



Relationship between Adverse Childhood Experiences, Coping Styles, and Posttraumatic Growth

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Abstract

Adverse childhood experiences (ACEs) are known to be associated with a higher chance of developing mental health problems as an adult. On the other hand, some people might undergo posttraumatic growth (PTG) after experiencing childhood adversity. The current study investigated the connection between Post traumatic growth, coping strategies, and adverse childhood experiences in 201 young adults between the ages of 18 and 25. The findings pointed out a correlation between increasing usage of emotion-focused and avoidant-focused coping methods as exposure to ACEs increased. It was discovered that the association between ACEs

and PTG was considerably mediated by emotion-focused coping. These results imply that an individual's ability to make meaningful life adjustments from traumatic events is largely dependent on how they manage adversity throughout their youth. The findings of this research have significant ramifications for our comprehension of growth and resilience in the wake of childhood adversity.

Key Words: *Adverse childhood experiences, Coping styles, Emotion-focused coping, Posttraumatic growth, Young adults*

Introduction

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) are negative events that impact people aged one to seventeen. They represent an important paradigm in psychology and public health, giving valuable insights into the long-term impact of childhood adversity on people's physical and mental health. They include a wide range of negative events and circumstances that children may encounter in their familial, social, and community environments, such as abuse (physical, emotional, sexual), neglect (physical, emotional), and household dysfunction (e.g., substance abuse, mental illness, domestic violence, parental separation or divorce, incarceration) (Felitti et al., 1998).

Coping

Coping is described as “the thoughts and behaviours used to manage both internal and external stressful events” (Folkman & Moskowitz, 2004). It refers to the “conscious and intentional mobilisation of actions, as opposed to 'defence mechanisms', which are

subconscious or unconscious adaptive responses that try to decrease or accept stress” (Venner, 1988).

Coping strategies are as varied as the situations that cause them. Lazarus and Folkman (1984) categorized them as a) problem-focused; b) emotion-focused; and c) avoidant-focused strategies. Problem-focused coping techniques seeks to directly address and manage the stressor. Emotion-focused coping approaches, on the other hand, emphasis managing the emotional pain caused by the stressor rather than tackling the stressor itself. Avoidant-focused coping strategies seek to avoid or minimize involvement with the stressor and its emotional consequences.

Posttraumatic Growth

Tedeschi and Calhoun (1996) came up with the term "posttraumatic growth" to describe the “positive change that people report following traumatic experiences”. They stated that painful situations can foster personal development and psychological resilience. Tedeschi and Calhoun (1996) defined post traumatic growth (PTG) as "positive change that occurs as a result of overcoming difficult life crises." This process comprises confronting and dealing with adversity, which can result in psychological growth and enhanced resilience over time. Tedeschi and Calhoun (1996) defines five types of posttraumatic growth; greater appreciation for life, improved relationships, greater trust in personal strength, increased spiritual or existential growth, perceiving new possibilities, and adopting a new life philosophy.

Relationships Between ACEs, Coping Styles and Posttraumatic Growth

Research indicates a substantial link between emotion-focused coping and the development of psychopathology and maladaptive adjustment. According to Humphreys et al. (2020), maladaptive emotion-focused coping may act as a moderator in the link between emotional and behavioral issues and childhood trauma. Solberg et al. (2023) discovered that childhood traumas are associated with disengaged coping, which leads to poorer health outcomes and impacts the association between ACEs and drug use, smoking, and mental health. However, studies show that avoidant coping mechanisms can protect people with exceptionally traumatic or severe histories, such as those who have suffered severe neglect, sexual abuse, or chronic maltreatment (Huffhines et al., 2020). Pang and Thomas (2020) identified avoidance-focused coping as a potential mitigating factor that might alleviate psychological distress in adulthood.

Adverse childhood experiences (ACEs) are associated with a wide range of negative mental and physical health outcomes. However, recent research suggests a paradoxical association with posttraumatic growth (PTG), suggesting that even negative events can promote psychological development.

While some studies revealed a positive association between ACEs and PTG, meaning that persons who experience adversity are more likely to report personal growth outcomes, others found no significant correlation, emphasizing the relationship's complexities. Laceulle et al. (2015) explored how children deal with posttraumatic development. Stress responses were found to be favourably related to overall posttraumatic growth. Girls reported more posttraumatic growth than boys. Older children reported less growth after the stressful experience than younger youngsters. Higher levels of peer support were connected with greater posttraumatic growth. Quan et al. (2022) investigated the relationships between acceptance,

positive reappraisal, childhood trauma, and posttraumatic growth. More severe childhood trauma was shown to result in less personal growth, and the study concluded that childhood trauma had a strong negative predictive impact on posttraumatic growth.

Certain coping skills have been proven in studies to aid with PTG, but others might inhibit progress. Schmidt et al. (2012) discovered that religion, positive reframing, and active coping are associated to post-traumatic growth (PTG) and secure attachment. They discovered that effective coping practices can improve PTG and secure attachment functions as a predictor of PTG. Arikan and Karanci (2012) discovered that problem-focused coping, incident acceptance, positive reinterpretation, and positive religious coping all promoted growth. The researchers also discovered that fatalistic coping methods and good social support were important predictors of posttraumatic growth.

Rationale of the Study

Adverse childhood experiences presents a serious public health risk, harming people's physical, psychological, and social well-being. Despite significant research on the negative impacts of ACEs on mental and physical health outcomes, there is insufficient information regarding the beneficial psychological processes that may emerge in response to childhood trauma. There is limited research on the association between ACEs, coping methods, and posttraumatic development (PTG), with most studies focused on psychopathology and negative consequences. This study tries to close this gap by looking into the relationship between adverse childhood events, coping strategies, and posttraumatic growth, moving the emphasis from pathology to resilience.

METHODOLOGY

Purpose

The purpose of the study is to understand the relationship between adverse childhood experiences, coping styles, and posttraumatic growth.

Hypothesis

- H1: Individuals who have experienced ACEs are more likely to exhibit maladaptive coping styles, such as emotion focused coping and avoidance coping as compared to those with lower ACE exposure.
- H2: Exposure to ACEs will be inversely related to posttraumatic growth in individuals.
- H3: Individuals using problem focused coping styles show higher levels of posttraumatic growth.
- H4: Individuals using emotion focused coping styles show higher levels of posttraumatic growth.

Sample

The present study included young individuals between the ages of 18 and 25. A total of 201 participants completed the survey form, which included three surveys, both online using Google Forms and in person using a paper version. The sample included 120 female and 81 male individuals. Participants were chosen via convenience sampling.

Measures

- ***Childhood Trauma Questionnaire-Short Form:*** The frequency and severity of ACEs were evaluated using the Childhood Trauma Questionnaire-Short Form (CTQ-SF) developed by Bernstein et al. (2003). The CTQ-SF has 28 items and is organized into five subscales based on the forms of childhood trauma experienced: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. The participants rate each item on a 5-point Likert scale. Cronbach's alpha values have been observed to range from 0.66 to 0.92 across several subscales, suggesting good to exceptional internal consistency.
- ***Brief COPE:*** Coping strategies were evaluated using the Brief COPE Scale (Carver, 1997). It comprises 28 items and is separated into three subscales (Problem Focused Coping, Avoidant Coping, and Emotion Focused Coping) according to Dias et al's (2012) classification. All responses are evaluated using a four-point Likert scale. Carver (1997) found Cronbach's alpha values ranging from 0.50 to 0.90 for several subscales of the Brief COPE scale, showing good to outstanding internal consistency.
- ***Posttraumatic Growth Inventory:*** The Posttraumatic Growth Inventory (PTGI), created by Tedeschi and Calhoun (1996), was used to measure posttraumatic growth. It divides posttraumatic growth into five categories: relationships with others, new possibilities, personal strength, spiritual change, and appreciation for life (Taku et al, 2008). It has 21 items that are rated on a 6-point Likert scale. Tedeschi and Calhoun (1996) found that the questionnaire had an overall alpha coefficient of 0.90. The Cronbach's alpha range for each subscale was 0.67 to 0.85.

Procedure

The study sought to look at the links between coping mechanisms, posttraumatic growth, and adverse childhood experiences (ACEs), as well as whether coping methods mediated the link between childhood traumas and posttraumatic growth. Participants were chosen via convenience sampling. A variety of trustworthy and valid questionnaires with Likert scales were utilized to measure ACEs, coping methods, and post-traumatic development. Data were gathered via online questionnaires (Google Forms) and in-person administration. All participants provided informed consent after receiving details on the study's goal, potential risks/benefits, and ensured of their privacy and voluntary participation. Clear instructions were given throughout the survey administration to guarantee correct responses. The data was scored in Microsoft Excel and analysed with SPSS and Jamovi software, which included mediational and correlational analysis.

Results

Table 1

Descriptive Analysis Showing Mean, Median and Standard Deviation Values for All Variables

	N	Mean	Median	SD
Emotional Abuse	201	10.52	10.00	4.29
Physical Abuse	201	8.12	6.00	4.24
Sexual Abuse	201	7.42	5.00	4.75
Emotional Neglect	201	11.22	10.00	4.90
Physical Neglect	201	8.10	7.00	3.34
Total Childhood Trauma	201	45.40	41.00	16.70
Problem Focused	201	20.60	21.00	5.49

Emotion Focused	201	29.02	29.00	6.93
Avoidant Focused	201	15.38	15.00	4.37
Posttraumatic Growth	201	56.92	60.00	25.15

The table above displayed the total number of participants (201), as well as the mean scores on each scale. The mean scores for emotional abuse (M=10.52), emotional neglect (M=11.22), and post-traumatic growth (M=56.92) are greater than the other factors, indicating that these events are more common in the sample. Physical abuse (M=8.12) and sexual abuse (M=7.42) had lower mean scores than emotional abuse and neglect, but they nonetheless represent substantial experiences in this group.

According to the Brief COPE scale, individuals utilized more emotional coping techniques than issue or avoidant coping, with mean scores of 29.02 for emotional coping and 20.60 for problem-focused coping. Avoidant coping had the lowest mean score, 15.38.

Table2

Correlational Analyses Assessing the Relationships Between All Variables

	Childhood Trauma	Problem Focused	Emotion Focused	Avoidant Focused	Posttraumatic Growth
Childhood Trauma	—				
Problem Focused	-0.058	—			

Emotion Focused	0.247**	0.651**	—		
Avoidant Focused	0.332**	0.194**	0.474**	—	
Posttraumatic Growth	0.004	0.592**	0.468**	0.099	—
Note. * $p < .05$, ** $p < .01$					

Correlational analysis was used to assess the relationships between the variables. People who faced childhood adversity reported more avoidant and emotion-focused coping. Surprisingly, adverse childhood events have minimal impact on posttraumatic growth. Furthermore, a positive correlation was discovered between higher levels of problem-focused and emotion-focused coping and posttraumatic growth.

Jamovi (2.38) was used to conduct a mediation analysis to investigate the impact of the strategies for coping on the link between adverse childhood events and posttraumatic development. Bootstrapping was performed using 1,000 samples to determine the statistical significance of the models.

Table3

Path Estimates Between Adverse Childhood Experiences, Problem Focused Coping and Posttraumatic Growth

						95% Confidence Interval			
			Label	Estimate	SE	Lower	Upper	Z	p
Total Childhood Trauma	→	Problem Focused	a	-0.019	0.021	-0.065	0.022	-0.898	0.369
Problem Focused	→	Posttraumatic Growth	b	2.725	0.248	2.221	3.175	10.958	<.001
Total Childhood Trauma	→	Posttraumatic Growth	c	0.059	0.075	-0.069	0.221	0.785	0.432

The results show that the path from adverse childhood experiences to problem focused coping was not significant ($\beta = -0.01$, $SE = .02$, $p = 0.3$). The direct path from adverse childhood experiences to post-traumatic was non-significant ($\beta = .05$, $SE = .107$, $p = .432$). The path from problem focused coping to posttraumatic growth was significant ($\beta = 2.72$, $SE = .24$, $p = <.001$)

Table 4

Direct, Indirect, and Total Effects of Adverse Childhood Experiences, Problem Focused Coping, and Posttraumatic Growth

Effect	Label	Estimate	SE	95% Confidence Interval		Z	p	% Mediation
				Lower	Upper			
Indirect	a x b	-0.052	0.058	-0.175	0.061	-0.894	0.371	47.0
Direct	c	0.059	0.075	-0.069	0.221	0.785	0.432	53.0
Total	c + a x b	0.006	0.089	-0.175	0.197	0.074	0.941	100.0

Bootstrapping for significance testing revealed that the mediation was not significant, ($\beta = -0.052$, $SE = .058$) with a 95% confidence interval (CI) not excluding zero $[-0.175, 0.061]$. This meant that individuals using problem focused coping did not experience greater posttraumatic growth as a result of their childhood experiences.

Table5

Path Estimates Between Adverse Childhood Experiences, Emotion Focused Coping and Posttraumatic Growth

						95% Confidence Interval			
			Label	Estimate	SE	Lower	Upper	Z	p
Total Childhood Trauma	→	Emotion Focused	a	0.103	0.025	0.046	0.147	4.05	< .001
Emotion Focused	→	Posttraumatic Growth	b	1.806	0.207	1.379	2.209	8.71	< .001
Total Childhood Trauma	→	Posttraumatic Growth	c	-0.178	0.088	-0.335	0.007	- 2.02	0.044

The results show that the path from adverse childhood experiences to emotion-focused coping was significant ($\beta = 0.103$, $SE = 0.025$, $p = <0.01$). The direct path from adverse childhood experiences to post-traumatic was non-significant ($\beta = -0.178$, $SE = 0.088$, $p = 0.0044$). The path from emotion focused coping to posttraumatic growth was also significant ($\beta = 1.806$, $SE = 0.207$, $p = <.001$)

Table 6

Direct, Indirect, and Total Effects of Adverse Childhood Experiences, Emotion Focused Coping, and Posttraumatic Growth

				95% Confidence Interval				
Effect	Label	Estimate	SE	Lower	Upper	Z	p	% Mediation
Indirect	a x b	0.185	0.052	0.086	0.291	3.520	< .001	50.9
Direct	c	-0.178	0.088	-0.335	0.007	-2.017	0.044	49.1
Total	c + a x b	0.006	0.092	-0.178	0.199	0.072	0.943	100.0

Bootstrapping for significance testing revealed that the mediation was significant, with the indirect effect being ($\beta = 0.185$, $SE = 0.052$) with a 95% confidence interval (CI) not excluding zero [0.086, 0.291]. As stated by the hypothesis, individuals who experienced greater number of adversities in their childhood used more emotion focused coping which led to greater post-traumatic growth.

Discussion

The purpose of the study was to investigate the association between adverse childhood events, coping strategies, and posttraumatic growth. Our initial hypothesis was that people who have experienced ACEs in the past are more prone to utilize maladaptive coping strategies including emotion-focused coping and avoidance coping. Analysis of correlation revealed that

ACEs were positively associated with emotion-focused and avoidance coping. This shows that persons who experienced more traumas were more likely to use these coping strategies. This is consistent with previous research; McElroy and Hevey (2014) found that higher ACEs were related with higher neuroticism and emotion-focused coping, as well as poorer scores for conscientiousness, agreeableness, trait emotional intelligence, and task coping.

One possible explanation for this finding is that those who endured ACEs learned these coping strategies as a means of survival or self-protection amid their bad experiences (Fergus & Zimmerman, 2005). Adverse childhood experiences can have a psychological and emotional impact, making it harder for individuals to address and cope with challenges. People may engage in avoidant activities as a temporary solution to emotional control and protection (Linley & Joseph, 2004; Davis et al., 1998). Emotion-focused coping, such as venting or seeking emotional support, may have offered temporary relief from ACE-induced pain (De Venter et al. 2019).

Our second hypothesis was that exposure to ACEs would be inversely associated to posttraumatic growth in people. Our study found no significant link between Adverse Childhood Experiences (ACEs) and Posttraumatic Growth (PTG), allowing for a deeper examination of the relationship's intricacies.

To begin, studies have repeatedly demonstrated that childhood trauma and posttraumatic growth interact in intricate ways. While various studies, like those by Vloet et al. (2017) and Levine et al. (2009), have revealed a link between trauma exposure and developmental outcomes, the relationship remains unclear. Schott (2016) and Mohr and Rosén (2017) addressed the complexities involved, revealing that trauma exposure might lead to impaired posttraumatic growth in some contexts, while protective variables such as social support can

mitigate the impact. Thus, while our study demonstrated no significant link between ACEs and PTG, the intricacies of this relationship indicate the need for more investigation.

The third hypothesis proposed that those who adopt problem-focused coping methods experience more posttraumatic growth. The findings somewhat support this notion. While the mediation study found no significant indirect influence of problem-focused coping on the link between ACEs and PTG, the correlational analyses revealed a favourable association between the two. However, the lack of a substantial mediation effect suggests that the relationship between ACEs, problem-focused coping, and PTG is more complicated or influenced by factors not addressed in the study.

The fourth hypothesis proposed that people who adopt emotion-focused methods experience more posttraumatic growth. The findings somewhat support this notion. This study's findings are consistent with previous research, which shows that emotion-focused coping, such as emotional resilience, event centrality, and emotion regulation, plays an important role in mediating the relationship between ACEs and posttraumatic growth (Tranter et al., 2020; Sheffler et al., 2019; Cloitre et al., 2019; Espeleta et al., 2018).

Finally, this study has important consequences and adds new perspectives to the current literature on adverse childhood experiences, coping techniques, and posttraumatic growth. The study contributes to our understanding of coping mechanisms that promote resilience and personal growth in the aftermath of adversity by examining coping methods considering negative childhood experiences and posttraumatic growth.

The study's main strength is that it includes posttraumatic growth as a variable, introducing a strength-based approach. While unfavorable childhood experiences can have serious implications, the notion of posttraumatic growth acknowledges the possibility of constructive psychological growth and personal transformation following trauma.

Future research should look at additional impacting factors such as socioeconomic status, family dynamics, cultural beliefs, and the effects of various forms of childhood trauma on posttraumatic growth domains. Longitudinal studies might follow the trajectories of these variables from childhood through adulthood, looking for changes in coping and growth throughout developmental stages. Cross-cultural and transcultural research might look into how acculturation, values, and beliefs impact posttraumatic growth perception and expression, as well as the applicability of theoretical models across different contexts.

Conclusion

The study investigated the link between adverse childhood experiences (ACEs), problem, emotion, avoidant coping strategies, and post-traumatic growth. It discovered that those who have faced early adversity are more likely to utilize avoidance and emotion-focused coping strategies. Post-traumatic growth was associated with both problem-focused and emotion-focused coping strategies. Although there was no significant relationship between ACEs and PTG, emotion-focused coping had a significant mediating influence. The research emphasizes resilience and personal growth in the face of childhood adversity.

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