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EXPLORING THE DEFINITION OF RESILIENCE: A CONVERGENT PARALLEL MIXED METHODS STUDY IN ADULTS OVER THE AGE OF 65

A Dissertation

Presented to the Faculty of

Antioch University Seattle

In partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

by

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November 2023

EXPLORING THE DEFINITION OF RESILIENCE:
A CONVERGENT PARALLEL MIXED METHODS STUDY
IN ADULTS OVER AGE 65.

This dissertation, by Sara Jane Blessington has
been approved by the committee members signed below
who recommend that it be accepted by the faculty of the
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in partial fulfillment of requirements for the degree of

DOCTOR OF PSYCHOLOGY

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ABSTRACT

EXPLORING THE DEFINITION OF RESILIENCE:
A CONVERGENT PARALLEL MIXED METHODS STUDY
IN ADULTS OVER THE AGE OF 65.

Sara Jane Blessington

Antioch University Seattle

Seattle, WA

The definition of a word helps us understand its context and how it is meant to be used in daily life or research. When a word lacks a universal definition, it is hard to know how to use it. "Resilience" is that type of word. The resilience community in psychological research does not have a concrete, universal definition for this word. It takes on whatever characteristics are useful to the investigator. This study began with seeking a universal definition for the domain known as resilience. This study used a convergent parallel design with adults aged 60 and older living independently to seek out their personal definitions of resilience, then employed a well validated measure—the Conner-Davidson-25 (CD-RISC-25)—to test this population's resiliency and how they felt the measure addressed to domain of resilience. The findings of the study demonstrated that resilience is a complex and nuanced domain and a broad scope, making it challenging to develop a universal definition. This dissertation is available in open access at AURA (https://aura.antioch.edu/) and Ohio Link ETD Center (https://etd.ohiolink.edu/etd).

Keywords: resilience, broad and build theory of emotions, biopsychosocial model, attachment, postmodern therapy, utilization principle, carl rogers, mixed methods, convergent parallel design, conner-davidison resilience scale, older adults

Dedication

I would like to dedicate this project to my husband, Chris Blessington, who has always been my most ardent supporter, sounding board, and defender of my possibilities. My children Emily and Andrew Blessington inspire me with their intelligence, love, and support. You are amazing people with principles and values that are uniquely your own.

I would also like to dedicate this project to my parents, Lois and Peter Smith, who always believed in me and my siblings Becky Ponessa, Michael Smith, Tim Smith, Catherine Stetson, and Mary Joy Harvest, and their spouses and families, who are the best support team a graduate student could ask for.

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CHAPTER I: INTRODUCTION

The concept of resilience is used daily in the common vernacular, through books written about the topic, or videos and talks about the components that people assume are part of resilience. The abundance of information on the idea of resilience is everywhere within the mainstream including wellness books, podcasts, and magazines. These offer a broad-based point of view on how one can become resilient or stay resilient during a stressful period. Academic researchers have studied the concept of resilience from multiple angles (Garcia-Dia et al., 2013). Though these studies center around resilience as a positive character trait, if the reader looks closely the definitions of resilience are broad, leaving the reader to assume the definition of resilience by inference from the material at hand. Resilience is a concept that has not been specifically and thoroughly defined by the research community. This mercurial concept takes on the investigator's own meaning within any given study (Southwick et al., 2014).

Problem Statement

Currently, a universal definition of resilience does not exist beyond, perhaps, as a general tendency. The challenge in developing a universal definition is that the current ones involve casual vernacular and are subject to the whims of the author of the most recent mainstream book or investigator of a study. The concept of resilience is missing cultural, ecological, and systematic elements of the biological and mental health pieces necessary for a scientific definition. This definition requires a multidimensional approach. In her popular 2016 mainstream self-help book titled *Grit: The Power of Passion and Perseverance,* Angela Duckworth refers to resilience, either the noun or adjective form, 16 times in outlining her strategies for developing "grit." Not once does she define it. Instead, Duckworth allows the reader to infer what they mean by resilience or resilient (Duckworth, 2016). George E. Vaillant defines resilience in his 2002

Aging Well metaphorically as, "a twig with fresh, green living core. When twisted out of shape, such as a twig bends, but it does not break; instead, it springs back and continues growing" (Vaillant, 2002). Lastly, Rick and Forrest Hanson, in their 2018 book *Resilient*, explain that "mental resources like determination, self-worth, and kindness are what makes us resilient; those able to cope with adversity and push through challenges in the pursuit of opportunities." The authors go on to further describe resilience as "recovering from loss and trauma," but "[t]rue Resilience fosters well-being, an underlying sense of happiness, love, and peace." They further state that "internalizing experiences of well-being, that builds inner strength which he believes is the key to "turning passing experiences into lasting inner resources built into your brain" (Hanson & Hanson, 2018).

Within the academic literature, the definition of resilience is equally as broad and encompassing as in mainstream media. For example, Luthar et al's (2000) *The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work* defines resilience as "a dynamic process encompassing positive adaptation within the context of the significant adversity." Garcia-Dia et al's (2013) *Concept Analysis: Resilience* derives the concept's meaning from its Latin roots to the popular mainstream online website Dictionary.com. The authors state that "the commonality of all definitions is the ability to recover from an altered state but offer no mechanisms by which resilience occurs" (p. 264). Ben-David and Jonson-Reid (2017) define and describe the concept of resilience as "a multidimensional or multi-determined process that captures a social-ecological system that is interactive with the individual affected."

Methods for Current Study

This study contributes to resilience research by enhancing conceptual knowledge through refining the definition via an interdisciplinary perspective (Southwick et al., 2014; Windle,

2011). Conceptual knowledge and data analysis provide greater unity and solidify the comprehension of resilience within the social sciences. This contribution provides a greater common understanding of terms, concepts, and domains that engage scientists to conduct studies on resilience based on a mutual understanding of what the term means and how it is to be utilized within the research (Windle et al., 2008).

Moreover, in science, a common understanding of terms, concepts, and domains helps scientists to conduct studies based on this shared interpretation of the domain being addressed. Through clarifying the conceptual knowledge and data analysis of the complex construct known as resilience, this study aids future researchers in investigating this topic with a clear understanding of what it is they are looking to achieve in their inquiries (Windle, 2011).

The resilience literature includes an abundance of quantitative studies trying to define the concept by developing measures and instruments to give meaning to therapeutic intervention and to define the concept by providing a data analytical understanding of resilience. Quantitative studies on resilience provide clear figures giving the investigator a sense of meaning and reaching a characteristic understanding of what resilience will mean to the group being studied. On the other hand, qualitative studies provide the lived experience of the group being studied by using participants' own language and experiences to help create meaning. Qualitative studies are gaining more traction in the social sciences because they help researchers reach the meaning of a topic being studied. Researchers believe that this methodological approach helps to build upon theories and to give voice to concepts that remain stalled, such as the concept of resilience (Vaillant, 2002). This stalled state is exacerbated by the wide variance in approaches to defining resilience (Vaillant, 2002). By bringing both qualitative and quantitative methods to this study using a Parallel Convergent Design, I produce data that can be statistically analyzed and provide

intrinsic meaning through necessary voices. This results in a more comprehensive understanding of the concept of resilience. Mixed methods studies are a unique blend of the data collected and the words received from the participants in a study. This type of information is robust in its findings and can move a concept forward by providing an abundance of data with real-time and future implications for the research (Creswell & Plano Clark, 2018).

Gaps in the Literature

The domain of resilience has taken on several meanings throughout the literature. These include character traits, recovery from stress, and behavioral components. Defining resilience seems to take on the shape of the study based on the researcher conducting it. Troy and Mauss (2011) look at resilience from a character trait point of view. These researchers believe resilience stems from a psychological trait that leads to positive outcomes rather than a stress response to an adverse situation. The researchers suggest that not all individuals experience prolonged stress that would put them into a stress recovery response (Troy & Mauss, 2011). Nath and Pradhan (2012) investigate resilience from a psychological well-being perspective. They define resilience as "effective coping and adaption despite significant loss, hardship or adversity in one's life." (Nath & Pradhan, 2012, p. 163)

Fredrickson et al. (2003) examine the domain of resilience as a character trait perspective. They define resilience as "a relatively stable personality trait characterized as the ability to bounce back from negative experience and by flexible adaption to the ever-changing demands of life (Fredrickson et al., 2003, p. 4). Richardson et al. (1990) investigate resilience from a health education and prevention perspective by creating a framework of resilience known as the "Resiliency Model." These investigators approach resilience from a prevention framework rather than a state-trait or individual characteristic standpoint. Richardson et al. (1990) describe

resilience as “the process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption that results from the event” (Richardson et al., 1990, p. 33-34)

Bonanno (2004) researches resilience in relation to loss from an adverse event. He looks at resilience differently from recovery. Bonanno believes that recovery begins where “the point of a trajectory gives way to normal functioning temporarily gives way to temporarily to threshold or subthreshold psychopathology for a period of time, typically for several months, and then returns to pre-event functioning” (p. 20) In contrast, he sees resilience as “the ability to maintain stable equilibrium” (Bonanno, 2004, p. 20)

Martinez-Marti and Ruch (2017) lay out explicitly that the definitions of resilience do not align throughout the research. **They** state**,** “there are wide discrepancies in the way that resilience is defined. For example, resilience has been conceptualized as a character trait and dynamic process which are based on two processes—positive adaptation and adversity. They go on to further address the differences that investigators have in the two domains of positive adaption and adversity” (Martinez-Marti & Ruch, 2017, p. 110)

Participants

Older adults represented the ideal group for this research. Current research includes a plethora of studies about children and adolescents as well as adults between 21 and 60 years of age. However, there remains a dearth of research on older adults, 60 years of age and older, when it comes to defining the construct of resilience. This population brings a generational perspective because it encompasses Baby Boomers, the Silent Generation, and the Greatest Generation ("American Generation Fast Facts," 2019). These three generations were born before the computer age. It was a time of change and upheaval in American society that included

several wars, social justice movements, and rapid economic changes. People in this population experienced monumental shifts in industrialization, travel, and technology ("American Generation Fast Facts," 2019).

Purpose of the Study

This mixed-methods study addressed the need to refine the definition of resilience. A convergent parallel mixed-methods design was used in which qualitative and quantitative data were collected in parallel, analyzed separately, and then merged. In this approach, the Connor-Davidson Resilience Scale-25 was applied to measure the level of resilience within each participant (Connor & Davidson, 2003). Semi-structured interviews were given prior to the measure and right after the participant used the measure to explore their thoughts surrounding their personal definition of resilience and how they understand it in their life experiences. The qualitative data explored the thoughts around a personal definition of resilience for men and women 60 years of age and older who live independently or in an assisted living facility. The reason for collecting both quantitative and qualitative data was to converge the two forms of data to bring greater insight leading towards a more refined definition of resilience. Using a Convergent Parallel Design allowed for robust data collection ensuring a deeper understanding (Creswell & Plano Clark, 2018).

Research Questions

I investigated how the definition of resilience can be refined. The research around this concept agrees that this complex domain does not have a common definition. The definition seems to adapt based on the work of an individual researcher in a particular area of resilience. I contribute to resilience research by helping to synthesize a definition through semi-structured interviews about the concept of resilience. The next phase of the study administered the CD-RISC-25 to participants, a validated and thoroughly researched resilience scale to see if the scale

measures the participant as resilient or sustaining a level of resilience commensurate with others in this population. The final phase of the study asked participants qualitative questions about the CD-RISC-25 to determine if they felt any parts of the measure were missing or were relevant to them (Connor & Davidson, 2003)

Qualitative

The qualitative part of this study asked four questions:

1. What is the meaning of resilience to each person?
2. How does resilience manifest itself within each person?
3. How does this impact the participant?
4. What themes drawn out of the interviews will further the discussion on the definition of resilience?

Quantitative

The quantitative part of this study asked three questions:

1. What components are missing from this well-validated resilience scale, the CD-RISC-25, to aid in the definition?
2. What items on the CD-RISC-25 have advanced the definition of resilience, therefore making it more integrative?
3. How do higher scores on the CD-RISC-25 correlate positively with the interview questions?

Mixed Methods

The mixed methods convergence part of this study asked two questions:

1. To what extent do the quantitative and qualitative data converge?

2. What results emerge from comparing the convergent qualitative data about resilience with outcome quantitative data measured on a resilience instrument?

Theoretical Foundations

Resilience is a complex construct that elicits a great deal of conversation over its precise makeup. In 2013, several resilience researchers were part of a panel at the International Society for Traumatic Stress Studies conference to discuss some of the most challenging questions in resilience research. One of these questions was how to define resilience (Southwick et al., 2014). The researchers concluded that this construct needed an interdisciplinary approach. This complex construct needed to have a wide set of boundaries that included within its definition "individuals, family, organizations, society, and culture" (p. 11) and recognized that the definition needed to take into consideration that individuals vacillate in their flexibility and might be more resilient in some phases of their lives than others. Southwick et al. (2014) came to a consensus at the end of the conference that collaboration with experts from multiple fields is necessary because this allows for a broader range of input for a better operational definition that can include sub-components of within the resilience construct (Southwick et al., 2014).

This current study explores the labyrinthine construct of resilience from an epistemological and pragmatic point of view. This study used a Biopsychosocial Model framework as developed by George L. Engel in the late 1970s to provide an interdisciplinary approach (Engel, 1981). Additionally, the Broaden and Build Theory of Positive Emotions rounded out the framework by demonstrating that perception of a threat can determine how an individual will frame the response, enhancing the trajectory of the event (Fredrickson, 2001).

Biopsychosocial Model

In the late 1970s George L. Engel postulated a model that brought together biology, psychology, and the social aspects of medicine and human interaction (Engel, 1981). Engel

(1981) created the Biopsychosocial Model (BPS) as a systemic approach for physicians to interact with patients in a holistic way (Borrell-Carrió et al., 2004). Borrell-Carrío et al. (2004) characterize Engel as a physician and researcher who came from a psychoanalytic background and became disillusioned with the biomedical model and its exclusion of the patient as a vital part of the medical relationship between physician and patient (Borrell-Carrió et al., 2004).

After practicing medicine, Engel chose the systems theory approach due to his belief that diagnosis, cause, and treatment were all interconnected and part of a continuum (Engel, 1981). He further wanted to change how patients were dehumanized and thought to be objects rather than integral parts of the medical process. Engel (1981) believed that "each system at the same time is a component of higher systems" (Engel, 1981, p. 106). Engel (1981) believed that no system, even a person, was isolated, but instead influenced by other systems and configured through the environment within which the system existed. Engel created the BPS model to begin with a two-person system—the doctor-patient relationship (Engel, 1981). The data collected from this relationship consists of "thoughts, feelings, sensations, opinions, memories, and reported and observable behaviors" (Engel, 1981, p. 107). For instance, a physician subscribing to this model would be concerned for his patient, family, community, culture, and society. Engel (1981) argued that the BPS model is a conceptual framework that provides the physician with the ability to apply rationale to areas of his case where they were excluded in the biomedical model (Engel, 1981).

Borrell-Carríó et al. (2004) report that Engel sought to add a human dimension to the medical relationship. The way this human dimension takes place is through a dialogue which is created and recreated by the physician. The task of dialogue is to come to a shared understanding of the patient's narrative with the patient. The understanding around the dialogue comes from the

physician not suspending his medical acumen but rather incorporating the patient's input of their symptoms from their perspective (Borrell-Carrió et al., 2004).

Borrell-Carríó et al. (2004) report that this dialogue should accompany several aspects of patient care. First, "Implications for Autonomy" is seen as giving patients too much leeway with decision-making in their care. The investigators report the gold standard is "autonomy in relation" as the informed choice supported by a caring relationship between the patient and their physician. Second, the "Social Milieu" suggests the physician looking at the patient from the expression of social norms. In essence it is understood that the physician should look at the patient from a cultural normative perspective before trying to effect change. This perspective considers how the patient lives, their beliefs, values, and customs with regard to their culture. Third, through "Caring, Paternalism, and Empathy" Engel believed that the physician needed to engage on a personal level with the patient. Engel advocated for the physician to behave less as a "technical adviser" and more as a caring healer (Borrell-Carrió et al., 2004, p. 579).

The Broaden and Build Theory of Positive Emotions

The Broaden and Build Theory of Positive Emotions (BBT) posits that individuals' experiences with certain discrete positive emotions (joy, interest, contentment, pride, and love) influence fugacious thought-action repertoires which build and broaden their enduring personal physical and intellectual resources to social, psychological, and physiological resources (Fredrickson, 2001, 2004). This theory suggests that how someone perceives an experience will influence how they respond to the outcome of the situation (Fredrickson, 2001).

Fredrickson (2001) suggests in BBT that a person who approaches a challenging situation with a more positive perspective will have a thought-action repertoire that will broaden their experience from that condition (Fredrickson, 2001). Fredrickson contends that physiological

changes take place within a person when they experience positive emotions. Additionally, Fredrickson suggests that experiencing positive emotions leads a person to change their outlook on the incident and to create positive lifelong physiological changes within their body (Fredrickson, 2001, 2004).

Fredrickson posits that the broadening of positive emotions is a result of a positive thought-action process which is a repository for undoing negative emotions. For instance, when a person experiences a positive thought-action process the result of that process may loosen the negative thought-action process thus changing how this person perceives the result of the experience (Fredrickson, 2001, 2004). Fredrickson states this undoing can be illustrated in the physiological reduction in cardiovascular activity (Fredrickson, 2001, 2004). The reduction in cardiovascular activity can help facilitate change cognitively in how a person responds to the negative emotion or memory they have felt or perceived (Fredrickson, 2001, 2004).

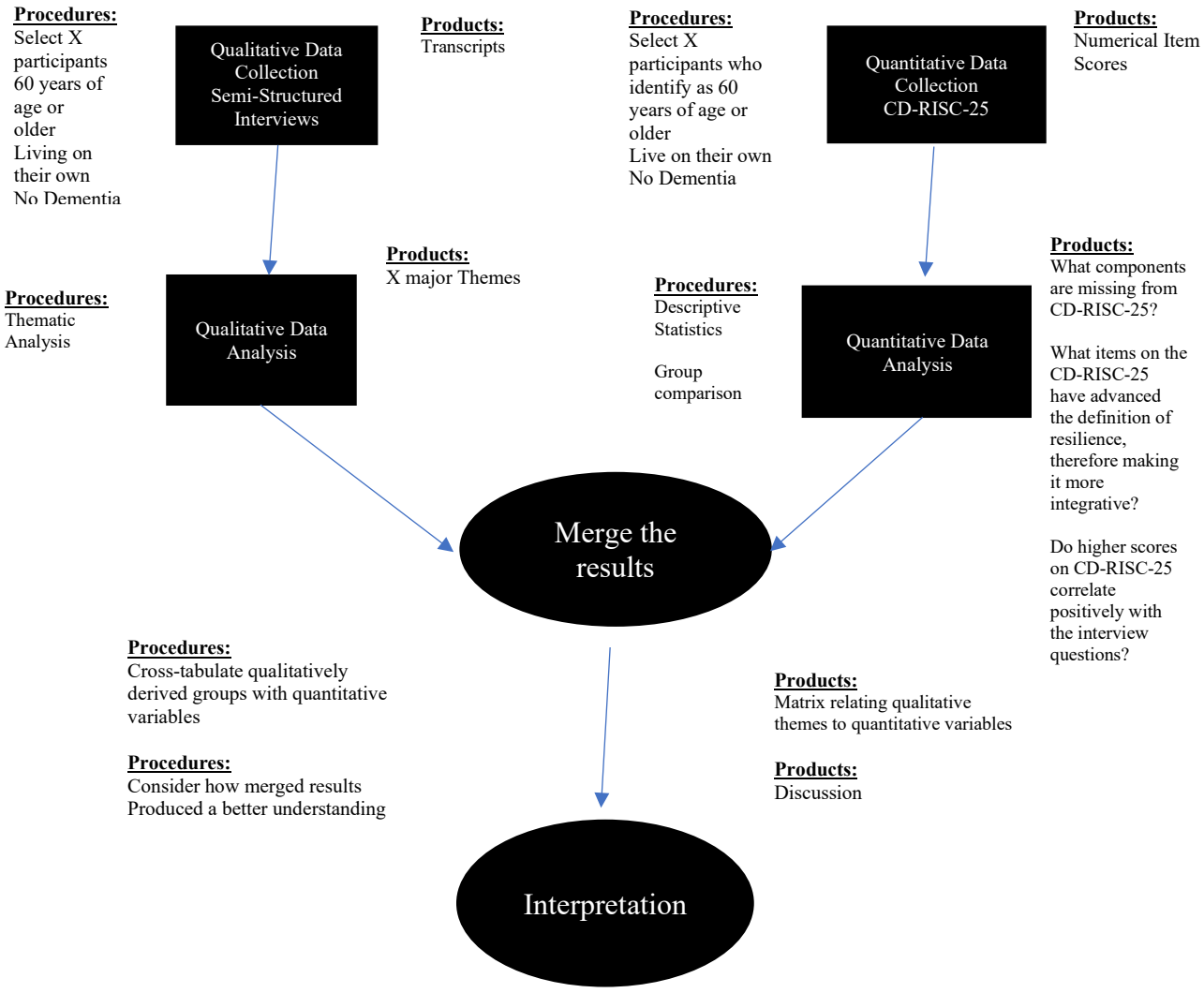
The undoing of the negative thought-action process, Fredrickson (2001, 2004) believes, leads to a person having a greater sense of psychological well-being. Fredrickson (2001, 2004) states how positive affect and positive beliefs from the use of positive emotions facilitate the ability for people to cope with adverse situations by calling up a repository of clear experiences to draw from (Fredrickson 2001, 2004). Fredrickson (2001, 2004) found through her research that resilience has played an integral part in her participants' reports of positive emotions (Fredrickson, 2001, 2004). For instance, during one of her studies, participants deemed as resilient felt higher levels of the emotions of happiness and interest than those who were not resilient (Fredrickson, 2001, 2004).

Additionally, Fredrickson (2001, 2004) found in her research that the same individuals who were deemed resilient also returned to a cardiovascular baseline faster than those

individuals who were not thought to be resilient (Fredrickson, 2001, 2004). Fredrickson cites three coping mechanisms that she postulates as possible ways resilient individuals process adverse situations: positive reappraisal, problem-focused coping, and the infusion of positive emotions with ordinary events (Fredrickson, 2001, 2004). She also asks if resilient individuals think more broadly, beginning when they are confronted with a negative experience. In posing this question she posits that over time, Broaden and Build Theory of Positive Emotions may reinforce psychological resilience within an individual (Fredrickson, 2001, 2004).

Figure 1.1

Diagram for Exploring the Definition of Resilience Study



CHAPTER II: LITERATURE REVIEW

Resilience is a domain that conjures up many different definitions. From popular literature to academic literature the definition of this construct takes on a significant meaning based on what the author is addressing in their material. Deduction of resilience's definition is left to the reader (Fletcher & Sarkar, 2013; Luthar et al., 2000). Defining the construct of resilience more stringently and giving it a holistic meaning will help future researchers understand this domain more clearly. The definition of resilience is missing cultural, ecological, and systemic parts to the biological and mental health proponents of this definition (Luthar et al., 2000). Is resilience a personality trait, dynamic process, or both, as the literature might suggest? This study explored definitions of resilience through conducting an interdisciplinary convergent parallel study with semi-structured interviews bookended between the Connor-Davidson Resilience Scale-25 (CD-RISC-25) (Connor & Davidson, 2003; Luthar et al., 2000). Additionally, the investigator used the CD-RISC-25 to help refine the definition as well as to see if this scale does in fact address resilience in the population used in this study (Connor & Davidson, 2003).

Background

History of Resilience. Resilience research dates back to the 1950s with the classically trained psychoanalyst John Bowlby. Bowlby's World Health Organization (WHO) essay, "Maternal Care and Mental Health**,**" was the first to speak about mental health, adversity, and effects on the individual. Specifically, he addressed the adverse effects of maternal deprivation and how th**ese** could affect the child (Bowlby, 1951). Due to Bowlby's background in psychoanalysis, early resilience research possessed a psychoanalytic slant focusing on maladaptive behavior with children in hopes of figuring out how it could be prevented in

adults (Vernon, 2004). Vernon's landmark essay gave rise to the importance of attachment by highlighting the significance of the effects of parental attachment upon the infant showing that affection and connection contribute to more than just physical health. Bowlby was one of the first to address nurturing as an essential part of the parental relationship (Bowlby, 1951; Vernon, 2004).

Mary Ainsworth was a protégé of John Bowlby in the 1950s. Out of her work with Bowlby, Ainsworth went to Uganda and studied mothers and their children to further her research on attachment. Upon returning to the United States, Ainsworth developed a naturalistic observational longitudinal study looking at children and their bond to their caregiver. The "Strange Situation" study set the precedent for how attachment is seen around the world. The goal of this landmark study was to put into play Bowlby's attachment theory by investigating whether the secure attachment base established by the mother and child was carried out by the dyad (Ainsworth et al., 2015). The basis of Ainsworth's study was centered around her definition of attachment as, "an affectional tie that one person forms between himself and another person—a tie that binds them together in space that endures forever" (Salter-Ainsworth & Bell, 1970, p. 50).

Mary Main**,** who studied with Mary Ainsworth**,** wanted to develop a behaviorally based method identifying the style of attachment in young children up to six years. Due to her work with Ainsworth**,** Main developed a method seeking to define attachment in young children with their caregivers. The result of Main's study provided a system in which young children up to age six have their attachment style classified. The results of this method found that Main built on Ainsworth letter system of attachment. For instance, the method developed by Main showed that the reunion attempts during the study showed children at age six who were found to be

“disorganized/disoriented” during infancy were found to possess controlling behavior toward the parent at age six. This landmark study shows that attachment is fluid and can shape and morph into a relationship that is predictable and fluid in the parent/child relationship (Main & Cassidy, 1988).

Due to Bowlby's early research on children and maternal attachment, the next step in resilience research moved into child psychiatry. The 1970s began the "proper era" of resilience research with early researchers such as Rutter, Heatherington, Wallerstein and Kelly, and Horowitz's work on adults affected by trauma in childhood; for instance, mother-child separation and divorce (Heatherington, 1980; Horowitz, 1989; Rutter, 1985; Wallerstein & Kelly, 1980).

The research of the 1970s and 1980s focused on stress and trauma, first giving rise to the idea of risk factors and how they influenced a person's recovery from a traumatic event (Garmezy, 1971). Garmezy's (1971) foundational work on children of parents with schizophrenia determined the children were endowed with a remarkable sense of positive adjustment. Garmezy's (1971) results reported that 90% of the children did not develop schizophrenia but rather showed invincibility to their circumstances (Garmezy, 1971). Garmezy (1971) stated the children "bear the visible indices that are hallmarks of competence: good peer relations, academic achievement, commitment to education and to purposive life goals, early and successful work" (p. 114).

The 1970s opened the research vault to allow for resilience to be studied as its own phenomenon. While early research focused on children's experiences with adversity and the improvements made from the unfortunate event (Garmezy, 1971; Luthar et al., 2000), this new research included areas such as socioeconomic disadvantages and associated risks, maltreatment, urban poverty, community violence, and catastrophic life events. The thrust of this body of

research searched for systemic protective factors. The researchers were looking for specific protective factors that differentiated the affected children from non-affected children (Luthar et al., 2000) Masten and Garmezy's (1985) work addressed the personal factors of the "resilient child" (p.5) This research sought specific attributes of children that would solidify their theory that a resilient child existed (Masten & Garmezy, 1985).

Research on resilience has changed as it has entered the 21st century. The focus has shifted from internal factors to external factors. Investigators have focused on understanding underlying protective processes and have begun to look at how such elements contribute to external factors. The general thought in this arena is that this will advance resilience theory and move the construct forward (Luthar et al., 2000). The final shift in resilience research has been through a shift in thinking from a relative or circumspect position to an absolute and global stance which has brought more meaning to the resilience research community (Luthar et al., 2000).

Postmodern Therapy

Out of the twentieth century came a therapy model that shifted how psychology was perceived. Postmodern therapy came out of the need to look at how an individual participated in the therapy process. The idea of postmodern therapy is to challenge traditional views of knowledge. These views come out of the modernist framework which postmodernists have made as their foundational views (Prawat, 1996). One of these is that knowledge is the primary property of the individual. Another is the assumption that science will solve mind-world problem between the mental and physical. Further is the idea that if knowledge is to have a claim on our allegiance it has to be part of a foolproof inferential system (Prawat, 1996, p. 217). The postmodern model believed that human beings are capable of attaining a progressively truer

understanding of themselves and their world. This created the basis of understanding for rational belief and action as they develop and change collectively and individually (Martin & Sugarman, 2000). According to Martin and Sugarman (2000), “postmodernists are out to demolish ideological positions built on the idea of an epistemic subject being the subject of the world instead of being part of the text of the world” (p. 397). For postmodernists there is no single truth hidden by distorted realities but rather multiple truths competing for legitimacy. Postmodernists do this by eliciting multiple queries such as emphasizing, suspicion, irony, tension, irrationality and vulnerability to any structure or order for understanding reality (Mease, 2017).

The basis of postmodern therapies perceives the world as relational to the individual and the encounters a person may have and their limited framework that helps them make sense of the world. Given the relational nature of knowledge, postmodernists see knowledge as a conduit to the world. There is no single truth, but rather how the individual defines their experience and gives it meaning (Mease, 2017).

Utilization Principle

Milton Erickson’s utilization principle described by Bill O’Hanlon (1987) addresses Erickson’s unconventional methods for conducting therapy. O’Hanlon addresses how Erickson would “utilize” whatever the client offered in therapy such as rigid beliefs and behaviors, demands, delusions and characteristics (O'Hanlon, 1987, p. 10) O’Hanlon writes that Erickson saw them as not interfering with therapy but rather he saw them as tools that helped facilitate therapy. Erickson saw these unlikely attributes an individual would bring to the therapy session as “grist for the mill” (O'Hanlon, 1987, p. 29).

Erickson obtained three approaches to intervening in patterns: 1) the utilization of current patterns in service of change; 2) alternation or blocking of current patterns; 3) establishing new

patterns. The main cornerstone of Erickson's approach was the acceptance and utilization of an individual's patterns of behavior and experiences, and social and family patterns of interaction (O'Hanlon, 1987, p. 23). O'Hanlon posits that Erickson believed that the therapist needed to accept nonjudgmentally what the patient presented but to actively discover and use them in the service of change. O'Hanlon addresses six interventions that Erickson would use with an individual as a means for change. They are: 1) the patient's language; 2) the patient's interests and motivations; 3) the patient's beliefs and frame of reference; 4) the patient's behavior; 5) the patient's symptom(s); 6) the patient's resistance (O'Hanlon, 1987, p. 24). O'Hanlon writes Erickson saw these six interventions as a way to join the patient and to build the alliance of the therapy process along with showing understanding of the patient's plight (O'Hanlon, 1987). Ultimately Erickson held the view that "the therapist should like a good organic gardener, use everything that the patient presented—even things that look like weeds—as part of therapy." (O'Hanlon & Weiner-Davis, 2003, p. 15).

Carl Rogers

Carl Rogers is the father of client-centered therapeutic approach. He believed that personality change was possible in all clients. He believed in six conditions to be present for change to occur. These conditions exist and continue over a period of time.

> One, two persons are in psychological contact; Two, the first, whom we shall term the client, is in a state of incongruence, being vulnerable or anxious. Three, the second person, whom we shall term the therapist is congruent or integrated in the relationship. Four, the therapist experiences unconditional positive regard for the client. Five, the therapist experiences an empathic understanding of the client's internal frame of reference and endeavors to communicate this experience to the client. Six, the

> communication to the client of the therapist's empathic understanding and unconditional positive regard is to minimal degree achieved. (Rogers, 1957, p. 241)

Rogers (1957) believed that change occurred in relationship and the other five conditions define the characteristics of the relationship. He believed that change was in concert with a client and the therapists' willingness to be present for each other and for both to possess a vulnerable state while in the therapy room (Rogers, 1957). The cornerstone of Rogers' therapeutic style is unconditional positive regard. This is the beginning of change for the client. The therapist needs to possess a form of compassion for the client as a separate individual with their own experiences. Allowing the client to revel in their own experiences and to have permission to "foster" their own experiences and allowing the client to change and possess change talk which is an essential component to change (Rogers, 1957).

The other component that Rogers felt strongly about was empathy. Creating an environment where empathy for the client by the therapist allows the client to safely begin to trust the therapeutic process which allows them to feel comfortable to change (Rogers, 1957). For change to take place, Rogers believed, an individual's worth needed to be acknowledged without judgement. He also believed that the climate of the therapeutic process needed to be free from conclusions on the part of the therapist. To join the client in their distress and to allay the doubts the client may possess in the process (Rogers, 1954). Finally, Rogers believed that the therapeutic process needed to be embedded in the understanding and identification of a mutual viewpoint. The therapist needed to see and feel the client's perspective and position of their beliefs. Rogers felt doing this would allow the client to possess a psychological freedom, this creative expression allows the client the autonomy to think, to feel and to be whoever he would like to be while in the midst of the therapeutic process. Being able to be free allows the client to

express behaviors associated with feelings, impulses and to form thoughts about how they would most like to be. Rogers saw this as a juggling of percepts, concepts and meanings which is part of the creative process that leads a client to personality change (Rogers, 1954). Miller and Moyers (2017) believe that the simplicity of Rogers' work evoked a provisional set of decision rules that Rogers used intuitively to guide the conversation so that the client rather than the therapist is voicing the reasons for change (Miller & Moyers, 2017).

Positive Psychology

Since the twenty-first century began the area of Positive Psychology has grown significantly. It was first heralded in during the 1998 American Psychological Association's annual convention when then-president Martin Seligman, PhD, announced that it was time for psychology to widen its scope and address positive character traits, therapeutic processes, and theories, and to develop research around this new construct (American Psychological Association [APA], 1998).

Martin Seligman is seen as the father of Positive Psychology and attributes this shift in his psychological perspective to his daughter, Nikki, who asked her him "'Do you remember my 5th Birthday?' She went on to tell her father that she was going to stop whining by her 5th birthday and if she could stop whining, he could stop being a grouch." (Seligman, 2000, p. 6). Seligman referred to this moment as the "epiphany" moment where he began to look at things differently (Seligman, 2000, p. 6).

The area of Positive Psychology is relatively new. In its two decades or so, this area of psychology has exploded with theories and research. For instance, the PERMA model is a Positive Psychology model developed by Seligman which has 5 elements: Positive Emotion,

Engagement, Positive Relationships, Meaning, and Accomplishments. This model is the building block of Seligman's Well-Being Theory (Seligman, 2011).

Luthar et al. (2014) identify Positive Psychology as the study of positive emotions, positive character, and positive institutions. The investigators demonstrate the construct of resilience has several similarities to the construct of Positive Psychology. For instance, both burgeoning areas are met with "critical appraisal of scientific work, examining issues of operational definitions, methodical approaches, and the velocity of conclusions" (Luthar et al., 2014, p. 133-134). The investigators further state that both disciplines are "interlinked and mutually beneficial salutary constructs" such as the idea of "chain effects" where one element is interconnected to another, as demonstrated in Fredrickson's Broaden and Build Theory of Positive Emotions (Luthar et al., 2014).

Yates et al. (2015) state that a resilience framework is a good tool in Positive Psychology within the context of adversity by highlighting additive information and impacts which are derived from a framework that integrates multiple levels in the application of Positive Psychology (Yates et al., 2015). Yates and Masten (2004) state the resilience framework would further the area of Positive Psychology research within the arena of exploring developmental processes' extenuating conditions (Yates & Masten, 2004). The investigators address how resilience research could help Positive Psychology by promoting positive interventions as tools for psychotherapy. For instance, they illustrate how resilience research can inform prevention science across multiple levels by clarifying program goals, identifying theoretical variables expected to bring about positive change, guiding the measurement of target variables, and providing a conceptual framework in which findings can be interpreted (Yates & Masten, 2004).

Emotion Regulation

Karreman and Vingerhoets (2012) state that emotion regulation is a process of influencing emotions, as well as, when and how to experience and express these emotions (Karreman & Vingerhoets, 2012). Troy and Mauss (2011) state stress response to an event is usually a highly charged emotional event (Troy & Mauss, 2011). The authors go on to posit further that if people can regulate their emotional responses, perhaps they are more likely to be resilient. Which infers that emotion regulation plays an ancillary role in the stress-appraisal process as well as to be a moderator for resilience (Troy & Mauss, 2011).

Karreman and Vingerhoets (2012) and Troy and Mauss (2011) address emotion regulation through the lens of cognitive strategies. These strategies create a cognitive reappraisal which helps to reframe an emotional situation as less emotional by influencing the emotion trajectory. This approach is influenced by three cognitive areas. First, suppression of expression refers to inhibiting emotional expression when becoming emotionally aroused. Second, attention control refers to selectively attending towards or away from particular stimuli. Selectively attending can lead to a state of emotional arousal. Third, cognitive reappraisal is the reframing of an emotional event in order to change its impact on an individual (Karreman & Vingerhoets, 2012; Troy & Mauss, 2011).

Emotional Intelligence

Emotions play a fundamental role in helping an individual ascertain their surroundings. External stimuli help shape the information received which in turn helps to focus our attention on threats and interprets these stimuli which motivate our response to the anticipated or actual event (Schneider et al., 2013). Emotional understanding is the ability to comprehend emotional

information, the manner in which it is combined, and the causes and consequences that result (Schneider et al., 2013).

Emotional management is the ability to understand the experience of the feeling and modulate the response to facilitate growth. The process of being able to understand and manage emotions in times of crisis is a skill people typically learn over their lifetime (Schneider et al., 2013). The stress process begins with evaluations and appraisals which result in the interpretation of the experience. The evaluation and appraisal system is a two-part system. The first is the Primary Appraisals of the situation. It is expressed by the individual assessing if the situation is of personal relevance to them. The second is the Secondary Appraisal. This centers around an individual's personal beliefs about the situation (Schneider et al., 2013). Given the depth of the situation the two appraisal systems interact with each other in a continuum ranging from challenging to threat (Schneider et al., 2013).

Schneider et al. (2013) found that the stress response was across the board in men and women. As a result, men's emotional perception produced lower negative affect across the stress response. Schneider demonstrated in her study that men whose emotional perception was considered high had difficulty in the stress response. For instance, Schneider posits that those individuals who scored high on emotional perception possibly course-corrected emotionally during the stress event and possessed variability in vascular resistance (Schneider et al., 2013).

Research has shown that negative emotions narrow a person's attention and response whereas positive emotions broaden the scope of receptivity and understanding (Schneider et al., 2013). As a response to positive emotions, Schneider et al. (2013) found that emotional understanding facilitates resilience. Schneider et al. (2013) found over time that the men with higher emotional understanding were associated with more positive affect across a stress event.

The investigator believes that across the stress event the men were aware of the transient emotional events which allowed them to make changes surrounding the stress event (Schneider et al., 2013).

Schneider et al. (2013) report that the women in the study showed high emotional management despite the ability to understand the stress event more thoroughly than men. Schneider et al (2013) report that women felt the stress event more intensely, in a physiological appraisal, despite the increase in emotional management which the investigators attributed this response to a healthful response process within the women who participated in the study (Schneider et al., 2013).

Well-Being

Well-being has long been associated with psychological resilience. The Broaden and Build Theory suggests that positive affect contributes to an upward spiral of physical and psychological well-being over time (Garland et al., 2010; Nath & Pradhan, 2012). Nath and Pradhan's (2012) report in the area of positive psychology finding positive meaning in one's life has a significant contribution to building resilience in a person throughout their life (Nath & Pradhan, 2012). The investigators also report a positive effect has a significant relationship with psychological resilience and with psychological well-being within individuals (Nath & Pradhan, 2012). Nath and Pradhan's (2012) finding suggests the levels of positive affect directly affect physical health, psychological resilience, and psychological well-being. The interconnected relationship between physical health, psychological resilience, and well-being demonstrate how psychological resilience might be a mediator in this arena of resilience research (Nath & Pradhan, 2012).

Attachment

In its simplest form attachment theory posits that the significant relationships of the earliest stages of life shape our survival functions in its most basic way and for the rest of our lives lie at the center of the human experience. Schore (2000) theorizes that there are psychobiological outcomes that identify how early emotional transactions with one's primary figure impact the psychic structure. He continues by noting that affective attachment communications facilitate the maturation of brain systems involved in affect and self-regulation (Schore & Schore, 2008). Schore (2000) reports that the physiological center of attachment lies in the orbitofrontal center of the brain. The connections of this region of the brain help homeostatic social responses direct social stimuli which creates a connection and impression on the infant. Due to the orbitofrontal lobes ability to regulate social and emotional responses is ultimately the driving force in human motivation and inhibitory control (Schore, 2000). Schore notes that a mutually enriching dialogue between the biological and the psychological realms stress a primacy effect and fundamentally a system of regulation. This support of the neurobiologically component supports attachment principles as an affect communication and regulation approach (Schore & Schore, 2008).

Early relationships with a primary attachment figure are the key stabilizing factor in a person's life. Schore (1994) writes that if this relationship is interrupted and its organization of physiological components have difficulty in creating a solid connection with this the affective core system this disruption affects the infant in a negative way. However, if the physiological system that is first influenced as a child is made to enhance and connect properly with the caregiver this affect regulation system is then carried into adulthood helping the then adult foster

positive emotional mood regulation, intensity and rate of recovery are related to this neurophysiologic process (Schore, 1994).

Character Trait

Character traits are thought to be innate parts of a person that come as part of their personality (Hu et al., 2015). Character traits are part of a person's personality that play a role in creating who they are. They are innate and some research reports character traits are fixed and cannot be changed such as a trait like integrity which anchor's an individual's personality. Whereas other investigators report character traits can be adjusted throughout life just as behavior adjustments can be adapted within a personality stress (Hu et al., 2015). Hu et al. (2015) and Linneman et al. (2020) address the definition of character traits as personality characteristics that enhance a person's ability to adjust to negative experiences and moderate stress (Hu et al., 2015; Linnemann et al., 2020). Hu et al.'s (2015) definition is similar to Linnemann et al.'s (2020) with the exception of adding "achieve good adjustment and development" (Hu et al., 2015, p. 1). This heterogeneous definition also encompasses the terms "outcome-approach" and process-oriented resilience" demonstrating the meaning behind this domain has flexibility (Linnemann et al., 2020, p. 1).

Linnemann et al. (2020) postulate that the concept of stability and change in character traits is considered the most widely studied aspect of the developmental personality. The investigators contend there are four ways to discern how personality traits have changed within an individual. Ranking Stability is the relative change of a person's personality trait compared to group members over time. Mean-Level Change describes changes in the most common personality traits over time in a particular population. Intra-Individual Stability is individual changes within a person over time and with increasing age. Ipsative Stability refers to

the stability of a person's personality trait in comparison with the development of another personality trait (Linnemann et al., 2020, p. 1)

Linnemann et al. (2020) state there are internal factors within a person that link character traits to resilience. Higher educational attainment is associated with higher levels of resilience. There is also a positive relationship between resilience and successful processing of traumatic events from childhood as an adult. Higher levels of the Big Five personality trait known as neuroticism correlated with lower levels of resilience, whereas the remaining Big Five personality traits (openness, agreeableness, conscientiousness, and extraversion) correlate positively with resilience (Linnemann et al., 2020, p. 2).

Resilience research has validated positive character traits as proponents of resilience for some time (Hu et al., 2015; Linnemann et al., 2020; Martínez-Martía & Ruch, 2017). Hu et al. (2012) and Snijders et al. (2018) report that researchers who believe positive character traits will "inoculate" a person against the impact of adversity will be inclined to take the stance that this type of safeguarding will help an individual become more resilient (Hu et al., 2015; Snijders et al., 2018).

Loh et al. (2013) reports individuals with high trait resilience tend to possess a higher degree of flexibility which is consistent with Hayes' view on cognitive flexibility (Hayes, 2022; Loh et al., 2013). The more flexible a person can be under changing demands demonstrates the greater likelihood for self-regulation under times of adversity which results in a better chance of being more resilient (Loh et al., 2013). Besides, the high trait resilient individual demonstrates that flexibility allows for a greater ability to self-regulate whereas low trait resilient individuals tend to over or under regulate themselves. Essential to resilience is the ability to

highly regulate one's environment which illustrates a high level of self-confidence and better psychological adjustment (Loh et al., 2013).

Martínez-Martí and Ruch (2017) addressed the strengths of character as a trait-like part of an individual's personality. These character traits are described as having moral excellence that has shown to be a factor in resilience. The investigators describe them as emotional, interpersonal, cognitive, temperance, and theological strengths. Emotional strengths were considered to be bravery, persistence, honesty, authenticity, and zest. Interpersonal strengths were considered to be love, kindness, and social interest. Cognitive strengths were considered to be creativity, curiosity, love of learning, and perspective. Strengths of Temperance were forgiveness, modesty, prudence, and self-regulation. The final virtue—theological—did not correlate significantly with resilience. The character strengths in this domain are appreciation, hope, humor, and religiousness or spirituality. Ultimately, the investigators found the theological strength to be correlated with resilience but had a predictive value over and above other resilience-related factors, such as positive affect, self-efficacy, optimism, social support, self-esteem, and life satisfaction, and sociodemographic variables (Martínez-Martía & Ruch, 2017, p. 111).

Dynamic Process

The second wave of resilience research sees resilience as a dynamic process. (Grafton et al., 2010). Grafton et al. (2010) define Dynamic Process as a set of personal resources by which an individual cope and recovers from an adverse event (Grafton et al., 2010). Tusaie and Dyer (2004) state the dynamic process of resilience is a negotiation through life that fluctuates across time, developmental stage, and context (Tusaie & Dyer, 2004). The result of the dynamic process

is to learn and move on from the challenging circumstance demonstrating the cognitive thought-process as a key element to resilience (Grafton et al., 2010).

The resilience research surrounding the Dynamic Process aims to help the individual grow, strengthen, adapt, and learn from the injurious event (Grafton et al., 2010). Tusaie and Dyer (2004) see the domain of Dynamic Process as a mediator between the person and their environment and the person and the outcome (Tusaie & Dyer, 2004). Grafton et al. (2010) describe the course that a dynamic process takes as the individual's response to stress or a deleterious situation. Montpetit et al. (2010) report the dynamic process of resilience is the individual disentangling themselves from the experience of the negative effect of the experience (Montpetit et al.; Tiberio, & Boker, 2010).

Stress and Trauma

Resilience was first investigated through the lens of trauma beginning in the 1970s with Emily Werner's foundational longitudinal study on childhood maltreatment and neglect of 698 infants who experienced environmental risks and reproductive issues (Werner, 1993). George Bonanno studied adults suffering from life-threatening events to Post-Traumatic Stress Disorder (PTSD) (Bonanno, 2004, 2012).

Bonanno (2004) argues that Potentially Traumatic Events (PTE) should not be linked to resilience because they are short in duration, acute in nature, and not chronic and perpetual. He continues that the logical way to understand resilience is to have a "clearly referenced adversity and a clear, conceptually defensible outcome in response to that adversity" (Bonanno, 2004).

Maschi et al. (2012) researched the temporal exposure of trauma in adults, and they have shown the participants in these studies who suffer from PTSD have varying psychological distress, depression, and anxiety. These events range from a single event to an accumulation of

disturbing stress and life events (Maschi et al., 2012). The investigators have found the effects of trauma on adult survivors may result in revictimization, cognitive impairment, psychiatric disorders, maladaptive stress responses, physical disabilities, and premature death. These effects can be seen across the life span taking their toll on the physical and physiological aspects of a person (Maschi et al., 2012).

Bonanno (2012) report individuals who show post-traumatic growth after a traumatic event demonstrate a definite trajectory. The results of this research on traumatic recovery show individuals who struggle to achieve resilience have a different progression than those who achieve resilience. The difference between these two types of individuals is that those who achieve recovery are exposed to mild psychological symptoms which only disrupt cognition for a short period of time then decline gradually over several months before returning to pre-traumatic events (Bonanno, 2012).

Summary

The literature review points out a clear need for a more specific and evidence-based definition of the construct known as resilience. From the history of resilience beginning with Bowlby's WHO essay to Garmezy's work with children of schizophrenic parents and the current research on trauma and stress, adversity, and maltreatment, research towards exploring the definition of resilience as a construct has developed in several directions (Bonanno, 2004, 2012; Bowlby, 1951; Garmezy, 1971; Luthar et al., 2000; Vernon, 2004). The advent of Positive Psychology saw resilience as a mechanism to scaffold the positive shift in the psychology realm that Seligman and others envisioned at the 1998 APA Convention when he ushered in the era of Positive Psychology (Seligman, 2000).

The literature review revealed several areas of value where the exploration of the resilience construct provides a substantial place to begin to explore the definition of the construct of resilience. Emotional regulation is about an individual's ability to process the cognitive and emotional influences that they experience. Then emotional management begins and is the ability to understand and evaluate the stress appraisals that result from the emotional response. Well-being is a term that has long been associated with resilience. Well-being research has discovered an interconnected relationship between physical health, psychological resilience, and well-being, a conciliator-like connection for individuals experiencing distress.

The next section of the literature review revealed the most robust areas of resilience research. Character trait, dynamic process, and stress and trauma are all domains in the resilience research where the operational definition has developed. Character traits speak to the individual's personality and whether or not a person has the capacity to withstand an adversity. Dynamic process is seen as a resource for the individual to help negotiate the recovery process from an adverse event. Stress and trauma address adversity and maltreatment of what Bonanno calls PTEs because of their duration, acute nature, and result in chronic and perpetual outcomes (Bonanno, 2004, 2012).

The culmination of this literature review sets up the argument for the need to explore the definition of the construct of resilience. Even the current leaders in resilience research have stated the construct needs a clear operational definition through their statement "the importance of continued research directed in establishing an empirically driven operational definition of resilience, recognizing that resilience is a complex construct that may have specific meaning to a particular individual, family, organization, society, and culture" (Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014, p. 11). This perspective evolves from the historical nature of

early resilience research and the expanding nature of resilience research brings a clearer contextual understanding to a systemic viewpoint that will guide future research to expand the theories, tools, and concepts surrounding this ever-evolving area of psychology.

CHAPTER III: METHODOLOGY

Summary of Proposed Study Design

This study sought to refine and develop the definition of resilience. The resilience literature discussed the need for a concise, systemic, and operational definition of this construct (Ben-David & Jonson-Reid, 2017; Luthar et al., 2000). Specifically, the construct at present is missing cultural, systemic, biological, and mental health segments (Southwick et al., 2014). To date, resilience research has been grounded in childhood maltreatment, emotional regulation, emotional intelligence, psychological endurance as seen through stress and trauma, and well-being (Garmezy, 1971; Southwick et al., 2014). Currently, the construct of resilience is defined from the framework of a character trait or a dynamic process (Grafton et al., 2010; Linnemann et al., 2020).

Design

The study was a convergent parallel mixed methods study. The design was set up to simultaneously obtain different but complementary data. This design was chosen because the investigator compared quantitative statistical results with the qualitative finding for a complete understanding of the research problem (Creswell & Plano Clark, 2018). This method of collecting data allowed for the participants' voices to be incorporated into the quantitative findings for a more robust understanding of the research problem.

The framework for this study is Engel's (1981) Biopsychosocial Model coupled with Fredrickson's (2001, 2004) Broaden and Build Theory of Positive Emotions. Both of these theories support the complex nature of the construct of resilience. The Biopsychosocial Model addresses multiple components that resilience researchers believe are necessary for a comprehensive definition (Engel, 1981; Southwick et al., 2014). The Broaden and Build Theory of Positive Emotions addresses the need for individuals to be responsive to change in a receptive

way. It suggests that an individual's ability towards positive thought-action repertoires will lead to an affirmative personal and intellectual response and a social, psychological, and physiological situation that will influence their response to a negative situation (Fredrickson, 2001, 2004). These two theories provide scaffolding for this study.

Ben-David and Jonson-Reid (2017) suggest for future research the need for mixed methods studies that look at subgroups with targeted interviews to understand the individual's perception and meanings around resilience as a valuable tool towards theory development (Ben-David & Jonson-Reid, 2017).

Procedures

Recruitment

The investigator was granted IRB approval for 12 participants to be recruited consisting of men and women, 60 years of age and older, who are living independently. The investigator recruited participants by soliciting through a flyer, email, social media, and by referral (Appendix A). The participants contacted the investigator to participate in the study. The total amount of time the participants were involved in the study was approximately 60 minutes (Guest et al., 2006).

Sampling

The foundation of the study was semi-structured interviews bookended by a quantitative measure called the Connor-Davidson Resilience Scale-25 (CD-RISC-25). The semi-structured interviews were coded for themes using the qualitative method known as reflexive thematic analysis. The rationale for beginning with the qualitative interview was to obtain the participants' untainted view of resilience. The idea behind this method was to get an unfiltered view of the participants' views of resilience through the lens of their life experience. The population

represented in this study have lived through many life changing events that might influence how they view resilience. The study began with an open-ended series of questions pertaining to each participant's personal definition of resilience and how resilience has manifested itself within each person. Next, the subject was given the CD-RISC-25 as an assessment to obtain their level of resilience. Immediately following the completion of the CD-RISC-25, the subject was asked an open-ended series of questions pertaining to the measure. The subject was asked questions about the measure adequately capturing the concept of resilience.

Data Collection Instruments

Data collection instruments were chosen for their efficacy and support of mixed methods research. Appropriate permissions were granted by the author of the CD-RISC-25 for use in this study (Appendix B).

Connor-Davidson Resilience Scale

The Connor-Davidson Resilience Scale-25 was developed as a self-administered clinical measure to assess treatment response within adults 18 years of age and older. The measure was developed from several early researchers doing work in the area hardiness, attachment, patience, tolerance to negative effect, adaptability to change, optimism, and faith. Connor and Davidson (2003) developed this 5-point Likert scale based on the subject's feeling over the previous month. The total score ranges from 0-100 with the higher score indicating greater resilience capabilities.

During the assessment's development the data analysis of the CD-RISC was found to hold the best reliability and validity amongst two groups—those with Generalized Anxiety Disorder (GAD) and Posttraumatic Stress Disorder (PTSD), with no clinical change noted between the groups. The generalized population sample helped to evaluate the internal

consistency using the Cronbach's alpha for the total and item-total scores (Connor & Davidson, 2003).

Factor analysis of the CD-RISC-25 was completed through the subjects that represented the general population. The five factors that were evaluated are personal competence (high standards and tenacity), trust in one's instincts (tolerance of negative affect and strengthening effects of stress), positive acceptance of change and secure relationships, control, and the last factor was related to spiritual influences (Connor & Davidson, 2003).

Areas of possible influence for the CD-RISC-25 are biological aspects of resilience as characterized by a response to major stress along with the relationship between resilience and the function of serotonin. Another area for impact on resilience for the CD-RISC-25 is the application within clinical practice to help clients understand their capacity for resilience. A final area for influence is for studies designed to investigate adaptive or maladaptive strategies for coping with stress and as a screening measure for individuals who engage in high-risk or high-stress activities or occupations (Connor & Davidson, 2003).

Validity and Reliability

Windle et al.'s (2011) study on a review of resilience scales gave CD-RISC-25 high marks for its psychometric properties. The study evaluated 15 measures that evaluated resilience and the Connor-Davidson Resilience Scale-25 was amongst the top three measures to receive the study's highest ratings. The investigators used the SPICE tool (Setting, Perspective, Intervention, Comparison, Evaluation, and Methodical Approach) which is a framework used for creating sound, efficacious questions for a measure (Booth, 2006; Windle et al., 2011). The investigators of the study found that the quality of questions on the top three measures, when taken at face value, may appear moderate in their evaluation of resilience. The scoring criteria for the

assessments were based on property and reproducibility of each measure. The criteria for property consisted of content, internal, and construct validities. The criteria for reproducibility include agreement, reliability, responsiveness, floor and ceiling effects, and interpretability. Within the area of reliability and responsiveness the researchers gave the CD-RISC a rating of "doubtful design or method" (pp. 3-4) and an overall score of 7 which placed it in second place out of all the measures reviewed in the study (Windle et al., 2011).

Semi-Structured Interview

The participants enrolled in the study participated in a semi-structured interview at the beginning of the study and the end of the study. The interview was no more than 30 minutes in duration. The interview took place either virtually or in person at the participant's preferred location, such as place of residence or over an online web conferencing tool such as Zoom.

The open-ended questions pertaining to the semi-structured interview at the beginning of the study were centered around three areas: 1) what resilience means to each person; 2) how resilience manifests itself within the participant; and 3) how resilience impacts the participant. The interviews were audio recorded and transcribed by a third-party company.

The three questions asked of the participants were:

1. What does resilience mean to you? Tell me more.
2. How has resilience manifested itself within you? Tell me more.
3. How has resilience impacted your life? Tell me more.

The semi-structured interview at the end of the study addressed the quantitative portion of the study, the CD-RISC-25. The participants were asked two open-ended questions:

1. How do you feel the CD-RISC-25 addressed the area of resilience?
2. What areas of resilience do you feel the CD-RISC-25 missed?

The data collected from the interviews were analyzed for themes using the thematic analysis process outlined in Braun and Clarke's (2006) "Using Thematic Analysis in Psychology."

Demographics

The demographic data collected from each participant were age, date of birth, sex/gender, race/ethnicity, nationality, highest education attained, relationship status, and employment status (Appendix C).

Data Analysis

The convergent parallel mixed methods study was intended to optimize for integration of qualitative and quantitative measures seeking to explore the definition of resilience. The qualitative measures were coded using thematic analysis through a data analysis program (Braun & Clarke, 2006). The quantitative measure was scored according to the scoring criteria of the CD-RISC-25, and then descriptive statistics were used to solidify the qualitative themes discovered in the semi-structured interviews.

Once both the qualitative and quantitative methods were coded and scored the results of each measure were integrated to see where both methods met, with the hope of progress toward a systematic and comprehensive definition of resilience. For the qualitative piece of the study the investigator used NVivo for transcription of the interviews and categorizing themes that emerge(Appendix D). For the quantitative portion of the study, descriptive statistics were used to formulate the outcome of this portion of the study; these included, for instance, measure of frequency distribution, measures of central tendency, measures of dispersion or variance, measures of position (Tashakkori, Johnson, & Teddlie, 2021). The investigator used IBM SPSS Statistics to perform the descriptive statistic needed from the results of the CD-RISC-25.

Confidentiality and Privacy Considerations

Risk of Harm to Participants

The study participants were made aware of the purpose, duration, and intent of the study. They were given the opportunity to withdraw from the study at any point. Participants were made aware that the potential for harm to the participant may exist in the area of psychological/emotional harm associated with telling their story during the initial phase of the study. Participants were made aware that if this level of harm should occur, it is no more than what a mental healthcare professional could be reasonably expected to attend to during their normal course of clinical work or within other areas of the healthcare field. As such, the potential benefits outweighed the potential risks of this study. The contribution to the research on this topic could potentially help to move resilience research forward.

Protective Measures

Internal Review Board Application

In an effort to protect the subjects' information, welfare, and rights of this study as required by Antioch University Seattle, an application to conduct research with human participants was approved by the University's Internal Review Board (IRB). The IRB application required information on the methodologies and procedural components of this study. The information included in this application included design, data collection, and the protection of the information gathered from this study, protection of the information, data analysis, rights and protections of the human subjects, and recruitment and consent forms. All information gathered from the study's subjects was de-identified. Due to the low risk of harm to the subjects of this study the application was granted Exempt status for participation within the US Federal Government's Regulations around Protection of Human Research Subjects: 45 CFR 46.101(b)

Categories of Exempt Human Subjects Research (*Electronic Code of Federal Regulations*, 2020).

Informed Consent

Prior to engaging in the study, all subjects involved were given the opportunity to review the Informed Consent document (Appendix E) for this study and were allowed to exit the study at any time. The subjects were not asked for any identifying information during the data collection part of the study for their protection. Each participant was given a $50 gift card of their choice to a restaurant, store, or website, provided by the investigator at the end of the data collection process. The participants were given the contact information of the investigator for the purposes of asking questions or providing feedback.

Summary

The study is a convergent parallel design that explored the definition of the construct of resilience. The framework for the study is centered around a Biopsychosocial Model and The Broaden and Build Theory of Positive Emotions. This scaffolds the construct of resilience well to support the exploration of the definition. This mixed methods study recruited 12 subjects who are 60 years old and older and living independently. The recruitment took place through a flyer, email, social media, or referral. The data collection for the study consisted of semi-structured open-ended interviews and the administration of the Connor-Davidson Resilience Scale-25. The investigator took the utmost care of the data collected by de-identifying it upon collection and storing it on a USB drive and the investigators' external hard drive. The purpose of the semi-structured interviews was to obtain the study subjects' personal understandings of the construct of resilience and its impact on them throughout their lives. The purpose of the quantitative measure is as an administrative tool to discover the participants' level of resilience. Both the

coding and scoring of the data were integrated in hopes of finding results that will produce a concrete operational definition of resilience.

CHAPTER IV: RESULTS

Data Collection

Qualitative Strand

I employed semi structured interview protocols to encourage consistency across the study. The three questions used to obtain this information were chosen because they are direct yet broad in their conceptualization of the domain of resilience. They are simple in their overall context because they can relate to each person. The questions elicited a plethora of thoughts, ideas, and meaning for the participants (Kerrigan, 2014).

Quantitative Strand

I used the 25-question scale of the Conner-Davidson Resilience scale because this is considered the full version of the questionnaire, and it has the five factors that Drs. Conner and Davidson considered when they were developing this measure. The five factors include: Personal Competence and High Standards, Positive Acceptance of Change, Secure Relationships, Control, and Spiritual Influences (Davidson, 2020).

Data Analysis

Consistent with the parallel design, the data, the quantitative and qualitative strands were analyzed independently. The results of each independent analysis yielded several different types of information. The characteristics of the sample described the participants' major demographics and specify study specific properties. Descriptive Statistics were used to describe the sample characteristics of age, gender, sex, education, marital status, ethnicity, and religion. Descriptive statistics were used to summarize the study's data measures of central tendency and dispersion of the scores from the Conner-Davidson Resilience Scale. Reflexive Thematic Analysis showed ideas, meaning, and concepts of resilience can help to create a more robust definition of

resilience, to point future researchers in the direction of building upon this much needed definition (Braun & Clarke, 2022).

Sample Characteristics

The sample was comprised of twelve adults ages 60 and up who were living independently. The subjects were either renting apartments through the HUD program in St. Paul, Minnesota, or they owned their own condominium. Participants were randomly recruited through flyer or word of mouth. The participants met criteria by passing the MOCA 8.3 version in English. Participants needed to obtain a score of 26 or above to participate in the study. Twelve of the thirteen volunteers met those criteria.

As shown in Tables 4.1, 4.2, 4.3, 4.4, 4.5, and 4.6 the demographic characteristics of the sample reflect a similar population with little diversity. Table 1 shows that 50 percent of the participants were of the age 70-74. Table 2 shows the gender of the study participants were primarily women with one man who participated in the study. Table 3 shows the ethnicity of the participants leaned heavily towards white participants with one African American participant. Table 4 shows that 50 percent of participants had at least two years of college. Table 5 shows that the primary religion of the participants was Christian. One interesting point to not was that one participant identified as participating in the Native American-Lakota tribal beliefs. Table 6 shows the marital status of the participants were varied, with 41 percent divorced and the remaining 59 percent in other categories.

Table 4.1

Age of Participants

Age	N	%
65-69	2	16.7%
70-74	6	50.0%
75-79	2	16.7%
80-84	2	16.7%

Table 4.2

Gender of Participants

Gender	N	%
Male	1	8.3%
Female	11	91.7%

Table 4.3

Ethnicity of Participants

Ethnicity	N	%
White	11	91.7%
Black/African American	1	8.3%

Table 4.4

Education of Participants

Education	N	%
High School	4	33.3%
Some College [2 yrs.]	6	50.0%
4-year College Degree	1	8.3%
Other	1	8.3%

Table 4.5

Religion of Participants

Religion		
	N	%
Christian	10	83.3%
Other	2	16.7%

Table 4.6

Marital Status of Participants

Marital Status		
	N	%
Married	2	16.7%
Divorce	5	41.7%
Never Married	2	16.7%
Widow	3	25.0%

Descriptive Statistics

The sample (*n = 12)* was generated through a flyer (Appendix A) and word of mouth from other participants. Table 4.7 shows the descriptive statistics for the Conner-Davidson Resilience Scale-25. The score for the CD-RISC-25 is out of 100 according to the CD-RISC-25 manual (Davidison, 2020). The participants' scores reflect a mean of 75.25% which reflects that this sample saw themselves as more resilient. Table 4.8 shows the frequency and the percentage of the participants answers.

Table 4.7

Descriptive Statistics for CD-RISC-25

Statistics		
Conner Davidson Resilience Scale		
N	Valid	12
	Missing	0
Mean		75.2500
Std. Error of Mean		3.46875
Std. Deviation		12.01609
Skewness		.127
Std. Error of Skewness		.637

Table 4.8

Frequency/Percentage of Scores on the CD-RISC-25

Conner Davidson Resilience Scale				
Scores	Frequency	Percent	Valid Percent	Cumulative Percent
55.00	1	8.3	8.3	8.3
63.00	1	8.3	8.3	16.7
68.00	2	16.7	16.7	33.3
69.00	1	8.3	8.3	41.7
71.00	1	8.3	8.3	50.0
75.00	2	16.7	16.7	66.7
86.00	1	8.3	8.3	75.0
89.00	1	8.3	8.3	83.3
92.00	2	16.7	16.7	100.0
Total	12	100.0	100.0	

Reflexive Thematic Analysis

Reflexive Thematic Analysis created three codes from twelve participants. These codes resulted from analysis a of semi-structured interviews with the twelve participants. The questions that the participants were asked were:

1. What does resilience mean to you? Tell me more.
2. How has resilience manifested itself within you? Tell me more.
3. How has resilience impacted your life? Tell me more.

The participants' responses were recorded and then transcribed using NVivo's transcription service. The codes were deciphered from the interviews by reading the transcribed interviews and picking out the most salient parts of the conversation. The codes were then constructed from the commonality of the meaning behind the conversations. The three themes that emerged were 1) Bouncing back; 2) Perseverance; and 3) Handle Yourself Efficiently. After the interviews the participants filled out the CD-RISC-25 to see how their level of resilience was rated. Then the participants were interviewed about the measure and asked if they found any missing components to the measure. The questions the participants were asked were:

1. How do you feel the CD-RISC-25 addressed the area of resilience?
2. What areas of resilience do you feel the CD-RISC-25 missed?

Using Reflexive Thematic Analysis provided a disciplined critical lens to the interviews and then impacted and influenced the research by obtaining information that is robust in its meaning (Braun & Clarke, 2022). It helped to create how the investigator will direct the research.

Themes

Figure 4.1

Primary Themes Generated from Semi-Structured Interviews

Figure 4.2

How Resilience was Manifested in the Participants

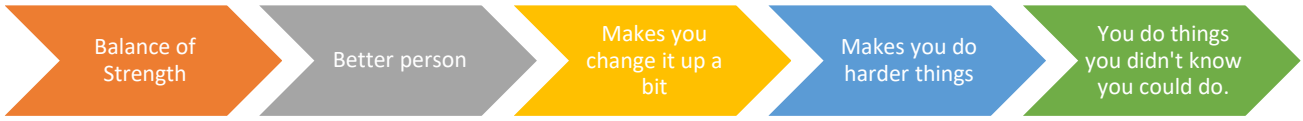
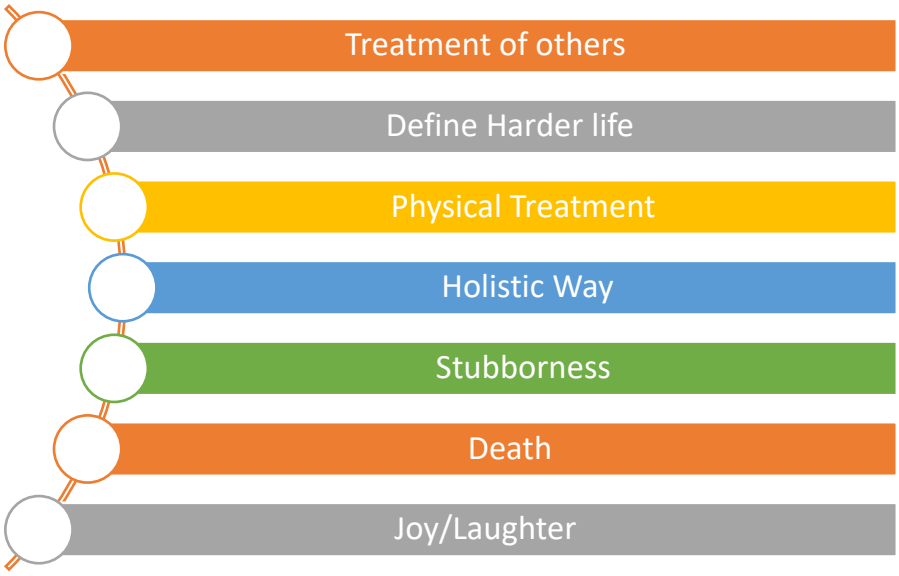


Figure 4.3

How Resilience Impacted the Participants

Figure 4.4

CD-RISC-25 Missing Elements as Seen Through Participants' Lens



CHAPTER V: DISCUSSION

The present study was conducted to define the construct of resilience. The research within this domain does not have a universal definition. The purpose of this study was to blend the two forms of data, quantitative and qualitative**,** to see if there is an emergence of a definition of resilience.

Question 1: To What Extent Do the Quantitative and Qualitative Data Converge?

In this study the 12 participants were asked a series of open-ended questions about the domain of resilience. Then they were given the CD-RISC-25 to assess their own resilience. The participants' overall score of 75.25 identified the group as a resilient group. The measure showed that the participants felt that they had what it took to be considered resilient.

The qualitative thread of the study identified three themes: Bounce back, Perseverance, and Handling Yourself Efficiently. These themes generated several responses that identified resilience.

Bounce Back. This theme generated several ideas of what it meant to bounce back. For instance, a stretch band, ball bouncing, popping back, bouncing back from turmoil. These themes are visual and descriptive. As Fredrickson (2001) explains in her Broad and Build Theory of Positive Emotions, the study participants have had a thought action repertoire that allowed them to identify resilient entities within themselves that help them identify the positive parts of their experiences. According to Fredrickson (2004), this thought action repertoire produces a physiological change within the body that allows the body to remember the positive experience for future recall. One study participant said "no matter how far you beat me down I will snap back. It's about being able to bounce back after something hard…. that feels good." Another

participant noted “Being able to see something difficult, but then being able to find a way to think more positively.”

Perseverance. The theme of perseverance had an intrinsic element to it. It retains a character trait within the study participant that shows a more fundamental aspect of themselves, such as “not falling apart by doing something,” “to stick to something,” “dealing with a horrific accident,” “finding out what you can do,” “being challenged and being able to work around it,” “sticking with something,” “survival and beyond survival,” “staying alive and staying together,” “find a way not to give up, doing things that are there to help you, and gumption.” Perseverance identifies a dynamic process which is a negotiation of life that varies across time, developmental stage, and context. Grafton et al. (2010) sees the dynamic process of resilience as a process of learning and moving from one challenging event to another which identifies a cognitive thought process as a key element to resilience (Grafton et al., 2010) One study participant identified the dynamic process as “finding out that you can be all right being alone. You can turn around and make new friends.” Another one spoke about perseverance as “traveling around the world and being involved in each other’s lives. That will keep you going,” and “making yourself do things that are there to help you like exercise and running.”

If we look at perseverance from a strategic viewpoint, we see that attachment plays a vital role in resilience. Having a tie to a significant person when we first come into the world biologically begins to create social and emotional connections that provide individuals with the ability to sustain any type of adverse experience, they are placed in. It is the regulation of this system that stabilizes someone and creates the scaffolding for their emotions to recover, which allows them to instinctually pursue other events or situations without too much stress on the body (Schore, 1994).

Handling Yourself Efficiently. Positive Psychology refers to the PERMA model as its building blocks. Seligman (2000) talks about looking at things differently. This model discusses five aspects that will improve personal well-being. The five aspects of the PERMA model are Positive Emotions, Engagement, Relationships, Meaning and Accomplishments. These five elements of Seligman's Well-Being theory provide a roadmap for a person to be able to handle adverse situations (Seligman, 2000). In the study the participants described these five components such as "standing on your own feet," "being able to recover emotionally, mentally and physically," "doing a 180 after achieving sobriety," "my makeup—how I was born," "stand up for your beliefs," "traveling—getting to know others."

Connor-Davidson Resilience Scale. The 12 participants were given the CD-RISC-25 to answer to see how their resilience measured. The mean for the group of participants was 75.25. This group turned out to be a very resilient group. The participants found the measure to be complete but there were a few suggestions about different types of questions. One participant found the measure to be missing physical treatment, identifying a "harder life, bad treatment by a person or group." Another participant shared "Well, I never really thought about all that kind of stuff before, but I think it was a good survey." Some thought it "addressed resilience in a holistic way," and suggested, "I would have like to see it address grief," and "I think humor is important to resilience."

Question 2: What Results Emerge from Comparing the Convergent Qualitative Data About Resilience With Outcome Quantitative Data Measured on a Resilience Instrument?

The qualitative themes generated from this study show that resilience is seen as a biological and emotional component, character trait, and personal well-being. The participants in this study were considered resilient based on the Connor-Davidson Resilience Scale-25 scoring

system out of 100. The score of 75.25 shows that the participants view themselves as having a considerable amount of resilience (Davidson, 2020).

The emergence of the data shows that the construct of resilience is complex and has multiple and nuanced layers. These gradations provide a subtle but vibrant understanding about the intricate domain of resilience. The narrowing down of the definition of resilience may not be possible due to the variations in what resilience means to each individual. The subtleties that resilience implies to each person generates a conceptualization that is idiosyncratic to each person.

Limitations

One limitation of this study was the familiarity of the population with electronics. This age group 60 and above are not digital natives; therefore, holding interviews in person were preferable to video communication like Zoom.

Another limitation was the prequalification of the participants. The participants were required to take the MOCA 8.3 to qualify to be a part of the study. The participants' nerves while taking the measure may have accounted for lower scores.

The final limitation was that the collection of data had to be postponed due to the COVID-19 pandemic. The population of this study was considered a vulnerable population. Waiting for the pandemic to wane and for the easing of medical guidelines set by the Centers for Disease Control and the World Health Organization allowed for participants' safety.

Strengths

This study reflects several unique strengths. First, the mixed methods design provides a distinctive and useful insight into the construct resilience. It provides a robust look at resilience that can be used by other investigators to help further the research around this domain. Second, the use of the older adult population as participants is one that has often been neglected in

research. This age group (60 and up) are an overlooked population that can provide a wealth of information to any investigator. Third, an exhaustive search of academic databases did not produce similar focused studies with the comparable participant group.

Implications and Future Research

The implications of this study include the potential for increased clarity of the conceptualization and definition of resilience. The study provided an in-depth look at the domain of resilience and its surrounding theoretical implications.

The recommendations for future research in the area of resilience could center around cultural implications for the domain of resilience. Individual cultures may conceptualize resilience differently which could lead to new areas of research. These new areas could develop new drivers or determinants of resilience that could lead an investigator to discover different domains for broadening the definition of resilience.

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Appendix A: Recruitment Flyer

Looking for 12 interested participants to help explore the Definition of Resilience.

If you are:

- **60 years of age and over**
- **Male or Female**
- **Married or Unmarried**
- **Living independently**
- **No signs of severe cognitive decline**

Time:

- **One-time participation of 90 minutes**

What will you do:

- **Participate in two brief interviews and fill out a 25-question questionnaire.**
- **Provide some demographic information for study purposes only. It will not be sold or distributed to a third-party.**

Compensation:

- **A $50.00 gift card to a retailer of your choice. Such as Amazon, Movies, Grocery store, and Restaurant.**

Risk/Benefits:

- **Risk: (1) Physical discomfort due to lack of movement while completing the study. (2) Possible psychological discomfort because you are being asked to recall your experience with resilience.**

Benefit: Helping to further ongoing research efforts to redefine the construct of resilience.

Appendix B: Conner-Davidson Resilience Scale Copyright Attribution and Permissions

Dear Sara:
Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the CD-RISC-25 in the project you have described under the following terms of agreement:

1. You agree (i) not to use the CD-RISC for any commercial purpose unless permission has been granted, or (ii) in research or other work performed for a third party, or (iii) provide the scale to a third party without permission. If other colleagues or off-site collaborators are involved with your project, their use is restricted.
2. You may use the CD-RISC in written form, by telephone, or in secure electronic format whereby the scale is protected from unauthored distribution or the possibility of modification. In all presentations of the CD-RISC, including electronic versions, the full copyright and terms of use statement must appear with the scale. The scale should be accessed by password at a secure link, should not appear in any form where it is accessible to the public and should be removed from electronic and other sites once the project has been completed. The RISC is not to be sent as an email attachment, and can only be made accessible after subjects have logged in with a password and given consent.
3. Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.
4. Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.
5. A student-rate fee of $ 30 US is payable to Jonathan Davidson at 2434 Racquet Club Drive, Seabrook Island, SC 29455, USA either by PayPal (www.paypal.com, account mail@cd.risc.com), cheque or bank wire transfer (in US $$). Money orders are not accepted.
6. Complete and return this form via email to mail@cd-risc.com.
7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce items from the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above email address. Upon receipt of the signed agreement and of payment, we will email a copy of the scale.

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at mail@cd-risc.com. We wish you well in pursuing your goals.

Sincerely,
Jonathan R. T. Davidson

Agreed to by:
Sara Blessington

07/25/2022
Date

Investigator/Doctoral Intern
Title

Antioch University Seattle
Organization

Appendix C: Demographics

Age: *Study number:* _____

☐ 60-64 ☐ 65-69 ☐ 70-74 ☐ 75-79

☐ 80-84 ☐ 85-89 ☐ 90-94 ☐ 94 – 100

Gender:
☐ Male ☐ Female ☐ Prefer not to say

Sex:
☐ Heterosexual ☐ Homosexual/Lesbian/Bisexual ☐ Prefer not to say

Religion:
☐ Christian ☐ Non-Christian ☐ Other _____

☐ Prefer not to say ☐ Do not participate in a religious practice

Educational Status:
☐ High school ☐ GED ☐ Some college (up to 2 years)

☐ 4-year college ☐ Master's degree ☐ Doctoral degree

☐ Other _____

Employment Status:
☐ Employed ☐ Unemployed ☐ Retired

Marital Status:
☐ Married ☐ Divorce ☐ Widow ☐ Widower

Nationality:
☐ US Citizen ☐ Non-US Citizen ☐ Other _____

Ethnicity:
☐ White ☐ Black/African American ☐ Pacific Islander

☐ Latin or Latinx ☐ Native American/Indigenous ☐ Non-Pacific Islander

☐ Asian

Appendix D: NVivo—QSR INTERNATIONAL GLOBAL DATA PRIVACY POLICY

By using this site, you acknowledge that you have reviewed the terms of this QSR International Global Data Privacy Policy ("Privacy Policy") and agree that we may collect, use, process and transfer your personal data in accordance with this Privacy Policy. If you do not agree to these terms, you may choose not to provide any personal data and not to use our site. However, this may preclude you from using our products or services. This Privacy Policy also forms part of the Terms and Conditions for ordering and purchasing QSR International's products and services. Please read this Privacy Policy carefully.

In this Privacy Policy, references to "we," "our" and "us" are to QSR (as that term is defined below), and references to "you," "your" and "yours" are to our customers and third parties. We may make changes to this Privacy Policy from time to time in accordance with legislative changes and business requirements. The most current version of the Privacy Policy will be posted on the QSR website. If a revision meaningfully reduces your rights, we will notify you by email.

1. **WHO ARE WE?**

QSR International, LLC ("QSR International") is a global organization. QSR International's head office is located in Burlington, Massachusetts, USA, and we have offices in the United Kingdom, Australia, Japan and Switzerland.

The related entities of QSR International include:

- QSR International (Americas) Inc. – United States of America;
- QSR International (UK) Limited – United Kingdom;
- QSR International Pty Ltd - Australia;
- Planet Software Pty Ltd - Australia;
- QSR International Japan K.K. – Japan; and
- Swiss Academic Software GmbH - Switzerland.

For the purposes of this Privacy Policy, QSR International and its related entities will collectively be known as "QSR" or "QSR Group". As part of the business operations of QSR, all the information you provide may be transferred to or accessed by the various entities within the QSR Group in accordance with the provisions of this Privacy Policy.

QSR is committed to protecting the privacy of its customers' personal data and to the responsible use of personal data in accordance with the relevant laws which govern our use and handling of such information. We have developed this Privacy Policy to explain how we collect, store, use, process and disclose your personal data.

This Privacy Policy sets out information on:

- the general categories of personal data we collect;
- why we collect an individual's personal data;
- how it will be used, and who it will be disclosed to;
- the legal basis of our processing of personal data;
- your rights in relation to the personal data we collect; and

- your rights and interests that will be affected if you elect not to provide your personal data.

2. **WHAT TYPE OF DATA IS COLLECTED?**

QSR will collect, store, use, process and disclose personal data (including sensitive information) only in a manner permitted by law.

Personal data is any information or an opinion about an identified or identifiable natural person ("data subject"). The personal data that we may collect and hold in connection with your use of our website, software and services may include your:

- name;
- identification number;
- date of birth;
- gender;
- postal and email address;
- phone number;
- contact preferences;
- demographic information;
- the location from which you have come to the site and the pages you have visited; and
- technical data, which may include IP address, the types of devices you are using to access the website, device attributes, browser type, language and operating system.

When you apply for and we facilitate the provision of a specific product or service, we may also collect information from you related to that product or service.

Sensitive information includes information that reveals an individual's racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, sexual orientation or practices, health information, criminal convictions and genetic or certain biometric information.

Job Applicants

If you are applying for employment with QSR, we may collect and process information about you such as your employment history, qualifications, residency status, background check and other information required as part of the recruitment process. Where reasonably necessary for the position for which you apply, we may also collect sensitive information about you such as your health or medical information, racial or ethnic origin and criminal convictions (if any). You acknowledge and consent to QSR's collection, storage, use, processing and disclosure of any such information for the purpose of assessing your employment application.

QSR generally collects personal data as part of its recruitment process for the purpose of facilitating safe recruitment and determining suitability for the role. If you fail to provide certain information when requested, we may not be able to enter into an employment contract with you (for example if incorrect references are provided), or we may be prevented from complying with our legal obligations (such as evidence of right to work).

Throughout your job application process, QSR will only use your personal information for the purposes for which it was collected, unless we reasonably consider that we need to use it for a secondary purpose, and that purpose is related, or in the case of sensitive information - directly related, to the original purpose. If we need to use your personal information for an unrelated secondary purpose, we will notify you and seek your consent.

The period for which we retain your information will depend on whether your application is successful, and you become employed by us, the nature of the information concerned, and the purposes for which it is processed.
If the information is no longer required by us for any purpose for which it was collected and is no longer required by law to be retained by us, we will destroy or de-identify the information.

HOW DOES QSR COLLECT YOUR PERSONAL DATA?

QSR may collect personal data from the individual concerned and from third parties, including but not limited to QSR's partners, agents and resellers.
QSR may collect your personal data in various ways, such as when you communicate with us over the phone, via email, QSR's portal, through our website (for instance, when you activate the QSR software) or through a written application.
When ordering or registering on our website, you may be asked to enter personal data such as your name or email address. We may also ask for further personal data including your mailing address, phone number, contact preferences and credit card information. QSR does not store credit card information as payments are processed through third parties using external payment gateways.
In particular, your personal data will be collected by QSR when you participate in the following:

- Requesting a free trial software download.
- Purchasing a product from QSR.
- Activating QSR software or e-demos (includes trial software).
- Being a member of a user testing community.
- Registering for QSR training, webinars, conferences, events or exclusive content.
- Subscribing to email communications and newsletters.
- Submitting a product support request (including product crash report dialogues).
- Contacting QSR in relation to a query.
- Participating in an online survey and/or user testing activities.
- QSR marketing/promotional activities.

We have processes in place to ensure that our records remain accurate, complete and up to date, including by verifying information with you each time you use our services or from other sources.
If you provide another person's personal data to QSR, you are responsible for telling the other person that you have provided their personal data to QSR. You must also refer them to this Privacy Policy. By providing another person's personal data to QSR, you represent and guarantee that you are legally authorized to provide such personal data, and QSR will not be responsible for verifying any such authorization.

Can I choose to remain anonymous?

You can always choose to deal with us anonymously or by using a pseudonym. You may also choose not to give us your personal data. However, please note that if you choose not to provide us with your personal data or to deal with us anonymously, this may affect your ability to access or use certain functions of our website, software, products, or services, and we may not be able to respond to your queries.
If you wish to remain anonymous when dealing with us via a telephone call, please advise the call operator assisting you. Providing your personal details enables us to provide you with a contact record reference number which allows you, and other authorized persons, to retrieve information about that call at a later date.

3. **HOW YOUR PERSONAL DATA MAY BE USED BY QSR**

QSR has a legitimate business interest in operating and improving its business and the services it offers. QSR may only collect, store, use, process and disclose your personal data, and you consent to us doing so, for the following purposes:

- to enable you to access and use our website, apps, and services;
- to provide you with the information, products and services that you request from us;
- to operate, improve and optimise the QSR website to better serve you and other users;
- to send support and administrative messages, reminders, technical notices, billing, updates, security alerts, and information to you;
- to enable QSR to respond promptly to your customer service requests;
- to facilitate payment transactions;
- to review QSR services or products.
- to communicate with you and respond to queries via live chat, email, or phone;
- to provide the service(s), information or products you have requested or to carry out the transaction(s) you have authorized (or we may disclose this information to authorized QSR partners to undertake this activity on our behalf);
- for research and development in order to improve QSR's product offerings and solutions;
- to send marketing and promotional messages to you and other information that has been requested or which may be of interest;
- to investigate, prevent, or take action regarding illegal activities or suspected fraud; and
- to facilitate recruitment by QSR.

4. **RETAINING YOUR PERSONAL DATA**

We will retain your personal data for the period necessary to fulfil the purposes outlined in this Privacy Policy. In most cases, it is generally not possible for us to specify in advance the exact periods for which your personal data will be retained. In such cases, we will determine the period of retention based on the period required by applicable law.

If your personal data is no longer required by us for the purpose for which it was collected and is no longer required by law to be retained by us, we will destroy or de-identify the information.

5. **TYPES OF DATA NOT COLLECTED BY QSR**

QSR does not collect any details of the data you are working with when you use our software products. This data is stored only in the projects or files into which you direct the software to save the data.

NCapture stores the data you capture only in the files you create. When using NCapture to capture data from social media sites, you may be asked by the site whether you wish to grant NCapture permission to collect particular kinds of data.

Choosing to grant these permissions to NCapture:

- does not allow NCapture to capture any data that you, as a user of that social media site, do not yourself have access to; and
- does not cause NCapture to send any captured data to QSR.

When you import data captured using NCapture into NVivo, you have the option to exclude some unwanted information (such as location or bio data). Refer to the help documentation in NCapture and NVivo for further details.

6. **THIRD PARTIES TO WHOM QSR MAY DISCLOSE YOUR PERSONAL DATA**

We may disclose your personal data to third parties for the purposes listed above, and so that they may perform services for us or on our behalf. QSR may need to disclose your personal data to third parties including:

- QSR's suppliers, subcontractors, agents, professional advisers, government regulatory bodies, tribunals, courts of law, debt collection agents, insurers and to their respective related entities and partners.
- Third parties engaged by QSR (who will be bound by confidentiality obligations) in your geographic region or able to communicate in your language, to ensure that you are better serviced.
- Third parties engaged by QSR to conduct customer satisfaction surveys (only with your prior consent).
- A third-party event management platform such as Eventbrite to register QSR hosted events, workshops, eWorkshops and webinars. Eventbrite has its own privacy policy and may be a data controller in its own right in relation to the personal data we disclose to Eventbrite.
- In the event of a re-organization, merger, or sale we may transfer your personal data to a third party (who will be bound by confidentiality obligations) during the due diligence process.
- Payment services providers in relation to financial transactions relating to our services, including processing payments.
- In relation to disclosure necessary for compliance with a legal obligation applicable to QSR, we may also disclose your personal data in circumstances where necessary in legal proceedings, whether in or out of court.

Except as provided in this Privacy Policy, QSR will not disclose your personal data to a third party unless you have consented to the disclosure, the disclosure is required or authorized by law, in an emergency or in the event of an investigation of suspected criminal activity such as fraud.

When we disclose personal information to third parties, we make all reasonable efforts to ensure that we disclose only relevant information and that it is accurate, complete, and up to date and that the third party will comply with relevant privacy laws in relation to that information.

7. **HOW DOES QSR KEEP YOUR PERSONAL DATA SECURE?**

QSR has implemented security measures to protect your personal data from misuse, loss, and from unauthorized access, modification, and disclosure. The following security measures are in place:

- QSR uses malware scanning. QSR's website is scanned on a regular basis for security holes and known vulnerabilities in order to make your visit to QSR's website as safe as possible.
- Your personal data is contained behind secured networks and is only accessible to a limited number of persons duly authorised by QSR who are required to keep the information confidential.
- If you make an online application or undertake a payment transaction using QSR's website, QSR takes additional steps to protect the security of your personal data. Your personal data is encrypted via a Secure Socket Layer (SSL) technology (in your web browser, you can confirm that your session is encrypted by the appearance of a locked padlock symbol at the foot of the browser).

- All payment transactions are processed through a gateway provider and are not stored or processed on our servers.
- Our staff are trained in how to keep your information safe and secure.
- We store your hard copy and electronic records in secure systems.
- We use trusted contracted service providers (including cloud storage providers).
- To help protect your privacy and maintain security, we may take steps to verify your identity before we can action your request.

Notwithstanding the security measures implemented by QSR, we advise that there are inherent risks in transmitting information across the internet, including the risk that information sent to or from a website may be intercepted, corrupted, or modified by third parties. While QSR takes reasonable measures to protect your personal data, we cannot warrant the security of any information transmitted to QSR online and users of our website do so at their own risk.
If you have security concerns or wish to provide personal information by other means (e.g. by telephone or paper), you may contact us using the contact details set out at the bottom of this Privacy Policy.

8. **INTERNATIONAL TRANSFERS OF PERSONAL DATA**

In certain circumstances we may need to transfer your personal data to countries outside the country in which the data was collected (or, in the case of personal data collected within the European Economic Area ("EEA"), to countries outside the EEA) including our offices around the world which are currently located in the USA, UK, Australia, Japan and Switzerland. International transfers of your personal data are protected by appropriate safeguards, such as the standard data protection model clauses adopted by the European Commission or any other supervisory authority, which we will incorporate into our agreements with such transferees of personal data.
As a customer or website user of QSR, you consent to QSR transferring or granting access to your personal data to companies in the QSR Group. All data is transferred or accessed using either a secure transport layer or encrypted algorithm. Most of the data collected is then centralized and imported into a central customer relationship management system and housed within secure data center facilities. This is available to staff across all regions within the QSR Group by way of an encrypted secure transport layer and individual staff authentication is required.

9. **CLOUD STORAGE OF PERSONAL DATA**

We may store data on remote servers operated by a cloud service provider, rather than storing it on our own servers. Regardless of the location from which you use our online services or provide information to us, your data may be transferred to and maintained on servers located outside the country in which the data was collected (or, in the case of personal data collected within the EEA, to countries outside the EEA). By providing any data through our online services, you hereby expressly consent to the transferring and processing of your data in such other countries. Transfers of personal data to servers operated by cloud service providers outside the EEA will be protected by appropriate safeguards, namely the standard data protection clauses adopted by the European Commission or other supervisory authority, which we will incorporate into our agreements with such cloud service providers.
All data is stored with secure methods, and with limited/restricted access to persons duly authorized by QSR. Customer data stored in the cloud components of QSR products is stored in one of the four regional data centers used by QSR. These data centers are located in Canada,

Singapore, Netherlands, and the USA. The data center geographically closest to the customer will be chosen as the default location. Enterprise customers may specify the data center they wish to use. Should Enterprise customers decide not to specify a region, the region geographically closest to the Enterprise customer will be selected by default.

10. **YOUR RIGHTS**

If you are a “data subject” under applicable data protection law in the EU or United Kingdom, you will have the following rights in relation to your personal data held by QSR:

Right to Access: you may request confirmation from QSR as to whether we process your personal data, and if so, you may request a copy of that personal data. However, it may not be possible to give you a copy of the information if it was provided anonymously or if it may lead to harm being done to another person;

Right to Rectification: you have the right to request that we rectify or update any personal data that is inaccurate, incomplete, or outdated without undue delay;

Right to Erasure: you have the right to request that we erase your personal data without undue delay in certain circumstances, such as where we collected personal data on the basis of your consent, and you withdraw your consent;

Right to Restriction of Processing: you have the right request that we restrict the use of your personal data in certain circumstances, such as while we consider another request that you have submitted, for example a request that we update your personal data;

Right to Withdraw Consent: where you have given us consent to process your personal data, you have the right to withdraw your consent; and

Right to Data Portability: you have the right to request that we provide you with a copy of your personal data in a structured, commonly used and machine-readable format in certain circumstances.

Similarly, if you reside in Australia, you have the 'Right of Access' and the 'Right of Rectification' set out above. If we refuse to provide you with access to your personal data or to update your data in the way you request, we will provide you with written reasons. If we refuse to correct or update your information, you may request that we make a note on your record that you are of the opinion that the information is inaccurate, incomplete, out of date, irrelevant or misleading, as the case may be.

There is no charge for requesting access to your personal information, but we may require you to meet our reasonable costs in providing you with access (such as photocopying costs or costs for time spent on collating large amounts of material). You will be notified of any likely costs before your request is processed.

To exercise your rights as set out above, please contact our Data Protection Officer (DPO) using the contact details set out at the bottom of this Privacy Policy.

11. **LINKS TO THIRD PARTY SITES**

The QSR website may provide links to other websites for your convenience and information. These websites may be owned and operated by companies other than QSR. QSR is not responsible for these sites or any consequence of a person's use of those sites. In particular, we are not responsible for the privacy policies or practices of the operators of other websites. We recommend that you review the privacy policies of those external websites before using them.

12. **BLOGS AND OTHER INTERACTIVE SERVICES**

QSR may provide blogs, online forums or other interactive services on its website which enable users to post and share information. Any information posted or shared by users through blogs,

online forums or other interactive services will become public information and will be available to other users who access the QSR website.

13. **COOKIES**

Cookies are small files that a site or its service provider transfers to your computer's hard drive through your web browser (if you allow) that enables the site's or service provider's systems to recognize your browser and capture and remember certain information.

We use cookies to understand and save user preferences for future visits to our website, for statistical purposes, for marketing purpose and to compile aggregate data about site traffic and site interactions in order to offer better site experiences and tools in the future. Cookies help us improve the QRS website and products, optimise your experience, store information about your preferences, speed up your searches and to recognise you when you return to the QRS site.

Data collected through the use of cookies may include personal data (and will therefore be regulated by applicable privacy laws) if the data subject is an identified or identifiable natural person. We will deal with any personal data collected by cookies in the same way we handle other personal data under this Privacy Policy.

You can choose to have your computer warn you each time a cookie is being sent, or you can choose to turn off all cookies by selecting the appropriate setting on your browser. If you disable cookies, this may prevent you from using the full functionality of our website. However, you can still place orders.

14. DIRECT MARKETING

We do not sell, trade, or otherwise transfer to third parties (other than as set out in this Privacy Policy) your personal data for the purposes of direct marketing. However, we may provide non-personally identifiable user data to third parties for marketing, advertising, or other uses.

For marketing and profiling purposes, we will only process your personal data with your specific consent. You have the right to withdraw your consent at any time by following the opt-out instructions provided in the communication or by letting us know using the contact details set out at the bottom of this Privacy Policy. Your decision to provide your data for such purposes is optional and will have no impact on your ability to use our products or benefit from our services.

15. **THIRD PARTY SERVICES**

Google Analytics

Our website uses Google Analytics, a web analytics service provided by Google Inc. (Google). Google Analytics uses cookies to help analyse how users use the website. Google Analytics anonymously tracks how users interact with the website, including where they came from, what they did on the website and whether they completed any transactions on the website.

The information generated by the cookie about your use of the website (including their IP address) will be transmitted to and stored by Google on servers in the United States. Google will use this information for the purpose of compiling reports on the website activity and providing other services relating to the website and internet usage. Google may also transfer this information to third parties where required to do so by law, or where such third parties process the information on Google’s behalf. Google will not associate a person's IP address with any other data held by Google.

You can opt out of the collection of information via Google Analytics by downloading the Google Analytics Opt-out browser add here. Google’s privacy policy can be found here.

Google AdWords
Our website uses Google Analytics and Google AdWords cookies to advertise our products and services through Google AdWords and/or other third-party vendors to persons who have previously accessed our website.
We use Google Ads to improve our presence online and help measure the effectiveness of our advertising. Google Ads helps QSR to make sure our ads are shown to the right people. It collects data that helps you track conversions from Google ads, optimize ads, build targeted audiences for future ads and remarket to people who have already taken some kind of action on your website.
You can opt out of Google's use of cookies by visiting the Google Ad Settings here.
Alternatively, you can opt out of a third-party vendor's use of cookies by visiting the Network Advertising Initiative opt-out page here.

Clickstream data
When you visit our website, a record is made of your visit, including the following information:

- your server address;
- your top-level domain name;
- the date and time of access to the site;
- pages accessed and documents downloaded;
- the previous site visited; and
- the type of browser software in use.

We analyse this non-identifiable website traffic data (including through the use of third-party service providers) on an aggregated basis to improve our services and for statistical purposes. No attempt will be made to identify users or their browsing activities except in the unlikely event of an investigation, where a law enforcement agency may exercise a warrant to inspect the Internet Service Provider's log files.

Facebook
We use the Facebook pixel - a piece of code that you put on your website that allows you to measure the effectiveness of your advertising by understanding the actions people take on your website.
Pixels helps QSR to make sure our ads are shown to the right people. It collects data that helps you track conversions from Facebook ads, optimize ads, build targeted audiences for future ads, and remarket to people who have already taken some kind of action on your website.

Autopilot
We use Autopilot to send marketing communications. Autopilot will capture identifiable information (e.g. Name, Email). Autopilot collects information to help us better segment audiences and serve you relevant marketing communications.

Mixmax
We use Mixmax to improve our email communication. Personally identifiable information will be captured in Mixmax (e.g. email). The application is used to improve our email communications.

LinkedIn
We use the LinkedIn pixel - a piece of code that you put on your website that allows you to measure the effectiveness of your advertising by understanding the actions people take on your website. Pixels helps QSR to make sure our ads are shown to the right people. It collects data that helps you track conversions from LinkedIn ads, optimize ads, build targeted audiences for future ads and remarket to people who have already taken some kind of action on your website.

Zapier
We use Zapier to send collected information between multiple applications. When you submit your details on our website, these details may be passed via Zapier to other applications. This helps us understand how you use our website.

Typeform
Typeform is used to collect survey data. We use collected survey data to improve our products, create educational content, create marketing content.

Demio
Demio is a webinar platform we use to engage, communicate, and build relationships with our prospects and customers. We use Demio to host webinars and collect personally identifiable information in relation to webinar engagement data.

Unbounce
We use Unbounce to create marketing web pages. We capture personally identifiable information such as names, emails, and addresses so we can best communicate with users interested in our products.

Amplitude
We use Amplitude to report on our product usage. We capture non-identifiable, and identifiable information in Amplitude. This is primarily used to aggregate data and generate reports on how our products are being used. This helps us improve our products, and operations.

Segment
We use Segment to pass information between applications. Segment is used to pass information between applications. Your information, identifiable and non-identifiable, may flow through segment.

Notion
Notion is used as an internal wiki. Occasionally, information you provide may be included in Notion for the purposes of improving our products and operations.

Drift
Drift is used to provide a chat-bot and real-time conversation with our team, on our website. We may capture personally identifiable information such as names and email. This is so we can best communicate with the user.

16. **UNSUBSCRIBE FROM EMAILS**

If at any time you would like to unsubscribe from receiving emails from QSR, you can email us at info@qsrinternational.com and we will promptly action you request.

17. **CHILDREN**

QSR considers a child to be anyone under the age of 18. We do not knowingly seek or collect personal data from a child without the consent of a parent or guardian. If QSR becomes aware that personal data that has been submitted relates to a child without the consent of a parent or guardian, QSR will use reasonable efforts to delete that personal data from its files as soon as possible. If deletion is not possible, QSR will ensure that the personal data is not used further for any purpose.

18. **HOW TO CONTACT US**

If you have any questions, complaints or concerns about how we handle your personal information or think that your privacy has been affected, please contact our DPO for an examination of your complaint or concern. Our DPO is responsible for all matters relating to privacy and data protection and can be contacted at dataprotectionofficer@qsrinternational.com.
If you remain unsatisfied with the way in which we have handled a privacy issue, you may approach an independent advisor or contact the relevant data privacy regulator:
For Australian residents, this is the Office of the Australian Information Commissioner;
For UK residents, this is the Information Commissioner's Office;
For residents of the European Economic Area, this is the data protection authority in your country of residence. A list of EU national data protection authorities can be found on the European Commission website at: https://ec.europa.eu/info/strategy/justice-and-fundamental-rights/data-protection_en

Appendix E: Informed Consent

You are invited to participate in a research study. The purpose of this research study is to explore the definition of resilience. You are being asked to participate because you are an adult age 60 years and older, living independently, and have no signs of cognitive decline. If you participate in this research, you will be asked to complete a brief interview about your thoughts, experience, and feelings about resilience. Then, fill out a 25-question questionnaire about resilience, and then complete a follow-up interview about the resilience measure you just completed. You will be asked to provide demographic information about your age, gender, sex, religion, educational status, marital status, employment, and nationality. Your interviews will be audio or video recorded, and by signing this consent form, you consent to the use of this mode for storing interview data for the research project. Once the research project is complete, the recordings will be deleted.

Potential risks of participating in this study might involve physical discomfort due to lack of movement while completing the study and possible psychological discomfort because you are being asked to recall your experience with resilience. Your participation will take approximately 90 minutes.

Compensation for participating in this study is that each participant will receive a $50 gift card to the establishment of your choice. Such as Amazon, movies, grocery store, or restaurant. Your participation in this research is strictly voluntary. You may refuse to participate entirely or choose to stop your participation at any point in the research, without fear of penalty or negative consequences of any kind.

The information/data you provide for this research will be treated confidentially, and all raw data will be deidentified by assigning a study number by the principal investigator. Results of the research will be reported as aggregate summary data only, and no individually identifiable information will be presented. You also have the right to review the results of the research if you wish to do so. A copy of the results may be obtained by contacting the principal investigator: Sara Blessington

Your direct personal benefits from your participation in this research included compensation for your time. The results of the research may contribute to ongoing efforts to help redefine the construct of resilience.

I understand that this research has been reviewed and Certified by the Institutional Review Board, Antioch University, Seattle. For research-related problems or questions regarding participants' rights, I can contact Antioch University’s Institutional Board Chair, Dr. Melissa Kennedy at The primary researcher conducting this study is Sara Blessington, MA doctoral student of clinical psychology under the research supervision of William Heusler, Psy.D. If you have questions later, you may contact Sara Blessington or by phone at

I have read and understand the information explaining the purpose of this research and my rights and responsibilities as a participant. By signing this document, I give my consent to participate in this research study, according to the terms and conditions outlined above.

_____	_____
Signature of Participant	Date

_____

Print Name of Participant