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The Relationship Between Adverse Childhood Experience, Guilt Proneness, and Shame-Proneness: An Exploratory Investigation

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Abstract

The research on adverse childhood experiences (ACEs) in relation to shame and guilt proneness in adults is limited. Studies have shown that children *and* adults can be affected by ACEs. More specifically, ACEs are associated with negative health and wellness. This study examines a unique relationship between ACEs and guilt and shame proneness. Participants in this study were comprised of a convenience sample of 137 adults. Two primary assessment instruments were used: Adverse Childhood Experience questionnaire and the Test of Self-Conscious Affect-3 (TOSCA). The surveys were distributed through social media, email, and classrooms. Results revealed a statistically significant positive relationship between ACE scores and shame proneness. Furthermore, a statistically significant difference was discovered between participants with high ACEs versus participants with low ACEs regarding shame proneness.

Keywords: adverse childhood experience, shame, guilt

**The Relationship between Adverse Childhood Experiences,
Guilt Proneness and Shame Proneness: An Exploratory Investigation**

According to the CDC (2019), Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur in childhood. ACEs can include violence, abuse, and growing up in a family with mental health or substance use problems. The CDC also has reported that: 1) one in six adults experienced four or more types of ACEs, 2) at least five of the top ten leading causes of death are associated with ACEs, and 3) preventing ACEs could reduce the number of adults with depression by as much as 44%. Other research has revealed that children and adults can be affected by (ACEs). For example, Shonkoff and Garner (2012) found that ACEs are associated with negative health and wellness.

Shame and guilt are emotions that have garnered the attention of clinical, social, and developmental psychologists for generations. It is thought that “guilt and especially shame lurk in corners we never imagined. These are powerful, ubiquitous emotions that come into play across most important areas of life” (Tangney & Dearing, 2002, p.8). Research has shown that guilt and shame are distinct affective experiences that result in different behavioral reactions. For example, it has been shown that shame can interfere with other-oriented empathetic connections, is generally more painful than guilt, can lead to a feeling of worthlessness, and leads to a desire to hide, escape, and strike back. However, a gap currently exists in the literature regarding Adverse Childhood Experiences (ACEs) in relation to shame and guilt-proneness in adults. To fill this gap, the current study examined the relationship between ACEs and shame and guilt-proneness with the hope to better understand this complex association.

Defining ACE

Adverse childhood experiences (ACE) are traumatic events that happen before the age of 18 (Felitti et al., 1998). ACEs include experiencing or witnessing violence, abuse, or neglect. ACEs also include any part of a child's environment that could significantly worsen their sense of safety, stability, and/or ability to bond with an adult in a healthy way. Understanding ACEs and their effect on how people respond to their environment can help us understand the effect ACEs have on large demographic groups. People in certain demographic groups, such as minorities or those in poverty (Hughes & Tucker, 2018), those who did not complete high school, and those who make less than \$15,000 per year have a disproportionately higher chance of having an ACE (Merrick et al., 2018). An ACE study conducted in 1998 was the first to examine adverse childhood experiences in relation to health risk behaviors and diseases in adults (Felitti et al., 1998). A strong association was found between ACEs and chronic health problems, mental illness, and substance abuse (Kerker et al., 2015; Putnam, 2006; Uddin et al., 2020).

Adverse Childhood Experiences and Their Effects on Children

The brain is more sensitive to influence as a child ("Child Development," n.d.; Frederiksen, n.d.; Putnam, 2006; Su et al., 2015). The effects of childhood trauma on mental, physical, and emotional health can even begin while a child is in the mother's womb (Shonkoff & Garner, 2012). The majority of a person's physical and mental development occurs between the ages of 0-18 ("Child Development," n.d.). Living through any form of ACE can also disrupt children's proper neurodevelopment and even lead to premature death. Chronic stress increases the occurrence of the body's natural defense mechanisms, such as fight or flight responses. This alteration to the brain can contribute to biological changes that lead to negative health outcomes (Kelly-Irving et al., 2013). Repeated trauma, neglect, or abuse is toxic to children and the potential increased activation of defense mechanisms disrupts normal development (Shonkoff &

Garner, 2012). Continued trauma not only affects an individual's experience of childhood but also adulthood, as they become parents, friends, and members of society (Putnam, 2006).

Children's healthy emotional and cognitive development depends on the caregiving of adults (Uddin et al., 2020). Responsive, dependable, and appropriate interactions with adults help children develop properly. Although ACE can impact people immediately, the lifelong consequences of ACE often display more readily in adults and are often the ones studied.

Adverse Childhood Experience and Effect on Adults

ACEs have lifelong effects. The more stress someone experiences early in life, the more likely they are to experience avoidable injuries, mental, physical, and emotional health problems, and the more likely they are to exhibit risky behavior (Merrick et al., 2018). Those who have ACE are more likely to respond to stress poorly, because they have not developed healthy coping strategies (Merrick et al., 2018; Merrick & Guinn, 2018; Felitti, 2002). This response suggests that ACEs are often generational, because those who have experienced childhood trauma were never given the tools to handle higher levels of emotional, physical, and mental stress (Kelly- Irving et al., 2013; Merrick et al., 2018; Murphy et al., 2014; Uddin et al., 2020). When we consider the generational trend of ACEs, it demonstrates how doctors, healthcare physicians, and policymakers can look at ACEs as a large contributor to society's overall experience of physical health and wellbeing. Recognizing that ACEs have a direct relationship to health and wellbeing forces physicians and mental health professionals to consider options beyond modern medicine to treat patients.

Adverse Childhood Experience and Mental Health

Like physical health, mental health alters one's ability to appropriately, effectively, and successfully operate in society (Shonkoff & Garner, 2012). ACE prevalence is high among

vulnerable populations (Felitti et al., 1998), and studies suggest that the effects of trauma are almost immediate (Merrick & Guinn, 2018; Shonkoff & Garner, 2012). In a child welfare study, it was found that children in this demographic had a statistically higher chance of having ACE (Kerker et al., 2015). The likelihood of encountering an ACE before the age of five increases the likelihood of developing mental health problems. In the U.S. in 2017, mental illness affected approximately 1 out of 5 people which is 46.6 million individuals (Kerker et al., 2015; *NIMH » Mental Illness*, n.d.). The tangible effects of ACEs on adult mental health are as strong as their effects on our physical health. Because childhood is a critical period of development, and it has been shown that exposure to ACE increases the likelihood of reported mental health problems by 33% (Uddin et al., 2020), it is important that we understand the multiple aspects of ACEs. How adults learn to connect experiences, whether positive or negative, internalize how they feel about them, and process the world around them drastically affect how we interact with ourselves, the world, and the future (Kerker et al., 2015). Understanding how ACEs affect our mental health can also help us understand how we internalize our emotions and behaviors.

Guilt and Shame

In the same way that ACEs can alter the foundation of how someone views the world around them, residual shame and guilt can alter the way someone views themselves and their actions (Miceli & Castelfranchi, 2018; Tangney & Dearing, 2003). Shame and guilt are distinct, internal, self-conscious emotions (O’Leary et al., 2019). Shame and guilt can both be felt publicly or privately by the person experiencing them (Miceli & Castelfranchi, 2018; Tangney et al., 2007; Tangney & Dearing, 2003; Wojcik et al., 2019). In the English language, these emotions are often used as synonyms; however, recognition of their differences dates back decades (Tangney & Dearing, 2003). While shame and guilt are similar, but they are not the

same. Both shame and guilt are self-conscious emotions, which means a reflection on oneself, and both are negative evaluations based on cultural standards of either self or behavior (Tracy & Robins, 2004). Shame is usually defined as a maladaptive emotion; and guilt is usually viewed as an adaptive, prosocial emotion. These behaviors can be either maladaptive or adaptive, and the result of these emotions are often dependent on the ability to regulate emotions (Robins & Schriber, n.d.; Tangney & Dearing, 2003).

Guilt

Unlike shame, guilt is a negative emotion related to one's self behaviors, not one's ideal self (Miceli & Castelfranchi, 2018; Tangney et al., 2007; Tangney & Dearing, 2003). These views are connected to one's moral standards and based on a society's understanding of right and wrong, which are based on the goals and beliefs for which the person feels personally responsible (Tangney et al., 2007). Guilt is usually an adaptive, constructive emotion. It helps people alter our behavior in a positive way. Shame reduces people's ability to act appropriately in constructive ways, because it is often easier to alter one's behaviors rather than one's internal view of oneself (Brown, 2012). Guilt allows us to look at decisions outside of ourselves and see how we have broken moral or ethical norms; but shame is often internalized and negatively skews one's self-concept (Covert et al., 2003).

Shame

When someone experiences shame, that feeling often reflects a negative view of their internal view of themselves. The effect of that negative internal self-concept is internalized as oneself being bad, rather than the actions or behavior committed (Miceli & Castelfranchi, 2018; Tangney et al., 2007; Tangney & Dearing, 2003). In this way, shame is more likely to be a maladaptive emotion. When we cannot appropriately process our emotions in adaptive ways, we

are more likely to hurt ourselves and others over time (O’Leary et al., 2019). Shame proneness (i.e., the likelihood of experiencing shame in any given situation) is associated with higher anxiety, whereas guilt proneness is not (Cândeia & Szentagotai-Tătar, 2018). When people experience shame, they are more likely to respond to life’s challenges in a debilitating, self-defeating cycle of negative behavior, whereas those who experience guilt are more inclined to take positive steps toward changing their behavior itself (Miceli & Castelfranchi, 2018). Shame is highly correlated with behaviors like addiction, depression, violence, aggression, suicide, and eating disorders. In contrast, guilt is inversely correlated (Brown, 2012). This supports the theory that shame is much more destructive and maladaptive than guilt.

Based on previous studies, researchers have begun to better understand ACE in relation to health and wellbeing (Kelly-Irving et al., 2013; Murphy et al., 2014; Putnam, 2006). However, there is still an insignificant understanding of the relationship between ACEs and shame and guilt proneness which is the focus of the current study. To better understand the complex association among ACEs, guilt-proneness, and shame proneness, the current study sought to answer the following questions: RQ1) Is there a significant correlation between ACEs and shame-proneness in adulthood? RQ2) Is there a significant correlation between ACEs and guilt-proneness in adulthood? RQ3) Is there a significant difference in levels of shame-proneness between those with high versus low ACEs?

Methods

Sample

Participants were collected through a convenience sampling technique, which included students from a private, liberal arts university and posting the survey on social media. The survey included age range, gender, race, and amount of school completed. For this study, of the 137

sampled, 104 (76%) were female and 33 (24%) were male. Regarding ethnicity, 119 (87%) identified as Caucasian. Regarding the sample's education level, 63 (46%) were college graduates, 66(48%) had completed some college, and 8 (6%) had only completed high school. The age range included 94 (69%) 18-29 olds, 22 (16%) 30-49 year olds, and 21 (15%) who were 50 and over.

Instruments

For this study, there were two primary instruments. The first was the Adverse Childhood Experience (ACE) Questionnaire (Felitti et al., 1998), which includes ten self-report items. The ten questions help identify if a child has experienced or witnessed violence, abuse, or neglect in the home or community. It also identifies if someone has experienced the death of a relative. All questions are answered either "yes" or "no." For each "yes" answer, a person is given one point, with ten being the highest score possible. The Adverse Childhood Experience test is the largest one to be used to examine the connection between childhood trauma and well-being later in life, it has a modest test-retest coefficient, $r = .71$, $p < .001$, and a Cronbach's alpha of .88 (Murphy et al., 2014). The following is an example question, "Before your 18th birthday, did you often feel that ...You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? or Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?"

The second instrument, the Test of Self-Conscious Affect-3 (TOSCA), uses a scenario-based measurement to assess the guilt and shame proneness of participants (Broerman, 2018; Covert et al., 2003; Tangney et al., 2007). The TOSCA is also a self-report measure, and it consists of 16 scenarios. Participants hear a scenario, then imagine how they would respond, then rate how they would likely respond on a 5-point scale, with 1 being not likely and 5 being very

likely. There are 11 negative scenarios and five positive scenarios (Broerman, 2018). Shame and guilt can be measured as an emotional state or a disposition (Tangney, 1996). For this study, the TOSCA measures it as a disposition. The internal consistency reliability of the TOSCA Questionnaire has a Cronbach's alpha for the Shame and Guilt scales of .76 and .66, with face validity being high as well (Broerman, 2018). An example of a TOSCA question is, "You make a mistake at work and find out a coworker is blamed for the error. You would think the company did not like the coworker, You would think Life is not fair, You would keep quiet and avoid the coworker, and You would feel unhappy and eager to correct the situation."

Procedure

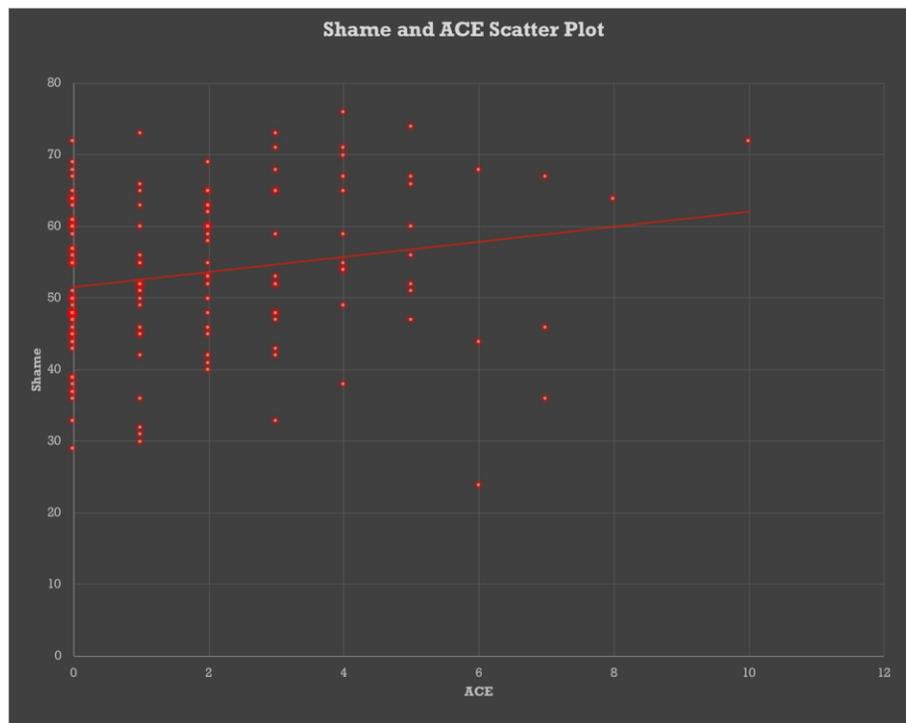
After IRB approval was obtained, professors at the university where the study was conducted were contacted to gain permission to use their classes to distribute the surveys. Once permission was given, the researcher arranged a time to distribute the surveys at the beginning of a class period. The completion of the study from start to finish took approximately 20 minutes. Access to participate in the study online was posted on social media during this same time period. Participants that were recruited through social media were sent a Google Form link that contained the surveys. They were able to complete the surveys at their convenience from any location. All participants were free to choose to participate and were not encouraged or coerced in any way. Participants were also notified that they were under no obligation to complete the form and could withdraw at any time without penalty. All participants completed the surveys in the following order: informed consent, the Adverse Childhood Experience (ACE) Questionnaire (Felitti et al., 1998; Murphy et al., 2014), the Test of Self-Conscious Affect-3 (TOSCA-3) (Covert et al., 2003), and a debriefing form.

Results

A Pearson's correlation coefficient was used to examine any relationships that exist between ACEs and guilt/shame proneness. The results revealed no statistically significant relationship between ACE scores and guilt-proneness, $r(136) = .164, p > .05$. However, there was a statistically significant positive relationship found between ACE scores and shame proneness, $r(136) = .197, p < .05$. Figure 1 displays the scatterplot between ACEs and shame proneness.

Figure 1

Scatterplot between ACEs and Shame Proneness

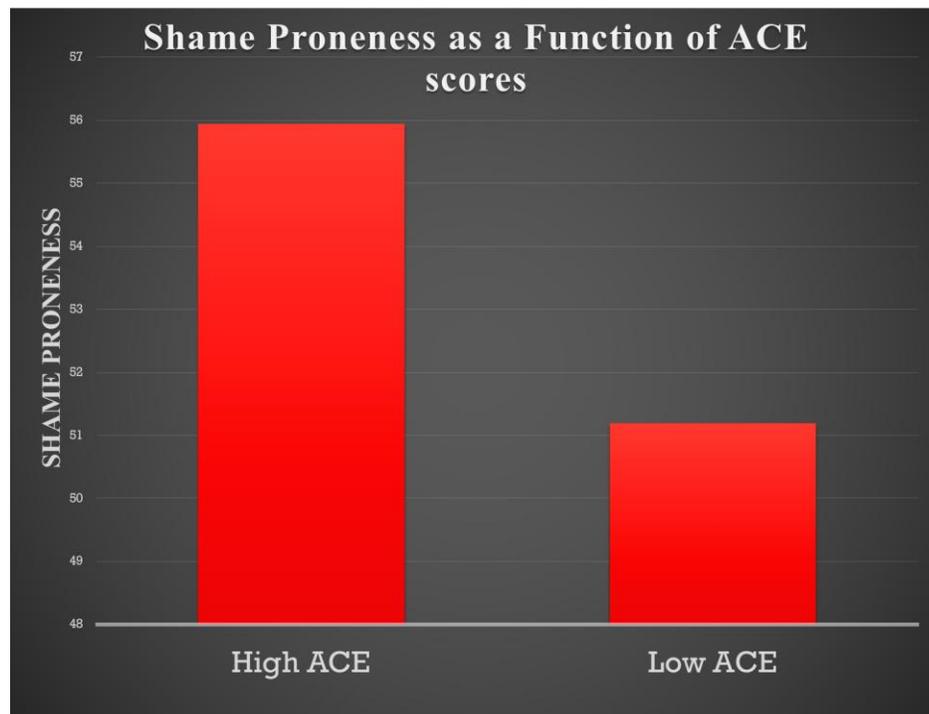


Additionally, an independent sample t-test was conducted to determine if a significant difference existed in shame proneness in those with “high” versus “low” ACEs. In this study, the mean ACE score was 1.85, thus an ACE score of two or more was considered high. Furthermore, an ACE score of two or more also allowed equal sample sizes. A statistically significant difference was discovered between those with high ACE ($M = 55.94$) versus low ACE ($M =$

51.19) scores and shame proneness, $t(135) = -2.56, p = .011, d = .44$. A bar chart showing mean differences between participants with high and low ACEs can be seen in Figure 2.

Figure 2

Shame Proneness as a Function of ACEs



Discussion

The answer to RQ1 (Is there a significant correlation between ACEs and shame-proneness in adulthood?) was answered in the affirmative. More specifically, the results indicated that the presence of ACEs is related to shame proneness in adulthood. However, similar patterns were not seen in relation to levels of guilt proneness (RQ2: Is there a significant correlation between ACEs and guilt-proneness in adulthood?). Lastly, a significant difference was discovered in levels of shame-proneness (as measured by the TOSCA) as a function of ACEs (RQ3: Is there a significant difference in levels of shame-proneness between those with high versus low ACEs?). Participants with high ACEs had significantly higher levels of shame-proneness in adulthood

compared to participants with low ACEs. These results are consistent with previous findings that have suggested that guilt and shame “develop from our earliest interpersonal experiences—in the family and in other key relationships” (Tangney & Dearing, 2002, p. 2). If shame is related with ACEs, what does this say about someone regarding how they experience the world? According to Tangney and Dearing (2002), “these experiences of shame or guilt can guide our behavior and influence who we are in our own eyes.” (p.2).

Because the increase of ACEs appears to be associated with an increase in shame proneness as adults, it suggests that the two are connected in some way. Adverse childhood experiences are foundational experiences of someone’s life that are forced. Because shame had a statistically significant correlation, it leads the authors to believe that shame is at least one of the lifelong negative psychological effects of ACEs (Putnam, 2006; Shonkoff & Garner, 2012). ACE involves negative experiences caused by someone else and not the individual who experiences them. Therefore, ACEs threaten someone’s whole being. Shame is a threat to someone’s ideal self. The discovered relationship was expected due to shame being correlated to addiction, depression, violence, aggression, suicide, and eating disorders (Brown, 2012). Because previous research has found that shame is more harmful than guilt (Covert et al., 2003; Miceli & Castelfranchi, 2018; Norman et al., 2019; Tangney et al., 2007; Tangney & Dearing, 2003), the results from the current study warrant further investigation. More specifically, future studies are needed to pinpoint which specific ACEs are related to the development of shame proneness. In the current study, a total ACE score was computed without consideration of different categories of ACEs (e.g., verbal abuse versus physical abuse). It also warrants mentioning that the current study only examined the association between shame proneness and ACEs and therefore causal relationships cannot be determined. The results from the current study add to the extant body of

literature that can assist researchers and clinicians alike in understanding the complex self-conscious emotion of shame.

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