

2015-5

# Resiliency: Do We Choose It? Exploring the Possibility of a Choice Component of Resilience

Tori Anna Manteo

Follow this and additional works at: [https://digitalcommons.salemstate.edu/honors\\_theses](https://digitalcommons.salemstate.edu/honors_theses)



Part of the [Social Work Commons](#)

---

## Recommended Citation

Manteo, Tori Anna, "Resiliency: Do We Choose It? Exploring the Possibility of a Choice Component of Resilience" (2015). *Honors Theses*. 49.

[https://digitalcommons.salemstate.edu/honors\\_theses/49](https://digitalcommons.salemstate.edu/honors_theses/49)

This Thesis is brought to you for free and open access by the Student Scholarship at Digital Commons at Salem State University. It has been accepted for inclusion in Honors Theses by an authorized administrator of Digital Commons at Salem State University.

**Resiliency: Do We Choose It? Exploring the Possibility of a Choice  
Component of Resilience.**

**Honors Thesis**

Presented in Partial Fulfillment of the Requirements  
for the Degree of Bachelor of Social Work  
in the School of Social Work  
At Salem State University

By

**Tori Anna Manteo**

Dr. Rebecca Mirick

Faculty Advisor

Department of Social Work

## **RESILIENCY: DO WE CHOOSE IT?**

### **Abstract**

By examining how participants view their own resiliency, this study looked to explore how people view resiliency and if they believe they make a choice to be, or not be resilient in the face of stress or trauma. By examining past moments of participant resilience, this study explored the possibility of a choice component that may impact resiliency. This study utilized a questionnaire of 28 questions to survey Salem State University students (N=113). 71% felt there was a “tipping point” to a person being resilient or not. 75% of the participants also believed that there is a choice made for a person to be resilient. In addition, 85% of participants believe that they are aware of a choice that is made when looking at lesser adverse situations. The implications of these findings on the topic of resilience is discussed.

**Keywords:** Resiliency, change in resilience, choice, stress, crisis

## **RESILIENCY: DO WE CHOOSE IT?**

### **Introduction**

Contemplating on resilience or the resiliency of another person, one might believe that there is something inside of that person that makes them different from others. One might think that there are some kind of character traits that allow this person to be resilient. Looking at resiliency and how this person appears to be stronger, one might also think that resiliency is something that is out of reach or not accessible to everyone. However, when contemplating what makes a person resilient, most people do not think about what decisions they have made that have impacted their resilience which leads to the question of, “Do we choose to be resilient or not?”.

Contemplating resiliency, it could be that there is a part of the individual that chooses to continue on despite the adversity one might be facing. This is one of the areas this study wants to explore. A desire to carry on may be what makes a person resilient, a kind of willpower shall we say that pushes the person onward. If this is true, then it would be that these resilient people will always be resilient and those who have never been resilient before would lack this quality. This is another area the study is looking to explore. Looking at resilience, can it change over time or is it something that remains relatively static, like a person’s IQ Score. It could be that what makes a person resilient is this driving force within themselves that is a dynamic, always changing variable that shifts depending on the external forces, either negative, or positive. This would be a driving force that keeps them going on when others in similar situations would have given in. If

## **RESILIENCY: DO WE CHOOSE IT?**

this is the case, then there is still some form of choice that is made to continue on or not. This choice process is what this study is looking to further explore.

If a choice is made which defines if a person has a resilient response to adversity, it could mean that some type of assessment or cognitive comparison is made within the person. This would be an assessment that allows the person to examine the situation and what options they have to get past the adversity with as little alteration from the norm as possible. This comparison might inventory the external forces in motion as well as the types of supports available in order to find relief. It could also examine coping strategies as well as if these coping strategies are effectively dispersing the physical stress symptoms the person might be feeling such as depression or anxiety. Once the person has made this cognitive assessment, a decision of sorts could be made after taking all of these factors into consideration and this could be a conscious choice or may be subconscious in nature.

It may be easier to see this choice component in action when the levels of stress are low, and a person is more likely to feel they can successfully cope with the means they have at their disposal. This decision process may come after the person has inventoried the forces at work during this supposed cognitive assessment stage. When the level of stress and adversity is at a manageable level, it only makes logical sense that this would be easier to manage. When this level of adversity reaches a level where the person no longer feels that they have the means to handle it properly, the person could make the choice to “give up” and succumb to the forces that are distressing them.

## **Literature Review**

## **RESILIENCY: DO WE CHOOSE IT?**

When people experience adversity and challenges in life, there are always people, who for some reason can rise above the crisis, challenge, or adversity. There are many questions that come to mind in an attempt to understand why this happens. Questions like, “Why is it that these people can manage to successfully navigate through the crisis where others cannot?” or “What makes these people different?” are an example. These are all questions that have been driving forces of research at some point in order to define what is happening as well as many more.

There are many different types of adversity a person can experience throughout their lifetime. There are also varying degrees of severity or intensity that these adversities can have to impact a person’s wellbeing. Experiences such as rape or other types of sexual abuse, child abuse, the loss of a loved one, or being a soldier and going to battle and witnessing the horrors of war are all experiences that a person can have a resilient response to. However a person can also succumb to the adversity or experiences of negative effects that return a person to a state below their normal level of functioning. PTSD, Depression, and Anxiety are all examples of some of these negative outcomes. Everyone experiences some adversity in their lifetime that they will either have a negative or a positive response to, which is why it is so important to determine what makes a person resilient. The adversity people experience can be seen as a spectrum, from the very stressful experiences to those that are just a little stressful. Perhaps understanding what makes a person resilient throughout this spectrum of adverse intensities can allow professionals to teach resiliency to those who are not resilient.

### **Definitions of Resilience, and its Origins**

Resilience was a term originally constructed as a means to describe the effect researchers saw in individuals who survived maltreatment at an early age and lived on with little to no

## **RESILIENCY: DO WE CHOOSE IT?**

negative effects from the maltreatment in their life functioning (Richardson, 2002; Jew, Green, & Kroger, 1999).

“There is clear research evidence that experiences with one life transition or life event have an impact on subsequent transitions and events and may either protect the life course trajectory or put it at risk.” (Hutchinson, 2013, p. 387)

This concept was first described in the 1950's and has grown to cover several different definitions and disciplines of study (Jew, Green, & Kroger, 1999). In the pursuit to identify what resiliency was and how it allowed these children to thrive despite horrible maltreatment, early research looked into characteristics of resilient children.

The definition of resilience has changed over time. This change in definition happened because researchers have come to see resilience in a different way as the focus of research on resiliency has changed. These changing views of resilience had come in different waves. According to Glenn E Richardson, “Resiliency inquiry did not emerge from academic grounding in theory, but rather through the phenomenological identification of characteristics of survivors, mostly young people, living in high risk situations” (Richardson, 2002, p. 308). Eventually, this idea of resiliency would be expanded to include all negative life events that affect a person over the course of the entire life span. This would include war, poverty, homelessness, and any and all other traumatic events that a person can experience (Herrman, et al., 2011).

According to Richardson (2002), these research waves came in three different sections which changed how the definition of resilience was interpreted. The first was in response to the question of what kinds of characteristics these abused children had that made them resilient. We

## **RESILIENCY: DO WE CHOOSE IT?**

see the first definitions for resilience focus on making resilience a type of personality trait that a person has in comparison with a dynamic process (Herrman, et al., 2011).

The second wave was the attempt to explore the process of acquiring resilient qualities. It was suggested that resilient qualities were attained through “a law of disruption and reintegration” (Richardson, 2002, p. 310). This process as perceived by Richardson, (2002) states that a traumatic event disrupts a person’s homeostasis by disrupting the person’s biopsychosocial protective factors. However, when this disruption happens, people need to use coping skills in the face of a crisis and according to him, four different outcomes can occur. Sometimes there is a resilient outcome and sometimes there is a maladaptive or dysfunctional outcome.

The third wave defined resilience as an “Innate Resilience”. This is a more multidisciplinary approach looking at an identification of forces within a person or even groups of people as well as experiences that activate and utilize this resilience within (Richardson, 2002). This conceptualization of resilience sees resilience as an innate use of willpower the resilient person possesses, which allows the person to continue on in the face of trauma, choosing not to give up. This 3<sup>rd</sup> wave helped to create a working definition of resilience this study will use from here on. This definition is:

Resilience is a complex, multidimensional process of biological, social, and psychological factors that allows a person to rebound from the experience of traumatic events and conditions to a place of previous functionality with little negative outcome.

Over the past few decades, the level of understanding when it comes to the human brain and how a person functions under stress has increased but there is still a great deal that is unknown (Hutchinson, 2013).

## **RESILIENCY: DO WE CHOOSE IT?**

“Stress can clearly affect brain development, but there is little evidence that the first 3 years of life are all important.” (Hutchinson, 2013, p. 135)

There has been much written on resilience and its functioning by scholars and researchers. Models of Resiliency, theories of resiliency, as well as risk and protective factors are all extensions of resiliency research. Even contrasting resilience with established human behavior theories such as Erik Erickson’s psychosocial developmental stages contribute to the material written on resiliency. Because resilience can be applied to many different areas of life such as sports, military, business, psychology, and social work, it has become a multidisciplinary study. Resilience and the study of resiliency is expanding rapidly as multiple disciplines look to explain what resilience is and how it is acquired. These fields include, psychology, psychiatry, sociology, social work, as well as biological disciplines including genetics, epigenetics, endocrinology, and neuroscience (Herrman, et al., 2011). Even the fields of business and the military have begun studying resilience, utilizing current theory and research to develop programs that are geared to increase performance and “build resilience” (Seligman, 2011).

We have learned not only how to distinguish those who will grow after failure from those who will collapse, but also how to build the skills of people in the latter category. I have worked with colleagues from around the world to develop a program for teaching resilience. (Seligman, 2011, p. 1)

In the past decade, the field of athletics has begun using some of this research to include resilience training or coaching in the workplace for professional athletes (Palmer, 2013). The field of resilience has become increasingly diverse. While this diversity adds richness to the field, it can also create confusion.

## **RESILIENCY: DO WE CHOOSE IT?**

However, one of the main difficulties in conducting research on resilience is that wide discrepancies exist in the way that resiliency is defined and conceptualized. For instance, the construct of resilience has variously been defined as a trait, process, or outcome. This definitional debate is important to highlight because concepts provide researchers with theoretical boundaries that help determine the nature, direction, and veracity of research inquiry. (Fletcher & Sarkar, 2013, p. 13)

An understanding of the nature of resilience is still not completely understood and there remains debate in the field around an exact definition of resilience. The definition of resilience shapes the direction of research and informs the lens researchers use to approach the topic. In order to cut down on the confusion between the fields of various disciplines, the definition of resilience and the related terms of its functioning need to be carried over into all fields so that professionals are working with the same definitions and concepts.

The original conceptualization of resilience as a set of characteristics lead to a substantial body of research which identified the various characteristics that were present in resilient children. Researchers have learned that there are a number of factors or characteristics seen in resilient people which helped to create a measure of resiliency. These skills include, high IQ score, rapid responsivity to danger, precocious maturity/pseudo adulthood, disassociation of affect, information seeking, formation and utilization of relationships for survival, positive projective anticipation, decisive risk-taking, the conviction of being loved, idealization of aggressor's competence, cognitive restructuring of painful events, altruism, and optimism and hope (Jew, Green, & Kroger, 1999).

## **RESILIENCY: DO WE CHOOSE IT?**

These characteristics may lead to more positive coping skills. For example, high IQ is believed to help a person to navigate through difficult situations and find solutions or perceive potential solutions to their problems; this can increase resilience.

Noting, for example, Clayton's high IQ, one could posit that Clayton's cognitive abilities helped him to navigate his tough environment. Thus, identifying personal or social characteristics as 'protective' factors in relation to maladaptive outcomes has been a major focus of resiliency research. (Freitas & Downey, 1998, p. 264)

Over the years, the evolution of theoretical concepts and models of resiliency took shape, giving the researchers, therapists, and social workers more ideas on the process behind resiliency so that these various models of resiliency could be incorporated into therapeutic interventions and aids to assist the person in getting through adverse situations. This progress in research created a new language of terms and elements that assisted future researchers by labeling resilience in terms of either risk factors or protective factors.

### **Risk Factors and Protective Factors**

Risk factors and protective factors are two parts of the same coin when it comes to how researchers have looked at resiliency and understood the research on resiliency (Elizabeth D, 2013; Fletcher & Sarkar, 2013). Risk factors are the criteria that put a person at risk to not coming out of stressful events or adversity with a resilient outcome or returning to homeostasis. For instance, viewing abuse of a mother as a child is a risk factor for a woman selecting a partner. As stated in the ACE study, Filitti (1998) children who witness abuses in the household

## **RESILIENCY: DO WE CHOOSE IT?**

are at risk for negative outcomes in their adult lives including death. Risk factors play an important role in resiliency.

“Protective factors are personal and societal factors that reduce or protect against risk.” (Hutchinson, 2013, p. 387) Protective factors move the person towards resiliency and potentially add up to make it more likely that the person will successfully return to a state of homeostasis or better. Self-confidence, high IQ, independence, optimism, information seeking, positive projection anticipation, and decisive risk-taking to name a few are all protective factors (Jew, Green, & Kroger, 1999; Felitti, et al., 1998; Freitas & Downey, 1998). There are many more, but the presence of these protective factors have been shown to increase the likelihood of a person having a resilient outcome, or “appear to protect children from some of the ill effects of their dangerous environments” (Freitas & Downey, 1998, p. 264).

For instance, optimism is considered a protective factor. From research, we can see just how beneficial these factors can be and just how much their presence can increase resiliency.

Research has shown that when people have encountered adversity, those who are less optimistic tend to report more distress. In addition, researchers have argued that individuals who are optimistic are more likely to engage in practices that prevent or mitigate pathogenic outcomes of traumatic events. Conversely, people who are less optimistic are more likely to engage in maladaptive coping strategies (deTerte, Stephens, & Huddleston, 2014, p. 421).

Risk and protective factors are inseparable forces that impact how a person experiences a crisis or adversity. Because these terms are tied to resilience, it is important that they be mentioned here. Having these risk and protective factors certainly could impact how a person

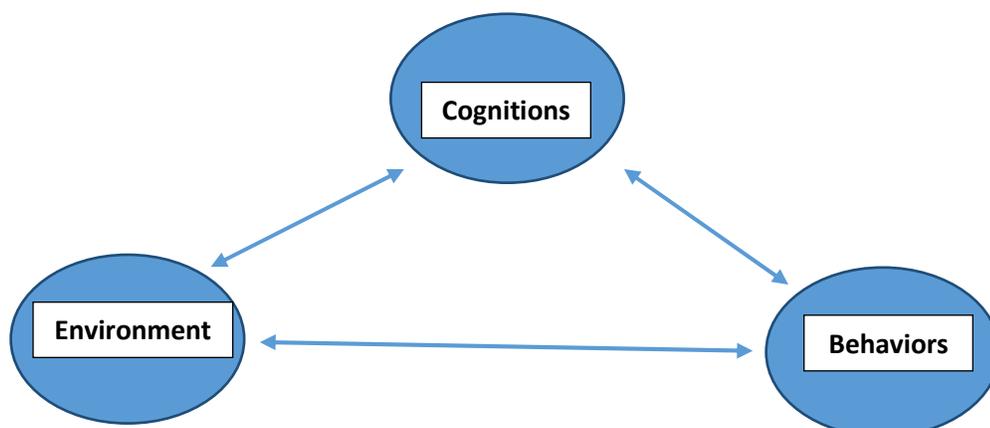
## RESILIENCY: DO WE CHOOSE IT?

chooses to be resilient, yet it is still unclear if a person is aware of a conscious choice to be resilient or not according to the literature.

### Models of Resilience

Over the years, researchers have tried to identify various different ways to define just how resiliency works by creating models that try to explain the resiliency process. These models vary in structure, however each and every one tries to place resiliency into a type of definable process that can be applied to any level of resilience experienced with any level of adversity. These models attempt to put into words what can often be a very difficult, elaborate process of abstract forces working in unison or against each other affecting the resilience of the individual.

One of these models consists of a three part model (deTerte, Stephens, & Huddleston, 2014). This three part model of psychological resilience utilizes three components that represent forces that interact with each other to help determine resiliency. These three components are cognitions, environment, and behaviors.



## RESILIENCY: DO WE CHOOSE IT?

### *Figure 1: The Three Part Model of Psychological Resilience*

(deTerte, Stephens, & Huddleston, 2014, p. 422)

“The results of this study suggest that a useful way to interpret psychological resilience is as a combination of cognitions, behaviors, and environmental factors. These factors are optimism, adaptive coping, adaptive health practices, and social support from colleagues.”

(deTerte, et al., 2014, p. 422)

A second model of resilience, the resiliency model, is similar to this three part model in that it examines forces in combination or conflict with each other (Richardson, Neiger, Jensen, & Krumpfer, 1990). However, this model is more specific in its nature of determining resiliency in an individual (Richardson, Neiger, Jensen & Kumpfer, 1990). This model suggests that external stressors pressing on the individual are met with Biopsychospiritual Protective factors. When these stressors are powerful, they cause disruption of homeostasis and disorganization occurs. This is then followed by a reintegration process that results in four different outcomes. The first is Resilient Reintegration. In this case, the individual becomes stronger from the interaction of the stressors and thus is more resilient; this is the best possible outcome. The second is a homeostatic reintegration which means that there was a resilient return to the individual's base line or normal life conditions. This is also a resilient outcome. The other two possible outcomes are Maladaptive and Dysfunctional reintegration. Both of these outcomes are not resilient outcomes and leave the individual weaker, or less than where they started out, essentially devastated by the crisis that they have endured which thus affects their life functioning (Richardson, Neiger, Jensen, & Krumpfer, 1990; Richardson, 2002).

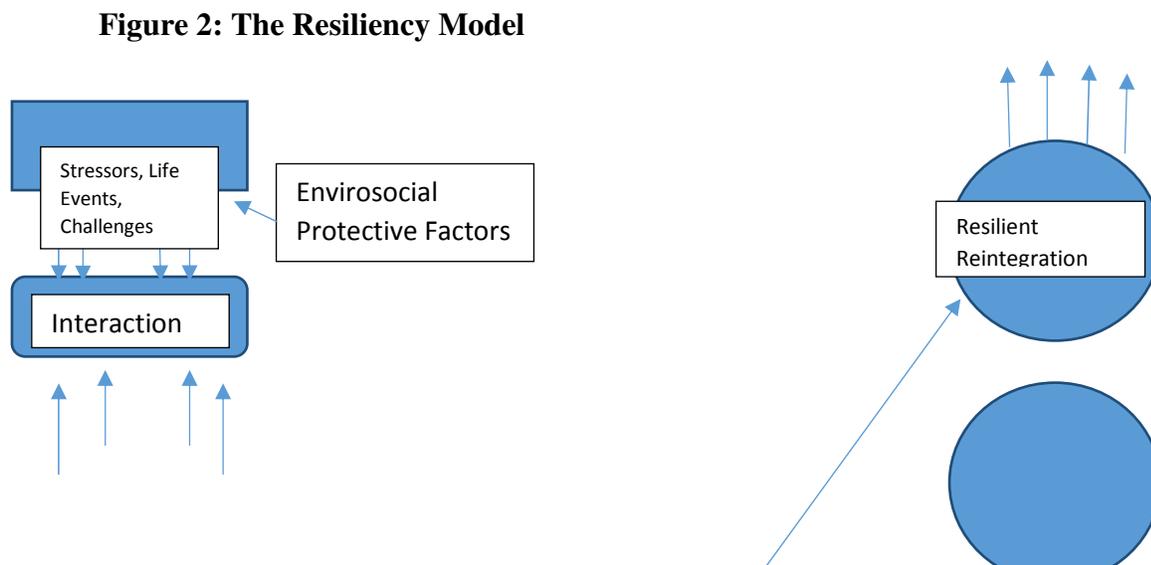
## RESILIENCY: DO WE CHOOSE IT?

Maladaptive reintegration represents a situation where an event has impacted the person so greatly that when they reintegrate after the trauma of the event, their functioning is at a lower level than their homeostasis or where they started off. Because of this traumatic event, the person will have fewer protective skills than before they had experienced the event.

Before the life event, these people may have had a good self-esteem, a sense of adventure and challenge, high expectations, and an internal locus of control, but in the face of failure they lose these traits and become resigned to a lower state of functioning. (Richardson, Neiger, Jensen, & Krumpfer, 1990, p. 37)

Dysfunctional reintegration represents a situation much like the maladaptive reintegration except that there is the need for some form of therapy. According to Richardson, 1990, there is significant disruption in the person's ability to function and reintegrates by using psychoactive substances, withdrawing into psychopathic syndromes that require therapeutic assistance, or possibly commit suicide attempts or succeed in killing themselves. At this level, there is tremendous impact to the person's ability to live and function normally and this is the worst possible outcome of a traumatic disruption.

This model visually looks like this:



## RESILIENCY: DO WE CHOOSE IT?

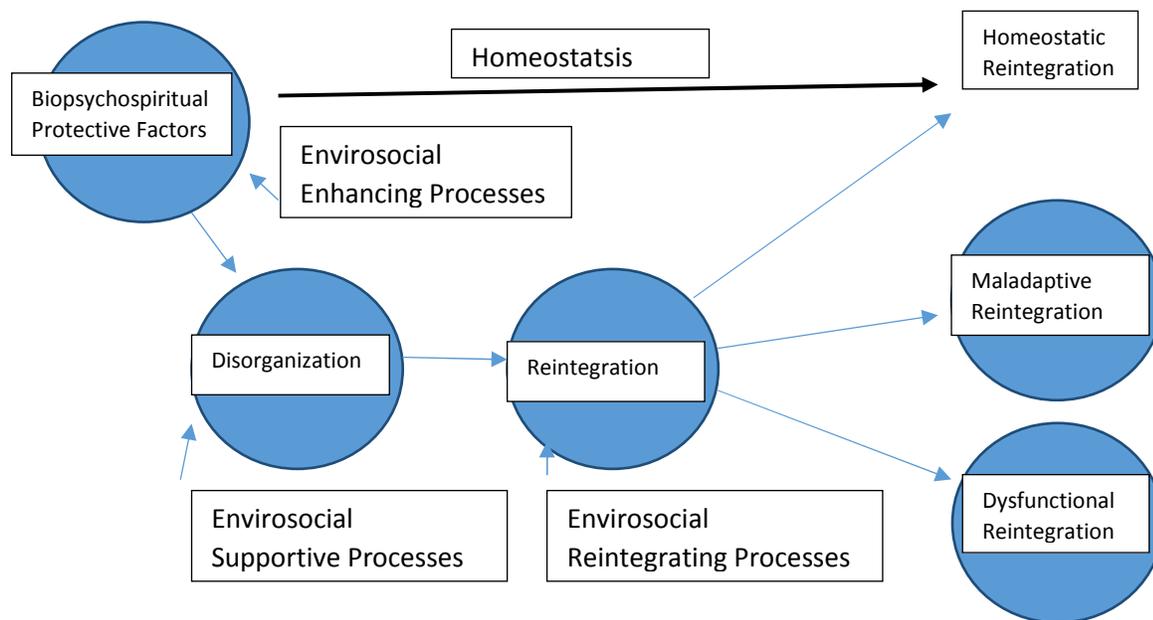


Image taken from Health and Education, Richardson, 1990, pg.38

Since this model most closely resembles the conceived process this study is looking to explore, this is the model that will be utilized for this study.

### Adversity and Changes in Resilience

The Adverse Childhood Experiences Study demonstrated a link between adverse experiences experienced as a child and many of the leading causes of death in adults (Felitti, et al., 1998). “We found a strong graded relationship between the breadth of exposure to abuse or household dysfunction during childhood and multiple risk factors for several of the leading causes of death in adults.” (Felitti, et al., 1998, p. 245)

This research found that children who experienced four or more categories of child abuse during their childhood are four to twelve times more likely to experience maladaptive coping such as alcoholism, drug abuse, depression as well as suicide attempt. These adverse childhood experiences included child abuse, substance abuse by a person in the home, mental illness,

## **RESILIENCY: DO WE CHOOSE IT?**

domestic violence, a household member attempted suicide, criminal activity in the home, or a parent in jail.

This study found that the child's ability to be resilient following experiences from the child abuse categories appear to be decreasing as more stressors in life are involved. This could mean that resiliency does change, but according to the study, the more incidents of distress on the person, the more likely they are to succumb to their adversity, resulting in either maladaptive coping, or complete dysfunction including death by suicide.

Yet, is it possible that when crises are experienced following the developmental stages of development as described by Erikson's theory and all of these stages have been positively resolved without core pathologies formed as an adult, could there be a better chance of positive adaptation from this successful developmental progress of the individual? (Svetina, 2014) Svetina (2014) suggests that when crises are experienced, these successes in overcoming adversity further increase a person's ability or likelihood that they would succeed in a positive adaptation in the future.

### **Theory and Resilience**

Matija Svetina explores Erikson's theory of Human Development to understand the current findings of resiliency research in comparison to the developmental stages as theorized by Erik Erickson (Svetina, 2014). He found that successfully navigating these developmental challenges in Erickson's theory is similar to how a person manages crisis to become resilient in the face of trauma. This means that the developmental processes that occur internally during the challenge of each developmental stage holds a similar function to the internal processes that make a person resilient. This was done by giving participants two different measures. The first

## **RESILIENCY: DO WE CHOOSE IT?**

measure was for measuring resilience and correlating that with the other for measuring personal coping. These were then compared to outcomes of developmental crises which were assessed by the second measure, Erickson's Psychosocial Inventory Scale. The analysis of his data suggests that developmental outcomes and resiliency are two concepts that are highly related to one another (Svetina, 2014).

The urge for addressing normative-developmental processes behind resilience rather than focusing primarily to adversity and maladaptation was stressed more than a decade ago and yet very little was done to address these mechanisms empirically. For this reason, the present research is of both theoretical and practical interest in describing mechanisms underlying resilience. (Svetina, 2014, p. 402)

This is an important statement because it is not yet determined what exact process leads to the outcome of resilience. Fully understanding these processes will benefit those who are facing adversity. Professionals could utilize this knowledge to create treatments and preventative therapies to increase resilience in those who are facing adverse situations or conditions.

### **The lack of "Choice" in the Literature**

There has been little discussion of the role of conscious choice in the development of resilience. And yet, people make conscious choices on a daily basis about life choices, coping skills and other important issues they face every day. If a choice component can be established, then it may be possible to help people make the choice to be resilient in the future as more research is done. It is interesting that researchers have not further explored the possibility of

## **RESILIENCY: DO WE CHOOSE IT?**

choice to impact whether a person is resilient or not since logically it makes sense that a form of choice should be viewable at the lower levels of adversity. This study will address this gap in the literature around the role of choice in resiliency and a survey will be used to explore students' perceptions of what they believe resiliency is and the role of choice in resiliency.

It is the study's hypothesis that people who feel that they are resilient will believe that there is some form of choice involved in how it functions. It is also a hypothesis that when there is less stress involved in a situation, a person is more likely to choose to be resilient. Likewise, the more intense the stress and the more the person feels that it is overwhelming, a person is more likely to choose to not be resilient.

### **Methods**

This study used a cross-sectional survey design. A convenience sample was used of students from Salem State University's undergraduate and graduate school programs. The Salem State IRB approved this study. Written and online versions of the survey were used. The survey was anonymous, and no personal or identifying information was gathered from the participants. Recruitment methods were as follows. Fliers were posted on bulletin boards with the information for the online survey which was stored on Survey Monkey. A recruitment letter was mass emailed and sent to 250 honors students. Two professors in the Social Work program allowed surveys to be handed out at the beginning of their classes. Also, students were asked to fill out fliers as they sat in the South Campus Cafeteria as well as the North Campus Cafeteria. All

## **RESILIENCY: DO WE CHOOSE IT?**

Surveys done on paper were collected and entered by hand into the Survey Monkey website for some basic data compilation.

The Salem State IRB approved this study on March 2<sup>nd</sup> 2015 and the PARCC survey was opened to online participants on March 6<sup>th</sup> of 2015 and data was collected until April 6<sup>th</sup> 2015.

### **Participants**

The survey participants were Salem State University students who responded to a request to fill out a survey on resiliency. The participants (N=113) were comprised of 84.11% females, 14.02% males, and 1.87% who classified their gender as other, defining it as “Genderqueer”. The average age of respondents (n=108) was ( $\bar{x}$ =29) years old. Concerning the question of ethnicity (n=102), participants wrote in their responses which were: 78% were white, 9% were Hispanic, and 8% were African American, and 4% were Asian, and Other were 1%.

### **Measures**

To probe these research questions, a survey was designed to explore how the participants viewed resiliency. This was broken into two sections, how they saw resiliency in general and then how they viewed their own resiliency while contemplating times they have been resilient in the past or not. In addition to these two sections, participants were also asked to look at their resiliency in comparison to varying levels of crisis or adversity. Participants were also asked questions on whether they felt that resiliency could change over time.

Several resiliency measurement tools were examined to ascertain how they measured resiliency and if any of them would be useful to assist in this research study. Unfortunately, all of these measurement devices only clarify how resilient a person ranks according to the participants selection/assessment of protective measures, character traits, or risk assessment of environment

## **RESILIENCY: DO WE CHOOSE IT?**

or other factors. Because of the nature of this research study, none of these tools would be of any use to the study simply because this study is not trying to quantify a participant's ability to be resilient (Connor & Davidson, 2003; Jew, Green, & Krroger, 1996; Alessandri, Vecchione, Caprara, & Letzring, 2012).

Instead, this research study is trying to explore if a person is aware of their resiliency and if they are aware that they are making some sort of choice during the crisis or adversity to be resilient. Because of this, a questionnaire was designed to explore four different sections of a person's own resiliency in respect to their ability to self-assess their own state of resiliency or not, and to ascertain if a person perceives a choice component.

In order to refer to this questionnaire, it was given a name of: the Personality Assessment of Resiliency Choice and Change (PARCC). This is not a standardized measurement tool and reliability and validity have not yet been established.

### **Personal Assessment of Resiliency Choice and Change (PARCC)**

The PARCC consists of 28 questions which determine the participants' understanding of their own resiliency and whether they feel it is a choice or if it can/does change over time. Each of the questions fall under one of the following four categories:

1. Do you consider yourself resilient?
2. How do you define Resilience Qualities?
3. Do you feel resiliency is a choice?
4. Do you feel that resilience can change over time?

The categories and the questions associated with them were as follows. Do you consider yourself resilient? The questions 3, 16, 18, 19, 20, and 21 were based on this topic. How do you

## RESILIENCY: DO WE CHOOSE IT?

define resilience qualities? The questions based on this topic were questions 4, 5, 6, 9, and 10.

Do you feel resiliency is a choice? This topic was examined by questions 12, 13, 14, 15, 16, 26, 27 and 28. Do you feel that resilience can change over time? This was tied to Questions 7, 8, 11, 17, 22, 23, 24 and 25.

By examining how the participants answered their questions in relation to these four categories, we can explore the possibility of just how participants are viewing their own resiliency and see if the participants feel that they have made some form of choice and if they feel that they are aware of the choice made. Also, by examining the responses in comparison to these 4 topics, it may also be able to explore how the participant sees this choice component in contrast to the various levels of stress or adversity involved in the process as well as if this can change over time.

### Results

Table 3 consists of the questions in the survey and the percentage of the participants that selected each response for each individual question. The data is broken down into percentages which are based on the sample size and those who elected to answer the question. In some cases the n for a response is lower than the total N because some respondents skipped a question.

#### Summary of Results for PARCC Questionnaire

A summary of all of the collected data is below (See Table 1).

Table 1: Summary of respondent questions by individual question noting the percentage of the overall responses.

PARCC Questions	Strongly Agree	Somewhat Agree	Not Sure	Not	Somewhat Disagree	Strongly Disagree
Question3. Do you consider	42.59%	41.67%	9.26%		6.48%	0%

## RESILIENCY: DO WE CHOOSE IT?

yourself to be resilient?					
Question4. Do you feel that resiliency is a matter of Willpower?	19.81%	55.66%	16.04%	8.49%	0%
Question5. Do you feel that resiliency is something out of our control?	1.85%	18.52%	20.37%	43.52%	15.74%
Question6. Do you think that resiliency is something that we are born with?	2.80%	39.25%	21.50%	28.04%	8.41%
Question7. Do you feel that resiliency can change over time?	48.15%	44.44%	3.70%	1.85%	1.85%
Question8. Do you believe that resiliency can increase over time as challenges increase?	40.19%	49.53%	5.61%	3.74%	.93%
Question9. Do you believe that some people are just "stronger" than others mentally?	35.19%	50.00%	10.19%	2.78%	1.85%
Question10. If so, is it those people that are resilient?	15.89%	42.99%	31.78%	9.35%	0%
Question11. Do you believe that resiliency is biological in nature?	.93%	37.38%	31.78%	23.36%	6.54%
Question12. Do you believe that people can be taught to be resilient?	23.15%	49.07%	16.67%	9.26%	1.85%
Question13. Do you believe that there is a tipping point, a moment where a person can either be resilient or not?	24.30%	45.79%	19.63%	9.35%	.93%
Question14.	13.89%	50.93%	12.96%	20.37%	1.85%

## RESILIENCY: DO WE CHOOSE IT?

Do you believe that resiliency is a choice that we make?					
Question15.	27.78%	55.56%	8.33%	4.63%	3.70%
Does the increase of a challenge, adversity, or stress change whether you are likely to be resilient?					
Question16.	68.87%	25.47%	1.89%	2.83%	.94%
Have you ever experienced "more than normal" moments of stress in your life?					
Question17.	41.12%	33.64%	6.54%	18.69%	0%
Do you think it is easier to be resilient when the challenge is easily dealt with?					
Question18.	19.81%	50.00%	12.26%	16.04%	1.89%
Do you believe that you normally cope well with stress?					
Question19.	11.21%	52.34%	14.95%	17.76%	3.74%
Do you believe that you normally cope well with feelings of being overwhelmed?					
Question20.	49.06%	43.40%	4.72%	2.83%	0%
Is there a time in your past where you feel you didn't cope with stress as well as you do now?					
Question21.	33.02%	44.34%	13.21%	9.43%	0%
Do you feel that you have some control over what happens in your life?					
Question22.	23.36%	40.19%	12.15%	19.63%	4.67%
Have you ever considered yourself to be resilient in the past and later had an experience where you found that you were not as resilient?					

## RESILIENCY: DO WE CHOOSE IT?

Question23. Have you ever considered yourself NOT resilient in the past and later found that you were more resilient than you thought?	32.71%	41.12%	10.28%	13.08%	2.80%
Question24. Do you feel that your resiliency has improved from the overwhelming experiences you have had in your life?	43.93%	42.99%	10.28%	1.87%	.93%
Question25. Do you think that getting through stress is a mental choice?	19.63%	51.40%	14.02%	11.21%	3.74%
Question26. Do you think that getting through overwhelming situations is a mental choice?	23.58%	50.94%	12.26%	10.38%	2.83%
Question27. Do you think that resiliency could be a subconscious decision we make?	10.28%	45.79%	28.04%	14.02%	1.87%

### Considering Self Resiliency

84.26% of the participants felt that they were resilient. In addition to this, 94.34% of the participants believe that they have experienced more than what would be considered normal moments of stress in their lives. 69.81% of participants believe that they normally cope well with stress. When faced with overwhelming, 63.55% of participants' felt that they normally cope well with these feelings of being overwhelmed.

### Define Resiliency

## **RESILIENCY: DO WE CHOOSE IT?**

75.47% of participants felt that resilience was a matter of willpower. 42.05% of the participants believed that resiliency was something that people were born with while 36.45% believed that it was not something they were born with. 85.19% of the participants believe that some people are just “stronger” than others mentally.

### **Choice in Resiliency**

70.09% of the respondents feel that there is some type of “tipping point” or a moment where a person can either be resilient or not. 64.82% of participants feel that resiliency is a choice that we make with 22.22% disagreeing in some way with this idea. 71.03% feel that getting through stress is a mental choice while 74.52% believe that getting through overwhelming situations is a mental choice with 13.21% disagreeing in some way. 56.07% of participants believe that there may be some kind of subconscious choice that is made by people in order to be resilient or not. 28.04% were unsure on this question and 15.89% disagreed that there was some kind of subconscious choice made for resiliency.

### **Change in Resiliency**

92.59% of participants believe that resiliency can change over time. 89.72% of the participants feel that resiliency can increase over time as challenges increase. 63.55% believe that they have considered themselves resilient in the past and later had an experience where they found that they were not as resilient as before. However, 73.83% of the participants felt that they had considered themselves not as resilient as in the past and later found that they were actually more resilient than they thought. Finally, 86.92% of participants feel that their resiliency has increased from the overwhelming situations they have experienced in their lives.

## **Discussion**

## **RESILIENCY: DO WE CHOOSE IT?**

The topic of resilience involves a complex and dynamic balance of delicate internal and external processes and forces. The nature of resilience can be abstract since what is involved in these processes often play out in the depths of the psyche of the individual. It is only when these forces combine to create negative results that we often take notice. The importance of resiliency is massive in its scope, because each person is impacted by some form of adversity within their lifetime. Achieving a resilient reintegration from these forces is key to living happier lives. Determining if there is a choice component to impact resiliency can change how professionals view the subject yet again. However understanding the true nature of what is involved in what makes a person resilient can improve how professionals assist people in crisis. This study has explored this topic and looking at each of the four categories of the survey, this study has found some interesting data from the results.

### **Considering Self Resiliency**

Most of the participants feel that they have experienced more adversity in their life than what would be considered “normal amounts of stress” in their lives. This is a subjective question because the study never defined what would be considered “normal” for this question. Interestingly, 84.26% of the participants feel that they are resilient yet only 69.71% of the respondents felt that they normally cope well with stress.

### **Define Resiliency**

Another interesting finding is that the majority of participants believe that resiliency comes from a kind of willpower that is expressed by those who are resilient. The PARCC follow-up question ties in well with this data since it suggests that participants believe that some people are “just stronger than others” and perhaps it is these people that are stronger who are

## **RESILIENCY: DO WE CHOOSE IT?**

resilient. What is interesting is that only 42% believe that it is something we are born with suggesting that this potentially comes from someplace else. Since risk and protective factors are known to impact a person's resiliency this could be a factor impacting the participants' view of resiliency and see this as something that is outside of themselves. On the other hand, it may be possible that the participants may view this as external forces deciding a resilient outcome. If this is the case, then perhaps this comes from an internal choice to be resilient

### **Choice in Resiliency**

The data from this survey also reports that 70% of the respondents feel that there is some sort of "tipping point" where a person can be resilient or not. This could imply that there could be a choice involved, however according to the survey, 64.82% feel that there is a choice involved. The shift in values could represent how participants view the forces involved and if they feel there is no choice that can be made other than succumb to the adverse condition. Interestingly, the value for this grows to 74.52% when overwhelming situations are involved. Participants believe that getting through overwhelming situations is a mental choice and this doesn't change with the level of stress.

This data suggests that the hypothesis is correct to some degree. It does appear that there is some sort of choice component that participants perceived on some level of consciousness. Another point of interest in the study was that 74.76% of participants feel that it is easier to be resilient when the challenge is easily dealt with. This figure also points to the possibility that there is a choice component that is intertwined with what makes a person resilient. This data suggests the hypothesis could be correct that not only is there some form of choice component that is part of resiliency but that it can be easier to detect this choice component when lesser levels of stress are involved in what it takes to be resilient in the situation. When the stressors are

## **RESILIENCY: DO WE CHOOSE IT?**

high, it may impact how a person sees the outcome of the forces acting upon them which could be why 56% of the participants in the study feel that there could be some subconscious decision.

### **Change in Resiliency**

When examining the data, some very important features stand out. First, 70.09% of the participants feel that there is some sort of “tipping point” where a person could be either resilient or not. This data also falls in line with the question, “Do you believe that resiliency is a choice we make?” as 64.82% of survey participants either responded strongly agree or somewhat agree that this is true. This data falls in line with the hypothesis that there is some sort of choice component to resiliency. This finding further supports the research hypothesis could be correct, because 71.03% of the participants also feel that getting through stress is a mental choice that we make. Surprisingly only 15% disagree with this question. Also interestingly, 74.52% of respondents didn’t change their opinion that with the higher degrees of stress, there is still some form of mental choice involved in their minds. This is interesting because even at the higher levels of stress, people are still aware that they are making a choice. This is important because if people can understand that they are always making a choice to be resilient, then perhaps assistance can be made to help a person make the choice to be resilient in the future.

Another point the data of this survey makes clear is that participants feel that the increased level of a challenge, adversity or stress changes whether a person is likely to be resilient or not. This question in the survey was answered with a percentage of 83.34% of people agreeing with this statement. This suggests that increases of stress or adversity impact how the participants decide to make the choice to be resilient or not. Interestingly, 75.41% of participants feel that resiliency is a matter of willpower and only 8.49% of the participants somewhat disagreed with this statement. Yet, only 64.82% believe that resiliency is a choice that we make.

## **RESILIENCY: DO WE CHOOSE IT?**

From this data, willpower could be perceived as separate thing from a choice that can be made to be resilient when facing some adverse situation or event.

Most surprising of all was the data that participants feel that their resiliency has improved from the overwhelming experiences they have had in their lives. 86.92% responded this way. This is most surprising because the ACE study points to almost the exact opposite (Felitti, et al., 1998). However, this survey suggests that the participants have grown stronger from their overwhelming experiences. The seemingly contradictory results could be in part that the adversities that were talked about in this study were left to the participant to decide what was stressful and what was overwhelming. There were no defining crisis categories to indicate a reference point for the participant. Since the Ace study is very particular in what adverse events they chose to study, this could be a reason why the results are opposing.

While the data certainly points to participants feeling that there is some sort of choice that is made in the face of adversity, it can be extremely difficult to quantify and prove. This study's main function is to open up the door to the scientific community to take another look at resiliency and take into consideration that people may decide whether they are going to be resilient or not. The data in this study certainly points to the possibility that resiliency: appears to be a choice visible at lower levels of stress as well as a choice at higher levels of stress, can change over time, and possibly improves as people experience significant levels of trauma or adversity.

Although the pain of being out of biopsychospiritual homeostasis is unpleasant and even agonizing, the disruption is beneficial to the resilient individual. Surviving an experience leaves the person better skilled and stronger. The unpleasantness of the disruptive state creates a situation that essentially

## **RESILIENCY: DO WE CHOOSE IT?**

forces the resilient individual to look inwardly and adapt competently to life events and develop new negotiating skills. (Richardson et al., 1990, p. 36)

What is not clear regarding this is whether the participants had successfully navigated the adversity they had experienced in their life that they feel has increased their own resiliency. It is potentially possible to explain this phenomenon going from The Resiliency Model. If the participants had successfully reintegrated after the crisis, this best case scenario would be called a “resilient reintegration” (Richardson et al., 1990, p. 36)

As we know from the ACE study, children who experience four or more types of abuse or trauma ratings are highly likely succumb to events like suicide (Felitti et al., 1998). Perhaps the data seen in this study that points to participants feeling that overwhelming experiences in their life have increased their ability to be resilient if they feel that they have successfully navigated through the crisis and have had a “resilient reintegration” (Richardson et al., 1990).

There are obviously many factors that go into whether a person is resilient or not, however if professionals take into consideration that people may be deciding if they are going to be resilient in a particular situation, there may be ways to help to increase the likelihood that a person chooses resilience rather than to succumb to the effects of the adversity or stressor. This could be adding healthy coping strategies or programs that can relieve some of the perceived burden on the person which may in turn allow the person to choose to be resilient.

### **Limitations**

There are obvious limitations to this study. This study’s sampling method was one of convenience and sampling was not done randomly. A large number of those who took this survey were linked to the school of social work at Salem State University which would also

## **RESILIENCY: DO WE CHOOSE IT?**

account for the large number of female participants (84.11%). It is possible that there is a gender link to the results found in this survey since most of the participants were women. Since social work students may have a different vision of what resiliency means to them, this certainly creates a bias on the results. This study asked participants to recall moments of stress which requires a person's perception of the results which could be faulty as time has passed. Also, the study allowed the participant to define what was adverse and what defined stressful verses overwhelming. This subjective view could also have impacted the results. The survey used in this study is not a standardized measuring instrument so the reliability and validity of the instrument are unknown. Future research would be needed to obtain its accuracy but as an exploratory study it presents an opportunity for future researchers to explore the issue of the role of choice in resiliency.

### **Future Research**

While this study was done anonymously, future research surrounding this topic might interview the participants and perhaps get a deeper understanding if the participant can ascertain when this "tipping point" happened for them and if they were aware of it while it was happening. This same motivational interviewing technique could potentially probe deeper into the idea of a choice component that may be impacting the client's ability to move past a crisis resiliently.

Also, future research might examine participants who are currently experiencing crisis to see if there is a clearer idea of a choice component impacting their resiliency. In addition to this, future researchers could develop a standardized measure to study the choice component that this study shows could potentially be linked to resiliency.

### **Conclusion**

## **RESILIENCY: DO WE CHOOSE IT?**

This study has examined how people perceive resilience. Designing a questionnaire that explores four sections of perceived resiliency has allowed this study to probe into a possible choice component that ties into the resiliency of the participants. Based on the data, it seems possible that there is a choice component. 75.47% of the participants feel that resiliency is a matter of willpower. Only 8.49% of all participants disagreed with this while the remaining 16.04% were unsure. This data ties into the perception that there is a choice involved in what it would take for a person to be resilient in the face of adversity.

A choice can be seen in the participants' view of lower levels of adversity as an event that participants appear to be aware of, at least in some fashion. The study has found that 83.34% of the participants surveyed believe that increasing the challenge, adversity, or stress changes whether the person is likely to be resilient or not and 70.09% of these participants believe that there is a "tipping point" where a person can either be resilient or not. In addition, the study found that 74.76% participants believe that it is easier to be resilient when the challenge is easily dealt with.

This is an important topic since most people in their life will experience some form of crisis that they may either have a resilient outcome or succumb to the effects of a maladaptive reintegration (Richardson, et al., 1990). Understanding the process of resiliency is an important part of being able to help those who are in crisis find ways to have a resilient outcome. Examining a choice component to resiliency may help to yet again redefine resiliency in a manner that more closely defines the processes at hand. Because resiliency has been researched mainly as characteristics or traits that define a person's resilient qualities or the impacting internal or external forces, researchers may be overlooking the simple fact that a person chooses to be resilient or not. If this is the case then this could change how preventative help approaches

## RESILIENCY: DO WE CHOOSE IT?

crisis. Being able to identify the choice component may be able to help professionals assist their client to make the choice to be resilient, rather than succumb to crisis. This can potentially increase the wellbeing of everyone in crisis.

### Appendix 1

#### Research Questionnaire - Resiliency

Please Answer by Checking the Space before your answer.

**re·sil·ience** noun \ri-zil-yən(t)s\

Resilience is a complex, multidimensional process of biological, social, and psychological factors that allows a person to rebound from the experience of traumatic events and conditions to a place of previous functionality with little negative outcome

1. Gender:  Female  Male  Other (please identify) \_\_\_\_\_
2. Age:  Ethnic Background (White, Native American, etc.): \_\_\_\_\_
3. Do you consider yourself to be resilient?  
 Strongly Agree  Agree  Not Sure  Disagree  Strongly Disagree
4. Do you feel that resiliency is a matter of willpower?  
 Strongly Agree  Agree  Not Sure  Disagree  Strongly Disagree
5. Do you think that resiliency is something that is out of our control?  
 Strongly Agree  Agree  Not Sure  Disagree  Strongly Disagree
6. Do you feel that resiliency is something that we are born with?  
 Strongly Agree  Agree  Not Sure  Disagree  Strongly Disagree
7. Do you feel that resiliency can change over time?  
 Strongly Agree  Agree  Not Sure  Disagree  Strongly Disagree
8. Do you believe that resiliency *can increase over time as challenges increase*?

## RESILIENCY: DO WE CHOOSE IT?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

9. Do you believe that some people are just “stronger” than others mentally?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

If so is it those people who are resilient?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

10. Do you believe that resiliency is biological in nature?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

11. Do you believe that people can be taught to be resilient?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

12. Do you believe that there is a tipping point where a person can either be resilient or not?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

13. Do you believe that resiliency is a choice we make?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

14. Does the increase of a challenge, adversity, or stress change whether you are likely to be resilient?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

**\*\* The next series of questions will ask you to recall specific moments in your past when dealing with a crisis. If you are currently dealing with a crisis, or have in the past, and these questions begin to make you feel uncomfortable you may stop at any time.**

**As a reminder, If you would like professional help in dealing with a crisis, you can call Emergency Services in Salem at 1-978-744-1585.**

**\*\*Please note: Some of the questions may appear to repeat themselves, however this is done with the intent of changing wording slightly to represent different LEVELS of stress. For instance, Stressful experiences is assumed to be a lesser degree of intensity than Overwhelming experiences even though both of these are stressful. Please keep this in mind when answering these questions.**

15. Have you experienced “more than normal” moments of stress in your life?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

16. Do you think it is easier to be resilient when the challenge is easily dealt with?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

17. Do you believe that you normally cope with stress well?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

18. Do you believe that you normally cope well with feelings of being overwhelmed?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

19. Is there a time in your past where you feel you didn't cope with stress as well as you do now?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

20. Do you feel that you have control over what happens in your life?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

## RESILIENCY: DO WE CHOOSE IT?

21. Have you ever considered yourself to be resilient in the past and later had an experience where you found that you were not as resilient?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

22. Have you ever considered yourself NOT resilient in the past and later found that you were more resilient than you thought?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

23. Do you feel that your resiliency has improved from the stressful experiences you have had in your life?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

24. Do you feel that your resiliency has improved from the overwhelming experiences you have had in your life?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

25. Do you think that getting through Stress is a mental choice?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

26. Do you think that getting through overwhelming situations is a mental choice?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

27. Do you think that resiliency could be a subconscious decision we make?

Strongly Agree    Agree    Not Sure    Disagree    Strongly Disagree

## References

- Alessandri, G., Vecchione, M., Caprara, G., & Letzring, T. D. (2012). The Ego Resiliency Scale Revised. *European Journal of Psychological Assessment, 28*(2), 139-146.
- Channel, S. (Producer). (2013). *Through the Wormhole* [Motion Picture].
- Connor, K. M., & Davidson, J. R. (2003). Development of a New Resilience Scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*, 76-82.
- deTerte, I., Stephens, C., & Huddleston, L. (2014). The Development of a Three Part Model of Psychological Resilience. *Stress and Health, 30*, 416-424.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of death in Adults The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245-258.
- Fletcher, D., & Sarkar, M. (2013). Psychological Resilience: A review and critique of definitions, concepts, and theory. *European Psychologist, 18*(1), 12-23.
- Freitas, A. L., & Downey, G. (1998). Resilience: A Dynamic Perspective. *International Journal of Behavioral Development, 22*(2), 263-285.

## RESILIENCY: DO WE CHOOSE IT?

- Greene, R. R., Galambos, C., & Lee, Y. (2003). Resilience Theory; Theoretical and Professional Conceptualizations. *Journal of Human Behavior in the Social Environment*, 8(4), 75-91.
- Gucciardi, D. F., Hodge, K., Jackson, B., Anthony, D. R., & Brooke, L. E. (2014). Implicit Theories of Mental Toughness: Relations with Cognitive, Motivational, and Behavioral Correlates. *American Psychological Association*, 14, 1-11.
- Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E., Jackson, B., & Yuen, t. (2011). What is Resilience? *La Revue canadienne de psychiatrie*, 56(5), 258-265.
- Hutchinson, E. (2013). *Essentials of Human Behavior*. Thousand Oaks, California: Sage Publications.
- Jew, C. I., Green, K. E., & Kroger, J. (1999). Development and Validation of a Measure of Resiliency. *Measurement and Evaluation in counseling and Development*, 32(2), 1-10.
- Lewis, T. (2013, July 13). *How Human Brains Could Be Hacked*. Retrieved from LiveScience: <http://www.livescience.com/37938-how-human-brain-could-be-hacked.html>
- Marc A. Zimmerman, P. (2013). Resiliency Theory: A Strengths Based Approach to Research and Practice for Adolescent Health. *Health Education and Behavior*, 40(4), 381-383.
- Palmer, S. (2013). Resilience Enhancing Imagery: A cognitive behavioral technique which includes Resilience Undermining Thinking and Resilience Enhancing Thinking. *The Coaching Psychologist*, 9(1), 48-50.
- Richardson, G. E. (2002). The Metatheory of Resilience and Resiliency. *Journal of Clinical Psychology*, 58(3), 307-321.
- Richardson, G. E., Neiger, B. L., Jensen, S., & Krumpfer, K. L. (1990). The Resiliency Model. *Health Education*, 21(6), 33-39.
- Seligman, M. E. (2011, April). *Building Resilience*. Retrieved March 2, 2015, from <https://hbr.org/2011/04/building-resilience>
- Svetina, M. (2014). Resilience in the context of Erikson's theory of human development. *Current Psychology*, 33, 393-404.
- Tiet, Q. Q., Huizinga, D., & Byrnes, H. F. (2010). Predictors of Resilience Among Inner City Youths. *Journal of Child and Family Studies*, 19, 360-378.
- Waaktaar, T., & Torgersen, S. (2012). Genetic and Environmental Causes of Variation in Trait Resilience in Young People. *Behavior Genetics*, 42, 366-377.
- Xing, C., & Sun, J.-m. (2013). The Role of Psychological Resilience and Positive Affect in Risky Decision-Making. *International Journal of Psychology*, 48(5), 935-943.