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THE TRAJECTORY OF TRAUMA: THE EFFECTS OF ACES ON SUICIDAL IDEATIONS

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It is established throughout literature that childhood abuse can have detrimental implications in adulthood, but a growing body of research has focused on the effects of adverse childhood experiences on adult mental health. Adverse childhood experiences (ACEs) are defined by traumatic occurrences throughout development that has been proven to detrimental in later adulthood. These experiences include abuse, neglect, exposure to domestic violence, socioeconomic status, and familial dysfunction, but it is not limited to these factors (Trossman et al., 2020). In addition, ACEs are widespread throughout society: an epidemiological study of 200,00 Americans recorded 62% of participants having at least one ACE (Trossman et al., 2020). It is noted throughout literature that ACEs contribute to maladaptive health issues and can lead to early death, in cases of cancer, stroke, and heart disease (Trossman et al., 2020). While it is of utmost importance to resolving these issues, recent research has found another alarming instance of early death among those with ACEs: suicide.

Several studies have been undertaken to determine a link between adverse childhood experiences and suicidal behaviors later in life. For example, one study explored the link between familial dysfunction, psychiatric symptomology, impulsivity, and alcohol use facilitated the connection between adverse childhood experiences and suicidality (Rytilä-Manninen et al., 2018).

Researchers drew from a population of 206 adolescents in psychiatric care and 203 adolescents from the community, controlling for age and gender (Rytilä-Manninen et al., 2018). After measuring for impulsivity, social dysfunction, and family dysfunction, researchers administered the Schedule for Affective Disorders and Schizophrenia for School-Age Children (Rytilä-Manninen et al., 2018). Results found a positive, direct effect of ACEs on suicidality. In addition, researchers observed an indirect effect of ACEs on suicidality on other factors, such as impulsivity and family dysfunctions (Rytilä-Manninen et al., 2018). In another study, researchers hypothesized that the presence of ACEs negatively impacted a person's sense of identity, leading to poor mental health outcomes in adulthood (Wong et al., 2019). Their study recruited 308 online participants to complete a battery of self-assessments, measuring adverse childhood experiences, suicidal behavior, depression, loneliness, self-concept, and self-esteem (Wong et al., 2019). Researchers observed a greater accumulation of ACEs corresponded to a lower self-concept score, correlating with distressing mental health. This establishes an association between ACE's and a person's sense of self, which can lead to issues such as depression and suicidal thoughts. In writing this paper, I seek to further explore the connection that early adverse experiences have on suicidal behaviors and ideations later in life.

The Impact of ACEs

Adverse childhood experiences were first discovered in a study conducted at Kaiser Permanente from 1995 to 1997. More than 17,000 members from the Health Maintenance Organization

received physical inspections and completed confidential surveys concerning their childhood experiences and current health status (CDC, 2020). The research found that long-term impacts of adverse experiences, such as higher risks of depression, addiction, attempted suicide, and mental health disorders. (CDC, 2020). As such, childhood adverse experiences are prevalent and persistent throughout the lifespan. A study conducted by Thompson et al. discovered that exposure to adverse experiences most commonly happens to children under the age of six (Thompson et al., 2015). Throughout the United States, 50% of children's adverse experiences are acquired by the age of 3 (CDC, 2020). Another investigation found that in a sample of 912 children, 98.1% reported experiencing at least one ACE (Kerker et al., 2015). These statistics are problematic because after a single ACE occurs in childhood, the probability of additional adversative experiences grows exponentially. Previous research has demonstrated that adults who have had higher numbers of childhood adverse experiences are more likely to experience mental illness and use unsafe coping strategies (Kerker et al., 2015). Greater quantities of ACES correlate with lower self-confidence and self-certainty in adulthood (Wong et al., 2019). In turn, a diminished sense of self negatively impacts mental health, giving way to feelings of depression, isolation, and intrusive suicidal thoughts.

In a podcast piloted by the UB School of Social Work Institute on Trauma and Trauma-Informed Care, individuals share their experiences with adverse experiences and how they've risen above their trauma. One episode interviews a man named Tom, who grew up with many different adverse experiences, including clerical child sexual abuse, sexual violence, emotional abuse, and substance abuse. Tom's sexual abuse began in second grade and at the peak of his trauma, he found the courage to confide in family and other clerics in the church. This was met with contempt, as Tom was told he was "an imaginative little boy...making all of this stuff up" (Rising from the Ashes, 2020). His mother was disgusted by his accusations and became violent towards him. Soon after, he found solace in the thought of suicide: "I found myself curled up underneath my bed contemplating suicide. I did not want to be alive in those moments. Those moments truly altered my life, and the way I was able to relate to my mother and my family, to my environment" (Rising from the Ashes, 2020). For years after, Tom experienced the lingering effects of his abuse and suicidal thoughts.

Defining Suicide Along its Continuum

Suicide is a tragic outcome with rates that have been increasing over time: since the year 2000, the rate of suicide among young adults in the U.S. has grown by 30% (CDC, 2020). Similarly, to adverse childhood experiences, suicidal thoughts can be enduring throughout the lifespan. In 2018, the CDC reported that 10.7 million American adults contemplated suicide, 3.3 million prepared a plan, and 1.4 million attempted suicide (CDC, 2020). By definition, suicide is death caused by harming oneself with the intent to die (CDC, 2020). A suicide attempt occurs when the intent is to die, but the outcome is not death. Lastly, suicidal ideation is the deliberate and thoughtful planning involved in taking one's own life. In the case of Tom, he was able to resist his intrusive thoughts, but suicidal ideation persisted throughout his adolescents and young adulthood. He shared this experience during his interview:

Isolation sort of became part of my childhood. I was a loner. I don't know if I understood depression in that time, but the thought of suicide, the thought of killing myself became a default reaction to situations. It's nothing I had ever attempted, but something I had to navigate (Rising from the Ashes, 2020).

The Interpersonal Psychological Theory of Suicide (IPTs) is a prominent theory of suicidal ideation and behavior throughout the literature (Love & Durtschi, 2020). The IPTs proposes that an individual will commit suicide if they are struggling to meet their interpersonal needs and have the ability to kill themselves. Examples of interpersonal needs include thwarted

belongingness and perceived burdensomeness. Those experiencing feelings of thwarted belongingness may feel alienated from their family, friends, and peers. Perceived burdensomeness accentuates feelings of pessimism; that family and friends would be “better off if they were dead” (Love & Durtschi, 2020). These two elements combined can lead to critical risk of suicidal ideation, but cannot become lethal without the capacity to commit suicide. Based on this theory, researchers conducted a latent profile analysis to investigate the relationship between suicidal ideation and behavior in young adults. The study recruited 4,208 participants from the National Longitudinal Study of Adolescent to Adult Health and created a profile based on hypothesized risk and protective indicators (Love & Durtschi, 2020). Three different profiles developed from the data: childhood isolation, adult isolation and burdensomeness, and flourishing. The adult isolation and burdensomeness profiles correlated with a greater risk for both suicidal ideations and attempts, and the flourishing profiles correlated with reduced risk for both suicidal ideation and attempts. Flourishing, the only profile to report reduced risks for suicidal ideation and attempts, was characterized by positive relationships throughout adolescence – feeling “cared for” by parents (Love & Durtschi, 2020). Conversely, both childhood isolation and adult isolation and burdensomeness profiles reported adverse experiences during adolescence. The findings of this study highlight the difference in outcomes based on upbringing.

Researchers drew from a similar participant pool, the National Longitudinal Study of Adolescent Health, with a sample of 9,421 young adults who took part in four waves of evaluations over 13 years (Thompson et al., 2019). This study was undertaken to add to the body of research surrounding ACES and suicidality, measuring the associations between eight different adverse events and suicidal ideation in adulthood. The ACES studied included physical, sexual, and emotional abuse, death of parent, incarceration, alcoholism, neglect, and familial suicide (Thompson et al., 2019). In addition, this study measured the correlation between compounded adverse events and suicidal attempts or ideations. Their findings showed that several factors (parental incarceration, family history of suicidality, and physical, sexual, and emotional abuse) led to a greater risk for suicidal ideation and attempts in adulthood (Thompson et al., 2019). In addition, the likelihood of attempting suicide as an adult was 3.53 times more likely with the presence of three or more adverse experiences, in comparison to those without any ACES (Thompson et al., 2019). In terms of suicidal ideation and attempts, the most significant factors were sexual and emotional abuse and familial suicide. Overall, the results were consistent with the current literature, validating the link between adverse childhood experiences and suicidality.

Challenges within the field. Additional research on the effects of adverse childhood experiences on suicidality in adulthood holds important clinical implications. Much of the current literature on ACES focuses on the negative health outcomes that can be physically measured, such as diabetes, heart disease, obesity, and chronic lung disease. However, the presence of adversarial experiences presents detrimental outcomes on mental health, as well. ACES directly relate to lower self-certainty and self-esteem, leading to disruptive mental health outcomes, such as identity crisis and a weakened self-image (Wong et al., 2019). Previous studies have determined a link between ACES and suicidality in adults (Rytilä-Manninen et al., 2018; Wong et al., 2019; Thompson et al., 2019), while other research has been analyzed to create a profile on suicidality among adults (Love & Durtschi, 2020). Their combined findings emphasize the importance of adopting strategies to reduce the exposure to ACES, in part to aid in suicide prevention.

Currently, the ACE screening test is widely available online and can be self-administered. There are ten items on a list, ranging from experiences with physical abuse to parental mental illness, to domestic violence. For every yes, a point is added to the cumulative ACE score. While this

science is still marginalized in many practices, a growing body of interest in making ACE screenings more routine at hospitals, doctor's offices, and schools.

Further studies should seek to identify resolving factors between adverse childhood events and suicidality. This can be achieved through many different methodologies. To begin, parent education is crucial in providing a nurturing and stable environment. Early experiences and relationships with parents shape a child's sense of identity (Wong et al., 2019). For the first few years of life, the infant's relationship with a caregiver is the only way to learn about relationships and develop a sense of self. Fostering supportive relationships between parents and child holds promise to prevent the intergenerational transmission of adverse experiences (Wong et al., 2019). It could also aid in fostering self-worth and promote expectations of healthy relationships. For Tom, developing a positive relationship with his mother many years later was a starting point in his healing process:

I was living with my mom at the time, so she was allowing me, in her late 80's, to be a small child again at the time. Several times over that year I broke down, and she held me in her arms and sobbed. And she treated me the way I needed to be treated forty years earlier. She took responsibility for it and her actions. So that collaboration of having a talk therapist, having a tool to relive the trauma, and having my mom right there to embrace me so I could let go of forty years of confusion, of anger, of hatred, of a riding of emotions that are almost undefinable (Rising from the Ashes, 2020).

Promising controlled trials of education programs have shown meaningful reductions in child maltreatment and improved parent-child relationships (Thompson et al., 2019). Implementing evaluations during prenatal healthcare visits may be necessary to detect at-risk parents and provide resources (Kerker et al., 2015). Finally, studies confirm that the lethality of trauma increases with a greater number of ACES. With this in mind, it might be helpful to seek out and treat children who have had multiple adverse experiences. Thompson and colleagues contend that although greater numbers of ACES correlate with an increased risk of suicidal behavior, many who accumulate three or more ACES do not engage in suicidality (Thompson et al., 2019). There is evidence that some adverse experiences hold more lethal implications than others. For instance, in the study performed by Thompson and colleagues, emotional and sexual abuse proved to be far more lethal implications than did parental incarceration. This advocates for additional research to be conducted, in an effort to isolate traits and factors that foster resilience (Thompson et al., 2019). Through promoting resilience in a nurturing environment, the adverse effects of trauma can be prevented. On a positive note, the earlier that adverse experiences can be recognized, the more quickly services can be provided to remedy these experiences.

The investigation of current literature highlights a distressing connection between adverse childhood experiences and suicidal ideation later in life. Adverse childhood experiences encompass a wide variety of stressors, including neglect, abuse, parental incarceration, and family violence. Throughout studies, a correlation has been established between ACES and suicidal behavior, such as lethal thoughts and attempts. Suicide remains to be a leading cause of death in the United States that only seems to be increasing over time. However, current research has proposed different ways to combat the trauma associated with adverse childhood experiences. Further research will be crucial in determining the strongest way to prevent ACES and suicidality among those living with adverse childhood experiences.

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