# A POSITIVE PSYCHOLOGY ENDEAVOR: EXPLORING THE RELATIONSHIP BETWEEN KINDNESS AND RESILIENCE

A dissertation submitted to the Wright Institute Graduate School of Psychology in partial fulfillment of the requirements for the degree of Doctor of Psychology

> by MARY STRANEVA KALPAKOFF MAY 2019

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### CERTIFICATION OF APPROVAL

I certify that I have read A POSITIVE PSYCHOLOGY ENDEAVOR: EXPLORING THE RELATIONSHIP BETWEEN KINDNESS AND RESILIENCE by Mary Straneva Kalpakoff, and that in my opinion this work meets the criteria for approval of a dissertation submitted in a partial fulfillment of requirements for the degree of Doctor of Psychology at the Wright Institute Graduate School of Psychology.

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# A POSITIVE PSYCHOLOGY ENDEAVOR: EXPLORING THE RELATIONSHIP BETWEEN KINDNESS AND RESILIENCE

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The purpose of this study was to address a gap in the literature by conducting a partial replication study, examining the relationship between kindness and resilience when controlling for social support and positive affect. It was hypothesized that higher scores on the Kindness subset of questions from the VIA Survey on Character (VIA-IS) would predict greater resilience (i.e., higher scores on the Brief Resilience Scale-BRS), while controlling for the variables of social support and positive affect. Social support and positive affect were measured by using the Multidimensional Scale of Perceived Social Support (MSPSS) as well as the Positive and Negative Affect Schedule (PANAS). This study employed a cross-sectional design and was conducted online via Google Forms. A total of 102 participants' data were used for analysis. The study's hypothesis was not supported. The Pearson correlation test was conducted and revealed no significant relationship between kindness and resilience. However, the other variables were significantly related to each other. Positive affect was significantly related to resilience, kindness, and social support. Kindness and social support were also significantly related. Limitations, implications, and future research suggestions are discussed.

### **Dedication**

# My Family and Friends:

I would like to thank my inspiration, my family and friends. Thank you for gracefully moving through your lives with kindness and resilience, for giving me hope in mental illness prevention, and for continually reminding me of the powerful inner strength that resides within each of us!

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#### **Chapter I: Introduction**

## Research Topic

The purpose of this study is to examine the relationship between kindness and resilience when controlling for social support and positive affect. The VIA Classification of Strengths defines kindness as "doing favors and good deeds for others" (Park & Peterson, 2009, p. 2). Furthermore, it posits that kindness is a character strength that falls under the broader virtue classification of Humanity, along with love and social intelligence. These three character traits are "interpersonal strengths that involve 'tending and befriending' others" (Seligman, Steen, Park, & Peterson, 2005, p. 412). Resilience has been defined as an adaptive trait that has two parts: (a) The ability to recover and bounce back after adversity, and (b) The capacity to grow after a setback and come back even stronger (Wong, 2011).

#### **Social and Clinical Context**

The field of psychology has been primarily concerned with suffering, and thus research into the strengths of humanity has not reached its full potential. However, choosing to develop one's mental health rather than solely focusing on decreasing one's mental illness, could be the key to prevention, mental illness relief, and cost-effectiveness (Seligman, 2008). Perhaps the field's preoccupation with pathologies has caused it to lose sight of the positive sides of human life and the significant strengths those carry.

Therefore, this study is concerned with the strengths of humanity. While there is abundant research on resilience as well as some research on kindness (and related concepts – e.g., prosocial behavior), there appears to only be one study that examines the relationship between the two different constructs (Martínez-Martí & Ruch, 2017).

Research has shown that kindness is associated with increased happiness (Otake et al., 2006), well-being (Tkach, 2006), and life satisfaction (Buchanan & Bardi, 2010). Resilience is thought to buffer against pathologies, as well as is expected to increase chances that individuals will have positive affect, be open to experience, and ultimately engage in life positively (Tellegen, 1985). If resilient people are less likely to suffer from pathologies, then identifying which factors correlate with resilience has crucial significance to the field of clinical psychology. Identifying how resilient people interact in the world (e.g., with kindness) could be a key preventive measure. If a relationship between kindness and resilience is found, even when social support and positive affect are controlled for, then this could provide further evidence that a relationship between the two variables exist. This would create an opening for future researchers to determine if there is a causal effect. Although this study will not imply causation, if a relationship between kindness and resilience is discovered, clinicians may begin thinking about what weaving kindness into their interventions and therapeutic relationship could look like.

## Rationale for the Proposed Research

There is ample research on resilience, some research on kindness, and a fair amount of research on concepts related to kindness. Several research studies, which will be examined in the literature review, have shown that a relationship exists between concepts similar to kindness (i.e., prosocial behavior, altruistic behavior, charitable behavior, and prosocial personality) and resilience (i.e., as well as concepts similar to resilience, such as posttraumatic growth; Anik, Aknin, Norton, & Dun, 2009; Haroz, Murray, Bolton, Betancourt, & Bass, 2013; Leontopoulou, 2010; Mosavel et al., 2015;

Rydell, Berlin, & Bohlin, 2003). These studies raise the possibility that kindness promotes resilience and vice versa (i.e., resilience promotes kindness).

There are three research findings in particular that suggest that there is a positive relationship between kindness and resilience. First, acts of kindness have been shown to contribute to healthy social relationships (Emmons & McCullough, 2003; Otake et al., 2006), and research has shown that a good social support network is linked to resilience (Wilks & Spivey, 2010). This suggests that kindness causes people to be resilient. Second, another line of research suggests that resilience causes people to be kind. Individuals who undergo adversity were more likely to show increased compassion toward others (Lim & DeSteno, 2016). Notably, this effect of a compassionate outlook was shown to predict prosocial behavior, in which these individuals attempted to reduce others' suffering (Lim & DeSteno, 2016). Therefore, it is possible that people who experience adversity are more kind because the previous study showed a link between adversity, compassion, and prosocial behavior (i.e., a construct very similar to kindness). Therefore, this developing research points to the idea that variations exist regarding the relationship between adversity and resilience, with adversity frequently boosting cooperation in the midst of collective suffering (Lim & DeSteno, 2016). Adversity is a necessary component of resilience, as resilience has been defined as an adaptive trait that has two parts: (a) The ability to recover and bounce back after adversity, and (b) The capacity to grow after a setback and come back even stronger (Wong, 2011). This line of research suggests that resilience causes people to be kind. Therefore, it is plausible a relationship between solely kindness and resilience exists.

Finally, in one study conducted online in Switzerland, evidence for the correlation between the character strength of kindness and resilience was shown to be significant (Martínez-Martí & Ruch, 2017). However, their analysis also revealed that kindness did not predict resilience when they included all of their control variables as well as all of the other character strengths. Yet, when the researchers conducted this analysis, kindness was lumped together with other interpersonal character strengths that are different from kindness (Martínez-Martí & Ruch, 2017). They did not examine kindness separately. This could conceivably be why kindness did not predict resilience when additional variables were controlled for. Therefore, it is currently unknown if there is a relationship between solely kindness and resilience. The present study plans to address this gap in the research by examining the relationship between solely kindness and resilience when controlling for social support and positive affect.

#### Conclusion

The first two studies raise the possibility that kindness promotes resilience or that resilience promotes kindness. There are many factors (e.g., social support, well-being, compassion, and gratitude) that could be mediating the possible relationship between kindness and resilience. However, it is unknown whether kindness promotes resilience or vice versa. Therefore, these are just hypotheses. The last study provides partial support for the present study's hypothesis, in that the researchers found a correlation between interpersonal strengths (i.e., including kindness) and resilience in one of their analyses (Martínez-Martí & Ruch, 2017). However, this is only one study and it grouped kindness together with other interpersonal strengths (e.g., fairness and teamwork). In sum,

evidence that kindness and resilience are related. Consequently, the purpose of this study is partial replication, to investigate if solely kindness is related to resilience, while controlling for social support and positive affect, in a United States sample of participants. This study will examine if a relationship exists between solely kindness and resilience, when controlling for the variables of social support and positive affect.

#### Chapter II: Literature Review

#### Overview

The literature review below has several aims, which are: (a) to highlight the importance of positive psychology and how this study contributes to this movement, (b) to define and differentiate this study's key variables (i.e., resilience and kindness), (c) to explore the possible direction of the relationship between the key variables (i.e., kindness  $\rightarrow$  resilience or resilience  $\rightarrow$  kindness) by presenting research on possible mediators (i.e., social support, well-being, compassion, and gratitude) that may be playing a role in each of these directions (e.g., kindness  $\rightarrow$  social support  $\rightarrow$  resilience), (d) to investigate a study that has examined the character strength of kindness and resilience, ultimately providing partial support for the present study's hypothesis, and (e) to justify reasons for the present study to be conducted.

## **Positive Psychology**

Positive psychology is a subfield of clinical psychology that researches positive character traits (e.g., kindness and resilience), positive emotions, and enabling institutions. The goal of positive psychology is to allow for a more balanced and comprehensive approach to the human experience, rather than solely focusing on human suffering (Seligman, Steen, Park, & Peterson, 2005). Additionally, positive psychologists argue that a comprehensive science should include knowledge of not only suffering, but also of happiness, as well as their relationship to each other. In other words, mental health professionals should be experts on suffering, but they should also be experts on well-being (Seligman et al., 2005).

In 1996, Martin Seligman was elected to be the President of the American Psychological Association. Since then, he has made growing the field of positive psychology one of his top priorities. Seligman (2008), boldly brought to light the point that although psychology and psychiatry have done their due diligence in treating mental illness (e.g. depression, anxiety, addiction, etc.), he noted that they have barely skimmed the surface on bolstering mental *health* (e.g. purpose, positive emotion, engagement, etc.). He asserted that solely eliminating mental illness does not necessarily lead to mental health (Seligman, 2008).

Traditionally, alleviating suffering has been prioritized over increasing happiness, well-being, and mental health (Seligman, 2008). For over a century, this alleviation of suffering has been targeted through psychotherapy, where clients come in and talk about their problems (Seligman, Rashid, & Parks, 2006). Others may enroll in workshops, retreats, and courses. Similarly, the emphasis is placed on healing negatives, such as disorders, traumas, and symptoms (Seligman at al., 2006). Such practices are built from the idea that talking about problems is healing. Nevertheless, concentrating on the positives in therapy is seldom an intervention used (Seligman et al., 2006).

Many may believe that human suffering must first be conquered before efforts can be focused on fostering well-being. Although understandable, Seligman confidently offers two reasons as to why this type of thinking is incorrect. First, people yearn for well-being period, and this goes beyond just reducing suffering. Second, although less apparent but perhaps even more important, he notes that nurturing well-being (e.g. positive relationships, positive emotion, purpose, etc.), could be one of the most important means to prevent and fight mental disorders (Seligman, 2008). A considerable

amount of research now indicates that depression can be improved through interventions that focus on cultivating positive states (Seligman, Steen, Park, & Peterson, 2005; Seligman et al., 2006). In other words, choosing to develop one's mental health rather than solely decreasing one's mental illness, could be the key to prevention, mental illness relief, and cost-effectiveness (Seligman, 2008). Perhaps the field's preoccupation with pathologies has caused it to lose sight of the positive sides of humanity, and the significant strengths those carry.

Positive psychology can be thought to have four main pillars: virtue, well-being, meaning, and resilience. These have specifically been chosen because empirical research has found them to be the essential elements as well the broadest psychological ideas of what is known to enhance life for individuals and society in both good and bad periods (Wong, 2011). If resilience is one of the main pillars thought to enhance life for individuals and society as a whole, then researching factors that correlate with resilience is crucial (Wong, 2011).

#### Resilience

**Definition and overview.** Life is full of hurdles, difficulties, failures, illness, losses, and deaths. How individuals react to these hardships can make an immense difference. The term resilience has been described in several different ways (Alvord & Grados, 2005). One of the more commonly used definitions in the field of psychology is offered by Masten, Best, and Garmezy (1990), who describe resilience as "the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (p. 426). Very similarly, other researchers have defined it as having the capability to come back after experiencing adverse emotional experiences and by being

flexible enough to adapt to the new demands of that unfavorable experience (Block & Block, 1980; Block & Kremen, 1996; Lazarus, 1993). In other words, a resilient individual not only has the ability to recover and bounce back in the face of adversity, but also has the capacity to grow after a setback and come back even stronger (Wong, 2011).

Resilience can be thought of as a dynamic process, as illustrated by an individual undergoing significant adversity or trauma but then being able to adapt positively despite that (Luthar & Cicchetti, 2000). Thus, resilience is comprised of two parts. The first part involves exposure to adversity and the second part implies a manifestation of positive aftereffects (Luthar & Cicchetti, 2000). When speaking of adversity with regards to resilience, it is synonymous with risk. As such, the term adversity refers to damaging life circumstances that are correlated with maladjustment (Luthar & Cicchetti, 2000). The second part of resilience, positive adaptation, can be defined as behavioral social competence or as attaining developmental tasks as would be expected (Luthar & Zigler, 1991). In conclusion, resilience has been defined as an adaptive trait that has two parts:

(a) The ability to recover and bounce back after adversity, and (b) The capacity to grow after a setback and come back even stronger (Wong, 2011). This clear and concise definition is the one that will be focused on for this study.

It is often assumed that individuals are either resilient or not. However, what many may not know is that resilience involves an individual possessing many skills, at varying levels, in order to help them cope (Alvord & Grados, 2005). In other words, resilience is not a characteristic that people either possess or do not possess (Alvord & Grados, 2005; Reivich & Shatté, 2002). Although certain characteristics have solely biological bases, some researchers believe that resilience skills can be acquired and

strengthened (Alvord & Grados, 2005). For example, when an individual has several protective factors present in their life, this seems to improve performance in many domains (Alvord & Grados, 2005). Protective factors can be defined as influences that change one's response to an environmental danger that made one vulnerable to a maladaptive outcome (Alvord & Grados, 2005). Some protective factors that increase resiliency include: proactive orientation (i.e., using self-agency in one's own life and believing in the success of it), self-regulation (i.e., being able to manage one's own emotion, behavior, and attention), proactive parenting (i.e., at least one parent who is loving, but also gives firm rules), connections and attachments (i.e., acquiring a sense of belonging, self-esteem, and self-efficacy through supportive relationships), school achievement and involvement (i.e., support from teachers, extracurricular activities, a positive perspective toward school, and cognitive ability), and community (i.e., provides healthy relationships apart from the family; Alvord & Grados, 2005). A resilience-based curriculum, The Alvord-Baker model of social skills groups, concentrates on a proactive orientation and cognitive-behavioral strategies. The several components of this model are: the interactive didactic component, free play and behavioral reversal, relaxation and self-control techniques, generalization (i.e., generalizing change to different settings to foster resilience), and parents as active partners. Acting on the different components of this systems model is thought to promote resilience (Alvord & Grados, 2005). In conclusion, resilience can be acquired and strengthened; individuals are not born with a fixed amount.

Although resilience is a concept that has been used for several decades now and has a large presence in psychological research, there are also several related concepts

from which it should be differentiated. Hardiness, grit, and posttraumatic growth are three concepts that will be defined and described below in order to be sure there is no confusion between them and resilience.

Differentiating resilience from related concepts. *Hardiness*. Hardiness has been described as a resilience-recovery factor and as a personality constellation (Kobasa, 1979), which has three key parts. These parts involve an individual: (a) feeling they have power over their own life, (b) having dedication to their own livelihood, and (c) having a willingness to perceive change as challenge (King, King, Fairbank, Keane, & Adams, 1998). The idea is that these different parts of hardiness may stimulate healthy coping in the face of stressors. Hardy individuals are thought to be more likely to capitalize on help that is available in their environment (King et al., 1998).

*Grit.* Grit is a more newly developed term in the field of psychology. Duckworth, Peterson, Matthews, and Kelly (2007) define grit as, "perseverance and passion for long-term goals, [which] entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress" (Duckworth et al., 2007, p. 1087-1088). A gritty person has great stamina and thus will look at achievement like a marathon. While others may abandon a goal after setback or boredom, a gritty person will remain steadfast (Duckworth et al., 2007). Grit is similar to resilience in that a gritty individual overcomes adversity. However, grit has another component as well. It involves having serious commitments that an individual devotes him or herself to over a long period of time (Perkins-Gough, 2013).

**Posttraumatic growth.** Similarly to grit, posttraumatic growth is a newer term that has recently emerged in the field of psychology. Posttraumatic growth has been defined

as, "the experience of positive change that occurs as a result of the struggle with highly challenging life crises" (Tedeschi & Calhoun, 2004, p. 1). Posttraumatic growth can be displayed in a multitude of ways, including having deeper interpersonal relationships, greater gratitude for life in general, modified priorities, a more meaningful spiritual and existential life, and an amplified feeling of personal strength. It has been proposed that several components contribute to posttraumatic growth, including: support, disclosure, personal characteristics, and cognitive processing - which encompasses cognitive structures that were endangered or damaged by the traumatic experiences. Moreover, it has been postulated that life wisdom and the expansion of one's life narrative interface with posttraumatic growth. Finally, posttraumatic growth is not thought of as a fixed end product, but rather as a continuing process (Tedeschi & Calhoun, 2004).

Resilience – a distinct concept. Although hardiness, grit, and posttraumatic growth are related to resilience, resilience is a unique concept in itself. Resilience is an adaptive trait that has two parts: (a) The ability to recover and bounce back after adversity, and (b) The capacity to grow after a setback and come back even stronger (Wong, 2011). Consequently, hardiness is different in that it has been described as a resilience-recovery factor and as a personality constellation (Kobasa, 1979). It has different parts that may stimulate healthy coping in the face of stressors (King et al., 1998). In other words, hardiness may be a contributing factor to resilience, but it does not encapsulate all that resilience does (King et al., 1998). Hardiness may be one factor present, which provides an individual the ability to be resilient in the face of adversity (part "a" of resilience definition; Wong, 2011). However, hardiness does not seem to

capture the second part of resilience, the ability to grow after a setback and come back even stronger (part "b" of resilience definition; Wong, 2011).

Although resilience is quite similar to grit, they are different as well. Grit is similar to resilience in that a gritty individual also overcomes adversity. However, grit takes a different direction. Grit involves having serious commitments that an individual devotes himself or herself to over a long period of time (Perkins-Gough, 2013). While resilience involves bouncing back from adversity (Wong, 2011), it does not require a specific serious commitment that an individual devotes him or herself to, like grit does (Perkins-Gough, 2013). Instead, the second part of resilience more vaguely implies a manifestation of positive aftereffects (Luthar & Cicchetti, 2000).

Finally, posttraumatic growth and resilience are perhaps the most closely related of the terms. Posttraumatic growth is similar to resilience (i.e., especially when using the definition that this study is focusing on) in that both concepts involve experiencing an extreme hardship in life, but then having the capability to come back stronger than before the hardship occurred (Tedeschi & Calhoun, 2004; Wong, 2011). However, these concepts differ in that posttraumatic growth more heavily emphasizes and goes into greater depth on the transformation that occurs when one is able to not only overcome adversity but also grow from it (e.g., have deeper interpersonal relationships, changed priorities, more meaningful spiritual life, etc.), whereas resilience does not place as much of an emphasis on the growth aspect of the definition (Tedeschi & Calhoun, 2004).

It should be noted that although resilience is distinct from these other concepts, the literature review below will cite some studies that explore these related concepts. This is because while these concepts are not identical to resilience, they are closely related and

therefore may still provide important insights for the purpose of this study (i.e., examining the relationship between kindness and resilience).

History of resilience. How the construct of resilience came to be in the field of psychology has a rich and fascinating history. Research on schizophrenic patients became the starting point of what would later be understood as resilience (Luthar, Cicchetti, & Becker, 2000; Masten, Best, & Garmezy, 1990). In these early explorations, understanding maladaptive behavior in these severely mentally ill patients was the primary focus, and therefore, the patients who were getting along fine, were given little focus and were thought of as abnormal. However, it was realized by the 1970s that schizophrenic patients who ended up having the more mild progressions of the disorder shared similarities. Specifically, before onset of the disorder, they appeared to have healthy functioning in several domains, including relationships, work, and responsibility (Garmezy, 1970; Luthar et al., 2000; Zigler & Glick, 1986). While these outlier schizophrenic patients who were functioning better than others, were not described as resilient back then, their healthy functioning (e.g., in social ability), may be thought of as predictive of a resilient course in present day (Luthar et al., 2000).

Similarly, the development of the theoretical subject of childhood resilience was spurred by studies examining children who had schizophrenic mothers (Garmezy, 1974; Garmezy & Streitman, 1974; Luthar et al., 2000; Masten et al., 1990). Findings that numerous of these high-risk children nonetheless flourished, guided researchers to begin exploring individual differences in reactions to hardship (Luthar et al., 2000). Moreover, early clinical case accounts sparked interest in resilient children and why some were able to overcome hardship while others surrendered. In addition, discussions of "invulnerable"

children (Anthony, 1987) and "good copers" (Murphy & Moriarty, 1976) captured attention. One account portrayed by Bleuler (1984; as cited in Alvord & Grados, 2005), told the story of a Swiss girl who endured several hardships growing up. For example, her mother was hospitalized due to mental health issues, she had cared for her alcoholic father, and she had been responsible for looking after her siblings. Amazingly, later on in life, she reported having a content life and happy marriage (Alvord & Grados, 2005). Consequently, this focus on children who overcame adversity, shed light on the idea that resilience can begin from a young age.

However, newer resilience studies have aided in laying the foundation for what is understood today (Alvord & Grados, 2005). For example, Werner and colleagues conducted a 30-year, longitudinal study examining vulnerable infants born into poverty on Kauai, a Hawaiian island (Alvord & Grados, 2005; Werner, 1989; Werner & Smith, 1982). Several discoveries were made, including: males displayed a greater risk of vulnerability in their first decade, that at different points in life the power of protective and risk factors changed, and that some protective factors appeared to have a broader influence on adaptation than did certain risk factors (Werner, 1989). For example, during childhood, the father's presence (for boys), the mother's long-term employment (for girls), and the presence of alternative caregivers in the household were significant resilience predictors. During late adolescence, significant factors included girls having mothers without mental health problems as well as one's view of the quality of one's relationship with their family, especially with one's father (Luthar & Zigler, 1991; Werner & Smith, 1982). After Werner's pioneering research on children in Hawaii was conducted, resilience research grew vastly (Werner & Smith, 1982). Several resilience

risk factors were examined, including community violence and urban poverty (Luthar, 1999), socioeconomic disadvantage (Rutter, 1979), maltreatment (Beeghly & Cicchetti, 1994), mental illness of parents (Masten & Coatsworth, 1995), devastating life events (O'Dougherty-Wright, Masten, Northwood, & Hubbard, 1997), and chronic sickness (Luthar et al., 2000; Wells & Schwebel, 1987).

After these discoveries, researchers shifted their focus to protective factors; in other words, they were looking for what set well-adjusted children apart. Therefore, beginning energies were spent investigating personal characteristics, such as high selfesteem of children who were thought to be resilient. For example, Dumont & Provost (1999) conducted a study in this vein. They divided their adolescent participants into three groups (well adjusted, resilient, and vulnerable) by crossing scores of frequency of daily hassles and depressive symptoms. The researchers aimed to examine group disparities on self-esteem, social support, different aspects of social life, and different strategies of coping. Findings showed that self-esteem, problem-solving coping strategies, and antisocial and illegal activities with friends aided in differentiating the groups. It was found that adolescents who were well-adjusted had greater self-esteem levels than the adolescents in the two other groups. Furthermore, it was revealed that vulnerable adolescents had lower self-esteem than resilient adolescents (Dumont & Provost, 1999). Nevertheless, as knowledge in this area advanced, researchers recognized that external factors might be contributing to resilience in children. Ensuing studies were able to find and outline three different influences involved in resilience's development. These were (a) qualities of the children themselves, (b) elements of their families, and (c) aspects of their greater social communities (Luthar et al., 2000; Masten & Garmezy, 1985; Werner & Smith, 1982, 1992).

More recently, resilience researchers' attention has turned from determining protective factors to comprehending what underlies protective processes. In other words, the question has shifted from what are the protective factors to how do these protective factors lead to increased positive consequences (Luthar et al., 2000). The significance of examining these underlying protective processes was illuminated in a study that examined intelligence among inner-city adolescents (Luthar, 1991). Trends showed that more intelligent youth displayed vaster decreases in performance at high versus low amounts of life stress than did less bright youth (Luthar, 1991). With regards to underlying processes, these discoveries might expose intelligent youth's greater sensitivity to negative life events. On the other hand, these findings might suggest that intelligent inner-city adolescents are more highly driven to achieve at school when there is low life stress (i.e., favorable life circumstances). Other research appeared to provide evidence for the latter. These findings revealed that minimal life stress and other psychosocial resources, such as beliefs in controllability of life events and good impulse control, were correlated with ideal academic functioning among bright but not less bright adolescents (Luthar & Zigler, 1992). This study showed that solely speaking of intelligence as a protective factor was not very helpful; it illuminated the importance of examining underlying protective processes (Luthar, 1993). Therefore, this shift of focus to underlying mechanisms is considered to be crucial for further developing resilience theory and research. In addition, it is thought that this shift will aid in creating more

pertinent prevention and intervention techniques for those dealing with life's hardships (Cicchetti & Toth, 1991, 1992; Luthar et al., 2000; Masten et al., 1990).

Finally, there has been debate in the field over different concepts of resilience. On the one hand resilience has been thought of as absolute or global. On the other hand, it has been thought of as relative or circumscribed. Nevertheless, it became apparent through research, that different life events brought out different strengths or vulnerabilities in individuals (Luthar et al., 2000). For example, it has been found that during late adolescence, whether or not girls' mothers have mental health problems and adolescents' views of the quality of their relationship with their family, especially with their father, were significant factors (Luthar & Zigler, 1991; Werner & Smith, 1982). Therefore, it has mostly been accepted that using the relative nature of the term as opposed to the fixed makes more sense (Luthar et al., 2000; Masten & Garmezy, 1985).

#### **Kindness**

**Definition and overview.** Heartwarming stories about random acts of kindness are disseminated on the news and radio frequently. However, in the psychological research realm, kindness is not researched nearly as extensively as resilience.

Nonetheless, it appears that research on the concept of kindness is beginning to gain momentum. There are a handful of definitions that will be presented below.

Varying kindness definitions range from concise and simplistic to more rich and comprehensive. The Oxford Dictionary describes kindness as the "quality of being friendly, generous, and considerate" ("Kindness | Definition of kindness in English by Oxford Dictionaries," 2017). The VIA Classification of Strengths offers another definition, the one that will be focused on for this study. It defines kindness as "doing

favors and good deeds for others" (Park & Peterson, 2009, p. 2). Furthermore, the VIA states that if kindness is an individual's top strength, then that individual is generous to others, always willing to do a favor no matter how busy they are, and also enjoys performing their acts of kindness for others, even if they are for strangers ("Kindness." 2017). According to the VIA, kind individuals hold the belief that others are worth affirmation and consideration solely based on the fact that they are human beings, not for obligatory purposes ("Kindness," 2017). It also proposes that kind individuals embody three altruistic personality traits: Empathy/Sympathy, Moral Reasoning, and Social Responsibility ("Kindness," 2017). Finally, the VIA classifies the character strength of kindness under the broader virtue category of Humanity. The category of Humanity designates strengths (i.e., kindness, love, and social intelligence) that reveal themselves in compassionate relationships with others. Consequently, these strengths tend to be interpersonal and most pertinent in relationships that are one-on-one ("Kindness," 2017). According to the VIA, a kind individual appears to embody inner moral strength as well as engages in kind behaviors. In sum, kindness is an interpersonal strength, which involves behavior geared towards helping others (e.g., favors and good deeds), unique personal qualities (i.e., friendly, generous, and considerate), and specific altruistic personality traits ("Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Park & Peterson, 2009; Peterson & Park, 2009; Peterson & Seligman, 2004).

Other researchers have also conceptualized kindness as a human strength (Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006). Otake and colleagues (2006) offered their own definition, postulating that the strength of kindness has three distinct

components: (a) having your own motivation to be kind to others; (b) being aware of kindness in others; and (c) engaging in kind behavior in one's own life on a daily basis (Otake et al., 2006, p. 362). Otake and colleagues (2006) created a questionnaire to assess these different components of kindness (i.e., motivation, recognition, and behavior). The questionnaire asks participants to rate to what extent they demonstrated each component. from 1 (not at all) to 5 (a great deal). The motivation item states, "I am always thinking that I wish to be kind and help other people in daily life" (Otake et al., 2006, p. 365). The recognition item states, "I recognize that I always do kind behavior and help other people in daily life" (Otake et al., 2006, p. 365). The behavior item states, "I do kind things and help others everyday" (Otake et al., 2006, p. 365). Higher scores reveal higher amounts of motivation, recognition, and behavior of kindness (Otake et al., 2006). Therefore, according to Otake and colleagues (2006), for an individual to be classified as kind, they must not only perform kind acts daily (i.e., the behavior component), but they must also recognize that they constantly perform kind acts and assist others daily (i.e., the recognition component) as well as must constantly have in mind that they desire to be kind and assist others in everyday life (i.e., motivation component).

These same researchers were interested in investigating the potential mechanisms that might connect the character strength of kindness and subjective happiness. Otake and colleagues (2006) presumed that several motivational, emotional, and cognitive processes affect the awareness and engagement of kind behaviors and consequently that this might influence subjective happiness (Otake et al., 2006). Their findings revealed that happy individuals scored higher on all three of the kindness components (i.e., motivation, recognition, and behavior), suggesting that happy individuals not only have the wish to

be kind, but are also more attuned to perceiving kindness, and tend to behave in a kind manner (Otake et al., 2006). The researchers concluded that kindness impacted subjective well-being positively, kindness supported healthy social relationships, and a reciprocal relationship may exist between kindness and happiness. Finally, the researchers posited that kindness is a vital and adaptive human strength (Otake et al., 2006).

In summary, from these above definitions, kindness is much more than solely a behavior, it is a rich and encompassing concept. Kindness not only includes behaving in a kind way, but also having the ability to recognize kindness, and finally possessing an inner motivation to show kindness to others (Otake et al., 2006). Furthermore, aside from performing acts of service for others (Park & Peterson, 2009), kind individuals hold the belief that others are worth affirmation and consideration solely based on the fact that they are human beings, not for obligatory purposes ("Kindness," 2017). Kind individuals embody three altruistic personality traits: Empathy/Sympathy, Moral Reasoning, and Social Responsibility ("Kindness," 2017). According to the VIA, kind individuals are generous to others, always willing to do a favor no matter how busy they are, and also enjoy performing their acts of kindness for others, even if they are strangers ("Kindness," 2017). Furthermore, a kind person engages in these behaviors on a *daily basis* and these behaviors *bring them joy* ("Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries." 2017; Otake et al., 2006; Park & Peterson, 2009).

While kindness does not have a large presence in psychological research yet, there are several related concepts that are used in psychological research frequently, from which it should be differentiated. Prosocial behavior, altruistic behavior, charitable behavior, and prosocial personality are four concepts that will be defined and described below in order to be sure there is no confusion between them and kindness.

Differentiating kindness from related concepts. *Prosocial behavior*. Prosocial behavior has commonly been described as, "voluntary, intentional behavior that results in benefits for another; the motive is unspecified and may be positive, negative, or both" (Eisenberg & Miller, 1987, p. 92; Eisenberg, 1982; Staub, 1978). It is often difficult to discern the motivations underlying individuals' prosocial actions, and because of this, it can make it nearly impossible to differentiate behaviors that are altruistic from behaviors that are nonaltruistic prosocial. Consequently, prosocial behavior is considered a more general term that is used when, (a) there is behavior that is prosocial and when, (b) the individual's motives are unspecified or unknown. Therefore, the term may denote prosocial actions that are both altruistic and nonaltruistic (Eisenberg & Miller, 1987).

Altruistic behavior. Altruistic behavior has been defined as "a subtype of prosocial behavior - a voluntary behavior intended to benefit another, which is not performed with the expectation of receiving external rewards or avoiding externally produced aversive stimuli or punishments" (Eisenberg & Miller, 1987, p. 92). In the majority of theoretical discussions, altruistic motivated prosocial behavior has been related conceptually to empathy or sympathy (Eisenberg & Miller, 1987). It is often challenging to discern whether feelings of personal distress, empathy, sympathy, or some other factor motivated a given prosocial act. However, one possible method for distinguishing between altruistic (i.e., sympathetically motivated) and egoistically motivated prosocial acting, is offered by Batson and his colleagues (Batson & Coke, 1981; Eisenberg & Miller, 1987). According to these researchers' perspective, an

altruistic individual's objective is to alleviate another's distress and not their own, there is psychological expense for not helping, and minimal reward for the potential helper in evading the situation without assisting. On the other hand, if an individual is primarily egoistically motivated (i.e., aiming to decrease their own personal distress), this objective can be reached more effortlessly by evading the aversive situation than by helping, if evading is both an option and not a challenge. Therefore, sympathy and personal distress feelings should lead to various patterns of prosocial behavior in situations, in which an individual can effortlessly evade the arousal-producing situation. Although limited, the research that has been conducted provides support for this idea (Batson & Coke, 1981; Eisenberg & Miller, 1987). Furthermore, it has been argued that unplanned prosocial behaviors, such as the pricey action of sharing, tend to be more altruistically motivated, as opposed to prosocial behaviors acted upon in response to a request. It seems the less spontaneous the response, the more time there is to evaluate the potential negative consequences and give into interpersonal pressures (Eisenberg, Cameron, Tryon, & Dodez, 1981). In conclusion, altruistic behavior can be described as a subtype of prosocial behavior – a voluntary action that has the aim of helping another without the expectation of gaining benefit or escaping punishment (Eisenberg & Miller, 1987). Many theoretical discussions have connected altruism conceptually to both empathy and sympathy (Eisenberg & Miller, 1987).

Charitable behavior. Charitable behavior has been defined as "voluntary donations of time or money that are intended to help others" (Winterich, Mittal, & Aquino, 2013, p. 3). The term charitable behavior is often used in the context of non-profit charity agencies. One way that charitable behavior is cultivated by nonprofits is

through recognizing their donors (Grace and Griffin, 2006; Winterich et al., 2013). It is common for agencies that frequently accept donations to create recognition programs for their donors (Winterich et al., 2013). Recognition can be defined as the donor's clear expectation that their charitable behavior will obtain notice by at least one individual (Winterich et al., 2013). Research has shown that recognition leads to higher amounts of charitable behavior in individuals who are described as low in moral identity internalization and high in moral identity symbolization. Intriguingly, individuals who are described as high in moral identity internalization, do no appear to be impacted by recognition, irrespective of their symbolization. This recognition can range greatly, from discreet (e.g., thank you card) to very public (e.g., building named in honor of donor). In general, recognizing an individual's charitable behavior socially bolsters their moral identity, consequently verifying their morality for them. In summary, charitable behavior refers to electing to give one's own time or money with the aim to assist others (Winterich et al., 2013). The term is frequently used in the context of non-profit charity agencies. One way that charitable behavior is fostered is through recognition of donors (Grace and Griffin, 2006; Winterich et al., 2013).

Prosocial personality. Prosocial personality has been defined as, "the lasting dispositional tendency for an individual to think about the rights and well-being of others, to feel empathy and worry for others, and to behave in a manner that benefits others" (Penner, Fritzsche, Craiger, & Freifeld, 1995, p. 147). Thus, prosocial personality is quite encompassing. From the above definition, it appears that for an individual to be classified as having a prosocial personality, (a) they must have a persisting character trait that involves consistently thinking about the welfare and rights of others, (b) they must feel

empathy and concern for others, and (c) they must perform actions that help others (Penner et al., 1995). The Prosocial Personality Battery (PSB) was created to measure the personality trait required for helpful behavior. The assessment consists of two factors: (a) Other-Oriented Empathy (i.e., the inclination to empathize and care for others), and (b) Helpfulness (i.e., based on previous experiences, proneness to engage in beneficial acts). The scale consists of 56 items and employs a Likert-type scale with 5 response-selections (Penner et al., 1995). The exploration for the prosocial personality has been lengthy and debated. Some have argued that the tendency to behave prosocially was due to lasting personal qualities, while others believed it was the effect of certain situational restrictions (Penner et al., 1995). More recent research has examined the overall systems fundamental to prosocial decisions, which has connected personality, emotion, and explicit prosocial behavior. Prosocial behavior and the Big Five personality dimensions have also been explored. Findings have revealed that agreeableness was the personality dimension most closely related with emotional responses to victims in need of assistance and ensuing choices to assist those individuals. From these findings, it has been suggested that prosocial processes (e.g., behaviors, emotions, and cognitions), may be components of a broader motivational process connected to personality (Habashi, Graziano, & Hoover, 2016). In summary, prosocial personality is quite encompassing, entailing an enduring dispositional inclination for an individual to think about others' welfare and rights, to feel concern and empathy for others, and to act in a way that helps others (Penner et al., 1995).

*Kindness – a distinct concept.* Although kindness is similar to the related concepts of prosocial behavior, altruistic behavior, charitable behavior, and prosocial

personality, this study posits that kindness is a unique concept in itself. According to The VIA Classification of Strengths, kindness is an interpersonal strength that is especially important in compassionate one-on-one relationships and has four different components to it. These four components are that a kind individual, (a) behaves in a kind manner – performing acts of service for others (Park & Peterson, 2009), (b) has the qualities of selflessness and generosity - consistently putting others before oneself and also enjoying it (e.g., always willing to do a favor no matter how busy one is, and also enjoying performing the kind deed), (c) holds a human rights view - believing that others are worth affirmation and consideration solely based on the fact that they are human beings, not for obligatory purpose, and (d) embodies three altruistic personality traits -Empathy/Sympathy, Moral Reasoning, and Social Responsibility ("Kindness," 2017; Park & Peterson, 2009; Peterson & Park, 2009; Peterson & Seligman, 2004). Otake and colleagues (2006) offered their own definition, positing that kindness is a vital and adaptive human strength that has three distinct components: (a) having your own motivation to be kind to others, (b) being aware of kindness in others, and (c) engaging in kind behavior in one's own life on a daily basis (Otake et al., 2006, p. 362). Therefore, according to Otake and colleagues (2006), for an individual to be classified as kind, they must not only perform acts of service and assist others daily (i.e., the behavior component), but they must also recognize that they have a tendency to engage in kind acts and assist others daily (i.e., the recognition component), as well as must constantly have in mind that they desire to be kind and assist others in their daily life (i.e., motivation component).

From these above definitions, kindness encapsulates several components. Kindness does not only involve behavior (i.e., prosocial, altruistic, or charitable), it also involves distinct personal qualities (i.e., friendly, selfless, and generous) and altruistic personality traits (i.e., Empathy/Sympathy, Moral Reasoning, and Social Responsibility). Furthermore, a kind *person* is *motivated* to act kindly, *recognizes* this quality in themselves, engages in these *behaviors on a daily basis*, and *enjoys* it. These aspects make it distinct ("Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Otake et al., 2006; Park & Peterson, 2009). Ultimately, this leads to a kind individual possessing an interpersonal strength that helps build compassionate one-on-one relationships ("Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Otake et al., 2006; Park & Peterson, 2009).

Consequently, kindness is distinct from prosocial behavior. Prosocial behavior can be defined as, a type of voluntary, deliberate behavior that leads to helping another; notably, motives of this behavior are unknown (Eisenberg, 1982; Eisenberg & Miller, 1987; Staub, 1978). Therefore, prosocial behavior is considered a more general term that is used when, (a) there is behavior that is prosocial and when, (b) the individual's motives are unspecified or unknown. Therefore, prosocial behavior may refer to both altruistic and nonaltruistic acts (Eisenberg & Miller, 1987). Similarly, kindness also includes the behavioral component of engaging in behavior that benefits another.

However, kindness differs from prosocial behavior in five ways. First, the motive of a kind individual is known to be altruistic, whereas when using the term prosocial behavior, the individual's motivation is unknown. Second, kind individuals perform their

deeds on a daily basis. However, prosocial behavior does not specify frequency. Third, kind individuals enjoy their good deeds, while the definition of prosocial behavior makes no mention of the impact the behavior has on the performer. Fourth, kindness encapsulates not only a behavioral component, like the concept of prosocial behavior, but also a personality component (i.e., motivation to act kindly, recognition of kindness, and three altruistic personality traits - Empathy/Sympathy, Moral Reasoning, and Social Responsibility). Finally, kindness involves unique personal qualities (i.e., friendly, selfless, and generous), and prosocial behavior does not. In conclusion, prosocial behavior is a much more general term used to describe behavior that benefits another, while kindness is more specific and describes a person's behavior, unique personal qualities, and personality traits (Eisenberg & Miller, 1987; "Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Otake et al., 2006; Park & Peterson, 2009).

Kindness is also distinct from altruistic behavior. Altruistic behavior can be defined as a behavior one chooses to engage in with the intention of helping another (Eisenberg & Miller, 1987). It is a subtype of prosocial behavior, in which the performing individual is not helping someone else for their own benefit or to avoid any punishments (Eisenberg & Miller, 1987). Many theoretical discussions have connected altruism conceptually to both empathy and sympathy (Eisenberg & Miller, 1987). Although kindness is similar to altruistic behavior in that kind individuals also engage in voluntary action with the aim of helping another without any expectation of gains, kindness is still distinct. Kindness differs because of four reasons. First, kind individuals perform their deeds on a daily basis, while the altruistic behavior definition does not specify frequency.

Second, kind individuals enjoy their good deeds, but the definition of altruistic behavior makes no mention of the impact on the performer. Third, kindness captures the behavioral component (e.g., altruistic behavior), but it also involves a personality component (i.e., are motivated to be kind to others, recognize kindness, and embody three altruistic personality traits - Empathy/Sympathy, Moral Reasoning, and Social Responsibility). Finally, kind individuals possess unique personal qualities (i.e., friendly, selfless, and generous), while altruistic behavior does not. In conclusion, altruistic behavior is part of what makes an individual kind (i.e., the behavior component), but it does not capture the other components of kindness (i.e., frequency, personal qualities, and personality traits) (Eisenberg & Miller, 1987; "Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Otake et al., 2006; Park & Peterson, 2009).

Kindness is also distinct from charitable behavior. Charitable behavior has been defined as electing to give one's own time or money with the aim to assist others (Winterich et al., 2013). The term is frequently used in the context of non-profit charity agencies (Grace and Griffin, 2006; Winterich et al., 2013). In a similar manner, kindness also includes the behavioral component of performing kind deeds that benefit another (e.g., volunteering time or money). However, kindness differs because of five reasons. First, the motive of a kind individual is known to be altruistic, whereas the motive of charitable behavior is not specified. Second, kind individuals perform their deeds on a daily basis, whereas the frequency of charitable behavior is not mentioned. Third, kind individuals simply enjoy their good deeds, whereas the effect of charitable behavior on the donating individual is that it bolsters their moral identity. Fourth, kindness

encapsulates not only a behavioral component, like charitable behavior, but also a personality component (i.e., are motivated to be kind to others, recognize kindness, and embody three altruistic personality traits - Empathy/Sympathy, Moral Reasoning, and Social Responsibility). Finally, kind individuals possess unique personal qualities (i.e., friendly, selfless, and generous). In conclusion, charitable behavior is a more general term mostly used in the context of donating, while kindness is more specific and describes a certain type of person (e.g., who has unique behavior, personality traits, and personal qualities) ("Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Otake et al., 2006; Park & Peterson, 2009; Winterich et al., 2013).

Finally, although kindness is probably most similar to prosocial personality, it is distinct from it as well. Prosocial personality has been defined as, an enduring dispositional inclination for an individual to think about others' welfare and rights, to feel concern and empathy for others, and to act in a way that helps others (Penner et al., 1995). Thus, similar to kindness, prosocial personality is quite encompassing. However, kindness is distinct from prosocial personality because of five reasons. First, kind individuals perform their deeds on a daily basis, while the definition of prosocial personality states that individuals with prosocial personality have the tendency to behave in a way that benefits others, it does not specify the exact frequency like kindness does. Second, kind individuals enjoy their good deeds, whereas from the above definition it is unclear of the impact the behavior has on the prosocial personality individual. Third, kindness encapsulates both a behavioral component, and also a personality component, like prosocial personality. However, the personality components diverge. For example,

the personality components of kindness include: the motivation to be kind to others and the ability to recognize kindness as well as three altruistic personality traits -Empathy/Sympathy, Moral Reasoning, and Social Responsibility. On the other hand, aside from the behavior component, prosocial personality involves an enduring tendency to think about the rights and well-being of others and to feel empathy and concern for others. Therefore, the two concepts are similar in sharing the altruistic personality traits (i.e., Empathy/Sympathy, Moral Reasoning, and Social Responsibility), but kindness also describes motivation and recognition components, and prosocial personality does not. Finally, kind individuals possess unique personal qualities (i.e., friendly, selfless, and generous), and prosocial personality does not capture these. In conclusion, prosocial personality is similar to the concept of kindness in that they both encapsulate behavioral and personality components. However, the two terms diverge in the exact personality characteristics, and kindness appears to be more specific (e.g., personal qualities, frequency, and impact on performer; "Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Otake et al., 2006; Park & Peterson, 2009; Penner et al., 1995).

It should be noted that although kindness is distinct from these other concepts, the literature review below will cite some studies that explore these related terms. This is because while these concepts are not identical to kindness, they are closely related and therefore may still provide important insights for the purpose of this study (i.e., examining the relationship between kindness and resilience).

**Kindness related concepts and resilience research.** One study has examined kindness and resilience, revealing partial support for the present study's hypothesis

(Martínez-Martí & Ruch, 2017). However, there is much more research examining the relationship between kindness-related concepts (e.g., prosocial behavior, altruistic behavior, charitable behavior, and prosocial personality) and resilience as well as resilience-related constructs. Therefore, this research will be explored below.

Prosocial behavior research. Research has demonstrated a link between prosocial behavior and constructs similar to resilience. A longitudinal study conducted by Rydell, Berlin, and Bohlin (2003) examined links between emotion regulation, emotionality, and children's ability to adapt behaviorally. Mothers rated children at 5 years old and then again at 6 years and 6 months old. The mothers rated the children on emotion regulation and emotionality linked to fear, anger, and positive emotions (e.g., exuberance). Findings revealed that high prosocial behavior levels were correlated with high positive emotion regulation and exuberance. While, low prosocial behavior levels and externalizing problem behaviors were correlated with low positive emotion regulation and exuberance (Rydell et al., 2003). In conclusion, it appears that prosocial behavior was related to more well-adjusted children (Rydell et al., 2003).

Prosocial behavior has not only been shown to correlate with resilience-related constructs in children, but adolescents as well. Over a 6-month duration, Haroz, Murray, Bolton, Betancourt, and Bass (2013) examined the relationship between prosocial behavior, perceived social support, and a decrease in depression and anxiety symptoms in Acholi adolescents aged 14 to 17 years old. These adolescents had survived war and displacement in Northern Uganda. The adolescents were administered a screener that was locally developed. The results revealed that high prosocial behavior levels were correlated with improvement in depression and anxiety symptoms. Consequently, the

researchers concluded with their findings that prosocial behavior was correlated with an increase in resilience in adolescents (Haroz et al., 2013).

Altruistic behavior research. Research has demonstrated a link between altruistic behavior and resilience. An exploratory study conducted by Leontopoulou (2010) examined the relationship between Greek children's (in the 5<sup>th</sup> and 6<sup>th</sup> class of Northern Greece Primary School) altruistic behavior with resilience, empathy, and climate in the classroom. Various questionnaires were administered to the students that measured altruism, empathy, resilience, and perceived classroom climate (Leontopoulou, 2010). These questionnaires included the Altruistic Behavior Questionnaire (Kakavoulis,1999), An Index of Empathy for Children and Adolescents (Bryant, 1982), a Resilience Scale (Wagnild & Young, 1993), and My Class Inventory (Fraser, Anderson, & Walberg, 1982). Findings showed that resilience, academic performance, participant gender, and empathy all reliably predicted altruism in children. Altruism was only slightly predicted by classroom climate. The researchers emphasized the need for altruism development training in emotional education programs at schools, as they could lead to more resilient youth (Leontopoulou, 2010). In conclusion, this study suggested that there was a relationship between altruistic behavior and resilience (Leontopoulou, 2010).

Similar research has been conducted with South African adolescents, suggesting a relationship between altruism and resiliency. Mosavel, Ahmed, Ports, and Simon (2015) set out to explore a deeper understanding of the ways adolescents rise above adversity as well as to examine how their future goals were related to factors of resilience. South African boys and girls (in grades 8-10) who had low socioeconomic statuses and who experienced high amounts of daily stress were recruited. Fourteen focus groups were

conducted and results revealed that the most predominant responses from the boys and girls included themes of altruism, community connectedness, and hope. The researchers stated that these could enable community and individual resiliency. However, they did not directly measure resilience and therefore the prior statement is hypothetical (Mosavel et al., 2015). In conclusion, this study suggested that it is possible that altruism is one factor enabling resiliency in these South African boys and girls.

Charitable behavior research. Research has thoroughly investigated the relationship between charitable behavior and happiness, an important ingredient of resilience. Anik, Aknin, Norton, and Dunn (2009) reviewed research examining the association between charitable behavior and happiness. They examined several studies that involved a range of participants (e.g., primates, children, and adults) as well as methods (experimental and correlational). For example, one study they reviewed revealed that participants who experienced positive events (e.g., being given cookies) tended to help others more frequently (Anik et al., 2009; Isen & Levin, 1972). Another study that was reviewed postulated that the positive emotions of happy people are what lead to them giving more. Participants played a game in which they were asked to divide up their money between them and another player. It was found that participants who were happier at the start of the game were more likely to offer at least a dollar to the other player (Anik et al., 2009; Konow & Earley, 2008). After their extensive literature review, the authors concluded that people who are happier also act more charitably (e.g., give more). They also concluded that this charitable behavior (e.g., giving) can cause an increase in even more happiness. Finally, they stated that these two interactions may function in a circular

manner (Anik et al., 2009). Therefore, it appears charitable behavior leads to happiness and that this in turn may lead to more resilient individuals.

Interestingly, research has suggested that social exclusion may play a role in one's prosocial behavior. The following study does not specifically examine charitable behavior and resilience. However, it may lead one to hypothesize that charitable behavior could be linked to resilience. Lee and Shrum (2012) examined donating (e.g., charitable behavior) in the context of social exclusion. They explored whether social exclusion leads to either prosocial or self-focused reactions. The researchers recruited business students pursuing their undergraduate degrees. After the participants arrived at the lab, they were randomly assigned to one of three conditions (i.e., the ignored, rejected, or control condition). The procedure involved a recall and writing task, which was employed in order to influence the conditions. Following this, participants were offered two hypothetical situations, which were created to measure their preferences for helping and conspicuous consumption. Findings revealed that those who were socially excluded by overt rejection had a boost in donating and helping behavior. However, those who were socially excluded by being ignored more implicitly, had a boost in conspicuous consumption behavior. The results showed that when people feel socially excluded, depending on the type of exclusion (e.g., explicit or implicit), they are either more likely to behave in a prosocial manner (e.g., donating – a charitable behavior) or in a more selffocused manner (e.g., conspicuous consumption; Lee & Shrum, 2012). Although this study did not overtly link charitable behavior to resilience, one might hypothesize that the reason a person who is overtly rejected chooses to donate, is because they have seen it lead to better outcomes (e.g., resilience) in the past either personally or by watching other

people. Furthermore, having endured hardships might make one more compassionate for other people.

**Prosocial personality research.** Research has shown a link between constructs similar to prosocial personality and resilience. Many studies have demonstrated that personality factors may influence the likelihood of whether or not an individual will suffer from depression, a risk to resilience. However, the function of peer relationships in the development of these factors has had minimal research (Kopala-Sibley, Zuroff, Leybman, & Hope, 2013). Thus, one study explored the function of peer experiences and recalled parenting in the forming of self-reassurance and self-criticism (Kopala-Sibley et al., 2013). A retrospective design was employed. The young adult participants were invited to recall memories of parenting and peer relationships during early adolescence, an age that has been found to be an at-risk period for susceptibility to depression. The participants were administered assessments of prosocial behavior by peers, overt and relational victimization, recalled parenting, and present amounts of self-reassurance and self-criticism. The findings revealed that parents and peers separately played roles in the forming of self-criticism and self-reassurance. When parental control and parental care were controlled for, prosocial behavior predicted self-reassurance. Additionally, relational victimization predicted inadequacy self-criticism, and overt victimization predicted self-hating self-criticism. Notably, the impact of overt victimization on selfreassurance was shielded by prosocial behavior. In conclusion, the results emphasized the important role of peers in personality risk and in the forming of depression resiliency factors. The researchers suggested that their findings point to intervention possibilities for preventing depression risk factors in adolescents (Kopala-Sibley et al., 2013). Although

this study did not directly examine prosocial personality and resilience, its findings could lead one to hypothesize that those who behave prosocially (i.e., embody a prosocial personality) are better protected from the development of depression, a threat to resiliency. Furthermore, the findings suggested that personality is a significant factor influencing one's capacity to be mentally healthy.

Research has highlighted the crucial importance of prosocial peer relationships in fostering resilience. It has been indicated that an adolescent's antisocial behavior can be decreased by relationships with prosocial peers. However, it unknown what the etiologic mechanisms are that drive this relationship. One study aimed to examine whether during childhood, the prosocial peer relationship acts to decrease genetic risk consequences for non-aggressive antisocial behavior, thus taking a gene-environment interaction (G x E) form (Burt & Klump, 2014). Participants were recruited from the Michigan State University Twin Registry (MSUTR). Consequently, the sample was made up of twin pairs (6-10 years old). The findings revealed strong support for moderation by prosocial peer relationships. In individuals with lesser amounts of prosocial peer relationships, genetic influences on non-aggressive antisocial behavior were observed to be several times larger, than in individuals with greater amounts of prosocial peer relationships. Notably, after the researchers controlled for gene-environment associations and deviant peer relationships, and after restricting the analyses to the twins who had nearly all mutual friends, the findings remained. The researchers concluded that their findings indicated that during childhood, prosocial peer affiliation moderates genetic effects on antisocial behaviors that are nonaggressive. Additionally, their findings supported the idea that protective environmental experiences may foster resilience (Burt & Klump,

2014). While this study did not directly examine prosocial personality and resilience, its findings suggested that children who tend to have more prosocial peer relationships (e.g., perhaps children who are friends with those who embody prosocial personalities) may be protected from developing nonaggressive antisocial behaviors, thus fostering resilience (Burt & Klump, 2014).

These studies suggest that kindness would be related to resilience. However, they did not directly measure kindness, and as noted above, kindness is different from these related concepts. To review, the concept of kindness is distinct because it has both a behavioral and personality component to it, as well as because kindness involves possessing unique personal characteristics (i.e., friendly, selfless, and generous) and is more specific (e.g., specifies frequency and impact on individual performing the behavior). Additionally, several of the above studies did not directly measure resilience, but rather related concepts. Therefore, the relationship between kindness and resilience necessitates further investigation.

## **Kindness May Promote Resilience**

If kindness and resilience are related, it is possible that kindness promotes resilience. In other words, individuals who act with kindness may be more likely to display resilience. Kindness may precede resilience due to two possible mediating factors: social support and well-being.

There are some studies that have directly measured kindness and there are other studies that have measured kindness related concepts. Both of these types of studies have examined social support and well-being. The research presented below suggests that kindness would be related to resilience because these possible mediating factors (i.e.,

social support and well-being) have not only been shown to relate to kindness and/or kindness related concepts, but because they have also been shown to relate to resilience as well (e.g., kindness/kindness related concepts  $\rightarrow$  social support  $\rightarrow$  resilience and kindness/kindness related concepts  $\rightarrow$  well-being  $\rightarrow$  resilience). Research investigating this idea will be explored below.

Social support. Research shows that both kindness (Otake et al., 2006) and prosocial behavior (Flook et al., 2015) are related to social support. Research also shows that social support is related to resilience (Dumont & Provost, 1999; Wilks & Spivey, 2010). This may make one wonder how these relationships connect. One idea is that those who act with kindness naturally build greater social support networks and that this buffer of having greater social support results in resilience.

Kindness and prosocial behavior linked to social support. Kindness has been shown to relate to social support and relationship satisfaction (O'Connell, O'Shea, & Gallagher, 2016). Prosocial behavior has been shown to relate to social competence (Flook, Goldberg, Pinger, & Davidson, 2015). Researchers have postulated that kindness can contribute to healthy social relationships and thus is an adaptive and important human strength (McAdams, Lohrenz, & Montague, 2015).

It appears that fostering kindness can significantly improve an individual's relationship satisfaction, possibly boosting social support levels. O'Connell, O'Shea, and Gallagher (2016) conducted a study with the goal of examining whether kindness-based and gratitude-based positive psychology activities can improve relationship satisfaction, via positive social interaction with peers. A longitudinal, randomized controlled design was employed. Participants were divided into one of three groups (i.e., self-focused,

relationship-focused, or control). Measures of social support, relationship satisfaction, and happiness were administered to the participants at three different time points (i.e., baseline, post-intervention, and 6 weeks). The positive psychology activities were either self-focused (i.e., including no socialization) or relationship-focused (i.e., including socialization). Findings revealed that at six-week follow-up, larger increases in relationship satisfaction were found in the participants who completed relationship-focused positive psychology activities compared to the participants who completed self-focused positive psychology activities as well as participants who were in the active control. Furthermore, it was found that at the end of the intervention, only participants in the relationship-focused group experienced their present friendships as improved. Intervention effects persisted, despite participants' baseline levels of social support. In conclusion, relationship satisfaction was significantly improved via positive psychology activities focused on fostering social kindness and gratitude (O'Connell et al., 2016). Therefore, it seems plausible that if acting with kindness produces more satisfying relationships, then this might ultimately result in an increase in social support levels.

Interestingly, it appears that increased prosocial behavior may lead to greater social competence and social-emotional development in preschoolers. Flook and colleagues (2015) conducted a study in which they employed a mindfulness-based kindness curriculum to preschool-aged children, with the goal of encouraging prosocial behavior and self-regulatory skills. Specifically, the researchers examined the effects of mindfulness-based Kindness Curriculum (KC) that was taught at a public school and lasted 12 weeks. Employing a randomized controlled design, the KC aimed to specifically target prosocial behavior, self-regulation, and executive function. The

participants were preschool children recruited from 6 various elementary schools within a mid-western city's public school district. For the experiment, classroom random assignment was used to place the children in either the mindfulness-based Kindness Curriculum (KC) intervention group or in the wait-list control group. Additionally, individual testing prior and following the training time was used to evaluate the preschoolers. Experienced mindfulness teachers led the 12-week KC. Therefore, mindfulness was emphasized with the goal of promoting kindness practices (e.g., empathy, sharing, gratitude), attention, and emotion regulation. In addition, the preschoolers' normal literature, movement, and music were able to be integrated into the KC, reinforcing kindness and compassion notions. The KC was taught for a total of about 10 hours over 12 weeks. Measures used included: items from the Teacher Social Competence Scale (i.e., consisted of a prosocial behavior and emotion regulation subscale), a sharing task, a delay of gratification task, a dimensional change card sort task (i.e., measured cognitive flexibility), a Flanker task (i.e., measured inhibitory control), and school grades (Flook et al., 2015). The results showed that the control group displayed more selfish conduct over time, while contrastingly, the KC intervention group demonstrated larger improvements in social competence as well as received better report grades in the categories of social-emotional development, health, and learning. Those in the KC group also appeared to perform better on the delay of gratification and cognitive flexibility measures, evidenced by small to medium effect sizes. Notably, greater improvements in social competence were shown in KC children who initially scored lower at baseline in social competence and executive functioning. The researchers concluded that their findings, gathered over a fairly brief time, lend support for the

program having the potential to foster prosocial behavior and self-regulation in preschool children. Finally, they stated that increased efforts in cultivating kindness and compassion in children as well as their caregivers are necessary, as guidance in these areas at an early age could have significant effects at both an individual and community level, throughout their lifespan (Flook et al., 2015). In sum, this study suggested that in preschoolers, increased prosocial behavior might lead to greater social competence and social-emotional development (Flook et al., 2015). It could be hypothesized that these strengths may lead to preschoolers more easily creating and maintaining friendships, thus resulting in increased social support.

Kindness and social relationships may play important roles in the development of a particular type of eating disorder. It has been suggested that having the ability to accurately perceive kindness could prevent social relationship difficulties, ultimately acting as a buffer in the development of anorexia nervosa. McAdams, Lohrenz, and Montague (2015) investigated the association between anorexia nervosa and social relationship difficulties. They hypothesized that social relationship deficits contribute to the disorder and that developing social support would be linked to recovery. Females between 18 and 47 years old were recruited as participants. The procedure involved using the multiround trust game (i.e., a game built on the concept of investing money with a person handling a stock market; roles include investor and trustee of account) and a 3T MRI to examine neural reactions in a social relationship, in three separate groups of female participants. The groups were women with anorexia nervosa, women in long-term weight recovery from anorexia nervosa, and healthy comparison women. Several measures were collected from the women (e.g., BMI, WASI, QIDS, etc.) and the women

also underwent MRI imaging. Results revealed that those who developed anorexia nervosa had the common trait of having difficulty perceiving kindness and that the ability to identify malevolence may be linked to recovery. Thus, it appeared that having the ability to recognize kindness could have crucial effects on one's social relationships. It was suggested that future work should focus on social brain function related to perception of kindness (McAdams et al., 2015). Given this study's findings (i.e., having the ability to accurately perceive kindness could prevent social relationship difficulties), it could be hypothesized that this prevention of social relationship difficulties could result in stronger relationships and thus ultimately greater social support (McAdams et al., 2015).

In sum, kindness has been shown to relate to social support and relationship satisfaction (O'Connell et al., 2016). Researchers have also postulated that kindness can contribute to healthy social relationships and thus is a significant human strength (McAdams et al., 2015). Prosocial behavior has been shown to relate to social competence, a skill that may be crucial for enabling high social support levels (Flook et al., 2015).

Social support linked to resilience. While kindness (McAdams et al., 2015; O'Connell et al., 2016) and prosocial behavior (Flook et al., 2015) have been linked to social support, notably, social support has also been shown to relate to resilience (Dumont & Provost, 1999). Therefore, it is possible that social support may be playing a mediating role between kindness and resilience.

It has been suggested that resilience may be drawn more from one's social support network, rather than being an intrinsic personal strength (Dumont & Provost, 1999). For example, one study found that resilient individuals engaged much more in

social support (Dumont & Provost, 1999). Dumont and Provost (1999) conducted a study in which adolescents in 8<sup>th</sup> and 11<sup>th</sup> grade were categorized as belonging to one of three groups: vulnerable, well adjusted, and resilient. The groups were divided by crossing scores of daily hassle occurrences and depressive symptoms. A research assistant supervised while questionnaires were administered to the adolescents in classrooms. These questionnaires measured daily hassles, depression, social support, coping strategies, self-esteem, and social activities. Results showed that the resilient adolescents had higher self-esteem, engaged less in anti-social behavior, and had better problem-solving coping strategies. With regards to specific coping styles, resilient individuals engaged much more in social support. This finding suggested that contrary to popular belief, resilience may be drawn more from one's social network rather than being an inherent personal strength (Dumont & Provost, 1999).

Furthering the notion that resilience may be more drawn from one's social network, research has shown that social support protects against academic stress. A study conducted by Wilks and Spivey (2010) examined the association between academic stress and resilience, with the aim of exploring if social support served as a protective factor within this relationship. Within models of mediation and moderation, testing social support achieved this aim. American undergraduate social work students were recruited as participants. They were administered surveys eliciting information on school stress, social support (i.e., family and friends), and perceived resilience. Moderate amounts of academic stress, social support, and resilience were reported by the participants. Results revealed that social support and resilience were significantly, negatively affected by academic stress. Additionally, social support systems wielded significant, positive effects

with resilience and with each other. Both types of social support (i.e., family and friends) had significant and positive correlations with resilience. The negative stress effect on resilience was not mediated by any social supports. However, the academic stress—resilience relationship was found to be moderated by friend support. Social support served as a protective factor within this relationship. The researchers discussed ideas for boosting supportive peer relationships in undergraduate school, which may be helpful for social work educators. Therefore once again, social support played a critical role in individuals' resiliency (Wilks & Spivey, 2010).

Keeping with the idea that social support may be a critical ingredient in resilience, another study explored this idea in a migrant population. Evidence has shown that having the capability to form and maintain supportive relationships can cushion the adverse effects of stressful life occurrences and ultimately lead to more resilient individuals (Han, Siegel, & Zhang, 2017). Specifically, Han and colleagues (2017) found social support to be a critical ingredient for fostering resilience in Chinese migrants. They found that social support moderated migration and stressful life situation's effects on people's mental and physical health. Their study examined the correlation between migration from rural to urban locations, in combination with other stressors, as well as mental and physical wellbeing in Shanghai China first-grade children's parents. The buffering effects of social support, marital satisfaction, and socioeconomic status were also examined. The researchers obtained their participants by sampling public school districts in Shanghai, China. They aimed to collect data from diverse families in order to equally represent families with different backgrounds (e.g., SES, urban, and rural migrant families). A convenience sampling strategy was employed to elicit involvement from suitable schools.

In order to measure migration/stressful life events, the researchers administered the hukou status, which checked whether the family had moved from a rural location and were migrants. Second, the parents were asked if they had gone through any of these challenging life situations: divorce of a parent, seeing violence or murder, a natural disaster such as an earthquake or tsunami, or a parent or sibling's premature death during childhood. The parents' mental well-being (i.e., depression) was measured using questions from the Center for Epidemiological Studies Depression Scale (Radloff, 1977), and the parents' physical symptoms were measured with an adapted version of the Hopkins Symptom Checklist (Derogatis et al., 1974). The researchers chose social support, marital satisfaction, and family SES to measure the possible resources parents may rely on to buffer the challenging life experiences. An adapted version of the Interpersonal Support Evaluation List (Cohen & Hoberman, 1983) was administered to evaluate social support and a modified version of the Marital Adjustment Test (Locke & Wallace, 1959) was given to measure parents' marital relationships. Finally, in order to assess SES, information was collected on family earnings, subjective social position, and parental schooling. To analyze the data, the researchers employed the method of ordinary least squares (OLS) regressions to examine mental and physical well-being in two specific models. The first model took into account the incidents of stressful life events and migration as well as all of the sociodemographic elements. The second model included the variables (i.e., social support, marital relationship, and family SES) that could have buffered the effects of stress. It was found that individuals with the most severe depression and physical illnesses were those who had migrated, especially in combination with going through trying life events. Indeed, the coefficients were found to

be different between Models 1 and 2, and consequently it was discovered that the effects of migration and other trying life occurrences on people's mental and physical well-being were moderated by social support and family socioeconomic status. Notably, while martial satisfaction was correlated with mental and physical well-being, it did not act as a moderator for people who migrated to Shanghai from rural locations. Thus, mental and physical well-being were related to marital satisfaction. However, regardless of martial satisfaction, parents who had both experienced a stressful life event and who had migrated developed greater amounts of physical and depression symptoms. In the researchers' discussion, they stated their findings provided further evidence that having the ability to build and keep supportive relationships can cushion the adverse effects of stressful life occurrences and ultimately lead to more resilient individuals (Han et al., 2017).

Social support summary. To summarize, research shows that kindness (McAdams et al., 2015; O'Connell et al., 2016) and prosocial behavior (Flook et al., 2015) are linked social support and relationship satisfaction. Research also shows that social support is related to resilience (Dumont & Provost, 1999; Wilks & Spivey, 2010). It appears that fostering kindness can significantly improve an individual's relationship satisfaction, possibly boosting social support levels (O'Connell et al., 2016). Researchers have also posited that kindness can contribute to healthy social relationships and thus is an adaptive human strength (McAdams et al., 2015). A study conducted by Flook et al. (2015) discovered that increased prosocial behavior led to greater social competence in preschoolers. Additionally, a different study suggested that being able to accurately

perceive kindness could be critical in the prevention of social relationship difficulties, ultimately protecting from the development of anorexia nervosa (McAdams et al., 2015).

The research also revealed that social support was related to resilience (Dumont & Provost, 1999; Han et al., 2017). For example, social support was found to be a critical ingredient for fostering resilience in Chinese migrants (Han et al., 2017), Findings have shown that with regards to specific coping styles, resilient individuals engaged much more in social support. This finding suggests that contrary to the popularly held assumption, resilience may be more attributed to one's social network rather than being an innate personal strength (Dumont & Provost, 1999). Additionally, social support played a significant function in social work students' resiliency (Wilks & Spivey, 2010). The above research shows that kindness contributes to healthy social relationships (McAdams et al., 2015; O'Connell et al., 2016). The above research also shows that social support shares an important relationship with resilience (Han et al., 2017). It appears that individuals who act with kindness may have stronger social relationships, which enables them to be more resilient. Thus, perhaps resiliency is truly drawn more from one's social network (Dumont & Provost, 1999). Consequently, it seems plausible that kindness may promote resilience, and that social support may be a mediating factor.

Well-being. If kindness promotes resilience, it is possible that this is due to well-being acting as a mediating variable. In other words, research has shown that kindness (Buchanan & Bardi, 2010; Otake et al., 2006; Tkach, 2005) and the related concept of loving kindness meditation (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008) are correlated with well-being. Research has also shown that well-being is correlated with resilience (Fredrickson et al., 2003; Pendse & Ruikar, 2013). This may make one wonder

how these relationships connect. One idea is that those who act with kindness increase their well-being (e.g., happiness, positive emotions, etc.), and consequently this increased sense of well-being results in resilience. Research exploring this idea will be presented below.

Well-being is a term that can sometimes be vaguely used. However, Wong (2011) offered some clarity. He defined well-being as, "an umbrella term for happiness, health, flourishing, and optimal functioning at both the individual and national levels in both positive and negative conditions...[it] denotes the desirable condition of our existence and the end state of our pursuit" (Wong, 2011, p. 75). Thus, in line with this definition, the research presented below will also explore positive emotions, as they are considered part of well-being.

Kindness and loving kindness meditation (LKM) linked to well-being. Research has shown that kindness is associated with well-being (Tkach, 2005), increased happiness (Otake et al., 2006), and life satisfaction (Buchanan & Bardi, 2010). A study conducted by Otake and colleagues (2006), examined if happy individuals are more kind than those who are less happy. The participants were undergraduate students from two different colleges in Japan. A kindness scale measuring its three parts (i.e., motivation, recognition, & behavior), a Subjective Happiness Scale – Japanese version (JSHS), and daily happy and unhappy experiences reports were all used as measures. A median-split was used to separate participants into less happy people and happy people, based on their total scores on the JSHS. It was found that the individuals in the happy group scored higher on all three parts of kindness when compared to the less happy group.

the wish to be kind, but additionally, are attuned to acknowledge kindness, and are more likely to act kindly. Lastly, the researchers concluded that those who were kind experienced greater amounts of happiness as well as had memories that were happier (Otake et al., 2006).

Furthermore, there does not seem to just be a relationship, but it appears that kindness actually increases happiness. In a dissertation by Tkach (2005), an experimental design was employed to explore the possible benefits of engaging in acts of kindness for a prolonged time period. The author hypothesized that practicing acts of kindness (e.g., providing money to a homeless individual, assisting another student in studying, cleaning the living space for a roommate that is busy preparing for a test, etc.) could lead to enduring improvements in well-being and happiness. Participants recruited were undergraduate students enrolled in an Introductory Psychology class and were in between the ages of 16 and 28 years old. A 2 X 4 factorial design was employed. In the treatment conditions, subjects were requested to engage in kindness acts with differing levels of "frequency" and "variety" (Tkach, 2005, p. vii). However, those in the control group were only requested to keep track of daily events that had happened to them with differing levels of frequency (Tkach, 2005). The participants were assessed with several different well-being tests that measured subjective well-being, subjective happiness, life satisfaction, affect, stress, self-acceptance, self-evaluations, friends' social support, and relations with others. The participants completed these tests during Week 1 (preintervention), Week 5 (mid-intervention), Week 10 (post-intervention), and Week 14 (follow up after 1 month). Furthermore, using a web diary, participants documented either the acts of kindness they engaged in (treatment group) or on what happened in their life recently (control group). Findings showed that those who engaged in kind acts for 10 weeks had slightly greater levels of subjective well-being, happiness, self-acceptance, self-evaluations and lesser levels of negative affect and stress, than those who were in the control group. Additionally, the results also displayed that there may be a "kindness effect" occurring, in which the amount of gratitude that is expressed by individuals who were helped may be playing a key role in the increase of well-being. Notably, the researcher suggested that this effect may have the greatest impact on those who have low dispositional empathy. Therefore, the researcher concluded by stating that the "results tentatively suggest that kindness can lead to boosts in well-being, providing that the conditions are optimal" (Tkach, 2005, pp. vii- viii).

Other research suggests that simple activities geared around kindness may have a large impact on happiness. Another study conducted by Otake and colleagues (2006), investigated the simple practice of having participants count acts of kindness that they have performed and then the researchers measured the effect it had on the participants' feelings of happiness. Their participants, Japanese undergraduate students, were given self-report questionnaires during class. For the "counting kindness" intervention, participants were asked to become more mindful of their daily acts of kindness and to keep track of each deed for a week. The researchers administered the Japanese Subjective Happiness Scale (JSHS) one month prior to the intervention (baseline) as well as one month after the intervention had finished (follow-up). Additionally, at the follow-up, the experimental group rated their perceived achievement as well as how grateful they felt during the week of counting their kind deeds. The results displayed that the "counting kindness" intervention not only increased the participants' subjective happiness, but also

led these happy people to become more grateful and more kind. Thus, this study suggested that to begin with, happy people are more kind, and that they can increase their happiness even more as well as become kinder and more grateful by simply counting their kind deeds (Otake et al., 2006).

Similar to research on happiness, it also appears that kindness has an association with life satisfaction. Buchanan and Bardi (2010) created a 10-day long experiment that aimed to examine the impact of kindness acts and novelty acts on life satisfaction.

Participants joined the study voluntarily and were between the ages of 18 and 60 years old. There were three groups in which participants were randomly assigned to (i.e., to perform no acts, acts of novelty, or acts of kindness). A measurement of life satisfaction was taken both prior to and following the 10-day study. Findings showed that individuals who engaged in acts of kindness or acts of novelty had an increase in life satisfaction (Buchanan & Bardi, 2010).

Researchers have also turned their attention towards meditation practices for answers. Bankard (2015) specifically concentrated on loving-kindness mediation (LKM) and its effects on prosocial behavior and the positive emotion of compassion. LKM is a specific type of meditation that is practiced to cultivate compassion and warmth for others and self (Bankard, 2015). Compassion can be defined as an emotion that is felt when one wishes to cease another's pain (Bankard, 2015). A study was conducted to specifically look at the relationship between LKM and positive emotions (Fredrickson et al., 2008). Participants (Median age = 41) were recruited from the Compuware Corporation. After, they were split into two groups, about half were asked to partake in a 7-week LKM training, which required them to report their emotional states. The LKM

group had different components, including: group meditation, participant check-in, and teaching on mediation and how to incorporate it into daily life. The meditations' (e.g., 15-22 minutes in length) focus shifted each week, beginning with sending love and compassion towards themselves, then to loved ones, acquaintances, strangers, and then finally to all living creatures. They were also asked to meditate at home at least five days per week. The other participants were placed on the waitlist, and thus were not involved in the LKM, but were also asked to fill out daily reports. Findings revealed that participating in the LKM group led to more subjective experiences of positive emotions, such as joy, love, hope, gratitude, contentment, awe, and pride (Fredrickson et al., 2008). While this study examined loving-kindness meditation, from the findings, one may hypothesize that kindness leads to more positive emotion, which is an important part of well-being.

Well-being linked to resilience. The research shows that kindness (Buchanan & Bardi, 2010; Otake et al., 2006; Tkach, 2005) and loving-kindness meditation (Fredrickson et al., 2008) are related to greater well-being (e.g., life-satisfaction, increase happiness, and positive emotions). Thus, it seems logical that well-being may also be related to resilience. If this is the case, one may conjecture that an individual who shows kindness towards another may feel a "glow" of positive emotions afterwards, which leads to a greater sense of well-being. Consequently, this greater sense well-being could lead to health benefits, ultimately resulting in resilience. The second part of this idea (well-being → resilience) will be explored below.

It is known that more positive emotion is correlated with decreased levels of anxiety and depression (Seligman, 2002). Hope, optimism, faith, trust, and confidence

have all been shown to keep depression at bay (Seligman, 1991, 2002). One study revealed that expressing positive emotions bolsters resilience in crises (Fredrickson et al., 2003; Tugade & Fredrickson, 2004). A study conducted by Fredrickson and colleagues (2003) hypothesized that (a) Positive emotions help prevent the development of depression in resilient individuals, and (b) Positive emotions help resilient individuals thrive. Participants of the study (M age = 20) were taken from a previous study on emotions that occurred between March and June of 2001. They were recruited via advertisements and consisted of University of Michigan students as well recent graduates. Participants were contacted again for a follow-up study after September 11<sup>th</sup>, with the aim of examining their reactions since the attacks. In the study prior to the attacks (precrisis) several measures had been given to the participants including: the ego-resiliency scale (Block & Kremen, 1996), a brief version of the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992), the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), and the researchers created their own measure of tranquility. After the September 11, 2001 attacks (post-crisis), the researchers administered: an Affect Grid that was modified to be one item (Russell, Weiss, & Mendelsohn, 1989), in which participants were asked to write a check in the box of the grid that best displayed how they were feeling. Participants were also asked to recall the most significant difficulty they had encountered since September 11, 2001. The researchers also measured the amount of positive meaning participants found with their present difficulties, positive and negative emotions, and depressive symptoms. Additionally, measures were readministered to evaluate life satisfaction, optimism, and tranquility. The findings revealed that positive emotions, such as, gratitude, love, and interest, explained the links

between (a) before-crisis resilience and depressive symptom progression, as well as (b) before-crisis resilience and after-crisis increase in psychological coping (Fredrickson et al., 2003). These findings support the idea that positive emotions have a key role in protecting resilient people from depression as well as in assisting people to flourish after a crisis (Fredrickson et al., 2003).

Other researchers were inspired by the broaden-and-build theory of positive emotions and used it as a jumping off point to examine the connection between positive emotions and ego resilience change (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009). Ego resilience can be defined as a persisting personality trait that allows an individual to be flexible and adjust to varying situations (Block & Block, 1980; Block & Kremen, 1996; Cohn et al., 2009). The broaden-and-build theory of positive emotions (Fredrickson, 1998; Fredrickson & Cohn, 2008) states that positive emotions are "evolved adaptations that function to build lasting resources" (Cohn et al., 2009, p. 361). While negative emotions are restricting, focusing one's attention, cognition, and biology on surviving a direct danger (Carver, 2003; Cosmides & Tooby, 2000), positive emotions contrastingly, can help spark new, expansive thinking and acting that are not crucial to one's urgent safety (Cohn et al., 2009). The theory posits that with time, these new experiences accumulate, becoming resources that can transform individuals' lives. For example, fondness and care can turn into a long-lasting, supportive relationship. Therefore, the theory claims that positive emotions can predict positive outcomes, such as prosperity, longevity, and health because they assist in accumulating the resources needed (Cohn et al., 2009). Consequently, to test this hypothesis, the researchers used two mediational models. The first looked at positive emotions as a consequence of ego

resilience as well as a predictor of its potential growth, and the second examined whether life satisfaction is enhanced by positive emotions, particularly because they assist in increasing ego-resilience (Cohn et al., 2009). In order to examine the relationships between daily positive emotions, global life satisfaction, and ego-resilience, the researchers used "computer-validated diary data" (Cohn et al., 2009, p. 362). Participants of the study (M age = 18.7 years) were recruited at a university through newspaper advertisements. Those accepted to be in the study did not have a high chance for clinical depression, were 18 years old, and were native English speakers. The procedure of the study involved participants completing a first round of questionnaires, which included measures of ego resilience and life-satisfaction (Cohn et al., 2009). Specifically, the Ego-Resiliency 89 (Block & Kremen, 1996) and the Satisfaction with Life Scale were administered (Diener et al., 1985). Next, participants were asked to visit the researchers' website for 28 days, one time every evening. On the website, participants reported their strongest daily emotions using the modified Differential Emotions Scale (mDES; Fredrickson et al., 2003). Compassion, amusement, awe, contentment, gratitude, hope, interest, joy, love, and pride were the emotions included in The Positive Emotions subscale. While contempt, disgust, anger, embarrassment, fear, guilt, sadness, and shame were the emotions included in The Negative Emotions subscale. After participants filled out their final daily report, they went back on the website to fill out the above-mentioned questionnaires (i.e., on ego resilience and life satisfaction) for the second time. Findings revealed that rises in both life satisfaction and resilience were predicted by positive emotions, as well as that the benefits of positive emotions were not affected by negative emotions (Cohn et al., 2009). Additionally, it was found that the relationship between

baseline and final resilience was mediated by positive emotions. However, the relationship was not mediated by life satisfaction. Thus, it appeared that positive life outcomes and happiness were less linked to general positive evaluations of one's life, but rather were more linked to in-the-moment positive emotions. Therefore, because the correlation between increased life satisfaction and positive emotions was mediated by change in resilience, it is suggested that happy individuals grow in satisfaction because they build resources for thriving, not merely because they feel well (Cohn et al., 2009).

Notably, the emotion of compassion specifically appears to play a crucial role in building an individual's resilience, acting as a shield against the onset and maintenance of depression. Ehret, Joormann, and Berking (2015) hypothesized that vulnerability to depression and concurrent depression are correlated to recurrent self-criticism as well as infrequent self-compassion. Their study examined these factors and compared the results between three different groups of participants: never depressed, remitted depressed, and presently depressed individuals. Participants were randomly selected from a group of patients who qualified as having Major Depressive Disorder (MDD). They also recruited never depressed and remitted patients. All participants were at least 18 years old. A Structured Clinical Interview took place that identified which groups to place patients in. Those in the MDD group had a primary diagnosis of MDD. Those in the remitted depressed group had not experienced a major depression for at least the last two months and had at least one major depressive episode during the past year. Individuals in the never depressed control group had no history of MDD and did not display any symptoms. Questionnaires were administered to measure several factors including: depression, selfcriticism, perfectionistic beliefs, perfectionistic thoughts, ruminative sadness, and

emotion regulation. On all scales, significant group differences were found. As hypothesized, the authors found that lower levels of self-compassion and increased levels of habitual self-criticism were seen more in the currently depressed and remitted depressed participants. Their findings pointed to the idea that low self-compassion may not only be linked to acute depression but may also increase risk for reoccurring episodes (Ehret et al., 2015).

It has also been suggested that self-compassion may predict positive psychological strengths (i.e., a component of resilience). Neff, Rude, & Kirkpatrick (2007) demonstrated self-compassion's critical role in resilience. These researchers examined self-compassion's relationship with positive mental health and the five-factor personality model. They defined self-compassion as being kind to oneself in moments of suffering; understanding one's trials as part of the bigger experience of being human; and carrying hurtful feelings and thoughts in balanced mindfulness. Participants were undergraduate students recruited from a big Southwestern university (M age = 20.02 years). They filled out self-report questionnaires, which included all of the study's measures (e.g., selfcompassion, wisdom, personal initiative, curiosity and exploration, happiness, optimism, positive and negative affect, and personality characteristics). The findings revealed that self-compassion was significantly correlated with all of the positive health constructs that were explored. Specifically, self-compassion had a significant positive correlation with the self-reported measures of optimism, happiness, positive affect, personal initiative, wisdom, curiosity and exploration, extroversion, conscientiousness, and agreeableness. Furthermore, self-compassion was shown to have a negative significant relationship with neuroticism and negative affect. The authors concluded that beyond being accredited to

personality, positive psychological health was significantly predicted by self-compassion. Finally, the researchers posited that their findings lend support for the argument that self-compassion predicts positive psychological strengths (i.e., a component of resilience), which is a step further than solely relieving psychopathology (Neff et al., 2007). Although the researchers did not directly examine resilience, they did examine several positive psychological strengths, which could be considered important ingredients for resilience.

Well-being summary. The above research shows that kindness (Buchanan & Bardi, 2010; Otake et al., 2006; Tkach, 2005) and the related concept of loving kindness meditation (Fredrickson et al., 2008) have been correlated with well-being. Furthermore, the above research shows that well-being is also correlated with resilience (Cohn et al., 2009; Ehret et al., 2015; Fredrickson et al., 2003; Pendse, & Ruikar, 2013). First, studies were examined that looked at the relationship between kindness as well as loving kindness meditation and well-being. Otake and colleagues (2006) found that happy individuals scored higher on all three parts of kindness when compared to the less happy individuals. Other research suggested that kindness might actually increase happiness.

Tkach (2005) stated that if conditions are optimal, acts of kindness can result in increased well-being. Otake and colleagues (2006) posited that happy people are more kind to start with and that they can boost their happiness, become kinder, and become more grateful by merely counting their kind deeds. In conclusion, the above research suggests that there appears to be a strong relationship between kindness and well-being.

Next, studies were examined that looked at the relationship between well-being (i.e., including positive emotions) and resilience. Indeed, ample research seems to suggest

that well-being is associated with resilience (Cohn et al., 2009; Ehret et al., 2015; Fredrickson et al., 2003; Neff et al., 2007). A study conducted by Fredrickson and colleagues (2003) revealed support for the idea that positive emotions have a key role in buffering depression in resilient people, as well as in assisting people to thrive after a crisis (Fredrickson et al., 2003). Cohn and colleagues (2009) found that positive emotions predicted increases in both life satisfaction and resilience, as well as that the benefits of positive emotions were not affected by negative emotions. Ehret and colleagues (2015) found that lower levels of self-compassion and increased levels of habitual self-criticism were seen more in the currently depressed and remitted depressed participants. Neff and colleagues (2007) demonstrated self-compassion's critical role in resilience. Their findings revealed that self-compassion had significant positive associations with the self-reported measures of optimism, happiness, positive affect, personal initiative, wisdom, curiosity and exploration, extroversion, conscientiousness, and agreeableness (Neff et al., 2007). In conclusion, the above research suggests that indeed kindness may promote resilience, and that well-being may be a mediating factor.

## **Resilience May Promote Kindness**

If resilience and kindness share a relationship, it is also possible that the direction of the relationship goes the opposite way than what was described above. Resilience may promote kindness. In other words, resilient individuals may be more likely to display kindness. Resilience may precede kindness due to two possible mediating factors: compassion and gratitude.

There are some studies that have directly measured resilience and there are other studies have measured resilience related concepts. Both of these types of studies have

examined compassion and gratitude. The research presented below suggests that resilience would be related to kindness because these possible mediating factors (i.e., compassion and gratitude) have not only been shown to relate to resilience and/or resilience related concepts, but because they have also been shown to relate to kindness as well (e.g., resilience/resilience related concepts  $\rightarrow$  compassion  $\rightarrow$  kindness and resilience/resilience related concepts  $\rightarrow$  gratitude  $\rightarrow$  kindness). Research investigating this idea will be explored below.

**Compassion.** If resilience promotes kindness, compassion may act as the mediator of this relationship. One idea is that individuals who overcome adversity and end up displaying resilience, may have increased levels of compassion. In turn, the increased compassion these individuals have, may lead them to act more kindly towards others.

Resilience and posttraumatic growth linked to compassion. While undergoing hardship can lead to bitterness in some cases, it is possible that resilience may be linked to compassion in other cases. For example, it is a common occurrence that those who undergo substance use rehabilitation and gain sobriety, choose to show compassion and become sponsors to those who are still struggling with substance use issues. In this spirit, the next section will examine research exploring the idea that resilience may be linked to compassion.

It has been suggested that resilience is related to higher levels of compassion, which results in a yearning to help others (Moore et al., 2015). One study examined just this, the relationship between resilience and compassion, among other variables. Moore and colleagues (2015) designed a study with the goal of examining theories about how

previous and present stressors as well as resilience, emotional functioning, and demographic indicators of life occurrences are linked to compassion in elder adults (Moore et al., 2015). Consequently, the researchers randomly recruited adults aged 50-99 years old (mean age = 77.3) who were community-living residents in San Diego County. The researchers then mailed wide-ranging self-report surveys to all of the participants, which included measures of resilience, compassion, previous and present stress and emotional functioning, and demographic information. Findings revealed that participants who reported higher levels of resilience, who faced more significant events in life, who were not currently in a marriage-like relationship, and those who were female, were also more likely to report higher levels of compassion. Finally, the researchers concluded that current stress and prior and present emotional functioning are less pertinent, but that significant life events and resilience independently seemed to enable a yearning to help others (Moore et al., 2015). Therefore, this study appears to support the idea that resilience is related to higher levels of compassion, which led to a yearning to help others (Moore et al., 2015).

Other research has demonstrated a link between posttraumatic growth, a variable similar to resilience, and compassion for others. Morris, Shakespeare-Finch, and Scott (2012) conducted a study examining posttraumatic growth and compassion for others in cancer survivors. The researchers explained that there is increasing support in psychooncology behind the idea that individuals can experience not only suffering after a cancer diagnosis, but also positive changes in their lives. They noted that several studies are still employing posttraumatic growth measures that were created for individuals who have experienced more general trauma. Consequently, these measures may not assess for life

changes that are specific to health-related traumas. Therefore, they aimed to examine growth in cancer survivors. The researchers recruited participants who had survived cancer and who had received their cancer diagnosis about 3 years prior. A mixed method approach was employed in order to explore these cancer survivors' experiences post-diagnosis. The results of the qualitative and quantitative analyses of posttraumatic growth revealed that for cancer survivors the most significant area of positive life change was having an appreciation for life. However, the findings also revealed that there were other positive life changes reported as well, which included compassion for others and health-related life modifications. The researchers concluded that their study underlines the need for context-specific posttraumatic growth measures, as existing measures may be underestimating the positive life change that is occurring. Finally, the researchers called for a posttraumatic growth measure for cancer-survivors, as their circumstance is unique (Morris et al., 2012). In conclusion, this study, which examined a variable similar to resilience (i.e., posttraumatic growth), suggests that there may be a relationship between resilience and compassion.

Compassion linked to altruistic and prosocial behavior. It would seem to make sense that if one has higher levels of compassion, then one may be more prone to act kindly towards others. Research exploring this idea will be explored below.

In line with this idea (i.e., higher levels of compassion may lead one to act more kindly), some researchers were interested in investigating whether individuals can be trained in compassion and if this could lead to increases in altruistic behavior (Weng et al., 2013). They stated that compassion is fundamental to the facilitation of altruistic behavior, but that it remains uncertain if trainings could possibly cultivate compassion.

Therefore, the researchers aimed to investigate whether, (a) altruistic behavior can be increased by short-term compassion training, and if (b) individual variations in altruism are correlated with changes from the training in neural reactions to suffering. In order to do this, the researchers recruited participants (M age = 21.9 years) and randomly assigned them to one of two groups. They were assigned to either a compassion training group (COM) or to a reappraisal training group (REP), which served as a control group. Both of the groups taught emotion regulation techniques and enhanced well-being, but differed in their aims. The goal for the compassionate training was to boost empathy and the wish to alleviate suffering, while the goal for the reappraisal training group was to diminish one's own personal discomfort. Both trainings used guided audio directions and practicing COM or REP for half an hour every day for two weeks. Cultivating compassionate feelings for various objects (e.g., loved one, stranger, self, etc.) was practiced by COM trainees. While, re-framing personally challenging incidents, in order to diminish negative affect, was practiced by REP trainees. A task specifically aimed at examining altruistic behavior was also created for the participants. The task was a redistribution game, in which the participants believed they were playing on the Internet with real humans. After seeing an unfair act in the game, the participants had the option to spend however much of their money (\$5) to reallocate it from the dictator to the victim. They would then be able to keep whatever amount they were left with. Lastly, another piece of the study included fMRI scanning both prior to and after the trainings. Additionally, participants were shown either suffering or neutral pictures. Those in the COM group were asked to elicit compassion, while saying compassion statements in their heads. On the other hand, those in the REP group were asked to re-frame the meaning of the

pictures silently in their heads. The results showed that compassion training did indeed increase altruistic behavior apart from the training environment in healthy young adults. Additionally, increased altruistic behavior following compassion training was correlated with changed activation in brain areas connected with emotion regulation and social cognition. The researchers concluded their findings suggested that training can cultivate compassion, where increased altruistic behavior can occur by way of increased activation in neural systems that are involved in emotional and executive control, reward processing, and understanding others' suffering (Weng et al., 2013). In conclusion, this study showed that compassion is linked to altruistic behavior, a kindness related concept. Thus, it is possible that compassion may be linked to the distinct but similar concept of kindness as well.

Research has shown that a relationship between compassion and prosocial behavior exists (Lim & DeSteno, 2016). Lim and DeSteno (2016) highlighted that although hardship is often linked to negative life outcomes, there appears to evidence indicating that there are relationships between hardship and resilience, with hardship often increasing cooperation in the midst of those suffering together. Thus, the two researchers conducted two studies that examined whether the intensity of previous adversity is related to a lasting tendency for empathy-mediated compassion. If so, the studies assessed whether the ensuing compassion is connected to behavior that is aimed to reduce others' suffering. In the first study, the researchers recruited participants via MTurk (M age = 41.23) to examine variation in empathy, life adversity, and dispositional compassion. They also administered a prosociality behavioral measure, in which participants had the option to donate some of their money, in order to validate the

compassion self-report assessment. The second study's procedure was very similar, as their aim was to look at the initial findings' robustness. The researchers recruited undergraduate students from Northeastern University as participants (M age = 18.92). Their aim in the second study was to enhance internal validity by conducting the study in a laboratory setting as well as using a more precise prosocial behavior measure. The authors were able to find consistent data across the two studies, adversity boosted empathy, which supported their idea that individuals who undergo hardship were also likely to have increased compassion. Consequently, it was concluded that these individuals had a propensity to place worth on others' well-being as well as took different perspectives. The authors pointed out that possibly most significant of all, this effect of a compassionate outlook also predicted prosocial behavior, in which these individuals attempted to reduce others' suffering (Lim & DeSteno, 2016).

Compassion summary. This section examined research exploring the idea that resilience may promote kindness, by way of compassion acting as a mediating variable. First, studies were explored that looked at the relationship between resilience and compassion. Moore and colleagues (2015) found that their elder adult participants who reported higher levels of resilience, who faced more significant events in life, who were single, and those who were female, were also more likely to report higher levels of compassion. The researchers concluded that resilience and significant life events independently seemed to facilitate a yearning to help others (Moore et al., 2015). Morris and colleagues (2012) discovered that for cancer survivors the most significant area of positive life change was having an appreciation for life. However, there were other

positive life changes reported as well, which included compassion for others and health-related life modifications (Morris et al., 2012).

Next, the relationship between compassion and kindness related concepts (i.e., altruistic behavior and prosocial behavior) was explored. Weng and colleagues (2013) found that compassion training increased altruistic behavior apart from the training environment in healthy young adults. This increased altruistic behavior following compassion training was correlated with changed activation in brain areas connected with emotion regulation and social cognition (Weng et al., 2013). Other researchers have found that compassion is linked to prosocial behavior (Lim & DeSteno, 2016). Lim and DeSteno (2016) conducted two studies that examined whether the intensity of previous adversity was related to a lasting predisposition for empathy-mediated compassion. The authors found across both of the studies that individuals who underwent hardship were likely to have increased compassion. The authors also pointed out that the effect of a compassionate outlook also predicted prosocial behavior, in which these individuals tried to reduce others' suffering (Lim & DeSteno, 2016). In conclusion, although the studies above measured kindness related concepts (i.e., altruistic behavior and prosocial behavior), the findings suggest that it is possible resilience may promote kindness (i.e., a distinct but related concept) and that compassion might act as a mediating variable.

**Gratitude.** If resilience promotes kindness, gratitude may act as a mediator of this relationship. One idea is that individuals who overcome adversity and end up displaying resilience, may feel thankful for their good fortune. Therefore, increased levels of gratitude may be present. In turn, the increased gratitude these individuals have, may lead

them to act more kindly towards others. Studies pertaining to this idea will be explored below.

Resilience linked to gratitude. When thinking about what may follow resilience, an individual bouncing back and growing after an adverse event (Wong, 2011), gratitude may come to mind. For example, it is not uncommon for individuals who have overcome an illness to express gratitude towards their physician, family members, and friends.

There have been investigations into the spiritual realm of resilience, which have revealed a link with gratitude. Manning (2014) conducted a study exploring spirituality and its association with resilience for women who were near the end of their lives. Women who were at least 80 years old were recruited. Manning (2014) held more than 30 interviews with them. In the interviews, the women spoke about how spiritual resilience helped them to endure adversity. Then, interpretive phenomenology was used to examine the data from the interviews. Through this phenomenological investigation, it was found that certain themes arose, which exemplified the elements of spiritual resilience. These elements included expressing gratitude, maintaining purpose, and divine support. Specifically with regards to gratitude, for most women, their gratitude was rooted in their gratitude for God. However, the women also expressed gratitude for almost all aspects of their lives, including the good and bad. These women showed they had the capability to re-frame adversity from being a barrier to a chance to practice gratefulness. This turned their focus away from the adversity and to a place of thankfulness. In this study, the women's ability to express gratitude, re-framing adversity, showed to be a crucial element in their spiritual resilience. In conclusion, this study revealed that for these spiritually resilient women, a relationship with God was vital.

Additionally, it was revealed that three main components (i.e., expressing gratitude, maintaining purpose, and divine support) served as mechanisms that fostered greater well-being and a general good quality of life, and therefore were crucial components to the women's resilience (Manning, 2014).

Research has demonstrated that gratitude can boost positive psychological functioning (i.e., a crucial component of resilience) in youth. Froh, Sefick, and Emmons (2008) stated that it is uncertain how gratitude develops and manifests in youth. Therefore, they aimed to examine how an adolescent's grateful outlook may impact various positive psychological functioning domains, including subjective well-being. It is important to note that positive psychological functioning can be considered a crucial component of resilience. The researchers recruited students who were in 6<sup>th</sup> and 7<sup>th</sup> grade at a middle school (M age = 12.17). They administered measures assessing different variables (e.g., prosocial behavior, well-being, life satisfaction, physical symptoms, and reactions to aid) at different time points. After randomly assigning 11 classes to one of three groups (i.e., gratitude, hassles, and control), a quasi-experimental design was employed. The classes that were in the gratitude group were asked to list as many as five things they were thankful for since the day before. Those in the hassles group were explained what hassles were (e.g., irritants) and then were asked to list as many as five hassles that they could think from the day before. Lastly, those who were in the control group solely completely the measures. After this, daily ratings were completed and collected from the students for the next 2 weeks during class. There was also a follow-up three weeks later. The researchers found that an increase of self-reported gratitude, optimism, life satisfaction, and decreased negative affect were correlated with counting

blessings. The strong relationship between gratitude and satisfaction with school experience was the most significant discovery. Consequently, the researchers concluded that counting blessings appears to be a successful technique for boosting positive psychological functioning (i.e., a crucial component of resilience) in adolescents (Froh et al., 2008).

Gratitude linked to prosociality and prosocial behavior. If one is continuing on with the idea that overcoming adversity could possibly relate to gratitude, then one may wonder what an individual would do with these feelings. If an individual is feeling a lot of gratitude, it seems plausible that they may be motivated by this feeling to act with kindness. A meta-analytic review by Ma, Tunney, and Ferguson (2017) aimed to examine the correlation between gratitude and prosociality. The authors stated that theoretical models have proposed that gratitude is related to prosociality, but there is a dearth of quantitative evidence to back this up. Therefore, the authors set out to (a) look at the general correlational strength between gratitude and prosociality and to (b) find the moderators (theoretical and methodological) of this link. Ma and colleagues (2017) were able to locate 91 studies via electronic databases and found 252 effect sizes (Total N = 18, 342). They discovered a moderate and statistically significant positive correlation between gratitude and prosociality. Interestingly, it was found that when gratitude was studied as a trait, effect sizes were significantly smaller than when gratitude was studied as an affective state. The authors concluded that their meta-analysis made several contributions to this topic, including that it revealed a clear association between gratitude and prosociality (r = .374), that this association can alter depending on type of gratitude that is provoked (e.g., state vs. trait), and when accounting for other prosocial emotions,

the largest effect size was linked to gratitude (after general positive affect) (Ma et al., 2017).

Research has examined the power gratitude has to influence costly prosocial behavior. Bartlett and DeSteno (2006) conducted three studies in which they used interpersonal emotion inductions and requests for help. In the first study, the objective was to show the direct impact gratitude has on helping behavior that is costly and to distinguish this impact from the effect of simple positivity and cognizance of reciprocity constraints. In order to obtain this objective, the researchers crafted highly orchestrated conditions where participants who were feeling distinct emotional states interacted with trained confederates (Bartlett & DeSteno, 2006).

Participants were assigned randomly to one of three emotion-induction groups. For the procedure, participants came into a lab and were led to believe that they were one out of two individuals in the study. However, the other individual was a trained confederate who was blind to the researchers' hypotheses. Both the participant and confederate were placed in front of computers. Then, they were told that the study aimed to explore individual versus group problem solving, and that the participants would be asked to complete various tasks. The participants were led to think that they and their partner (i.e., the confederate) would obtain one score for their joint effort, even though they were working on their own (Bartlett & DeSteno, 2006).

For the first task, the aim was to assess the participants' general knowledge. This task was crafted in order to give later authenticity to an emotion-manipulation check that measured feelings towards the confederate. Following this, the second task, which was a measure of hand-eye coordination was introduced. The researchers made it so no matter

the performance, the scores received were the same for all participants. This task was crafted to be tedious. Next, the researcher stated that after the third block, all of the participants' scores would be presented on a screen and be logged. This task's goal was to deliver a challenging experience that would play a central role in the gratitude induction. This was completed in all of the emotion conditions. Following this, the procedure shifted to become unique for each of the three emotion conditions (i.e., gratitude manipulation, amusement manipulation, and neutral manipulation) in order to elicit the appropriate emotions (Bartlett & DeSteno, 2006).

Following the emotion inductions, an emotion-manipulation check and a measurement of helping behavior was performed. For participants who were in the gratitude condition, the screen went blank after they had completed the hand-eye coordination task and were waiting for their scores to be presented on the screen. In reality, the confederate had actually sneakily unplugged the participant's monitor from the power. The confederate who had finished her tasks pretended to begin walking out until she realized that the participant was having an issue. Consequently, the confederate stayed and tried to help the participant figure out the problem, following a pre-planned set of behaviors and statements (Bartlett & DeSteno, 2006).

The confederate ended up figuring out the problem (i.e., the unplugged cord) and the participant's screen turned on again. Therefore, the researcher did not make the participant start over from the beginning again. For the participants who were in the amusement manipulation group, they were shown a humorous clip from "Saturday Night Live" on their monitors and told that they would be asked to complete a task afterwards. Following the clip, the confederate stated that she liked the clip and sparked a short

conversation with the participant. Then, in order to justify presenting the clip, the researcher asked the participants to identify from a list of words, which had been stated in the clip. For participants who were in the neutral manipulation group, after the hand-eve coordination task was complete, a neutral discussion took place. The confederate sparked a conversation about where the researcher might be. This discussion was had because the other two emotion induction groups also had verbal exchanges. Following this, an emotion-manipulation check was performed. This was achieved by administering questionnaires that were created to examine the emotional states and feelings the participants were having towards the confederates. Finally, after all of the participants had finished their questionnaires, they were asked to sit outside of the lab and complete an evaluation form. Shortly following this, the confederate came up to the participant asking if they would be willing to assist them with a survey they were giving out for their advisor. The confederate made it evident that the tedious survey would take at least thirty minutes and that they could complete as many questions as they would like. However, it was made clear that the more questions that were finished, the more beneficial it would be. The researcher kept note of how many minutes the participant spent answering questions on the survey (Bartlett & DeSteno, 2006).

The results showed from Study 1 that that there was robust preliminary evidence that gratitude influenced prosocial responding by boosting the probability that an individual would act in effortful helping behavior. In conclusion, the first study revealed that even if it is costly (i.e., hedonically negative), gratitude amplifies efforts to help a benefactor. Moreover, through mediational analyses, it was found that helping behavior is

driven by gratitude, rather than simple recognition of reciprocity norms (Bartlett & DeSteno, 2006).

Furthermore, gratitude can increase help given to strangers. In Study 2, Bartlett and DeSteno (2006) further examined whether gratitude was responsible for the prosocial behavior found in Study 1 or if it was due to the reciprocity norm. They did this by using the exact same procedure and assessment that were used in Study 1, with a few changes. First, the researchers eliminated the amusement condition, and then they varied the individual who was requesting assistance, by either having a stranger or benefactor approach the participant. Study 2 replicated the findings of Study 1, which strengthened the theory that gratitude mediates prosocial behavior. It was also revealed in Study 2 that gratitude had the capacity to act as an incidental emotion, and it was shown that it could increase help given to strangers (Bartlett & DeSteno, 2006).

Evidence has shown that gratitude mediates prosocial behavior. After having revealed that an incidental effect can be exerted from gratitude, in Study 3 Bartlett & DeSteno (2006) aimed to remove this effect by illuminating for participants why they were feeling gratitude. Consequently, Study 3 was almost identical to Study 2, but diverged in a couple of ways. First, only strangers asked for assistance and second, a condition was added in which the reason the participant was feeling gratitude was made more obvious. Accordingly, the researcher emphasized the fact that it was the confederate who discovered why the computer was acting up, in order to achieve this second aim. This was executed in order to shift the participant's focus to the benefactor's part in eliciting their gratitude. The findings showed that this incidental effect disappears if an individual is informed of the real cause of the emotional state. It was also discovered

through a planned contrast that participants in the normal gratitude condition assisted a stranger more than those in the gratitude-informed and neutral conditions. The researchers stated that this finding contributes further support to the idea that helping was not caused by prosocial norms. Instead, gratitude mediated prosocial behavior in these studies (Bartlett & DeSteno, 2006).

In conclusion, Bartlett & DeSteno (2006) stated that their three studies offered robust support behind the notion that gratitude plays a crucial part in enabling helping behavior that is costly. Additionally, they noted that this helping behavior is separate from plain recognition of prosocial norms or of a usual positive state. Finally, they underlined that this research offers the first direct experimental proof of gratitude's ability to influence prosocial behavior (Bartlett & DeSteno, 2006).

and the resilience related concept of positive psychological functioning (Froh et al., 2008) are related to gratitude. The research also shows that gratitude is related to prosociality (Ma et al., 2017) and prosocial behavior (Bartlett & DeSteno, 2006). First, the relationship between resilience/resilience related concepts and gratitude was examined. Manning (2014) conducted a study that examined spirituality and its association to resilience in elderly women. Findings revealed that important elements of spiritual resilience included expressing gratitude, maintaining purpose, and divine support. The women expressed gratitude for almost all parts of their lives (e.g., God, the good, and the bad; Manning, 2014). Froh and colleagues (2008) found that in adolescents, an increase of self-reported gratitude, optimism, life satisfaction, and decreased negative affect were associated with counting blessings. Consequently, the researchers concluded that

counting blessings appears to be a successful technique for boosting well-being in adolescents, a crucial component of resilience (Froh et al., 2008).

Following this, the relationship between gratitude and kindness-related concepts was explored. A meta-analytic review by Ma and colleagues (2017) examined the correlation between gratitude and prosociality. The authors determined that their meta-analysis revealed a clear correlation between gratitude and prosociality (r = .374), that this correlation can change depending on the type of gratitude that is activated (e.g., state vs. trait), and when accounting for other prosocial emotions, the largest effect size was linked to gratitude (after general positive affect) (Ma et al., 2017). Other researchers examined the power gratitude has to influence costly prosocial behavior. Bartlett and DeSteno (2006) found in three experimental studies that gratitude played a crucial role in enabling helping behavior that was costly. In conclusion, although the studies above did not directly measure kindness (i.e., they measured prosociality and prosocial behavior), the findings suggest that it is possible that resilience may promote kindness (i.e., a distinct but related concept) and that gratitude might act as a mediating variable.

While the above research presented in this literature review suggests kindness may promote resilience or vice versa, these are just hypotheses. The direction of the relationship between these two variables is unknown. Consequently, the first step is to see if the two constructs are related. Therefore, the purpose of this study is to explore whether in fact any relationship exists between kindness and resilience. This study will examine the relationship between these two variables.

#### Kindness and Resilience Research

**Notable study.** To date, one study has been conducted that provides evidence for the correlation between character strengths (e.g., including kindness) and resilience (Martínez-Martí & Ruch, 2017). Martínez-Martí and Ruch (2017) examined whether character strengths predict resilience, after controlling for the influence of other established resilience-related variables (i.e., social support, positive affect, life satisfaction, self-efficacy, self-esteem, and optimism) as well as sociodemographic factors (Martínez-Martí & Ruch, 2017). Participants (N = 363; Men = 65) were all adults (M = 28.34 years; Range = 18-73) and most were German-speaking Swiss (74.4%). Other participants were German (9.1%), Liechtensteiner (5.0%), Austrian (3.0%), and 'other nationality' (8.5%; Martínez-Martí & Ruch, 2017).

The researchers employed a cross-sectional design. Participants were administered measures of character strengths, resilience, and resilience-related factors online. To measure the 24 character strengths (e.g., kindness, creativity, zest, bravery, persistence, love, humor, etc.), the researchers used the German version of the 240-item Values in Action Inventory of Strengths (VIA-IS; Peterson & Seligman, 2004; Ruch et al., 2010), which measured participants' endorsement of the strengths. This assessment uses a 5-point Likert-scale (i.e., 1 = *very much unlike me* to 5 = *very much like me*). To measure resilience, the researchers utilized a 10-item, German version (Campbell-Sills & Stein, 2007; Schäfer et al., 2015) of the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003). This measures the ability to bounce back from adversity. It reveals the capacity to endure occurrences such as personal problems, sickness, change, pressure, painful feelings, and failure. This measure also uses a 5-point Likert scale (i.e.,

1 = not true at all to 5 = true nearly all of the time). In addition to character strengths (e.g., kindness) and resilience, assessments were also administered measuring social support, positive and negative affect, optimism and pessimism, self-esteem, life satisfaction, and self-efficacy (Martínez-Martí & Ruch, 2017).

A principal component analysis of the character strengths was conducted and five factors were extracted from it. The five factors were: emotional (e.g., zest, bravery, love), interpersonal (e.g., kindness, teamwork, fairness), intellectual (e.g., creativity, curiosity, open-mindedness), restraint (e.g., persistence, authenticity/honesty, perspective), and theological strengths (e.g., religiousness/spirituality, gratitude, and appreciation of beauty and excellence). The results revealed that aside from theological strengths, all strength factors produced significant positive correlations with resilience. Thus, notably, a positive correlation between kindness and resilience was found. A hierarchical regression also revealed that strengths predicted an extra 3% of the variance in resilience beyond sociodemographic and other established resilience-related variables (i.e., social support, positive affect, life satisfaction, self-efficacy, self-esteem, optimism). However, when all variables of the study were included simultaneously in the model (i.e., the five factors of character strengths, the six resilience-related factors, and the sociodemographic variables), the only character strengths that were found to be significant predictors of resilience were the emotional strengths (e.g., zest, bravery, love, social intelligence, hope, and humor) and the restraint strengths (e.g., persistence, authenticity/honesty, perspective, prudence, and self-regulation). Furthermore, findings showed that resilience shared the largest correlations with the three individual strengths of hope, zest, and bravery. Interestingly, these are all emotional strengths. The researchers discussed that

the large correlations between hope and zest with resilience are not surprising, as they seem to have a straightforward connections with well-established factors in the resilience literature (i.e., hope  $\rightarrow$  optimism; zest  $\rightarrow$  positive affect). However, they stated that bravery's large correlation with resilience is noteworthy. The researchers stated that they believe bravery, not hiding from challenge or pain but rather confronting hardship with determination, is an important component of resilience (Martínez-Martí & Ruch, 2017).

The authors concluded that their study provided many practical and theoretical implications: (a) it reveals the relationship between character strengths and resilience, (b) research on the relationship between character strengths and resilience is scarce and thus it offers evidence of the correlation between the 24 individual character strengths and resilience and between the five strengths factors and resilience beyond sociodemographic variables and other well-established resilience-related variables, (c) the findings suggest that character strengths are linked to various positive outcomes in various ways, as character strength research to date has mainly focused on certain strengths (e.g., hope, love, zest, curiosity, and gratitude) and used life satisfaction to measure well-being, and (d) finally, the correlations found between character strengths and resilience offer an initial step in this line of research (Martínez-Martí & Ruch, 2017).

While the authors did find a correlation between resilience and interpersonal character strengths, which included kindness, interpersonal strengths did not predict resilience when they included all of their control variables (e.g., social support and positive affect) as well as all of the other character strengths. However, when the researchers conducted their analysis, they did not examine kindness separately but together with other interpersonal character strengths (i.e., fairness, teamwork, leadership,

forgiveness, modesty, and authenticity), which are not kindness. Consequently, a limitation of this study is that the researchers did not examine kindness separately (Martínez-Martí & Ruch, 2017). Therefore, it is currently unknown if there is a relationship between solely kindness and resilience. The goal of this study is to address this limitation by specifically examining only kindness and its relationship to resilience, when social support and positive affect are controlled for. Of the co-variates that Martínez-Martí and Ruch (2017) controlled for, this researcher chose to control for the two variables (i.e., social support and positive affect) that had the highest correlations with interpersonal strengths (i.e., which included the character strength of kindness). Additionally, social support and positive affect seem to have the strongest support as potential important mediators between kindness and resilience. Therefore, this study aims to examine if a relationship exists between kindness and resilience, even when these two variables are controlled for.

Justification for present study. The present study will be a partial replication of Martínez-Martí and Ruch's (2017) study, in that kindness will be measured using the same scale, the VIA-IS (Peterson & Seligman, 2004). Additionally, the same control variables (i.e., social support and positive affect) will be measured and controlled for. However, in the present study, the focus will be kindness and its relationship to resilience. Research on character strengths and resilience is scarce (Martínez-Martí & Ruch, 2017). In fact, Martínez-Martí and Ruch's (2017) study was the first to provide original evidence for the correlation between character strengths and resilience (Martínez-Martí & Ruch, 2017). Therefore, more research is needed to explore if there is truly a relationship between solely kindness and resilience.

There has been one study conducted that has directly examined the correlation between kindness and resilience, using the same kindness (i.e., VIA-IS; Peterson & Seligman, 2004) and a very similar resilience definition (i.e., both speak to growing in the face of adversity) as the present study (Martínez-Martí & Ruch, 2017). While this study, which was described above, is similar to the present study in some respects, they differ in other respects (Martínez-Martí & Ruch, 2017). The present study is similar to Martínez-Martí and Ruch's (2017) study, in that the present study will also: (a) examine the relationship between the character strength of kindness and resilience, (b) control for the variables of social support and positive affect, (c) use the VIA-IS (Peterson & Seligman, 2004) to measure kindness, (d) use adult participants, and (e) administer measures online. However, the two studies will also differ. The differences between Martínez-Martí and Ruch's (2017) study and the present study are: (a) the present study will solely focus on measuring the variables of kindness and resilience, while Martínez-Martí and Ruch's (2017) study focused on 24 different character strengths and resilience, (b) while both use the VIA-IS (Peterson & Seligman, 2004) to measure kindness, the present study will only use the Kindness subset, which entails 10 questions, while Martínez-Martí and Ruch's (2017) study administered a German version of the full 240-item measure to their participants, (c) the present study will use the Brief Resilience Scale (BRS) (Smith et al., 2008) to measure resilience, while Martínez-Martí and Ruch's (2017) study utilized a 10item, German version (Campbell-Sills & Stein, 2007; Schäfer et al., 2015) of the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003), and (d) the present study will be conducted online in the United States and thus will likely attract English

speaking participants, while Martínez-Martí and Ruch's (2017) study was conducted online in Switzerland, resulting in mostly German-speaking Swiss participants (74.4%).

### **Summary**

In sum, this study uses the VIA Classification of Strengths' definition of kindness, "doing favors and good deeds for others" (Park & Peterson, 2009, p. 2). Notably, kindness has also been proposed to have three distinct components: (a) having your own motivation to be kind to others; (b) being aware of kindness in others; and (c) engaging in kind behavior in one's own life on a daily basis (Otake et al., 2006, p. 362). Regarding resilience, this study uses Wong's (2011) definition, which defines resilience as an adaptive trait that has two parts: (a) the ability to recover and bounce back after adversity, and (b) the capacity to grow after a setback and come back even stronger. There have been investigations that have shown relationships exist between kindness-related concepts (i.e., prosocial behavior, altruistic behavior, charitable behavior, and prosocial personality) and resilience (Anik et al., 2009; Burt & Klump, 2014; Haroz et al., 2013; Kopala-Sibley et al., 2013; Lee & Shrum, 2012; Leontopoulou, 2010; Mosavel et al., 2015; Rydell et al., 2003). However, this study posits that kindness is distinct from the above-mentioned related terms. Kindness entails behavior, personal qualities, and personality components, which result in kind individuals engaging in selfless behavior that benefits others every single day. They also recognize this quality in themselves and they enjoy it. Finally, this leads to a kind individual possessing an interpersonal strength that helps them build compassionate one-on-one relationships ("Kindness," 2017; "Kindness | Definition of kindness in English by Oxford Dictionaries," 2017; Otake et al., 2006; Park & Peterson, 2009).

It is possible that kindness may promote resilience via mediating variables (i.e., social support and well-being). Thus, research was examined that explored social support and well-being's individual relationships to kindness (i.e., including kindness-related concepts) and resilience (e.g., kindness → social support; social support → resilience). With regards to social support as a possible mediating variable, research has shown that both kindness (O'Connell et al., 2016) and prosocial behavior (Flook et al., 2015) are related to social support. Research has also shown that social support is related to resilience (Dumont & Provost, 1999; Wilks & Spivey, 2010). With regards to well-being as a possible mediating variable, research has shown that kindness (Buchanan & Bardi, 2010; Otake et al., 2006; Tkach, 2005) and the related concept of loving kindness meditation (Fredrickson et al., 2008) have been correlated with well-being. Research has also shown that well-being is correlated with resilience (Fredrickson et al., 2003; Pendse, & Ruikar, 2013). Therefore, this research suggests that it is possible kindness may promote resilience.

It was also suggested that resilience may promote kindness via mediating variables (i.e., compassion and gratitude). Thus, research was examined that explored compassion and gratitude's individual relationships to kindness-related concepts and resilience (e.g., resilience → compassion; compassion→ kindness). With regards to compassion as a possible mediating variable, research has shown that resilience (Moore et al., 2015) and the related concept of posttraumatic growth (Morris et al., 2012) are related to compassion. Research has also shown that compassion is related to altruistic behavior (Weng et al., 2013) as well as prosocial behavior (Lim & DeSteno, 2016). With regards to gratitude as a possible mediating variable, research has shown that resilience

(Manning, 2014) and positive psychological functioning – a crucial component of resilience (Froh et al., 2008), are related to gratitude. Research has also shown that gratitude is related to prosociality (Ma et al., 2017) and prosocial behavior (Bartlett & DeSteno, 2006). Therefore, this research suggests it is possible resilience may promote kindness. Taking all of the above studies together, it is possible a cyclical relationship exists between kindness and resilience.

Finally, a notable study was presented that examined 24 character strengths (i.e., including kindness) and resilience (Martínez-Martí & Ruch, 2017). It provided partial support for the present study's hypothesis. Findings revealed a significant relationship between the character strength of kindness and resilience. However, it was also discovered that kindness did not predict resilience when they included all of their control variables (e.g., social support and positive affect) as well as all of the other character strengths. Notably, when the researchers did this analysis, they lumped kindness together with other interpersonal character strengths (e.g., fairness and teamwork), which are different from kindness. This could conceivably be why kindness did not predict resilience when additional variables were controlled for (Martínez-Martí & Ruch, 2017). Therefore, more research is needed to explore if a relationship truly exists between solely kindness and resilience. The present study will be a partial replication of Martínez-Martí and Ruch's (2017) study in that it will use the same kindness measure and control for the same variables, but the present study will solely focus on the relationship between kindness and resilience.

### **Chapter III: Methods**

## **Hypothesis**

It was hypothesized that higher scores on the Kindness subset of questions from the VIA Survey on Character (VIA-IS) would predict greater resilience (i.e., higher scores on the Brief Resilience Scale-BRS), while controlling for the variables of social support and positive affect. Social support and positive affect were measured using the Multidimensional Scale of Perceived Social Support (MSPSS) as well as the Positive and Negative Affect Schedule (PANAS).

### **Participants**

The total number of participants recruited were 106, but 102 were used for the study (more details in the Results section). The target population was at least 80 adults, aged 18 and older, residing in the United States. Exclusion criteria included: 1)

Individuals who were under 18, and 2) Non-English speakers. According to a power analysis using G\* power, when predicting a medium effect size for multiple regressions, collecting data from 80 participants was sufficient ("Multiple Regression: 3 predictors," 2013). Several methods were used to publicize the survey. Participants were recruited via posting the study on Facebook, Craigslist (i.e., various different Craigslist city pages across the U.S. in the volunteer section), and a psychology graduate program email listsery.

The risks involved in this study were minimal. Participants may have experienced some mild anxiety or discomfort in responding to questions (e.g., thinking about resiliency could bring up memories from adverse past events). However, all instruments were questionnaires that exposed participants to no more possibility of harm than that

ordinarily encountered in everyday life or during routine psychological tests. There was little risk of violation of confidentiality, as participants had no personal contact with the researcher and returned the materials voluntarily and anonymously online, with no identifying information. Only statistical and general demographic information was used in the study. However, participants had the option of providing their email address if they wished to be entered into a raffle for a gift card. Total confidentiality or anonymity could not be promised to participants, as Internet-based research increases possible risks to confidentiality due to the possibility of third-party interception. Included in the letter of introduction was the name and email of the contact person (i.e., the present researcher), who was available for consultation and discussion of any adverse reactions or problems that could have occurred as a result of the participants' participation in the study.

#### Measures

Kindness. To assess an individual's kindness, participants were asked to complete the Kindness subset of the VIA Survey on Character (VIA-IS; "the kindness items from the 240-item VIA Survey"). The VIA-IS came from The Values in Action (VIA) Classification of Strengths, a project that measured character strengths (Peterson & Seligman, 2004). Before being able to assess this, however, the project first identified which traits good character consists of. Character strengths can be defined as the morally valued parts of an individual's personality. In the end, the VIA Classification organized good character by creating six broad virtues and 24 generally-valued character strengths that fall under these (Park & Peterson, 2009; Peterson & Seligman, 2004). The VIA Classification of Strengths recognized "kindness" as one of these 24 widely-valued character strengths. "Kindness" is one of the three character strengths, along with "Love"

and "Social Intelligence," that fall under the larger domain of "Humanity" (Park & Peterson, 2009, p. 2). The virtue of "Humanity" includes character strengths that are interpersonal, displaying themselves most commonly in compassionate one-on-one relationships ("Kindness," 2017).

The VIA-IS is a self-assessment that can be obtained online and taken for free (Peterson & Park, 2009; Peterson & Seligman, 2004). It is a psychometrically valid measure that aims to focus on the positive qualities of an individual, which is an aspect often neglected in personality tests ("Psychometric Data For VIA Survey-240," 2016). Consequently, the VIA-IS was designed to assist individuals in understanding their core character strengths. Together, Seligman and Peterson (a prominent scientist at the University of Michigan and author in the positive psychology field) created the VIA-IS. Robert McGrath validated it. The self-assessment is now thought of as a fundamental instrument in the positive psychology field and has been employed in hundreds of research studies. It has been translated into numerous languages (e.g., Afrikaans, Chinese, Croatian, Danish, English, French, German, Hebrew, Italian, Japanese, Portuguese, Spanish, Swedish, Turkish, and Persian) and more than 3 million people in more than 190 countries around the world have taken it (Peterson & Park, 2009; Peterson & Seligman, 2004).

Participants were asked to complete the Kindness subset of the VIA Survey on Character (VIA-IS) in order to assess kindness ("the kindness items from the 240-item VIA Survey"). This subset consists of 10 items from the 240-item VIA Survey on Character. It asks participants to read and respond to items using a 5-point Likert scale of one to five (e.g., 5 – *Very Much Like Me*, 4 – *Like me*, 3 – *Neutral*, 2 – *Unlike Me*, and 1

- Very Much Unlike Me). Each participant's kindness score was summed and divided by the number of items on the subset to measure their overall level of kindness. The range of possible scores was 1 to 5. The higher an individual scored on this scale, the more kind they perceived themselves. The VIA Institute on Character asked the researcher not to share example questions from the survey.

Regarding psychometric data on the Kindness subscale of the VIA-IS, the researcher obtained unpublished findings from the creators of the scale stating that the internal consistency reliability is 0.77. The test-retest reliability is 0.71. It has also been correlated (0.17) with life satisfaction (SWLS) and depression (CES-D) with a correlation of -0.10. With the exception of the test-retest reliability (120-item version), all of these correlations were from the 240-item version of the VIA ("Via Institute on Character," 2016).

Regarding psychometric data, on the whole VIA-IS, it is important to note that it has a few different forms. However, the Long Form (i.e., 240 Questions) has an internal consistency of 0.83, which is the form from which the kindness subset was pulled from. All of the scales have been shown to have alphas that are satisfactory (> .70). However, this study only used the Kindness subset of the questions. Therefore, it must be noted that the VIA Survey was not created and/or tested to only measure the character strength of kindness. Therefore, the Kindness subset by itself cannot be thought of as a validated measure. The researcher obtained permission to use the Kindness subset of questions.

**Resilience.** To assess an individual's resilience, participants were asked to complete the Brief Resilience Scale (BRS; Smith et al., 2008). The BRS is a self-report measure that consists of 6 items. The measure was created to especially emphasize the

bouncing back from stress component in resilience. Windle, Bennett, and Noyes (2011) stated that in the context of stress, the BRS can be a helpful outcome measure. Some example questions of the BRS include, "I tend to bounce back quickly after hard times" and "I tend to take a long time to get over set-backs in my life" (Smith et al., 2008). It requires that the participants read and respond to items regarding resilience using a five point Likert scale of one to five (e.g., 1 – *Strongly Disagree*, 2 – *Disagree*, 3 – *Neutral*, 4 – *Agree*, 5 – *Strongly Agree*). The BRS was scored by first reversing the coding on items 2, 4, and 6. Next, the responses of the six items were added (Range: 6-30). Lastly, the obtained sum was divided by the total number of questions the participant answered (Smith et al., 2008).

The BRS has an acceptable internal consistency with alphas of >0.70 and <0.95 (Windle et al., 2011). The criterion validity is also acceptable, as Smith and colleagues (2008) presented associations between the Brief Resilience Scale (BRS) and the Ego Resiliency Scale (ER-89) of 0.51 and the Connor-Davidson Resilience Scale (CD-RISC) of 0.59 (Sun & Stewart, 2007). Regarding construct validity, the resilience measure review found that the BRS attained the maximum score possible for criterion. The BRS's test-retest reliability had the coefficients of 0.62 (n = 61) in one sample and 0.69 (n = 48) in another.

**Social support.** To assess an individual's social support, participants were asked to complete the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS is a self-report measure that consists of 12 items. The measure was created to evaluate views of social support adequacy from three particular origins: family, friends, and significant other. The MSPSS creators stated that

there are various definitions of social support, but all tend to include that "it involves some kind of relationship transaction between individuals, the nature of the transaction is specified in a variety of ways" (Zimet et al., 1988, p. 31). Example items of the MSPSS include, "There is a special person who is around when I am in need," "My family really tries to help me," and "I can talk about my problems with my friends" (Zimet et al., 1988, p. 35). It requires that the participants read and rate how they feel about each statement using a 7-point Likert scale (i.e., 1 – Very Strongly Disagree, 2 – Strongly Disagree, 3 – Mildly Disagree, 4 – Neutral, 5 – Mildly Agree, 6 – Strongly Agree, 7 – Very Strongly Agree). The items can be separated into factor groups connecting to the three different types of social support the MSPSS measures, which is family (Fam), friends (Fri) or significant other (SO; Zimet et al., 1988; Zimet, Powell, Farley, Werkman, & Berkoff, 1990). In order to score the MSPSS, one can choose to calculate each of the subscale scores and/or the total scale. To calculate the Family Subscale, items 3, 4, 8, & 11 are added together and then the sum is divided by 4. To calculate the Friends Subscale, items 6, 7, 9, & 12 are added together and then the sum is divided by 4. To calculate the Significant Other Subscale, items 1, 2, 5, & 10 are added together and then the sum is divided by 4. To calculate the Total Scale, all of the items are added together and then the sum is divided by 12. The Total Scale was used for the present study. To interpret the calculations, low social support can be regarded as any mean total scale score ranging from 1 to 2.9. Moderate social support can be regarded as a score of 3 to 5. High social support can be regarded as a score ranging from 5.1 to 7 (Zimet et al., 1988).

Regarding psychometric data, the MSPSS appears to be a valid measure. Strong factorial validity has been displayed for its three subscales that are intended to assess for

Significant Other M = 5.74). Research has indicated that the MSPSS has good test-retest (Cronbach's coefficient alpha = .85 for total scale) and internal reliability (Cronbach's coefficient alpha = .85 for total scale). Additionally, research has suggested that the MSPSS has moderate construct validity. As expected, high amounts of reported social support were correlated with low amounts of depression and anxiety symptoms reported on the Hopkins Symptom Checklist (HSCL; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). The MSPSS as a whole was significantly, negatively related to depression (Depression: r = -.25, p < .01). However, each of the MSPSS subscales varied in the strength of their correlations to depression and anxiety symptoms (i.e., Family Support Subscale = Depression: r = -.24, p < .01 and Anxiety: r = -.18, p < .01; Friend Support Subscale = Depression: r = -.24, p < .01, Anxiety: No significant relationship; Significant Other Support Subscale: Depression: r = -.13, p < .05, Anxiety: No significant relationship). In conclusion, the research suggests that the MSPSS is a psychometrically sound measure (Zimet et al., 1988).

Positive affect. To assess an individual's positive affect, participants completed the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS is a self-report measure that consists of 20 items. The measure was created to measure the frequency of an individual's positive and negative emotional experiences (e.g., excited or upset). Watson and colleagues (1988) defined Positive Affect (PA) as "a state of high energy, full concentration, and pleasurable engagement, whereas low PA is characterized by sadness and lethargy" (Watson et al., 1988, p. 1063). On the other hand, "Negative affect (NA) is a general dimension of subjective distress and unpleasurable

engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness, with low NA being a state of calmness and serenity" (Watson et al., 1988, p. 1063). Example items of the PANAS include "interested," "distressed," "excited," "upset," "irritable," "inspired," and various other emotional states (Watson et al., 1988, p. 1070). It requires participants to read and rate how frequently they experience each positive and negative affect using a 5-point Likert scale (i.e.,  $1 - Very \ slightly \ or \ Not \ at \ All, 2 - A \ Little, 3 - Moderately, 4 - Quite \ a \ Bit, 5 - Extremely).$  In order to obtain the Positive Affect Score on the PANAS, the scores of the positive items (i.e., 1, 3, 5, 9, 10, 12, 14, 16, 17, 19) were added (Range: 10-50; Mean Scores: 35.0; SD  $\pm$  6.4). More elevated scores indicated higher amounts of positive affect. In order to obtain the Negative Affect Score on the PANAS, the scores of the negative items (i.e., 2, 4, 6, 7, 8, 11, 13, 15, 18, 20) can be added (Range: 10-50; Mean Scores: 18.1; SD  $\pm$  5.9). Lower scores indicate lower amounts of negative affect (Watson et al., 1988). Calculating this score was not necessary for the present study.

Regarding psychometric data, the PANAS has been shown to have excellent convergent and discriminant correlations with longer measures examining underlying mood factors. It has also been shown to have high internal consistency (Cronbach's coefficient), with Alpha reliabilities ranging from .86 to .90 for PA and .84 to .87 for NA. It also displays stability over the time period of 2-months. The PANAS correlated with measures of related constructs and showed the same correlation patterns with external variables that had been seen in other studies. For example, only the PA scale was associated with social activity and showed significant diurnal variation. While, only the NA scale was significantly correlated to perceived stress and displayed no circadian

pattern. Furthermore, as expected, the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was positively correlated with the PANAS NA (.58), but it was negatively correlated with the PANAS PA (-.36). In conclusion, the PANAS has been identified as a reliable, valid, and efficient measure for assessing these two essential mood dimensions (Watson et al., 1988).

**Demographics.** Participants were asked to complete a demographic information questionnaire (See Appendix A). This form contained 7 questions and asked participants about their age, gender, nationality, education level, ethnicity, sexual orientation, and religious/spiritual orientation.

#### **Procedures**

This study employed a cross-sectional design and was conducted online. Participants were recruited via posting the study on Facebook, Craigslist (i.e., various different Craigslist city pages across the U.S. in the volunteer section), and a psychology graduate program email listserv. Once recruited, participants clicked on a link or typed in a web address that took them to a series of forms, assessments, and questionnaires on Google Forms. First, a letter of introduction was presented that described the study and included all of the required elements of informed consent. Consent was obtained before the participants could move further with the study. Written consent was not requested of the participants because of the minimal risk involved in participation and the added risk to the participants' privacy that would result from a document identifying them as participants in the study. A signed consent form would have been the only record linking the participant and the research, as all materials were submitted anonymously. Next, various assessments were administered. Participants were asked to complete the Kindness

subset of questions from the VIA Survey on Character (VIA-IS; "the kindness items from the 240-item VIA Survey"). The researcher obtained permission to only use the Kindness subset of questions from the VIA-IS. The participants were also asked to complete the Brief Resilience Scale (BRS; Smith et al., 2008). Furthermore, the participants were asked to complete the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988) as well as the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). An "attention check" was included at the end of the social support survey to ensure participants completed the items thoughtfully (i.e., "Please click '5' for this item"). Additionally, the researcher counterbalanced all of the scales. Next, the participants were taken to the Demographic Information Questionnaire to fill out. Then, the participants were taken to a Debriefing Page. Lastly, participants were presented the option of providing their email address if they wished to be entered into a raffle for a gift card (i.e., \$50 Amazon gift card). Although general demographic information was collected, no identifiable personal data was (i.e., participants were able to choose if they wanted to provide their email address to be entered into the gift card raffle). Therefore, this study was anonymous. The Wright Institute CPHS approval was obtained and this research was conducted in accordance with the APA Ethical Principles of Psychologists.

#### **Data Analysis Plan**

To test the hypothesis that kindness would predict resilience while controlling for social support and positive affect, the plan was to conduct a multiple regression analysis. In this regression, kindness would have been entered as a predictor and resilience as the outcome variable, while social support and positive affect would have been entered as covariates.

#### **Chapter IV: Results**

## **Data Collection and Sample Size**

The online survey for this study was created on Google Forms. In order to counterbalance the scales, three separate forms were created. "Form One" presented the measures in the following order: (1) Kindness, (2) Social Support, (3) Positive Affect, and (4) Resilience. "Form Two" presented the measures in the following order: (1) Social Support, (2) Positive Affect, (3) Kindness, and (4) Resilience. Finally, "Form Three" presented the measures in the following order: (1) Positive Affect, (2) Kindness, (3) Social Support, and (4) Resilience. An "attention check" question (i.e., "Please click '5' for this item) was used at the end of the social support survey in an effort to catch any fraudulent responses. The survey was made public on May 15, 2018 and closed on May 31, 2018.

A total of 106 participants responded. All participants answered the attention check question correctly (i.e., clicked on '5' for their response). However, a total of 4 participants' data had to be thrown out due to missing and inappropriate responses as well as because one participant failed to endorse that they met the eligibility criteria (i.e., did not mark 'yes' that they were at least 18 years old, reside in the U.S., and speak English). Thus, a total of 102 participants' data were used for analysis.

#### Sample Demographics

Participants were asked to complete a Demographic Information Questionnaire, which asked about their age, gender, nationality, education, ethnicity, sexual orientation, and religious and/or spiritual orientation. Participants were not required to answer any of these questions to move forward with the study.

Age. Of the 102 participants, 95.09% of them reported their age (n = 97). The average age of these participants was 37 years, with the youngest participant being 22 years old and the oldest participant being 82 years old (M = 37, Mdn = 31, SD = 15).

**Gender.** With regard to gender, 99.02% of participants responded (n = 101). Of these, 64.40% identified as woman (n = 65), 27.70% identified as man (n = 28), 5% identified as genderqueer or gender fluid (n = 5), 1% identified as trans man (n = 1), 1% identified as trans woman (n = 1), and 1% identified as demigender (n = 1).

**Nationality.** With regard to nationality, 99.02% of participants typed a response (n = 101). Of these participants, 71.30% identified as "American" (n = 72), 4% identified as "Italian" (n = 4), 3% identified as "German" (n = 3), 3% identified as "Spanish" (n = 3), 2% identified as "Chinese" (n = 2), 2% identified as "Cuban" (n = 2), 2% identified as "Irish" (n = 2), 2% identified as "Jewish" (n = 2), 2% identified as "Mexican" (n = 2), 1% identified as "Asian" (n = 1), 1% identified as "Egyptian" (n = 1), 1% identified as "Indian" (n = 1), 1% identified as "Indian" (n = 1), 1% identified as "Middle Eastern" (n = 1), 1% identified as "New Zealand" (n = 1), 1% identified as "Persian" (n = 1), and 1% identified as "Scottish" (n = 1).

**Education.** With regard to education, 100% of participants responded (n = 102). The average education of the participants was 16.4 years, with the lowest number of years of education reported being 2 and the highest being 29 (M = 16.40, Mdn = 16, SD = 4.48).

Ethnicity. With regard to ethnicity, 99.02% of the participants responded (n = 101). Of these participants, 64.40% identified as White (n = 65), 8.90% identified as Hispanic or Latino (n = 9), 8.90% identified as Asian/Pacific Islander (n = 9), 7.90%

identified as Other (n = 8), 6.90% identified as Black or African American (n = 7), 2% identified as Native American or American Indian (n = 2), and 1% chose "would rather not specify" (n = 1).

**Sexual orientation.** With regard to sexual orientation, 100% of the participants responded (n = 102). Specifically, 75.50% identified as straight/heterosexual (n = 77), 6.90% identified as gay (n = 7), 3.90% identified as bisexual (n = 4), 3.90% identified as queer (n = 4), 2.90% identified as asexual (n = 3), 2.90% identified as lesbian (n = 3), 2% identified as pansexual (n = 2), 2% identified as questioning or unsure (n = 2).

**Religious and/or spiritual orientation.** With regard to religious and/or spiritual orientation, 100% of the participants responded to this question (n = 102). Specifically, 61.80% marked "yes" to having a religious and/or spiritual orientation (n = 63), 33.30% marked "no" (n = 34), and 4.90% marked "would rather not say" (n = 5). Some participants further specified their religious and/or spiritual orientations (n = 64). Of these participants, 48.40% identified as Christian (n = 31), 25% identified as Other (n = 16), 21.90% identified as Jewish (n = 14), 3.10% identified as Buddhist (n = 2), and 1.60% identified as Muslim (n = 1).

Table 1
Sample Demographics

Demographics	n	M(SD) or Percentage
Age		
Average Age	97	37 (15)
Gender		
Woman	65	64.40%

Table 1 (continued)

Sample Demographics

Demographics	n	M(SD) or Percentage
Man	28	27.70%
Genderqueer or Gender Fluid	5	5%
Trans Man	1	1%
Trans Woman	1	1%
Demigender	1	1%
Nationality		
American	72	71.30 %
Italian	4	4%
German	3	3%
Spanish	3	3%
Chinese	2	2%
Cuban	2	2%
Irish	2	2%
Jewish	2	2%
Mexican	2	2%
Asian	1	1%
Egyptian	1	1%
Filipino	1	1%
Haitian	1	1%
Indian	1	1%

Table 1 (continued)

Sample Demographics

Demographics	n	M(SD) or Percentage
Middle Eastern	1	1%
New Zealand	1	1%
Persian	1	1%
Scottish	1	1%
Education		
Average Length	102	16.40 (4.48)
Ethnicity		
White	65	64.40%
Hispanic or Latino	9	8.90%
Asian/ Pacific Islander	9	8.90%
Other	8	7.90%
Black or African American	7	6.90%
Native American or American Indian	2	2%
Would rather not specify	1	1%
Sexual Orientation		
Straight/Heterosexual	77	75.50%
Gay	7	6.90%
Bisexual	4	3.90%
Queer	4	3.90%
Asexual	3	2.90%

Table 1 (continued)

Sample Demographics

Demographics	n	M(SD) or Percentage
Lesbian	3	2.90%
Pansexual	2	2%
Questioning or Unsure	2	2%
Religious and/or Spiritual Orientation		
Yes	63	61.80%
No	34	33.30%
Would rather not say	5	4.90%
Christian	31	48.40%
Other	16	25%
Jewish	14	21.90%
Buddhist	2	3.10%
Muslim	1	1.60%

# **Descriptive Statistics for Measures**

Kindness. Participants completed four different measures, which examined kindness, resilience, social support, and positive affect. To measure self-perception of kindness, participants completed the Kindness Subset of questions from the VIA Survey on Character (VIA-IS; Park & Peterson, 2009; Peterson & Seligman, 2004, "the kindness items from the 240-item VIA Survey"). Possible responses on the Kindness Subset of Questions were 1 (*Very Much Unlike Me*) to 5 (*Very Much Like Me*). The range of

possible scores was also 1 to 5. The higher an individual's score on this scale, the higher their self-perception of kindness is. Results showed that participants scored an average of 4.07 (N = 102, M = 4.07, SD = 0.53, Cronbach's  $\alpha = .74$ ).

Resilience. To measure resilience, participants completed the Brief Resilience Scale (BRS; Smith et al., 2008). Possible responses on the BRS were 1 (*Strongly Disagree*) to 5 (*Strongly Agree*), with three questions being reverse coded. The range of possible scores was 6 to 30. Results showed that participants scored an average of 20.10 (N = 102, M = 20.10, SD = 5.47, Cronbach's  $\alpha = .88$ ).

**Social support.** To measure social support, participants completed the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988). Possible responses on the MSPSS were 1 (*Very Strongly Disagree*) to 7 (*Very Strongly Agree*). The range of possible scores on the MSPSS was 1 to 7. Results showed that participants scored an average of 5.40 (N = 102, M = 5.40, SD = 1.42, Cronbach's  $\alpha = .95$ ).

**Positive affect.** To measure positive affect, participants completed the positive affect subscale of the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988). Possible responses on the PANAS were 1 (*Very Slightly or Not at All*) to 5 (*Extremely*). The range of possible scores on the positive affect portion of the PANAS was 10 to 50. Results showed that participants scored an average of 36.01 (N = 102, M = 36.01, SD = 7.2, Cronbach's  $\alpha = .88$ ).

Table 2

Descriptives

	Kindness	Resilience	Social Support	Positive Affect
N	102	102	102	102
Missing	0	0	0	0
Mean	4.07	20.10	5.40	36.01
Standard deviation	0.53	5.47	1.42	7.2

# Hypothesis

It was hypothesized that higher scores on the Kindness subset of questions from the VIA Survey on Character (VIA-IS) would predict greater resilience (i.e., higher scores on the Brief Resilience Scale-BRS), while controlling for the variables of social support and positive affect. Social support and positive affect were measured by using the Multidimensional Scale of Perceived Social Support (MSPSS) as well as the Positive and Negative Affect Schedule (PANAS).

This study's hypothesis was not supported. The Pearson correlation test was conducted to first determine if there was a relationship between kindness and resilience. There was no significant relationship between kindness and resilience (r = .14, p = .15). Therefore, a multiple regression analysis (i.e., with kindness, social support, and positive affect as the predictors and resilience as the dependent variable) was not conducted.

Additional analyses were conducted to examine how social support and positive affect were related to the study's main variables, resilience and kindness. Resilience was

not statistically correlated with social support (r = .10, p = .34), but it was positively correlated with positive affect (r = .41, p < .001). Kindness was positively correlated with social support (r = .21, p = .04) and positive affect (r = .47, p < .001).

Table 3

Resilience, Kindness, Social Support, & Positive Affect Correlation Matrix

	Resilience	Kindness	SocialSupport	PosAffect
Pearson's r		.14	.10	.41
<i>p</i> -value	_	.15	.34	<.001
Pearson's r			.21	.47
<i>p</i> -value			.04	<.001
Pearson's r				.20
<i>p</i> -value			_	.04
Pearson's r				
<i>p</i> -value				_
	p-value  Pearson's $r$ $p$ -value  Pearson's $r$ $p$ -value  Pearson's $r$	Pearson's $r$ p-value  Pearson's $r$ p-value  Pearson's $r$ p-value  Pearson's $r$	Pearson's $r$ —.14 $p$ -value—.15Pearson's $r$ — $p$ -value—Pearson's $r$ $p$ -value $p$ -valuePearson's $r$	Pearson's $r$ —.14.10 $p$ -value—.15.34Pearson's $r$ —.21 $p$ -value—.04Pearson's $r$ —— $p$ -value——Pearson's $r$ ——

## **Chapter V: Discussion**

## **Overall Findings of Study**

It was hypothesized that higher scores on the Kindness subset of questions from the VIA Survey on Character (VIA-IS) would predict greater resilience (i.e., higher scores on the Brief Resilience Scale-BRS), while controlling for the variables of social support and positive affect. Social support and positive affect were measured by using the Multidimensional Scale of Perceived Social Support (MSPSS) as well as the Positive and Negative Affect Schedule (PANAS).

This study's hypothesis was not supported. There was no significant relationship between kindness and resilience. Therefore, a multiple regression analysis (i.e., with kindness, social support, and positive affect as the predictors and resilience as the dependent variable) was not conducted. However, additional analyses were conducted to examine how social support and positive affect were related to the study's main variables, resilience and kindness. Resilience was not statistically correlated with social support, but it was positively correlated with positive affect. Kindness was positively correlated with social support and positive affect were significantly related. In sum, positive affect was significantly related to resilience (moderate to large effect size), kindness (moderate to large effect size), and social support (small to moderate effect size).

## **Explanation of Findings**

Hypothesis - the relationship between kindness and resilience. This study's hypothesis was not supported. The relationship between kindness and resilience, while in the predicted direction (positive), was not statistically significant. These results are

inconsistent with findings of Martínez-Martí and Ruch's (2017), who examined character strengths' (i.e., including kindness) relation to resilience. They found that there was a significant relationship between interpersonal strengths (i.e., which included kindness) and resilience.

However, the present study's finding was more consistent with the finding of Martínez-Martí and Ruch's (2017) second analysis, when they conducted a multiple regression with all of their variables in the model. Martínez-Martí and Ruch (2017) found that when all variables of their study (i.e. the sociodemographic variables, the six resilience-related factors, and the five factors of character strengths) were included in the model simultaneously, only the emotional strengths (i.e., zest, bravery, love, social intelligence, hope, and humor) and strengths of restraint (i.e., persistence, authenticity/honesty, perspective, prudence, and self-regulation) were significant predictors of resilience. The interpersonal strengths (i.e., kindness, teamwork, fairness, leadership, forgiveness, and modesty) did not predict resilience. The present study conjectured that their lumping of kindness with other strengths could have explained why kindness did not predict resilience, when additional variables were controlled for (Martínez-Martí & Ruch, 2017). To test this explanation, the present study focused on the distinct concept of kindness and its relationship to resilience. However, the present study's finding supported Martínez-Martí and Ruch's (2017) second analysis finding (i.e., interpersonal strengths did not predict resilience). In sum, the present study's finding (i.e., no significant relationship between kindness and resilience) was inconsistent with Martínez-Martí & Ruch's (2017) initial analysis but consistent with their second analysis.

This initial inconsistency between the two findings, could be due to the differences in sample size and measures used. The present study had 102 participants, whereas Martínez-Martí and Ruch's (2017) study had 363 participants. The present study used the same kindness and positive affect measures as Martínez-Martí and Ruch (2017), but they used German versions of these measures. High methodological rigor is required to carryout the complicated procedure of adapting psychological measures (Borsa, Damásio, & Bandeira, 2012). For example, using a balance of various information sources, such as cultural, linguistic, scientific, and contextual must be used for a translation to be suitable. Martínez-Martí and Ruch (2017) did not provide an explanation of how the German versions of these measures that they used were validated. Furthermore, in the literature, there is no agreement on the steps of how to do so (Borsa et al., 2012). Therefore, it is possible that an imperfect adaptation of the kindness measure could partly explain the initial inconsistency between the two findings.

Furthermore, Martínez-Martí and Ruch (2017) used different resilience and social support measures than the present study. To assess resilience, Martínez-Martí and Ruch (2017) used the 10-item version (Campbell-Sills & Stein, 2007) of the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003). The CD-RISC measures an individual's ability to bounce back from adversity. It reveals an individual's capability to endure occurrences such as personal problems, change, pressure, failure, painful feelings, and illness (Martínez-Martí & Ruch, 2017). The measure was created for clinical practice and has been used to assess a drug intervention's impact on change (Windle et al., 2011). Furthermore, the viewpoint that resilience is a personal characteristic is taken by the authors (Windle et al., 2011). Notably, Windle and colleagues (2011) pointed out that the

CD-RISC's theoretical underpinnings are not particularly strong, as only three authors are cited to distinguish resilient individuals' characteristics. They stated that more theoretical clarification would be advantageous for this measure (Windle et al., 2011). In contrast, the present study used the Brief Resilience Scale (BRS; Smith et al., 2008). The BRS was created as an outcome assessment to measure an individual's capability to recover or bounce back from stress. Windle and colleagues (2011) emphasized that in the context of stress, the BRS can be a helpful outcome measure. No clinical applications were reported for the BRS (Windle et al., 2011). Regarding theoretical underpinnings of the BRS, Windle and colleagues (2011) stated that the authors' arguments are brief but straightforward. After piloting an original list of possible items for the BRS, the authors chose their final list of items. However, the data reduction does not seem to have any empirical validation (Windle et al., 2011). Although Smith and colleagues (2008) have presented associations between the Brief Resilience Scale (BRS) and the Connor-Davidson Resilience Scale (CD-RISC) of r = .59 (Sun & Stewart, 2007), it appears that the two measures slightly differ in their purpose and theoretical underpinnings. The CD-RISC focuses on bouncing back from adversity and was created for clinical practice, whereas the BRS emphasizes bouncing back in the context of stress and no clinical applications were reported (Martínez-Martí & Ruch, 2017; Windle et al., 2011). Adversity has been defined as mental, physical, or social losses that result in limited circumstances and opportunities (e.g., one's own poor health, death of a loved one, retirement conditions; Hildon, Smith, Netuveli, & Blane, 2008). Another definition describes adversity as damaging life circumstances that are correlated with maladjustment (Luthar & Cicchetti, 2000). On the other hand, stress has been defined as

predictable physiological, biochemical, and behavioral changes due to unpleasant emotional occurrences (Baum, 1990). Stress is also commonly explained as feeling worried, worn, or overwhelmed ("Understanding Chronic Stress," n.d.). Although very similar, it appears that adversity emphasizes the consequences of a broad range of losses (i.e., mental, physical, or social) and damaging life circumstances, whereas stress focuses more on the consequences of unpleasant emotional occurrences (Baum, 1990; Hildon et al., 2008; Luthar & Cicchetti, 2000; "Understanding Chronic Stress," n.d.). Therefore, it is possible that this difference contributed to the present study's inconsistent finding and perhaps suggests that kindness is related to bouncing back from adversity, but not bouncing back in the context of stress.

It is also possible that kindness and resilience were not actually related to each other in Martínez-Martí and Ruch's (2017) study. Instead, it is possible that one of the other interpersonal strengths (i.e., teamwork, fairness, leadership, forgiveness, and modesty) was the reason a significant relationship was found between interpersonal strengths and resilience. For example, perhaps the construct of forgiveness is strongly correlated with resilience, and this is what led to Martínez-Martí and Ruch's (2017) initial significant correlation between interpersonal strengths and resilience.

Another reason the present study may not have found a significant relationship between kindness and resilience is that the individuals who participated may have only experienced minimal adversity in their lives. This is unknown, however, because the number and intensity of adverse events in each participant's life was not measured.

The experience of adversity is necessary for resilience, when using this study's definition of resilience (Wong, 2011). Thus, without adversity, resilience is non-existent. Measuring

this variable would have allowed the present researcher to be certain adversity was experienced by each participant, in order to ensure the true measurement of resilience. Research has shown that interpersonal strengths (i.e., including kindness) generate linear relationships with the number of potentially traumatic incidents people have undergone in their lives (Peterson, Park, Pole, D'Andrea, & Seligman, 2008). In other words, the more traumatic incidents one experienced the stronger their kindness grew (e.g., 1 traumatic event = 3.99, 2 traumatic events = 4.00, 3 traumatic events = 4.10, 4+ traumatic events = 4.18). Peterson and colleagues' findings are significant because they contradict the numerous theories that suggest traumatic events are psychologically scarring; humans are more resilient than many existing models suggest (Peterson et al., 2008). Thus, measuring the number and intensity of adverse events in each participant's life could have been an important eligibility criterion to ensure the true measurement of resiliency.

Interpersonal strengths (i.e., including kindness) have been shown to have positive relationships with posttraumatic growth (Peterson et al., 2008). Perhaps kindness is more closely related to posttraumatic growth than resilience. The two concepts are closely related but distinct. Posttraumatic growth is similar to resilience in that both concepts involve experiencing an extreme hardship in life, but then having the capability to come back stronger than before the hardship occurred (Tedeschi & Calhoun, 2004; Wong, 2011). However, these concepts diverge in that posttraumatic growth more heavily emphasizes and focuses on the transformation that occurs when one is able to not only overcome adversity but also grow from it (e.g., develop deeper interpersonal relationships, changed priorities, more meaningful spiritual life, etc.), whereas resilience does not place as much of an emphasis on the growth aspect of the definition (Tedeschi &

Calhoun, 2004).

The present study's findings supported Martínez-Martí and Ruch's (2017) second analysis, which revealed interpersonal character strengths (i.e., kindness, teamwork, fairness, leadership, forgiveness, and modesty) did not predict resilience when all other variables were controlled for. Therefore, it is possible that interpersonal strengths, specifically kindness, may not be as vital to resilience as the present researcher hypothesized.

Interestingly, Martínez-Martí and Ruch's (2017) second analysis showed that the individual strengths of bravery, hope, and zest showed the largest associations with resilience. They asserted that resilience's correlation with bravery is an important and more novel revelation (Martínez-Martí & Ruch, 2017). To explain resilience's correlation with bravery, Martínez-Martí and Ruch (2017) cited Jordan (2005), who posited that brave individuals confront challenging situations with determination, rather than hiding from difficulty (Jordan, 2005). Intriguingly, they linked hope and zest to the already wellknown resilience-related variables of optimism and positive affect. Consequently, it seems that the construct of positive affect, a variable that the present study was going to control for, has a more influential role in resilience than the present researcher previously thought. In fact, it is known that more positive emotion is associated with lower anxiety and depression levels (Seligman, 2002). As previously mentioned, the broaden-and-build theory of positive emotions (Fredrickson, 1998; Fredrickson & Cohn, 2008) posited that positive affect works to form enduring resources (Cohn et al., 2009). For example, an individual who performs a kind deed may in turn experience positive feelings, and the accumulation of these positive feelings over time may result in less pathology and greater resilience.

The relationship between social support and resilience. Additionally, no significant relationship was found between social support and resilience. This was surprising given the research presented in the literature review. Research has shown that both kindness (Otake et al., 2006) and prosocial behavior (Flook et al., 2015) are related to social support. Research has also shown that social support is related to resilience (Dumont & Provost, 1999; Wilks & Spivey, 2010). From this literature, the present researcher suggested that it is possible that those who act with kindness naturally build greater social support networks and that this buffer of having greater social support results in resilience. Martínez-Martí and Ruch (2017) provided a similar explanation for the relationship they found between interpersonal strengths and resilience. They posited that interpersonal strengths may foster resilience by helping maintain healthy relationships within the community and by enabling the creation of group events, despite group adversities (Martínez-Martí & Ruch, 2017).

Contrasting to the present study's finding, Martínez-Martí and Ruch (2017) found a significant positive relationship between social support and resilience. However, they used a different measure than the present study. To assess social support, Martínez-Martí and Ruch (2017) used a German measure - the 14-item Social Support Questionnaire [Fragebogen zur sozialen Unterstützung] (F-SozU K-14; Fydrich, Sommer, Tydecks, & Brähler, 2009a). This questionnaire measures perceived social support (Martínez-Martí & Ruch, 2017). The items in this questionnaire belong to three different types of social support: emotional support (e.g., to share emotions, to experience involvement, etc.), social integration (e.g., being part of a friend group, participating in shared endeavors,

etc.), and to offer practical help in daily difficulties (e.g., obtaining advice, borrowing something, etc.; Fydrich, Sommer, Tydecks, & Brähler, 2009b). In contrast, the present study used the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS was created to measure views of social support adequacy from three particular origins: family, friends, and significant other. Strong factorial validity has been displayed for its three subscales that are intended to assess for different sources of social support (Zimet et al., 1988). Consequently, it appears that the two measures differ in how they measure social support. The German measure (F-SozU K-14) focuses on different aspects of social support (i.e., emotional support, social integration, and offering practical help in daily difficulties; Fydrich et al., 2009b). Contrastingly, the MSPSS focuses on various origins of social support (i.e., family, friends, and significant other; Zimet et al., 1988). Therefore, this difference could explain the present study's inconsistent finding.

Although the present study's finding, that social support was not significantly related to resilience, did not corroborate most of the research that was discussed in the literature review. This finding may support the first wave of resilience inquiry that occurred within the research community (Grafton, Gillespie, & Henderson, 2010). This first wave explained the phenomena of resilience as a collection of personal traits, such as self-efficacy, hardiness, coping, optimism, patience, tolerance, faith, adaptability, sense of humor, and self-esteem (Baron, Eisman, Scuello, Veyzer, & Lieberman, 1996; Garmezy, 1991; Grafton et al., 2010; Hunter & Chandler, 1999; Rutter, 1979, 1985; Wagnild & Young, 1993; Werner & Smith, 1982). Contrastingly, Dumont and Provost (1999), who were cited in the literature review, suggested that resilience may be drawn more from

one's social support network, rather than being an intrinsic personal strength. However, the present study's finding appears to counter this argument, as social support was not significantly related to resilience.

Furthermore, the present study's inconsistent finding with the research that was discussed in the literature review, could be due to potential study design related factors. For example, the present study used the Brief Resilience Scale (BRS), which was created to assess the capability one has to bounce back or recover from stress (Windle et al., 2011). The authors of this scale asserted that measuring ill individuals' ability to recover is imperative (Windle et al., 2011). The scale was created to have a particular emphasis on bouncing back from stress (Windle et al., 2011). The present study did not administer a stress measure. Therefore, the stress levels of the participants in this study are unknown. This could have negatively impacted the accuracy of measuring resiliency how it was intended by the authors.

The relationship between positive affect and resilience. A significant relationship was found between positive affect and resilience (r = .41, p = < .001). When examining these two constructs on a conceptual level, a relationship between the two seems probable. For example, it seems natural that an individual who experiences high levels of positive affect may be in a better mindset to deal with life's stressors. Similarly, when examining the other possible direction, if one is well adapt at handling life's challenges, they may be more likely to experience positive affect.

This significant relationship was expected, given the research presented in the literature review. The broaden-and-build theory of positive emotions (Fredrickson, 1998; Fredrickson & Cohn, 2008) may most aptly explain the relationship between positive

affect and resilience. This theory posited that positive emotions are evolved modifications that are responsible for building lasting resources (Cohn et al., 2009). Negative emotions restrict one's attention to surviving a threat (Carver, 2003; Cosmides & Tooby, 2000). In contrast, positive emotions lead to expansive thinking and behaving that are not crucial to one's urgent safety (Cohn et al., 2009). It is postulated that over time, these novel experiences accumulate, becoming resources that can change individuals' lives. Consequently, the theory proposed that positive emotions can predict positive outcomes, such as prosperity, longevity, and health because they aid in accumulating the resources needed (Cohn et al., 2009).

The relationship between kindness and positive affect and social support. Results showed that kindness had a significant relationship with both positive affect (r = .47, p = < .001) and social support (r = .21, p = .04). A relationship between kindness and positive affect could be explained by an individual performing a kind deed and then feeling good about it after. Additionally, positive affect may precede kindness, in that feeling good may motivate an individual to help others. The relationship between kindness and social support may be explained by an individual choosing to help others and then as a result attracting friends. However, it is also possible that an individual with high social support may be grateful and want to give back by performing kind deeds.

When examining the literature, it is possible that the broaden and build theory also accounts for the relationship between kindness and positive affect. As aforementioned, positive emotions lead to expansive thinking and behaving that are not crucial to one's urgent safety (Cohn et al., 2009). Consequently, this expansive behavior

due to positive emotions could possibly result in doing favors and kind deeds for others (i.e., kindness).

Regarding the relationship between kindness and social support, this result was not surprising given the literature reviewed. Kindness has been shown to relate to social support and relationship satisfaction (O'Connell et al., 2016). Kindness may also contribute to healthy social relationships and thus is a significant human strength (McAdams et al., 2015). Prosocial behavior has been shown to relate to social competence, a skill that may be crucial for enabling high social support levels (Flook et al., 2015). Furthermore, Martínez-Martí and Ruch (2017) noted the interpersonal strengths' (i.e., including kindness) importance in maintaining healthy relationships. Therefore, this study further confirms that kindness is likely a crucial part of healthy social support.

The relationship between social support and positive affect. Finally, social support and positive affect were significantly related (r = .20, p = .04). A relationship between these two constructs makes intuitive sense on a conceptual level when examining either directionality of the relationship. For example, it makes sense that having strong social support in one's life and feeling valued by others, could lead to positive emotions. On the other hand, experiencing positive emotions may give one the energy, motivation, and confidence to pursue social relationships. Furthermore, exuding positive emotions may attract more potential social support.

The finding of the significant relationship between social support and positive affect was consistent with previous literature. Specifically, the broaden and build theory stated that positive emotions lead to individuals building lasting resources in their lives (Cohn et

al., 2009). These lasting resources can have important positive impacts, such as a caring for another can turn into a nourishing relationship (Cohn et al., 2009). In fact, previous research findings made a strong argument that positive affect promotes sociability, liking of self and others, activity, altruism, strong bodies and immune systems, and effective conflict resolution skills (Lyubomirsky, King, & Diener, 2005). These resources that are nurtured by positive affect appear to be essential for relationships. Therefore, the present study's finding of a significant relationship between positive affect and social support is consistent with previous literature.

## Limitations of the Study

This study sought to examine if there is a relationship between kindness and resilience, but did not find one. Instrumentation may have played a role in decreasing this study's internal validity. In other words, the measures used may have produced invalid scores due to this study not measuring the number and intensity of adverse events in each participant's life. Having experienced adversity is required for resilience when using this study's definition of resilience (Wong, 2011). Research has shown that the more traumatic events a person has undergone, the greater their kindness grew (Peterson et al., 2008). However, the amount and intensity of adverse experiences the participants in the present study experienced is unknown. The authors of the Brief Resilience Scale (BRS) emphasized that the scale was created to have a particular emphasis on bouncing back from stress (Windle et al., 2011). However, the present study did not administer a stress measure. This could have been a key eligibility criterion. In summary, because the present study did not measure stress level and make it an inclusion criterion for completing the Brief Resilience Scale (BRS), it is possible that all of the present study's

participants may not have experienced significant stressful events in their lives (Smith et al., 2008). Consequently, this would make their resilience scores invalid.

Furthermore, as a partial replication study, the present study used the same kindness and positive affect measures, but different resilience and social support measures (i.e., other study used a German instrument; Martínez-Martí & Ruch, 2017). Additionally, after obtaining permission through personal communication, this study administered only the Kindness Subset of the VIA ("the kindness items from the 240-item VIA Survey"). However, the VIA Survey was not created and/or tested to only measure the character strength of kindness (Peterson & Park, 2009; Peterson & Seligman, 2004). Therefore, the Kindness subset by itself cannot be thought of as a validated measure. Consequently, the present researcher may not have been precisely measuring the targeted construct, perceived kindness ("the kindness items from the 240-item VIA Survey"). Instead, it is possible that the present researcher could have been measuring related constructs, such as perceived generosity, selflessness, helpfulness, or agreeableness. Therefore, due to this, the results may be inaccurate.

Regarding external validity, this study's ability to generalize to wider populations is narrow given the lack of diversity of the sample and limited measures used. Specific threats that may have affected this study's external validity include: selection bias, lack of diversity of the sample, and construct validity, which will be reviewed below.

Selection bias may have played a role in compromising this study's external validity. All participants were recruited online (e.g., Facebook, Craig's List, etc.) and were also offered compensation (i.e., \$50 Amazon gift card). Therefore, this may have attracted a certain group of people, such as those who have access to and the ability to use

computers, as well as possibly those who struggle financially and were hoping to win the gift card. If the sample was not sufficiently random, then the statistical analysis may be biased, the results may be skewed, and the interpretations concluded may be incorrect (Nugent, 2013).

The lack of diversity of the sample may have also negatively impacted this study's external validity. The present study had 102 participants, with 27.70% (n = 28) of them being men and the average age being 37 years old. Contrastingly, Martínez-Martí and Ruch's (2017) study had 363 participants, with 17.91% (n = 65) of them being men and the average age being 28.34 years. The present study's participants were all residing in the U.S, whereas most of Martínez-Martí and Ruch's (2017) participants were Germanspeaking Swiss (74.4%). The present study's participants completed an average of 16.4 years of education, while in Martínez-Martí and Ruch's (2017) study 49.6% graduated from secondary school and 46.3% from tertiary school. The present study's sample was made up of 64.40% (n = 65) White participants and 75.50% (n = 77) heterosexual participants. Regarding spirituality, 61.80% (n = 63) of participants endorsed having a religious and/or spiritual orientation. Martínez-Martí and Ruch (2017) did not report on these characteristics. In conclusion, because the present study's sample was made up of predominately White, heterosexual, educated, religious and/or spiritual women, these results may not be generalizable to other populations.

Additionally, construct validity may have lowered this study's external validity. Resilience and kindness are both broad terms that have many similar terms associated with them as well as varying definitions. This study operationally defined kindness as "doing favors and good deeds for others" (Park & Peterson, 2009, p. 2). The higher an

individual scored, the higher their self-perception of kindness was. VIA scores are viewed as proxies for actual behavior. Measuring a construct in this way can be problematic because how an individual views themselves may not align with how they actually behave. Introspective ability is challenging for most individuals. Even if participants are putting forth their best effort to provide accurate answers, they may unknowingly be providing erroneous responses due to a lack of introspective ability (Hoskin, 2012). In sum, self-perception may not match up with reality.

This study operationally defined resilience as an adaptive trait that has two parts:

(a) The ability to recover and bounce back after adversity, and (b) The capacity to grow after a setback and come back even stronger (Wong, 2011). This definition is limiting because it is vague. It does not explain what would be considered "adversity" and it does not describe what "com[ing] back even stronger" might be (Wong, 2011). Consequently, this study can only draw conclusions about kindness and resilience based on these specific definitions. However, these are just two definitions out of many in the psychological literature. Furthermore, this study only used one measure for each construct and they were all self-report. If different ways of measuring each variable were used, it would increase the generalizability of the findings.

In conclusion, this study has several limitations that threaten both its internal and external validity. A correlational design was employed, which means causation and directionality of the variables cannot be gleaned from these findings. Internal threats to this study's validity include, instrumentation. Specifically, this study did not measure the number or intensity of adverse events in each participant's life, and having experienced adversity is required for resilience when using this study's definition (Wong, 2011).

Thus, the measures used may have produced invalid scores. Additionally, this study administered only the Kindness Subset of the VIA, but the Kindness subset by itself cannot be thought of as a validated measure ("the kindness items from the 240-item VIA Survey"). Therefore, the present researcher may not have been precisely measuring the targeted construct, kindness. Therefore, the results may be inaccurate.

With regards to external validity, specific threats to this study include: selection bias, lack of diversity of the sample, and construct validity. Selection bias may have occurred because all participants were recruited online and were also offered compensation, which could have attracted a non-randomized sample. If this is the case, then the results may be skewed and the interpretations drawn may be incorrect ("External Validity," 2012; Nugent, 2013). Additionally, given the sample's lack of diversity, this study's findings may be most aptly generalized to White, heterosexual, American, adult women who have completed some higher education and who identify as having a religious and/or spiritual orientation. Finally, construct validity may have lowered this study's external validity. This study can only draw conclusions about kindness and resilience based on the specific definitions that were used. However, these are just two definitions out of several in the psychological literature. Finally, this study only used a single measure for each construct and they were all self-report. If different ways of measuring each variable were used, it would increase the generalizability of the findings.

# **Future Research**

While there are many studies on resilience, there is a paucity of research that has examined resilience and character strengths, using the VIA classification. Martínez-Martí and Ruch's (2017) study examined numerous character strengths and resilience, but they

lumped kindness with other strengths that were not kindness. The present study was the first to examine the relationship between solely kindness and resilience that this researcher is aware of. This study's hypothesis was not supported, a statistically significant relationship was not found between kindness and resilience. However, because this appears to be the first study to investigate solely kindness and resilience, more research is needed.

Based on the limitations of this study discussed above, future research should consider: (1) designing a study that would have the ability to infer a casual link, such as experimental studies; (2) employing a longitudinal design in order to more fully understand kindness and resilience's changes over time as well as to close the gap between self-perception and actual behavior; (3) administering a stress exposure assessment in order to more accurately understand an individual's resilience level as well as administering purely a kindness measure that has strong psychometric properties, which would combat instrumentation limitations; (4) taking special care to recruit a more diverse sample from various different platforms, as this could allow for a more randomized sample, increasing generalizability and combatting selection bias; and (5) using more than one method of measurement for each variable, as this could target more than one definition of each construct, combatting construct validity threats.

#### **Final Summary**

The purpose of the present study was to address a gap in the literature by conducting a partial replication study, examining the relationship between solely kindness and resilience when controlling for social support and positive affect. It was hypothesized that higher scores on the Kindness subset of questions from the VIA-IS would predict greater

resilience (i.e., higher scores on the BRS), while controlling for the variables of social support and positive affect (i.e., measured using the MSPSS and PANAS). This study's hypothesis was not supported - there was no significant relationship between kindness and resilience. Therefore, a multiple regression analysis was not conducted. However, additional analyses were conducted to examine how resilience and kindness were related to social support and positive affect. Resilience was not statistically correlated with social support, but it was positively correlated with positive affect. Kindness was positively correlated with social support and positive affect. Social support and positive affect were also significantly related. In sum, positive affect was significantly related to all of the present study's main variables.

Contrary to what was hypothesized, this study's findings support Martínez-Martí and Ruch's (2017) second analysis, which revealed interpersonal character strengths (i.e., kindness, teamwork, fairness, leadership, forgiveness, and modesty) did not predict resilience when all other variables were controlled for. Their second analysis also showed that the individual strengths of bravery, hope, and zest had the largest associations with resilience (Martínez-Martí & Ruch, 2017). Fascinatingly, they linked hope and zest to the already well-known resilience-related variables of optimism and positive affect.

Consequently, it seems that positive affect, a variable that the present study planned to control for, plays a more influential role in resiliency than the present researcher previously thought.

Furthermore, this finding may support the first wave of resilience inquiry that explained resilience as a collection of personal traits, such as optimism, sense of humor, self-efficacy, hardiness, coping, patience, tolerance, faith, adaptability, and self-esteem

(Baron et al., 1996; Garmezy, 1991; Grafton et al., 2010; Hunter & Chandler, 1999; Rutter, 1979, 1985; Wagnild & Young, 1993; Werner & Smith, 1982). Contrary to Dumont and Provost's (1999) suggestion that resilience may be drawn more from one's social support network, this study's findings suggest that this may not be the case and that personal strengths should not be counted out when thinking about resilience.

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## Appendix A: Questionnaire

## **Demographic Information Questionnaire**

- 1. What is your age?
- 2. Which gender do you identify with most?
  - a. Agender
  - b. Androgyne
  - c. Demigender
  - d. Genderqueer or Gender Fluid
  - e. Man
  - f. Questioning or Unsure
  - g. Trans Man
  - h. Trans Woman
  - i. Woman
  - j. Other
- 3. What is your nationality?
- 4. How many years of education have you completed?
- 5. What is your ethnicity?
  - a. White
  - b. Hispanic or Latino
  - c. Black or African American
  - d. Native American or American Indian
  - e. Asian / Pacific Islander
  - f. Other
  - g. Would rather not specify
- 6. What sexual orientation do you identify with most?
  - a. Asexual
  - b. Bisexual
  - c. Gay
  - d. Straight (Heterosexual)
  - e. Lesbian
  - f. Pansexual
  - g. Queer
  - h. Questioning or Unsure
  - i. Other
- 7. Do you identify as having a religious and/or spiritual orientation?
  - a. Yes
    - i. If yes, please specify below:
      - 1. Buddhist

- 2. Christian
- 3. Hindu
- 4. Jewish
- 5. Mormon
- 6. Muslim
- 7. An Orthodox Church (e.g., the Greek or Russian Orthodox Church)
- 8. Other
- b. No
- c. Would rather not say

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