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The Mediating Role of Self-Esteem in the Relationship Between Adverse Childhood Experiences and Impostor Syndrome Among Adolescents

Herlina, Hasfi Mutiara Insani, dan Ismawati Kosasih
Universitas Pendidikan Indonesia, Bandung, Indonesia
*Correspondence: E-mail: herlinahasan_psi@upi.edu

ABSTRACT

This study examined the mediating role of self-esteem in the relationship between adverse childhood experiences and impostor syndrome among adolescents. Using a quantitative correlational design, data were collected from 384 adolescents aged 12–21 years across various regions in Indonesia through accidental sampling. The instruments included the *Adverse Childhood Experience Questionnaire* (ACEQ; Felitti *et al*., 1998), the *Rosenberg Self-Esteem Scale* (RSES; Rosenberg, 1965), and the *Clance Impostor Phenomenon Scale* (CIPS; Clance, 1985), all of which were adapted into Indonesian. Questionnaires were administered via Google Forms distributed on WhatsApp, Instagram, and Facebook. Data were analyzed using simple linear regression, multiple regression, and Sobel tests with a significance level of α = .05, employing SPSS version 26.

Results indicated that adverse childhood experiences positively predicted impostor syndrome and negatively predicted self-esteem, while self-esteem negatively predicted impostor syndrome. Moreover, self-esteem partially mediated the relationship between adverse childhood experiences and impostor syndrome. These findings underscore the importance of preventing adverse experiences in childhood and fostering healthy self-esteem to support the development of a positive self-concept and reduce the risk of impostor syndrome in adolescence.

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1. INTRODUCTION

A study of high school students in US showed that 80.5% of adolescents experienced at least one adverse childhood experience, and 22.4% experienced more than four (Swedo et al., 2024). Another study of 399 elementary school students in Thailand showed that 48.7% of students experienced at least one adverse experience (Hunworawong et al., 2025).

Adverse childhood experiences (ACEs) are condition of prolonged exposure to potentially traumatic events in childhood that may have immediate or lasting lifelong consequences, including various forms of abuse, neglect, and household dysfunction. ACEs can occur in the form of abuse or violence including physical, emotional, and sexual; neglect or physical or emotional neglect; and household dysfunction such as living with a violent mother, family members who abuse alcohol and certain substances, family members with mental health problems, divorced parents, and living with family members who are incarcerated (Felitti, *et al*., 1998).

These are robust predictors of a wide range of negative mental and physical health outcomes across the life course (Boullier & ous Blair, 2018). Large-scale syntheses indicate a dose–response relationship between ACEs and later psychopathology and multimorbidity, underscoring ACEs as a major public-health determinant. (Ceccarelli, *et al*., 2022; Madigan, *et al*., 2023)

Although much of the ACEs literature has focused on adult outcomes, there is growing and consistent evidence that ACEs are strongly associated with poorer mental-health indicators during adolescence as well (e.g., greater anxiety, depression, self-harm, and substance use) (Craig, *et al*., 2023). Adolescence therefore represents a critical developmental window in which early adversity may shape socioemotional trajectories and increase vulnerability to maladaptive self-beliefs (Meeker, *et al*. 2021).

One maladaptive self-appraisal that has garnered increasing attention is impostor syndrome (also termed the impostor phenomenon): a pattern of persistent self-doubt of intellect, skills, fear of being exposed as a fraud, and discounting of one's achievements despite objective success (Clance, 1985; Huecker, *et al*. 2023). Recent reviews and meta-analytic work report high and variable prevalence estimates of impostor feelings across student and professional populations, and document strong associations between impostor experiences and internalizing symptoms (e.g., anxiety and depression), which together suggest both clinical relevance and the need to clarify upstream risk factors. (Salari, *et al*., 2025). Research conducted by Day and Blackhart (2023) shows that adverse childhood experiences indirectly predict the occurrence of impostor syndrome in a person through emotional dysregulation and attachment anxiety.

Theoretical and empirical work suggests that self-esteem — a global evaluative attitude toward the self (Rosenberg, 1965) — is a key socioemotional asset that may both be diminished by early adversity and protect against maladaptive outcomes. Longitudinal and cross-sectional studies indicate that ACEs are associated with lower self-esteem, while higher self-esteem buffers against future depressive symptoms and other negative outcomes among youth (Day & Blackhart, 2023; Ossai, 2023).

Research on the relationship between self-esteem and impostor syndrome shows that the lower a person's self-esteem, the more likely they are to experience impostor syndrome. Conversely, the higher their self-esteem, the lower the incidence of impostor syndrome (Wulandari & Tjundjing, 2007; Arya & Tetteng, 2023).

Given that impostor feelings centrally involve negative self-evaluation and chronic self-doubt, self-esteem is a plausible mediator linking ACEs to later impostor experiences. (Day & Blackhart, 2023).

Empirically, however, the pathways connecting ACEs, self-esteem, and impostor syndrome remain underexplored. Previous studies have shown that ACEs lead to poor self-concept and mental health, while low self-esteem increases the occurrence of impostor syndrome. However, integrated mediation testing to see whether ACEs has an indirect effect on impostor syndrome through self-esteem in adolescents is still scarce. Clarifying this mechanism is important because mediation implies potential intervention targets (for example, self-esteem enhancement) that could attenuate the downstream impact of early adversity on maladaptive self-perception (Taskiran, *et al*., 2025). Therefore, the present study addresses this gap by examining whether self-esteem mediates the relationship between ACEs and impostor syndrome in a large Indonesian adolescent sample.

Using validated measures adapted for the Indonesian context and regression-based mediation testing (including Sobel testing), we test three hypotheses:

(i) ACEs positively predict impostor syndrome
(ii) ACEs negatively predict self-esteem
(iii) Self-esteem negatively predicts impostor syndrome and mediates the ACEs–impostor relation.

Establishing partial or full mediation would highlight self-esteem as a theoretically and clinically actionable mechanism linking childhood adversity to impostor experiences in adolescence.

2. METHODS

To test the hypotheses of this study, we employed a quantitative correlational design with regression-based mediation testing.

The study sampled 423 adolescents aged 12–21 years from multiple regions in Indonesia using accidental sampling. To participate in this study, respondents first filled out an informed consent form.

Data collection relied on validated instruments adapted into Bahasa Indonesia: the *Adverse Childhood Experience Questionnaire* (ACEQ; Felitti *et al*., 1998), the *Rosenberg Self-Esteem Scale* (RSES; Rosenberg, 1965), and the *Clance Impostor Phenomenon Scale* (CIPS; Clance, 1985). Questionnaires were administered via Google Forms distributed through social media platforms (WhatsApp, Instagram, Facebook).

Data analysis included simple and multiple linear regression models and formal mediation testing (Sobel test), with statistical significance set at $\alpha = .05$ and analyses conducted in SPSS v.26.

3. RESULTS AND DISCUSSION

Results

The study was conducted on 423 adolescents from various regions in Indonesia. **Table 1** shows that more than half of the respondents (56%) were female, while 44% were male.

Table 1. Frequency distribution of respondents by sex

Sex	N	%
Male	187	44%
Female	236	56%
Total	423	100%

In **Table 2**, it can be seen that the 15-17 year age group dominates the number of respondents (37%), followed by the 18-21 year age group (34%), and finally the 12-14 year age group (29%).

Table 2. Frequency distribution of respondents by age

Age	N	%
12 – 14	120	29%
15 – 17	160	37%
18 – 21	143	34%
Total	423	100%

In terms of education level (see **Table 3**), most respondents had a Senior High School education (41%), followed by Junior High School (39%), Bachelor Degree (14%), and Diploma (6%).

Table 3. Frequency distribution of respondents by education

Education	N	%
Junior High School	164	39%
Senior High School	175	41%
Diploma	26	6%
Bachelor degree	58	14%
Total	423	100%

Based on the marital status of parents, **Table 4** shows that 80% of respondents have parents who are married, while the remaining 20% have parents who are divorced.

Table 4. Frequency distribution of respondents by parents' marital status

Parents' Marital Status	N	%
Maried	337	80%
Divorced	86	20%
Total	423	100%

Table 5 shows the respondents' ACEs levels. Forty-eight percent of respondents experienced low levels of ACEs, meaning nearly half of the study sample had experienced only a few adverse childhood experiences. They grew up in emotionally healthy families, with almost no physical or psychological abuse. Twenty-seven percent experienced high levels of ACEs, meaning they experienced numerous adverse childhood experiences, such as physical, sexual, and emotional abuse, and lived in dysfunctional families. Meanwhile, 25 percent of respondents experienced moderate levels of ACEs, meaning they had childhood experiences that were quite risky for their emotional, social, and behavioral development.

Tabel 5. The level of respondents' Adverse Childhood Experiences

ACEs Level	N	%
Low	203	48.0
Moderate	106	25
High	114	27.0

Total	423	100.0

A general overview of self-esteem can be seen in **Table 6**. 68.6% of respondents had moderate levels of self-esteem. This means that most of the sample had sufficient confidence and belief in their abilities, thus feeling they deserved respect. 15.8% of respondents had high self-esteem. They had good confidence in their abilities, perceived themselves positively, valued themselves, were able to express themselves well, and were resilient to pressure and negative judgment from their social environment. This percentage is relatively equivalent to the number of respondents who felt insecure about their abilities, thus lowering their self-esteem.

Tabel 6. The level of respondents' Self-Esteem

Self-esteem Level	N	%
Low	67	15.8
Moderate	290	68.6
High	66	15.5
Total	423	100.0

Table 7 shows that more than half of the sample (53%) experienced a severe level of impostor syndrome, indicating that they experience quite serious symptoms of impostor syndrome, accompanied by anxiety and aversion to praise or achievements. 24.8% of respondents experienced a moderate level, indicating that feelings of impostorism or "cheating" are beginning to interfere, characterized by doubts about personal achievements. 20.3% of respondents experienced a very severe level, meaning that feelings of impostorism or "cheating" have become dominant in their lives, potentially leading to a high risk of psychological disorders. A small proportion of respondents (1.9%) experienced a mild level of impostor syndrome, indicating that the respondents have relatively stable self-confidence and only experience slight feelings of inadequacy.

Tabel 7. The level of respondents' Impostor Syndrome

Impostor Syndrome Level	N	%
Mild	8	1.9
Moderate	105	24.8
Severe	224	53.0
Very Severe	86	20.3
Total	423	100.0

The results of the hypothesis testing on the effect of Adverse Childhood Experiences on Impostor Syndrome are shown in **Table 8**. This study found that ACEs had a significant positive effect on impostor syndrome ($p < 0.05$). This means that the higher the level of adverse childhood experiences a person experienced, the higher their likelihood of developing impostor syndrome.

Table 8. Results of the regression test of the effect of Adverse Childhood Experiences on Impostor Syndrome

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	63.821	0.762		83.791	0.000

X → Y	X	0.692	0.066	0.457	10.539	0.000

Table 9 shows the results of the hypothesis testing regarding the effect of ACEs on self-esteem. This table shows that ACEs have a significant negative effect on self-esteem ($p<0.05$). This means that the higher the level of adverse childhood experiences, the lower the level of self-esteem in adulthood.

Table 9. Results of the regression test of the effect of adverse childhood experiences on self-esteem

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
	(Constant)	27.635	0.287		96.367	0.000
X → Z	X	-0.350	0.025	-0.569	-14.181	0.000

Hypothesis testing of the influence of self-esteem on impostor syndrome (see **Table 10**) shows that self-esteem has a negative effect on impostor syndrome ($p<0.05$). This means that the higher a person's self-esteem, the lower their tendency to experience impostor syndrome. Conversely, the lower their self-esteem, the higher their tendency to experience impostor syndrome.

Tabel 10. Results of the regression test of the effect of Self-esteem on Impostor syndrome

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
	(Constant)	105.611	2.447		43.162	0.000
Z → Y	Z	-1.461	0.096	-0.595	15.182	0.000

The results of the multiple regression test showed that ACEs and self-esteem significantly influenced impostor syndrome ($p<0.05$). Table 11 shows that adverse childhood experiences contribute to an increased likelihood of individuals experiencing impostor syndrome, while high self-esteem acts as a protective factor, reducing the likelihood of someone experiencing impostor syndrome.

Table 11. Results of Multiple Regression Test of Adverse Childhood Experiences (X) and Self-esteem (Z) on Impostor Syndrome (Y)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
	(Constant)	97.428	3.255		29.928	0.000
X & Z → Y	X	0.265	0.071	0.175	3.739	0.000
	Z	-1.216	0.115	-0.495	-10.555	0.000

Table 12 and Figure 1 show the results of the path analysis calculation to see whether self-esteem mediates the effect of ACEs on impostor syndrome. From the calculation, it is known that ACEs (X) have a significant effect on self-esteem (Z) ($\beta = -0.569$, $p < 0.05$), and self-esteem (Z) has a significant effect on impostor syndrome (Y) (β

= -0.459, p < 0.05). The direct effect of ACEs (X) on impostor syndrome (Y) before the mediator is entered is β = 0.457 (p < 0.05), and decreases to β = 0.175 (p < 0.05) after self-esteem (Z) is entered into the model. The decrease in the coefficient value from 0.457 to 0.175 indicates that there is partial mediation, which means the effect of adverse childhood experiences on impostor syndrome can be explained through self-esteem.

Table 12. Path analysis result

Model		Path Coefficient	Sig.	Path description
X → Z		-0.569	0.000	a
X → Y		0.457	0.000	c
X & Z → Y	X → Y	0.175	0.000	c'
	Z → Y	-0.495	0.000	b

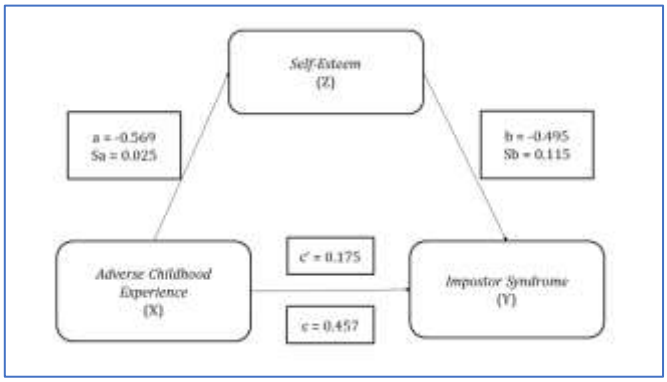

Figure 1. Path analysis chart

The results of the calculation using the Sobel test can be seen in **Figure 2**. Based on the results of the Sobel test calculator calculations that have been calculated on the Free Statistics Calculators website, a very small p-value (p < 0.01) indicates that the Sobel test results are significant, so it can be concluded that self-esteem significantly mediates the influence of adverse childhood experience on impostor syndrome.

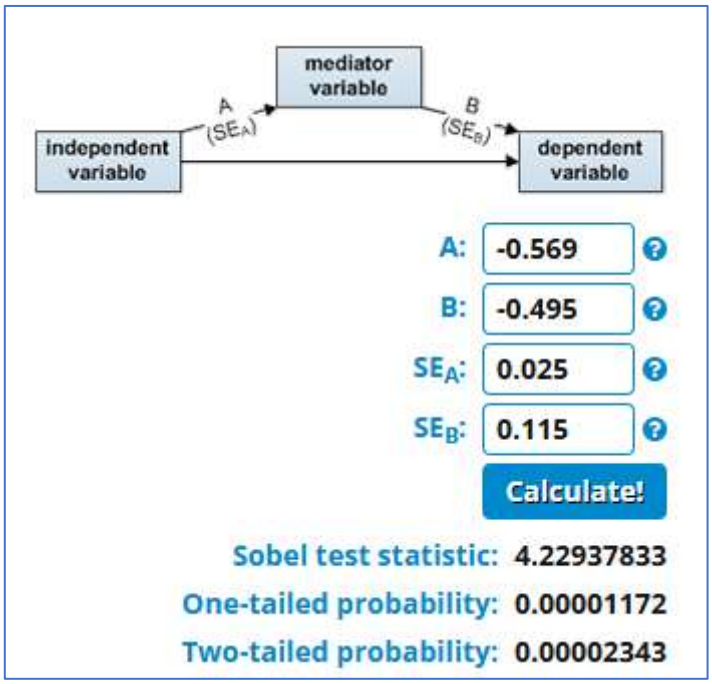

Figure 2. Sobel Test Results from Sobel Test Calculator Calculations

Discussion

This study found that the majority of respondents fell into the low ACEs category, but one-third experienced moderate to high levels of ACEs. This suggests that adverse childhood experiences remain a reality for many adolescents in Indonesia, ranging from violence and neglect to dysfunctional family situations. These findings align with a 2023 survey in the United States, which showed that 76.1% of students experienced one or more ACEs and 18.5% experienced four or more ACEs (Swedo *et al*., 2024). Traumatic childhood experiences are strong predictors of various psychological problems later in life, including affective disorders and self-esteem disorders.

Regarding self-esteem, this study shows that most adolescents have high levels of self-esteem. However, a group of adolescents with low levels of self-esteem was also found. This aligns with Erikson's (1968) theory of psychosocial development, which states that adolescence is a time of identity formation. More mature age and higher education contribute to the development of self-confidence and a more stable self-perception.

The description of impostor syndrome in adolescents indicates that most participants experienced severe levels of impostor syndrome. Participants expressed feelings of undeserving accomplishments or praise, and internalized their achievements as simply the result of luck. This high level of impostor syndrome is consistent with the findings of Clance and Imes (1978), who first proposed that individuals who grow up in environments with high demands and lack of emotional validation are prone to feelings of "cheating" or undeserving of their accomplishments. This finding is also supported by research by Sakulku and Alexander (2011), which states that impostor syndrome can be triggered by the interaction between family experiences and social pressures, including during adolescence.

Consistent with prior studies, exposure to adverse childhood experiences was linked to higher levels of impostor feelings. Adolescents who experienced emotional neglect, inconsistent caregiving, or critical family environments may internalize self-doubt and perfectionistic tendencies, which are central features of the impostor phenomenon (Bravata *et al*., 2020; Vergauwe *et al*., 2015). Early adversity can undermine the development of secure attachment and self-worth, fostering persistent beliefs of inadequacy despite evidence of competence (Clance & Imes, 1978).

The results of this study also strengthen the mediating role of self-esteem in the influence of ACEs on impostor syndrome. It was found that ACEs negatively impact self-esteem, and low self-esteem is positively correlated with impostor syndrome. When self-esteem was included as a mediating variable, the effect of ACEs on impostor syndrome decreased significantly. These results indicate that the influence of adverse childhood experiences on impostor syndrome is largely explained by an individual's level of self-esteem. The Sobel test, which yielded a Z value of 4.233 ($p < 0.01$), confirmed that the mediation of self-esteem was statistically significant. The significant mediating role of self-esteem supports the notion that self-evaluative processes are central to the development of impostor syndrome (Clance & Imes, 1978; Sakulku & Alexander, 2011). Individuals who have experienced adverse environments—such as neglect, emotional abuse, or inconsistent caregiving—often internalize negative self-concepts (Hughes *et al*., 2017). These self-concepts, once crystallized during adolescence, may manifest as chronic insecurity regarding personal competence and value (Orth & Robins, 2022). These findings are consistent with Coopersmith's (1967) theory that self-esteem is an important aspect of psychological resilience. Individuals with high self-esteem tend to be able to view their achievements objectively and internalize success more healthily, thus being more protected from feelings of "cheating." Conversely, individuals with low self-esteem are more likely to doubt their own achievements, especially if they have a history of adverse childhood experiences. In line with attachment and self-concept theories**,** adverse experiences in childhood can disrupt secure attachment patterns and diminish the internalized sense of safety and adequacy (Bowlby, 1988; Mikulincer & Shaver, 2019). Adolescents who lack these internal anchors are more vulnerable to the impostor phenomenon, especially when they enter performance-oriented environments (e.g., academic or competitive settings) that amplify the fear of being exposed as “fraudulent.”

The results also demonstrated that self-esteem partially mediated the relationship between ACE and impostor feelings, suggesting that low self-esteem serves as a psychological bridge linking early adversity and impostor syndrome; while low self-esteem plays a significant role, other psychological mechanisms—such as perfectionism, fear of failure, or maladaptive coping styles—may also transmit the effects of ACEs on impostor feelings (Neureiter & Traut-Mattausch, 2016; Zhang *et al*., 2023). This finding is in line with social–cognitive theory (Bandura, 1986), which posits that early experiences influence internal self-schemas that, in turn, shape perceptions of competence. Adolescents who develop fragile self-esteem as a result of adverse experiences are more prone to interpret success as luck rather than ability (Neureiter & Traut-Mattausch, 2016). In this way, self-esteem functions as a protective or risk factor, depending on its strength and stability. Comparable results have been reported in previous studies showing that individuals with low self-esteem exhibit greater impostor tendencies, lower self-efficacy, and heightened anxiety (Sonnak & Towell, 2001; Whitman & Shanine, 2012). Our findings extend this evidence by empirically demonstrating that self-esteem not only

correlates with impostor feelings but also mediates the pathway between childhood adversity and impostor syndrome among adolescents — a developmental stage where identity and competence beliefs are highly malleable.

4. CONCLUSION

Based on the results of this study, it can be concluded that:

(1) ACEs positively predict impostor syndrome
(2) ACEs negatively predict self-esteem
(3) Self-esteem negatively predicts impostor syndrome and mediates the ACEs–impostor relation.
(4) Self-esteem partially mediated the relationship between ACEs and impostor syndrome.

5. AUTHOS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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