* involves an interest in learning more about the world and seeking exploration and discovery. Finally, individuals who endorse *zest* approach life with energy and excitement (Peterson & Seligman, 2004). Therefore, it makes sense that individuals who have reciprocated, caring relationships with others, maintain a sense of positivity about the world, take interest in exploring new ideas, and approach life with excitement would subjectively view themselves as satisfied with their lives. The Satisfaction with Life Scale (SWLS) **(**Diener, et al., 1985**)** was used to measure subjective well-being, asking questions such as "The conditions of my life are excellent." Individuals who endorsed love, hope, curiosity and zest also tended to subjectively rate higher levels of well-being and satisfaction with life.

Research Question Three: Social Activity and Well-Being

Previous literature has also revealed a link between social activity and well-being (Cooper, et al., 1992; Tkach & Lyubomirsky, 2006). Results of this study did not find this

correlation to be significant. Differences between high and low levels of social activity were also hypothesized to impact the relationship between character strengths (love, hope, curiosity, zest) and subjective well-being, but no significant differences were present. Many of the interventions created for the intended purposes of character strength use (particularly relating to love, hope, curiosity, zest) involve aspects of social connectedness (e.g. writing letters of gratitude to others, engaging in sports/athletic teams, reaching out to old friends). In fact, the field of positive psychology places importance on social involvement by identifying "relationships: and "engagement" as two of the five goals of well-being theory. Secondly, the use of character strengths has been found to be a significant, intentional way to increase one's well-being (Linley & Harrington (2006) and therefore, it was expected social activity would be an influential variable in this relationship. It was surprising that significant differences did not exist between low and high levels of social activity. One explanation for this might be that other aspects of social connectedness may be more relevant in this relationship than what was measured. For example, writing thank you letters to others fosters strengths of gratitude and love. However, this specific behavior was not measured. Additionally, many of the dimensions measured for social activity may not necessarily involve being engaged with others, which may be a necessary component in increasing one's well-being. Going to the movies with friends or going to a party may involve being around other people, however, may also lack being socially engaged with others.

Although a link between social activity and well-being was not present, a link between social group participation and well-being was significant. These results display an interesting dynamic, as the two measures look at differing types of social activity. The items on the Social Activity Scale measure activity relating to social responsibilities (e.g. studying for an exam,

grocery shopping or running errands), active participation in events (e.g. going to a party or out to lunch with a friend), or types of social engagement (e.g. going to a movie or cultural event). These events are all independent from one another and do not imply long-term social connectedness. The second measure, social group participation, tallied a frequency of social groups that the individual is currently actively involved with. These groups include: social clubs or organizations, athletic teams (both NCAA and intramurals), community organizations, student government, and/or spiritual or religious organizations. Being part of a group requires a commitment for long-term social engagement and can make an individual feel more connected to others. This also adds an element of identity to which individuals can attach. Being part of a group adds meaning to one's life in a way that possibly individual, independent social activities cannot. Therefore, it is not surprising that this was found to correlate with higher levels of subjective well-being.

Another important element was that *love, curiosity,* and *zest* all related to social group participation, but *hope* did not. Individuals who endorse love also have reciprocating, caring relationships in their lives and value these relationships. Being involved in social groups provides a network to foster these relationships, enhancing this connection. Additionally, people who are curious about life and seek to learn more about the world may be more inclined to participate in social groups, particularly those that are university affiliated. Similarly, individuals who reveal higher levels of zest, or excitement/energy may also be more active in community and university social organizations. Being full of zest implies a passion for life, seeing it as an adventure and wanting to participate in as much as life can offer. There was also a significant positive relationship between *zest* and social activity. Individuals who endorse *zest* may be more inclined to reconnect with old friends or foster new relationships without fear of

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judgment. Surprisingly, *hope* was not significantly correlated with social group participation. People how endorse hope tend to expect the best out of life and work to achieve it (Peterson & Seligman, 2004). One explanation for this result may be that western societies place larger value on individualism; becoming aware of one's own preferences and working to achieve those preferences individually (Veenhoven, 1999). Therefore, a person's desired to achieve the best out of life may be more independently driven toward factors such as career and financial stability and less geared toward building community and lasting relationships.

Interestingly, *love* was not significantly correlated with social activity. This result was noteworthy as the strength of *love* is interpersonal, being mostly relevant in one-on-one relationships (Peterson & Seligman, 2004). The measure for social activity included several one-on-one interactions (e.g. having lunch with a friend, having a serious discussion), and therefore, it was expected that love would be highly correlated. One reason for this might have been that social activity only accounted for interactions that took place in the past week. Therefore, this may not have been an accurate reflection of a person's general pattern of connection with others. Additionally, a person may find other ways to endorse love in their lives outside of what the questions asked (e.g. having several small conversations with a person throughout the day instead of one serious discussion).

Research Question Four: Social Group Participation as a Mediator between Character Strengths and Well-Being

Although differences did exist in regression coefficients after controlling for social group participation, the results of the Sobel tests indicated that social group participation did not mediate the relationship between character strengths (love, hope, curiosity, zest) and well-being. This type of social connectedness may imply a more long-term engagement, however, still may

lack some of the same qualities as social activity. For example, playing on a sports team may provide a certain level of friendship and social support, yet it may lack the ability to engage one-on-one with others as the focus of the time spent together could be more on the sport itself rather than building social bonds.

Implications For Theory and Practice

Implications based on the results of this study could be very beneficial for the field of psychology as well as professionals working in university counseling centers. The significant positive relationship between character strengths (love, hope, curiosity, zest) and subjective well-being reinforces previous research and highlights a need for college students to continue to develop these strengths. It also highlights a need for researchers to continue to find positive interventions that increase well-being. The amount of students seeking university counseling services continue to rise (ACCA, 2012), and given the surplus of students and limited resources available, many counseling centers are required to offer brief, short-term therapy options. Students facing increased psychological distress could benefit from positive psychology interventions, particularly through the use of their individual signature strengths. Many interventions have already been found to increase well-being, particularly relating to the character strengths *love* (e.g. nurturing close relationships)*, hope* (e.g. journaling about good events and future goals)*, zest* (e.g. improving sleep hygiene)*,* and *curiosity* (e.g. increase your awareness on your current environment) (Peterson & Seligman, 2004; Peterson & Park, 2009). Yet, further research is necessary to have a better understanding of how these interventions increase well-being, particularly for the college-age population.

Higher levels of subjective well-being are correlated with higher levels of social group participation. This finding reveals an importance for connectedness with others. This is

particularly salient for college-age students whose self-concept and identity are in the key stages of development formation (Blimling, 2010). Establishing stronger connections between university liaisons and counseling centers allows for the possibility of networking and connecting students to services that fit their needs. For mental health professionals working in college counseling settings, building relationships with campus clubs, organizations, athletics, and departments and being more knowledgeable about the resources that are available on campuses can help to bridge these gaps between the counseling services that are offered to students and the connectedness to groups that can increase satisfaction with life. It can also add a new dimension to the focus of psychotherapy. This research provides a better understanding the importance of social group participation, particularly for students who feel isolated and alone and desire that level of connection with others.

Limitations and Directions for Future Research

Several limitations are present in the current study. Broadly, these limitations include: self-report bias, lack of experimental control, and generalizability. The first of these is inherent in the design of the study, as all included measures are self-report questionnaires. Therefore, conclusions are drawn based solely on the viewpoints of the participants. Many of the questions included in this study could be considered sensitive, and therefore, it is plausible that participants could respond in socially desirable ways. Many questions also related to a person's level of social activity and participants could have responded in ways to appear popular or involved. Cultural and language differences could also influence how a participant related to the responses (e.g. thoughts and feelings based on the participant's worldview). These cultural differences include, but are not limited to: race, sex, ethnicity, religion, sexual orientation, or socioeconomic status. Secondly, causality cannot be assumed given the lack of experimental control in this

study. Therefore, this study cannot attribute causation, make predictions, or generalize the results to diverse samples given that none of the independent variables were manipulated. Finally, convenience sampling was used instead of random sampling to recruit participants. Moreover, the majority of the participants of this study attend the same university in a small, rural community. Therefore, it may be difficult to generalize to other populations including schools, communities, age groups, and ethnic and racial backgrounds. Majority of the participants also identified as White, limiting the generalizability to other racial groups.

Further research is required to to support the claims presented with these findings. Social activity and connectedness could still play roles in the relationship between character strengths and subjective well-being, but the specifics of those roles are undetermined. Therefore, further research is needed in investigating which aspects of social activity are relevant in the link between character strengths, particularly *love, hope, curiosity,* and *zest* and subjective well-being. Given the positive relationship between social group participation and subjective well-being, expanding how one defines social activity to include other aspects of connectedness and social engagement could provide more robust results. Broadening the concepts related to positive subjective interpersonal experiences to include participation in social groups, one-to-one interactions with peers, levels of engagement, as well as levels of fulfilled connectivity could provide more depth into which types of social activity improve life satisfaction. Finally, incorporating a more diverse sample, particularly relating to race and ethnicity, would improve generalizability to a larger scope of college-age students and allow the researcher to investigate whether group differences exist.

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Appendix A

Extended Review of the Literature

Counseling services on college campuses are designed to meet the mental health needs of the student body. Many counseling centers offer a variety of services to their students and help students with a range of presenting concerns. Recently, there has been an increase in students seeking services, including non-traditional students who have underutilized services in the past. The American College Counseling Association (ACCA, 2012) stated that 88% of college counseling center directors reported a growing trend in the number of students with severe psychological problems on college campuses, with 73% of those directors stating that crises requiring immediate response had increased. Depression and anxiety still top the charts as the most frequent reason for seeking counseling (ACCA, 2012) in situations both relating to severe crisis situations as well as non-critical clientele. Additionally, because of the high numbers of students needing services, most commonly directors reported that non-critical clients are seen less frequently (ACCA, 2012). In other words, students who request services may not have the opportunity to receive services due to this high demand.

So what is it about the college population that makes counseling services so desirable and necessary? Research indicates that the traditional-age college population (ages 18-23) undergoes several developmental changes during the college years (Justice & Dornan, 2001). These include both biological and psychological changes, and many of these changes can contribute to increased psychological distress in college students (Blimling, 2010). The human brain does not reach full maturity until at least the mid-20s, meaning that emotional regulation, problem-solving and risk-taking processes are still developing during the college years (Giedd, 2004). Biologically, men and women of college age reach their physical prime, or the time where their

bodies develop full muscular potential including speed, dexterity, and overall strength. However, maturation develops at different paces for different people, and people tend to compare themselves to peers as a way of normalizing these changes. Comparison can affect how students feel about themselves and how they socialize with others. Therefore, maturation has been shown to psychologically affect self-concept and early identity formation (Blimling, 2010). The college age is also a prime time for early identity development (e.g. character and moral development), yet many students tend to conform to societal standards rather than become independent thinkers (Clinchy, 1990). Additionally, college students tend to develop on a variety of other psychological dimensions including: character, values, attitudes, knowledge, beliefs, self-concept, competences, and personality (Astin, 1993; Hamrick, Evans, & Schuh, 2002; Pascarella & Terenzini, 1991).

One way college student mental health could be addressed is through positive psychology. One of the central components of the field of positive psychology is investigating what makes life most worth living (Park et al., 2004). In essence, positive psychology seeks to understand how character strengths relate to happiness and well-being. However, this relationship alters at different points during an individual's lifespan (Isaacowitz, Vaillant, & Seligman, 2003). The high demand of students seeking university counseling services, and some of the preliminary links between character strengths and well-being indicate a need for further exploration of these concepts with this population. Moreover, a need exists for more research on how social activities relate to these factors, specifically for a population in which identity formation is so important. Future research could be invaluable to the field of psychology and contribute to the efficacy of university counseling center services.

Character Strengths

      Positive psychology. For years, a focus on pathology has dominated much of the

discipline of psychology (Seligman & Csikszentmihaly, 2000). Seligman et al. (2004) discussed

how the field of psychology has been largely devoted to understanding suffering and repairing

weakness instead of focusing on everyday well-being. After World War II, the field of

American psychology developed an emphasis on understanding, assessing, and treating mental

illness (Duckworth, Steen & Seligman, 2005). In psychotherapy, the focus has not generally

been on *positives*, but on *troubles*- deficits, disorders, symptoms, traumas and wounds (Seligman

et al.,2006). Through the works of Martin E. P. Seligman and Mihaly Csikszentmihalyi, the field

of positive psychology emerged as a new approach to viewing positive subjective experiences,

improving quality of life, and finding meaning (Seligman & Csikszentmihaly, 2000).

      Also known as the "three pillars" of positive psychology (Seligman, 2002), the field is

defined as "the study of positive emotion, positive character, and positive institutions" (Seligman

et al., 2005, p. 410). The field of positive psychology at the subjective level is about exploring

concepts relating to the past (well-being, contentment, and satisfaction); present (flow and

happiness); and future (hope and optimism) of the lives of individuals (Seligman &

Csikszentmihaly, 2000). Additionally, Gable and Haidt (2005) defined positive psychology as

"the study of the conditions and processes that contribute to the flourishing or optimal

functioning of people, groups, and institutions" (p. 103). There was little movement in the past

toward exploration of these concepts. Rogers' work on full functioning (Rogers, 1961),

Maslow's notions of individuation, peak experiences, and self-realization (Maslow, 1971),

Allport's interest in positive human characteristics (Allport, 1958) and Jahoda's work involving

positive mental health (Jahoda, 1958) attempted to focus more on positivity instead of deficits,

however these ideas were more just by-products of symptom relief (Seligman et al.,2006).

Therefore, positive psychologists seek to further understand components of positivity (Seligman et al., 2005) and what makes life most worth living (Peterson & Park, 2003).

The science of positive psychology rapidly became a popular subject. In fact, in just five short years (2000-2005), a stretch of time known as the "positive psychology movement" took place (Gable & Haidt, 2005). Seligman et al. (2005) stated that literally hundreds of articles were published in scholarly journals during this period of time. In addition to articles, edited volumes and handbooks were published, many conferences were held to gather world-wide researchers, courses in positive psychology were offered, and grants were being proposed and accepted for further research in this field (Gable & Haidt, 2005). According to Gable & Haidt (2005), topics of interest that had been explored in the past included: attachment, love, optimism, intrinsic motivation and emotional intelligence. There were also new topics forming that had been minimally explored including: forgiveness, awe, gratitude, laughter, curiosity, hope, and inspiration (Gable & Haidt, 2005).

Focusing on psychotherapy, practitioners have worked toward what is known as a "fix-what's-wrong" approach instead of a "build-what's strong approach" (Duckworth et al., 2005). Duckworth et al. (2005) used the Cognitive Behavioral Therapy (CBT) as an example of a "fix-what's-wrong" approach, which teaches clients to identify and fight automatic thoughts. CBT is a popular choice for many clinicians as it has been scientifically proven to be effective. However, Seligman et al. (2006) stated that, until very recently, therapies that focus specifically on the positive attributes of clients are few and far between. Additionally, prior to the positive psychology movement, very little empirical research has been done to explore the role of

strengths and positivity in prevention and treatment (Duckworth et al., 2005). Therefore, there

has been substantial growth in using positive psychology in therapy interventions.

Fordyce (1977) created one of the first interventions relating to positive psychology. In

attempting to increase personal happiness and life satisfaction, Fordyce created a "happiness"

intervention consisting of 14 tactics (e.g. socializing, being active, forming close relationships,

engaging in meaningful work). The hypothesis was that if normal college students could modify

their behaviors and attitudes to mimic the characteristics of happier people, then they themselves

could become happier. In a study consisting of 338 community college students, Fordyce found

that students who were taught how to do these 14 intervention tactics showed fewer depressive

symptoms and were happier than a comparative placebo control group. The implications of this

study suggest that these interventions may be helpful to individuals who hope to increase their

emotional satisfaction (Fordyce, 1977).

More recently, there has been a development of a therapeutic philosophy using positive

psychology to focus primarily on the positive aspects of a client's life (Seligman et al.,2006).

Known as *positive psychotherapy* (PPT), these interventions are designed to increase

engagement, meaning, and positive emotions instead of targeting depressive symptoms

(Seligman et al.,2006). Due to the relatively new nature of PPT, its efficacy has only briefly been

investigated in a population of depressed patients (Seligman et al.,2006). However, it is hopeful

that these interventions may be beneficial to a more diverse community of individuals.

Even though this field has been gaining momentum, it was not without its criticisms.

Gable and Haidt (2005) discussed that one major criticism of this movement is the assumption

that if there is a *positive* psychology, then the rest of psychology must be negative. Additionally,

if positive psychology has become a necessity in this field, this must mean that this "negative

psychology" must have taught very little (Gable and Haidt, 2005). Seligman et al. (2005) stated that research findings from positive psychology are intended to supplement what is already known about the human experience, not replace it. In fact, the goal is to have a balanced and complete outlook, including peaks and valleys, suffering and happiness (Seligman et al., 2005). Gable and Haidt (2005) stated that the aim of positive psychology is to complement an existing knowledge base and to build up what we already know about resilience and strength.

Therefore, the future of this field is looking bright. The field of psychology is striving for balance. By equalizing the focus of remedying deficits with nurturing strengths, positive psychologists are optimistic for the future (Seligman et al., 2004). Gable and Haidt (2005) stated that the future task of positive psychology is to "understand the factors that build strengths, outline the contexts of resilience, ascertain the role of positive experiences, and delineate the function of positive relationships with others" (p. 108). The hope is that positive psychology will help psychologists to understand and help to nurture elements that allow individuals, societies and communities to flourish (Seligman & Csikszentmihalyi, 2000).

The VIA classification of strengths. Many scholarly articles and books were published during the positive psychology movement, including one of the most influential books for the field of positive psychology entitled *Character Strengths and Virtues: A Handbook and Classification* (CSV; Peterson & Seligman, 2004). This handbook by Christopher Peterson and Martin E. P. Seligman provides a complete description of a new classification system, termed the VIA Classification of Strengths. It includes the definition of "strength" from a behavioral perspective, theoretical and research background of strength, and correlates of strength, as well as individual difference measures (LaFollette, 2010). Seligman et al. (2005) discussed how this classification system represents the most ambitious project undertaken to date in the field of

positive psychology. The purpose of developing a classification system for strengths and virtues was to provide psychologists with a better understanding of psychological well-being as the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* of the American psychiatric Association (1994) does for psychological disorders (Seligman et al., 2005). It is intended to be a positive complement to the DSM. Additionally, the strengths included in this classification reflect individual differences and are approached as *dimensional*, not categorical like DSM mental disorders (McGrath, Rashid, Park, & Peterson, 2010) (Karris & Craighead, 2012).

The VIA Classification of Strengths is grounded in the philosophical question, "What is the good of a person?" (Karris & Craighead, 2012). Like positive psychology, the recent development of this classification system focuses only on the strengths of character of individuals and what makes a good life possible (Karris & Craighead, 2012). Therefore, a classification scheme was proposed and assessment strategies were created for each of the different character strength and virtue entries (Peterson & Seligman, 2004). Supported by the field of positive psychology and initiated by the Values in Action (VIA) Institute, the VIA Classification of Strengths is one of the first attempts to operationalize character for the purpose of empirical research (Karris & Craighead, 2012).

The general scheme of the VIA Classification of Strengths relies on six overarching virtues, which are cross-culturally endorsed: wisdom, courage, humanity, justice, temperance, and transcendence (Seligman et al., 2005). Organized under these broad virtues are 24 character strengths: creativity, curiosity, open-mindedness, love of learning, perspective, authenticity, bravery, persistence, zest, kindness, love, social intelligence, fairness, leadership, teamwork, forgiveness, modesty, prudence, self-regulation, appreciation of beauty and excellence, gratitude, hope, humor, and religiousness (Karris & Craighead, 2012). Table 1 lays out the order of these

strengths and virtues and also provides definitions of each. When choosing which strengths to include in the classification system, scholars including Mihaly Cskikzsentmihalyi, Ed Diener, Martin Seligman, George Vaillant, and Christopher Peterson conducted several brainstorming sessions including examination of previous literature and historical and contemporary figures to formulate this list (Karris & Craighead, 2012). The list was finally narrowed to 24 after applying the strengths to an exhaustive list of criteria including: (1) recognition across cultures, (2) contribution to individual fulfillment, satisfaction, and happiness, (3) moral value, (4) production of admiration, not jealousy, (5) obvious antonyms that are "negative," (6) trait-like nature, (7) measurability, (8) lack of redundancy with other character strengths, (9) embodiment in some individuals, (10) demonstration by some children or youth, (11) lack of presence in some individuals, and (12) deliberate target of societal practices that try to cultivate it (Seligman et al., 2005).

   The values in action inventory of strengths (VIA-IS). Out of the VIA Classification of Strengths emerged a self-report assessment intended to measure these 24 character strengths. The Values in Action Inventory of Strengths (VIA-IS) was developed in 2004 by Christopher Peterson and Martin E. P. Seligman and has been taken by over one million people in ten different languages worldwide (LaFollette, 2010). This 240-item self-report assessment measures the degree to which respondents endorse each of the 24 character strengths on a 5-point Likert-type scale ranging from "very much like me" to "very much unlike me" (Karris & Craighead, 2012).

   Through the use of the VIA-IS, interesting empirical findings have surfaced. One of these findings includes the discovery of the most commonly endorsed strengths worldwide. In a study by Park, Peterson & Seligman (2006), the researchers used a web-based sample of 117,676

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adults ranging from 54 different countries including the United States and all 50 US states to investigate the relative prevalence of the 24 character strengths. The participants were gathered through the use of an online website (www.authentichappiness.com) between September 2002 and December 2003. The sample of participants included 71% from the United States (N= 83,576), and 34,887 respondents from approximately 200 other countries; however, only respondents from the first sample set were used in this study, which included 54 other countries. Among the findings, the researchers discovered that the most commonly endorsed strengths in the U.S. are: kindness, fairness, authenticity, gratitude, and open-mindedness. The least endorsed strengths include: prudence, modesty, and self-regulation. These endorsements also converged with the profiles of respondents in other countries (Park et al., 2006).

Previous measures of character. Prior to the construction of the VIA-IS, there were few other measures of character, and none that looked at character holistically. Karris and Craighead (2012) discussed how traditional measures of character have relied on single-construct questionnaires. Two popular measures include the Adult Hope Scale (Snyder et al., 1991) and the Gratitude Questionnaire (McCullough et al., 2002). Yet both of these scales only examined particular character strengths in isolation (e.g. hope and gratitude) (Karris & Craighead, 2012).

The adult hope scale. The Adult Hope Scale, developed by C. R. Synder and others, is a 12-item measure of a respondent's level of hope (Snyder et al., 1991). In his article *Rainbows in the Mind,* Synder defined hope as "the perceived capability to derive pathways to desired goals, and motivate oneself via agency thinking to use those pathways" (Synder, 2002, p. 249). The Adult Hope Scale is divided into two subscales: (1) agency (e.g. goal-directed energy), and (2) pathways (e.g. planning to accomplish goals). These two subscales are originally derived from Snyder's cognitive model and definition of hope. Of the 12 questions, 4 of these questions

pertain to agency, 4 pertain to pathways, and 4 items are just fillers. The scale is based on an 8-point Likert-type scale ranging from "Definitely False" to "Definitely True" (Snyder et al., 1991). The construct of hope, at high levels, has been consistently related to better academic outcomes, athletic outcomes, physical health, psychotherapy and psychological adjustment (Snyder, 2002).

Gratitude questionnaire (GQ-6). A second popular measure of character is the Gratitude Questionnaire (GQ-6). Developed by Michael McCullough, Robert Emmons and Jo-Ann Tsang (2002), the Gratitude Questionnaire is a uni-dimensional measure to assess the gratitude disposition. The questionnaire is a six-item self-report measure that assesses individual differences in gratitude. Examples of such items include, "I have so much in life to be thankful for," and "Long amounts of time can go by before I feel grateful to something or someone." Responses are scored on a 7-point Likert-type scale ranging from (1 = "strongly disagree") through (7 = "strongly agree"). The GQ-6 has also been found to have excellent psychometric properties, including a strong one-factor structure and high internal consistency. Gratefulness has been found to be correlated with measures of positive emotionality and well-being (e.g. vitality, happiness, hope, optimism, lack of depressive and anxious symptoms, and satisfaction with life). Additionally, gratitude has been found to correlate with a variety of affective, prosocial, and spiritual constructs. (McCullough et al., 2002).

Though these single variable measures have greatly contributed to our understanding of character, they are limited in that they do not allow for the simultaneous measurement of character strengths (Karris & Craighead, 2012). This is where the VIA-IS scale differs, and why many would consider the VIA-IS to be an improvement over traditional measures of character (LaFollette, 2010).

Correlates and outcomes among character strengths. Through the use of the VIA-IS and other measures of character, there has been a substantial volume of literature in the past decade devoted to the relationship of character strengths to mental health, including: depression and anxiety, stress and trauma, and happiness.

Depression and anxiety. In a study by Huta and Hawley (2010), correlations between character strengths, vulnerabilities, and forms of well-being were explored. Participants included 241 undergraduate students from a private university in the northeast United States. The mean age of participants was 19.61 years. Participants included 66% females and 44% males. Participants were 66% White, 17% Asian, 6% Hispanic, 5% Black, 3% East Indian/Pakistani, 1% Middle Eastern and 1% of mixed ethnic origin. Participants completed several web-based surveys including the VIA-IS and others relating to depression, life satisfaction, dysfunctional attitudes, positive and negative affect, self-esteem, vitality and meaning. One of the most remarkable findings in this study was the predictive role that strengths (in particular: hope, appreciation of beauty and excellence, and spirituality) play in the recovery of depressive symptoms.

In another study, Seligman et al. (2006) found that the use of positive psychotherapy (PPT) has been effective in reducing symptoms of depression and anxiety in children and adults. Character strengths have shown to be an intricate piece to the successful effectiveness of positive psychotherapy. It was found that character strengths embodied 60-70% of the interventions that make up positive psychotherapy. These interventions seek to increase engagement, meaning and positive emotion, which then heightens the presence of character strengths. Moreover, Park and Peterson (2008) discovered that the specific character strengths of zest, leadership and hope were heavily related to fewer problems with anxiety and depression. In a sample of 5,299 adults,

these specific character strengths were consistently correlated with higher levels of life satisfaction.

Similarly, using one's signature strengths decreased depression and increased happiness in another study (Gander et al., 2012). By using and cultivating signature strengths in one's own life, the experience of positive emotions is facilitated. It was found that the relationship between character strengths and health is mediated by the use of positive coping mechanisms (Gander et al., 2012). Additionally, McCullough et al. (2002) found evidence that gratitude is related to lower levels of negative emotions, such as anxiety, depression, and envy, even after controlling for Extraversion/positive affectivity, Neuroticism/negative affectivity, and Agreeableness. Grateful people appear to be different from those less grateful as they are more pro-socially oriented (more empathic, helpful, forgiving), less materialistic, and more spiritual/religious. It is hypothesized that these factors play a role in one's levels of negative emotions.

Stress and trauma. Rich, Dooley, and Florell (2006) investigated the relationships among adolescent students' levels of hope and various academic and psychological indicators of school adjustment. Participants included 341 middle and high school students from school districts in the Southeast. Of the 341 participants, there were 50 sixth graders, 47 seventh graders, 49 eighth graders, 52 ninth graders, 47 tenth graders, 50 eleventh graders, and 44 twelfth graders. Additionally, 57% were female, the mean age was 14.58, and majority of the participants (87%) were Caucasian. The researchers found that hope is negatively correlated with psychological distress and school maladjustment.

In another study, researchers investigated how character strengths are related to posttraumatic growth (Peterson et al., 2008). Participants included a sample of 1,739 adults, with an average age of 40 (ranging from 18 to 65+ years). Of the sample, 80% were White, 69%

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were women, and 72% were U.S. citizens. The majority of the participants completed several years of college. Posttraumatic growth has been defined to include: improved relationships with others, greater appreciation of life, openness to new possibilities, spiritual development, and enhanced personal strength. Researchers found that posttraumatic growth may entail the strengthening of character, as two of the factors (interpersonal – humor, kindness, leadership, love, social intelligence, teamwork; and cognitive – beauty, creativity, curiosity, and learning) showed relationships with the number of potentially traumatic events (Peterson et al., 2008).

Other relevant studies include Park and Peterson (2006) who found that hope, kindness, social intelligence, self-regulation, and perspective buffer against the negative effects of stress and trauma, and Tedeschi and Calhoun (1995) discovered that posttraumatic growth in various dimensions links with specific character strengths (e.g. openness to new possibilities links to curiosity, creativity, and love of learning. It is hypothesized that as people experience and survive traumatic events, they learn things that shape their character and further lead to growth. This reveals an important finding in trauma research; these findings show that traumatic experience is sometimes associated with increased character strengths (Peterson, et al., 2008).

Happiness and other correlates. Park and Peterson (2006) found that among children as young as 3 years old, associations between certain strengths of character and happiness exist. Seligman et al. (2005) found that using one's signature strengths increases happiness levels and decreases depressive symptoms. This research has been confirmed by others (Gander et al., 2012; Mongrain & Anselmo-Matthews, 2012). Many researchers have focused more on specific character strengths' relationship to happiness. Polak and McCullough (2006) found that gratitude may lead to a reduction in materialism, and thus an increase in happiness. Otake,

Shimai, Tanaka-Matsumi, Otsui, and Fredrickson (2006) found that an intervention to increase kindness in turn also increased happiness.

Other popular correlates include: *life-satisfaction* (Rust, Diessner, & Reade, 2009; Peterson & Peterson, 2008; Proctor, Tsukayama, Wood, Maltby, Fox Eades, & Linley, 2011; Peterson, Park, & Seligman, 2005; Peterson, Park, & Seligman, 2004; McCullough et al., 2002; Proyer, Gander, Wyss, & Ruch, 2011); *health and wellness* (Proyer, Gander, Wellenzohn, & Ruch, 2013; Peterson, Park, & Seligman, 2006; Peterson, Park, & Seligman, 2004; and *self-esteem* (Wood, Linley, Matlby, Kashdan, & Hurling, 2011).

Research of character strengths among college students. Some research has recently emerged in the last few years investigating character strengths in the population of college students. One of the early works is that of Govindji and Linley (2007), who found that students who used their strengths more reported higher levels of subjective and psychological well-being, confidence, self-esteem, and psychological vitality. The use of strengths is defined using the Strengths Use Scale, a 19 item measure designed to assess how much people use their strengths in a variety of settings. This scale asks questions such as "I am regularly able to do what I do best" and "I am able to use my strengths in lots of different ways" (Govindji and Linley, 2007).

Lounsbury, Fisher, Levy and Welsh (2009) examined character strengths in relation to academic success in college students. The study was based on a sample of 237 undergraduate university students of whom 41% were male and 59% were female. The majority of the participants were White (97%, n = 229), followed by African American (n = 2), Hispanic (n = 1), and Asian American (n = 1). In this study, character strengths were examined in relation to two indicators of academic success: student satisfaction and grade point average (GPA). Researchers found that all 24 character strengths were positively and significantly related to General Life

Satisfaction; 22 to College Satisfaction; and 16 to GPA. More specifically, they also found that specific character strengths (hope social intelligence, self-regulation and fairness) were predictors of college satisfaction. The strengths perseverance, love of learning, humor, fairness, and kindness predicted GPA. Similarly, Park and Peterson (2009) found that perseverance, love, gratitude, and hope predict academic achievement in college students.

More recently, Karris and Craighead (2012) explored endorsement of strengths among college students. Participants included a total of 759 students at the University of Colorado at Boulder enrolled in a general psychology class. Of the 759 students, 52% were male and 48% were female, the mean age was 18.91 years, and the ethnic distribution included: 86.6% Caucasian, 5% Asian American/Pacific Islander, 3.4% Latino, 1.2% African American, 0.3% Native American, and 3.6% other. Researchers found that students favorably endorsed possessing all 24 character strengths. The most frequently endorsed were: humor, love, kindness, integrity, and social intelligence. Students least often endorsed modesty/humility, self-regulation, spirituality, love of learning, and prudence. Gender differences were also found for 11 of the 24 character strengths, as females scored themselves higher on kindness, love, gratitude, forgiveness, appreciation of beauty and excellence, prudence, fairness, and leadership whereas males scored themselves significantly higher on creativity, bravery, and self-regulation.

Subjective Well-being

History and conceptualization of subjective well-being. Throughout history, there has been some debate as to what defines a good life or fulfilled existence. Many philosophers believed happiness to be the ultimate motivation and highest good for human action (Diener, 1984). In 1957, Warner Wilson was one of the first to give a broad review of subjective well-being, stating that a happy person is a "young, healthy, well-educated, well-paid, extroverted,

optimistic, worry-free, religious, married person with high self-esteem, job morale, modest aspirations, of either sex and of a wide range of intelligence" (Warner Wilson, Correlates of Avowed Happiness, in Diener et al., 1999). Researchers have used other comparable terms (e.g. happiness, life satisfaction, positive affect) interchangeably with subjective well-being, although some debate the compatibility. Changes have taken place to more accurately conceptualize subjective well-being, focusing less on the demographic characteristics and more on the underlying components.

Diener (2009) discussed how research has identified two broad aspects of subjective well-being: an affective component (which includes both pleasant and unpleasant affect), and a cognitive component (also commonly referred to as life satisfaction). These two components are moderately correlated (Chamberlain, 1988). However, many researchers choose to measure these components separately as they can provide complementary information. The affective component of subjective well-being has been a popular topic to measure for many researchers. An example of an affective component measure is the Positive and Negative Affect Schedule (PANAS: Watson, Clark, & Tellegen, 1998). The cognitive component, also referred to as life satisfaction, refers to a conscious cognitive judgment in which an individual evaluates his or her life based on the individual's own set of standards. The measure used in this study, Satisfaction with Life Scale (Diener et al., 1985), is an example of a measure of cognitive judgment. Diener et al. (1999) stated that growth in the field of subjective well-being suggests: the importance of subjective viewpoints in evaluating life, larger societal trends that are concerned with the value of the individual, and recognition that well-being includes positive elements that go beyond wealth.

The general concept of well-being refers to experience and optimal psychological functioning and is not the mere absence of mental illness (Ryan & Deci, 2001). Diener, Lucas, and Oishi (2002) defined subjective well-being as "a person's cognitive and affective evaluations of his or her life" (p. 63). The affective element of this concept includes both experiencing high levels of pleasant emotions and moods, and low levels of negative emotions and moods. The cognitive aspect is life satisfaction (Synder & Lopez, 2002). Similarly, Diener (2009) stated that subjective well-being is mainly concerned with why and how people experience their lives in positive ways, including both affective reactions and cognitive judgments. This has included other comparable terminology (e.g. happiness, life satisfaction, positive affect), although some debate the compatibleness of these terms.

Are happiness and well-being synonymous terms? Many researchers have used the terms happiness, well-being, and sometimes even life satisfaction interchangeably, as if differences do not exist. Many early measures of subjective well-being polled people about their happiness and life satisfaction using simple global surveys, implying that subjective well-being can be directly measured by levels of happiness (Snyder & Lopez, 2002). However, Raibley (2012) stated that happiness and well-being differ fundamentally as well as conceptually, metaphysically, and empirically. Ryan and Deci (2001) similarly stated that subjective well-being involves desirable personal characteristics beyond whether a person is happy. In his book *Flourish: A Visionary New Understanding of Happiness and Wellbeing,* Martin E. P. Seligman (2011) stated that happiness is a *thing* and well-being is a *construct*; well-being has several real, measurable elements, whereas no single measure can operationalize it. Yet happiness is a real thing that is felt, but is only measured through another comparable construct (e.g. life satisfaction). Further, Diener et al. (1999) stated that the construct subjective well-being entails

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several components including: people's emotional responses, domain satisfactions, and global judgments of life satisfaction.

Uchida, Norasakkunit, and Kitayama (2004) investigated the cultural constructions of happiness and well-being and identify differences in Western and Eastern cultures relating to how these terms are defined. For example, in East Asian cultures, happiness is viewed more in terms of interpersonal connectedness, and individuals from these cultures are motivated to maintain a balance between positive and negative affects. Yet, in contemporary literature, happiness is seen as a more universal emotion that is in association to subjective well-being.

Raibley (2012) critiqued two conceptual connections that have been accepted as fact, stating: (1) happiness and well-being do not have the same fundamental determinants, and (2) a person's degree of happiness does not assess their degree of well-being. He further argued that happiness is not a sufficient condition for high levels of well-being because happiness is only beneficial when it is valued.

Hedonic and eudaimonic approaches to well-being. The field of well-being has revolved around two different philosophical approaches, hedonism and eudaimonism, which have some overlapping properties, but are still relatively distinct in their make-up. The hedonistic viewpoint is that well-being consists of pleasure and happiness (Ryan and Deci, 2001). Keyes and Waterman (1993) stated that this approach defines well-being as maximizing pleasure and minimizing or avoiding pain. The second approach, eudaimonism, views well-being as more than just happiness, including an element of actualization of human potentials, fulfilling one's true nature (Ryan and Deci, 2001), or as Keyes and Waterman (1993) stated, one's "true self."

The true underpinnings of hedonic enjoyment refer to the positive effects that come with obtaining material possessions and having positive opportunities or experiences, because the "good life" consists of maximizing such experiences (Waterman, Schwartz, Conti, 2006). These positive effects join with the satisfaction of needs to create hedonic enjoyment, which can be physically, intellectually, and/or socially based (Keyes and Waterman, 1993). In contrast, the eudaimonic approach is not defined in terms of being pleased with one's life, but more revolved around "worth" (Waterman, et al., 2006). It asks whether something is worth doing or worth having. Ryan and Deci (2001) stated that these two perspectives ask different questions about how social and developmental processes relate to well-being and propose different approaches to life, yet, at critical moments the findings from these perspectives seem to overlap.

Hedonic treadmill theory. Originally developed by Brickman and Campbell (1971), hedonic treadmill theory states that individuals habituate quickly to changes in their lifestyles and eventually return to their baseline levels of happiness. One's emotion system adapts to life circumstances and the reactions of each individual are relative to his or her own prior experiences (Diener, Lucas, & Scollon, 2006). One of the earliest studies proposing this theory was that of Brickman, Coates, and Janoff-Bulman (1978) in which people with spinal cord injuries and lottery winners both produced similar levels of adaptation back to a baseline of neutrality (e.g. lottery winners were not significantly happier than a control group and individuals with spinal cord injuries were not as unhappy as was expected). Diener (2000) has since added a few changes including: (1) people do not adapt back to neutrality, but instead return to a positive set point, (2) baseline levels of happiness are influenced by temperament, expectancies and goals, and (3) people do not habituate completely to all conditions.

The concept of adaptation has now become a central component of modern theories of subjective well-being (Diener, et al., 1999). Research indicates that different types of well-being may change at different rates or directions, and therefore Diener et al. (2006) cautioned those interested in future research on subjective well-being interventions to first understand the patterns involved in adaptation so that successful interventions can be designed.

Shifts in the field of positive psychology. A radical shift in positive psychology has taken place from Authentic Happiness Theory to Well-Being Theory, as the topic of positive psychology used to be happiness, and the way of measuring happiness was life satisfaction. In his book *Flourish: A Visionary New Understanding of Happiness and Well-being*, Seligman (2011) discussed how the word happiness has become so overused that it is almost meaningless, stating that it is a far cry from its historical roots. He continued by saying that in the Authentic Happiness theory, happiness is defined and analyzed into three elements: positive emotions, engagement, and meaning; each of which is better defined and more measurable than happiness itself. However, with this shift, Seligman stated that now the topic of positive psychology has shifted to well-being (Seligman, 2011).

Authentic happiness theory. The intention behind authentic happiness theory (Petersen & Seligman, 2004) is to promote long term change in subjective well-being. At this time, happiness was the goal of positive psychology (Seligman, 2011). According to this theory, there are three distinct types of happiness: the Pleasant Life (positive emotion), the Good Life (engagement), and the Meaningful Life (meaning). This theory synthesizes all three types of happiness and states that this is what produces high levels of long-term subjective well-being (Seligman et al., 2004). Seligman (2011) defined these three types of happiness in more depth stating: positive emotion relates to what we feel (e.g. pleasure, rapture, ecstasy, comfort, and

warmth), engagement is related to flow (e.g. being one with the music, stopping time, loss of self-consciousness), and meaning which is belonging to and serving something that you believe is bigger than the self (e.g. religion, political party, family).

Yet, Seligman found flaws in his own developed theory. First, happiness has been socially constructed to exclusively align with being in a cheerful mood, despite the fact that happiness has many meanings. Additionally, critics have stated that authentic happiness theory redefines happiness by overly associating engagement and meaning into the category of happinesss. However, this was not the intent of this theory, as neither engagement nor meaning refer to how we feel. Secondly, life satisfaction has become too synonymous with happiness. In authentic happiness theory, happiness is defined by life satisfaction, however it turns out that how much life satisfaction people report is directly correlated with how well you judge your life at that moment (e.g. your present-moment mood), and does not account for meaning or engagement. Lastly, the goal of positive psychology was about what we choose for our own sake, not a means to an end. However, although happiness was the end goal, it was measured by life satisfaction, and was not pursued for its own sake (Seligman, 2011). To overcome these flaws, authentic happiness theory was no longer considered sufficient to be positive psychology's cornerstone and the Well-being theory was constructed.

Well-being theory. Well-being became the topic of positive psychology, replacing happiness and the authentic happiness theory. Well-being theory (Seligman, 2011) is constructed from five measureable elements. Also referred to as PERMA, these five elements include: positive emotion, engagement, relationships, meaning and purpose, and accomplishment (Seligman, 2011). These five elements were chosen based on three overarching criteria: (1) it must contribute to well-being, (2) many people pursue it for its own sake, not merely to get any

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of the other elements, and (3) it is defined and measured independent of the other elements (Seligman, 2011). Unlike happiness, no one element defines well-being, but each of these five elements contribute to it. In other words, with authentic happiness theory the topic was happiness, the measure for happiness was life satisfaction, and the goal for the theory was to increase life satisfaction. However, well-being theory is not so linear and simplified. With well-being theory, the topic is well-being, the measures include positive emotion, engagement, positive relationships, meaning, and accomplishment, and the goal is to increase flourishing by increasing those five measures (Seligman, 2011). Flourishing is defined as living in an optimal range of human functioning that brings goodness, generativity, resilience, and growth. It is also one overall measure of well-being (Fredrickson & Losada, 2005).

   Subjective well-being, health, and longevity. Several studies have indicated a link between higher levels of subjective well-being and better health and longevity. Early research showed a correlation between subjective well-being and health, yet no causal direction was determined (Diener & Chan, 2011). However, more recently, the relationship has been investigated through some longitudinal studies. Lyubormirsky, King, and Diener (2005) conducted a meta-analysis of longitudinal studies looking at subjective well-being and health. The final body of literature used included 225 papers, of which 11 were unpublished or dissertations. This sample comprised of over 275,000 participants, using 293 samples and 313 independent effect sizes. This review of empirical literature implies that subjective well-being is positively correlated with high levels of mental and physical health. More specifically, subjective well-being plays a role in health including its effects on: social relationships, stress, accident and suicide rates, coping, healthy behavior, and even immune function.

Additionally, Chida and Steptoe (2008) investigated the relationship between positive well-being and mortality in both healthy and diseased populations. The body of literature included 35 studies investigating mortality in healthy populations and 35 studies of populations suffering from disease. The researchers found that positive moods (e.g. joy, energy, and happiness) and positive characteristics (e.g. hopefulness, optimism, sense of humor, and life satisfaction) were related with a reduced risk of mortality and predicted longevity in healthy populations. Well-being was also related to lowered mortality rates in participants with HIV and renal failure.

Character Strengths and Well-being

These two constructs have been heavily researched in the positive psychology movement (Peterson, 2006). Studies have shown that five positive character strengths (love, hope, gratitude, curiosity, and zest) often correlate quite highly with well-being (Park et al., 2004). Park et al. also found that the use of signature strengths at work has been shown to increase workers' well-being and optimal functioning.

Many studies have also investigated well-being in adolescents and children. Garcia and Moradi (2012) performed a longitudinal study examining the relationship between temperament and character to subjective well-being at two points in time over a one year period. With a sample of 109 adolescents, they found that temperament (Harm Avoidance and Novelty Seeking) and character (Self-Directedness) predicted subjective well-being. Rashid et al. (2013) found that specific character strengths (love, zest, and hope) were significantly correlated with well-being in children and adolescents.

Govindji and Linley (2007), as mentioned earlier, also discovered some significant findings relating character strengths to well-being in college students. Participants included a

sample of 214 college students (129 females, 85 males) enrolled in a variety of courses including: psychology (42.1%), science (20.4%), humanities (6.3%), law (5.9%), and government and politics (4.1%). The mean age of the participants was 22.78 years, ranging from 18-58 years. The majority of the students were from a White ethnic background (64%), followed by Indian (20%), and Chinese (4%). English was the first language for all participants. They found that students who used their signature strengths more reported higher levels of subjective well-being, psychological well-being, confidence, self-esteem, and psychological vitality (e.g. having feelings of positive energy).

Moreover, Forest et al. (2012) took this research a step further by implementing an intervention where workers use their signature character strengths and their harmonious passion and well-being at work are investigated. Harmonious passion "develops when an activity becomes part of an individual's identity without any constraints or contingencies associated with it, and when it has been freely chosen as highly important for oneself" (Forest, et al., 2012, p. 1236). Participants included an experimental group of 186 college students (71 males, 115 males) from the province of Quebec. The majority of the participants had a college/professional degree (76.8%) and were full time students (85.5%). The mean age of the participants was 22.82 years. There were 36 university students in the control group (14 males), whereas the mean age was 22.42 years. The majority of the participants for both the experimental and control groups had part-time employment, working on average 22.77 and 19.48 hours per week, respectively. Researchers found that by discovering their own signature strengths and finding new ways to use them, participants used these strengths more at work. Furthermore, researchers found that being able to use one's signature strength in the workplace fosters well-being through its positive influence on harmonious passion toward work.

Social Activity and Belongingness

Humans are social creatures, and social bonding is present throughout the lifespan (e.g. caretakers, romantic relationships, connection to a larger society) (Cartensen, 1991). However, changes in social activity occur with age. Participating in social activities appears to be more prevalent in younger individuals and tends to diminish from mid-life to older adulthood (Cartensen, 1991). For college students, participating in social activities increases a student's level of social integration, but it requires an investment of time and energy (Braxton, Hirschy, & McClendon, 2004). Yet, many students feel as though participating in social activities is worth that investment. In a sample of college students, 70 percent admitted that participating in social activities in college is more important than academics (Grigsby, 2009). Milem and Berger (1997) found that students who participate in college social activities (e.g. fraternities/sororities, dating) experience greater levels of social integration and are more likely to be academically involved (e.g. attending classes, completing coursework).

Colleges and universities provide students with many different organizations, clubs, and social gatherings to fit an aspect of a student's identity (e.g. racial/ethnic groups, LGBT identity, religious/faith based organizations, athletic clubs). Although college students may choose to participate in a variety of social activities, not all types of social interactions foster a sense of belonging (Strayhorn, 2012). Experiencing a sense of inclusiveness and belonging is seen as a basic psychological need (Osterman, 2000). Furthermore, students' sense of belonging is highly correlated with happiness, college completion, and academic success (Strayhorn, 2012).

Rationale

There has been a large increase in college students seeking university counseling services (ACCA, 2012). Several factors may be contributing to this increase including: developmental

changes for the traditional-age college population (Justice & Dornan, 2001) leading to increased psychological distress (Blimling, 2010); under-developed cerebral cortex affecting emotional regulation, problem-solving, and risk-taking processes (Giedd, 2004); and formation of physical and identity development, affecting self-concept (Blimling, 2010) and independent thinking (Clinchy,1990). The rise in mental health issues on college campuses can be addressed through positive psychology, and more specifically, through further exploration of character strengths and well-being.

Well-being is a concept that has existed for some time and has been heavily researched. However, character strengths are a relatively new concept developed within the last decade. Therefore, more global research including diverse methodology, measures, and samples is needed in relation to character strengths (Lounsbury et al., 2009). Although some research has already investigated the relationship between character strengths and well-being, very little has focused on the college population and subjective well-being. Additionally no research has investigated how social activities in universities (e.g. on campus living, relationship status, and university activities/clubs) relate to character strengths and subjective well-being.

Appendix B

Consent to use the VIA Inventory of Strengths (VIA-IS)

From: Kelly Aluise <KellyA@viacharacter.org>
Subject: VIA Research Request
Date: September 13, 2013 2:03:05 PM CDT
To: "lindsay.murrell@okstate.edu" <lindsay.murrell@okstate.edu>

Hello Lindsay,

We are very pleased to provide permission to use the VIA Survey of Character in your research project, thereby expanding the knowledge base on the VIA Classification of Character Strengths and Virtues.

Since you are using the 240-item survey, as opposed to the 120-item survey that is on our site for the general public, please instruct your subjects to go to this unique address to access the survey:

http://www.viame.org/Via240

Tell your participants to watch for the field requesting a research code (after completing the survey), and to be certain to enter your code:

MLQR913

Use of the code will enable us to compile your data for you into a single Excel spreadsheet. When you want your results, just let me know via e-mail. You may not charge your research subjects any fee for taking the VIA survey. **Please note that we will not release identifying information (name or email address) for the individuals on the Excel sheet. The report you will receive from the VIA Institute will not include this information with the VIA scores—only age and gender will be included. If you need to identify individual participants you will need to assign them a "Participant ID Code." The "Participant ID Code" field will be immediately after the "Research Code" field. If you do not need to identify individual participants, you may instruct them to leave this field blank.

We very much want to retain the scientific integrity and reputation of the VIA Survey of Character, and so request that you limit your application and interpretation of results to that which is provided by VIA and otherwise is scientifically based. Here is a link to the VIA Institute's Guidelines for Use and Interpretation:

http://viacharacter.org/SURVEYS/UseandInterpretation/tabid/83/language/en-US/Default.aspx

Finally, in exchange for providing this free service, VIA requests that you share your research results with us. Please do so by e-mailing me a report, which I shall share with the VIA staff.

Again, thank you for your interest in expanding the body of scientific knowledge on character strengths and for including the VIA Survey on Character in your work. We look forward to learning of your results and wish you good luck in conducting your study. Don't hesitate to get in touch if you have any questions or concerns.

Regards,

Kelly Aluise
Communications Specialist
VIA Institute on Character
312 Walnut St., Suite 3600
Cincinnati, OH 45202
(513) 621-7501
www.viacharacter.org

Appendix C

Satisfaction with Life Scale (SWLS)

(Diener, Emmons, Larsen and Griffin, 1985)

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

___ In most ways my life is close to my ideal.

___ The conditions of my life are excellent.

___ I am satisfied with my life.

___ So far I have gotten the important things I want in life.

___ If I could live my life over, I would change almost nothing.

31 - 35 Extremely satisfied
26 - 30 Satisfied
21 - 25 Slightly satisfied
20   Neutral
15 - 19 Slightly dissatisfied
10 - 14 Dissatisfied
5 - 9 Extremely dissatisfied

Appendix D

Demographic Form

Age: _____   Gender: _____

Date of birth: Month _____ Day _____ Year _____

Race (choose one that best describes you):

           European/White

      Black

      Hispanic

      Asian

      Biracial/Multiracial   _____

      Other _____

Student Status (choose one that best describes you):

     Freshman

     Sophomore

     Junior

     Senior

     Graduate Studies

Please indicate how frequently you have engaged in each of the following activities **during the past week**. Only check those events that involved a significant level of social interaction with a friend or family member. If one activity falls into two or more categories, please choose the category that best represents that activity (Watson, Clark, McIntyre, & Hamaker, 1992).

Romantic activity or dating (e.g. going on a date)

0	1	2	3
Not at all	Once	Twice	Three or more times

Going to a party, sporting event, tailgating, or other social gathering

0	1	2	3
Not at all	Once	Twice	Three or more times

Playing video games, board games, or cards

0	1	2	3

Not at all   Once   Twice   Three or more times

Going out to lunch/dinner or out for coffee/drink
  0   1   2   3
Not at all   Once   Twice   Three or more times

Going to a movie, play, concert, or other cultural activity

  0   1   2   3
Not at all   Once   Twice   Three or more times

Exercising or playing sports (or other strenuous physical activity)

  0   1   2   3
Not at all   Once   Twice   Three or more times

Having a serious discussion with another person

  0   1   2   3
Not at all   Once   Twice   Three or more times

Studying

  0   1   2   3
Not at all   Once   Twice   Three or more times

Running errands or grocery shopping

  0   1   2   3
Not at all   Once   Twice   Three or more times

Other _____

  0   1   2   3
Not at all   Once   Twice   Three or more times

Please check the social groups that you are currently involved with (Check all that apply):

_____ University Clubs, Societies, Leadership, and Engagement

_____ Fraternity/Sorority Affiliation

_____ NCAA Division I Athletics

_____ Intermural Activities

_____ Student Government

_____ Religious/Spiritual Organizations

_____ Community Organizations (e.g. 4H, Big Brothers Big Sisters)

Other _____

Appendix E

Consent Form

You are invited to participate in a research study examining the relationship between character strengths and well-being in college students. It is hoped that information gleaned from this research will inform the field of psychology, specifically in areas relating to psychological health and well-being.

Participation is completely voluntary. If you choose to participate, you will be directed to an online survey via the weblink provided below. It is expected that the survey will take approximately 40-50 minutes to complete. Completing the survey and submitting your responses indicates both your consent to participate and your being 18 years of age or older. Individual responses will remain unidentifiable. If you choose to participate, you will be asked to provide basic demographic information and complete questionnaires related to your satisfaction with life and strengths of character. Though you are strongly encouraged to complete all questionnaires and demographic questions, you can opt out at any time by exiting the survey. All collected data will be stored in a confidential, secure location for the duration of the study up to 3 years. There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

All inquiries regarding this research can be addressed to the primary researcher, Lindsay Murrell, of Oklahoma State University, at lindsay.murrell@okstate.edu and/or advisor, Julie Koch, PhD, of Oklahoma State University, at julie.koch@okstate.edu. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

Qualtrics disclaimer: Note that Qualtrics has specific privacy policies of their own. You should be aware that this web service may be able to link your responses to your ID in ways that are not bound by this consent form and the data confidentiality procedures used in this study, and if you have concerns you should consult this service directly.

http://survey.az1.qualtrics.come/SE/?SID=SV_0vTGKOq9BH7i5MN

Appendix F

Institutional Review Board Approval

Oklahoma State University Institutional Review Board

Date:	Wednesday, April 09, 2014
IRB Application No	ED1436
Proposal Title:	Character Strengths and Well-Being: Differences in Social Activity Among College Students
Reviewed and Processed as:	Exempt

Status Recommended by Reviewer(s): Approved   Protocol Expires: 4/18/2017

Principal
Investigator(s):

Lindsay Murrell	Julie Koch
434 Willard	418 Willard
Stillwater, OK 74078	Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

X The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,

Shelia Kennison, Chair
Institutional Review Board

Table 1

Classification of 6 Virtues and 24 Character Strengths (Peterson & Seligman, 2004)

Virtue and strength	Definition
1. Wisdom and knowledge	Cognitive strengths that entail the acquisition and use of knowledge
Creativity	Thinking of novel and productive ways to do things
Curiosity	Taking an interest in all of ongoing experience
Open-mindedness	Thinking things through and examining them from all sides
Love of learning	Mastering new skills, topics, and bodies of knowledge
Perspective	Being able to provide wise counsel to others
2. Courage	Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal
Authenticity	Speaking the truth and presenting oneself in a genuine way
Bravery	*Not* shrinking from threat, challenge, difficulty, or pain
Persistence	Finishing what one starts
Zest	Approaching life with excitement and energy
3. Humanity	Interpersonal strengths that involve "tending and befriending" others
Kindness	Doing favors and good deeds for others
Love	Valuing close relations with others
Social intelligence	Being aware of the motives and feelings of self and others
4. Justice	Civic strengths that underlie healthy community life
Fairness	Treating all people the same according to notions of fairness and justice
Leadership	Organizing group activities and seeing that they happen
Teamwork	Working well as member of a group or team
5. Temperance	Strengths that protect against excess
Forgiveness	Forgiving those who have done wrong
Modesty	Letting one's accomplishments speak for themselves
Prudence	Being careful about one's choices; *not* saying or doing things that might later be regretted
Self-regulation	Regulating what one feels and does
6. Transcendence	Strengths that forge connections to the larger universe and provide meaning
Appreciation of beauty and excellence	Noticing and appreciating beauty, excellence, and/or skilled performance in all domains of life
Gratitude	Being aware of and thankful for the good things that happen
Hope	Expecting the best and working to achieve it
Humor	Liking to laugh and tease; bringing smiles to other people
Religiousness	Having coherent beliefs about the higher purpose and meaning of life

VITA

Lindsay Murrell, M.A.

Candidate for the Degree of

Doctor of Philosophy

Dissertation: CHARACTER STRENGTHS AND WELL-BEING: DIFFERENCES IN
                SOCIAL ACTIVITY AMONG COLLEGE STUDENTS

Major Field: Educational Psychology with an option in Counseling Psychology

Education:
          Oklahoma State University, 2011 – 2015, *Doctoral Candidate*, Expected graduation
          Summer 2015
          Rollins College, 2008 – 2011, *M.A. in Mental Health Counseling*
          Rollins College, 2008, *B.A. in Psychology*

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APA Accredited Internship at Emory University CAPS, *Intern*   2014-2015
UCO Counseling Services, *Practicum Student*   2012 – 2014
Oklahoma State University Athletic Department, *Sport Psychology*   2012 – 2013
OSU Counseling Psychology Clinic, *Practicum Student*   2012
Stillwater Domestic Violence Services, *Practicum Student*   2011 – 2012
Cornell Counseling Center, *Counseling Intern*   2010 – 2011
The Center for Drug-Free Living, *Counseling Intern*   2010 – 2011
Upward Bound Career Counseling, *Counseling Student*   2010

Professional Activity

          Member, American Psychological Association (APA)
          Member, APA Division 17 (Society of Counseling Psychology)
          Member, APA Division 47 (Society of Sport and Exercise Psychology)
          Member, Southwestern Psychological Association
          Member, Association of Applied Sport Psychology
          Oklahoma State University Athletics Department