

Adverse Childhood Experiences and Self-Esteem among College Students: A Descriptive Correlational Study

Dr. Jay Errol V. Baral., Divine Grace Batenga., Edrelaine F. Corpuz., Melchor Tolentino

Wesleyan University – Philippines, Cabanatuan City College of Arts and Sciences

DOI: <https://doi.org/10.47772/IJRISS.2026.100800421>

Received: 21 August 2026; Accepted: 26 August 2026; Published: 07 September 2026

ABSTRACT

Adverse childhood experiences (ACEs) include abuse, neglect, and household dysfunction that may extend beyond childhood and remain relevant to psychological functioning during young adulthood. This study examined the prevalence and distribution of ACEs, the levels of self-esteem, and the association between ACE score categories and self-esteem among college students. A cross-sectional, non-experimental design was used with 1,015 college students from the selected university. Data were collected using the Adverse Childhood Experiences (ACE) Questionnaire and the Coopersmith Self-Esteem Inventory–Adult Version (CSEI). Frequencies and percentages were used to describe ACE exposure and self-esteem levels, while the Chi-Square Test of Independence was used to examine their association. Emotional abuse was the most frequently reported ACE (41.1%), followed by physical abuse (27.7%) and emotional neglect (24.9%). Most participants reported three or fewer ACEs (77.2%), while 22.8% reported four or more. In terms of self-esteem, 64.8% of the participants were classified at the medium level, 30.8% at the low level, and 4.3% at the high level. The analysis showed a statistically significant association between ACE score category and self-esteem level, $\chi^2(2, N = 1,015) = 22.501, p < .001$. The finding indicates that self-esteem levels were distributed differently across ACE score categories; however, the observed distribution did not indicate a simple pattern in which greater ACE exposure was associated with lower self-esteem. The findings underscore the relevance of examining childhood adversity alongside self-esteem among college students while recognizing that the cross-sectional design does not permit causal interpretation.

Keywords: Adverse Childhood Experiences; Self-Esteem; College Students; Childhood Adversity; Sociometer Theory

INTRODUCTION

Adverse childhood experiences (ACEs) refer to negative and potentially traumatic events that occur during childhood, including abuse, neglect, and household dysfunction. Research has linked these forms of childhood adversity to difficulties in emotional development and overall well-being (Mwakanyamale et al., 2018). Their effects may also extend into later stages of life, with studies reporting associations between childhood adversity, psychological distress, and psychiatric conditions in adolescence and adulthood (Freire & Ferreira, 2019; Kalemi et al., 2019). Childhood adversity has likewise been associated with changes in emotional regulation and executive functioning (Anda et al., 2010; Flaherty et al., 2013; Shonkoff & Garner, 2012), as well as difficulties in relationships, coping, and feelings of alienation (Peckins et al., 2015; Waehrer et al., 2020). The accumulation of these difficulties may influence not only how individuals respond to their environment but also how they come to view themselves.

Self-esteem is one aspect of psychological functioning that may be affected by these early circumstances. It refers to an individual's evaluation of personal worth and competence (Mruk, 2006; Lubow, 2009). Rosenberg (1965) described self-esteem as a global evaluation of the self, which develops through an individual's experiences and the meanings attached to them. Experiences within the family and other early social environments therefore provide an important context for the development of self-perception. Repeated exposure to rejection, criticism, neglect, or instability may contribute to feelings of inadequacy, particularly when these experiences occur during formative years. Prolonged stress has been associated with emotional dysregulation,

maladaptive coping, and persistent feelings of inadequacy (Del Giudice et al., 2011; Miller et al., 2011; Kassel et al., 2003; Pearlin et al., 1997; Umberson et al., 2014). These patterns provide a basis for considering whether exposure to ACEs is also reflected in students' evaluations of their own worth. At the same time, ACE exposure does not necessarily result in low self-esteem, since later relationships, coping resources, and other protective factors may shape how childhood adversity is carried into adulthood.

The issue is particularly relevant to college students. The college years involve changes in identity, autonomy, relationships, and academic responsibilities, while students are also forming more stable views of themselves and their capabilities. Childhood adversity may remain relevant during this period even when the adverse circumstances themselves are no longer present. Although ACEs have been widely studied in relation to mental health, behavioral problems, and other psychological outcomes, fewer studies have focused specifically on their relationship with self-esteem among college students. This leaves a need to examine whether differences in exposure to childhood adversity are reflected in students' current levels of self-esteem. Understanding this relationship may provide a more specific account of how early adversity relates to psychological functioning during the college years and may offer useful information for institutions that provide counseling and student support services. Therefore, the present study aims to examine the association between adverse childhood experiences and self-esteem among college students, contributing empirical evidence that may inform initiatives aimed at supporting student well-being and strengthening positive self-concept development (In-Albon et al., 2017; Szkody et al., 2020).

LITERATURE REVIEW

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) refer to early-life adversities such as abuse, neglect, and household dysfunction that occur during childhood and may affect psychological functioning beyond this developmental period (Cohen et al., 2006; Lovallo et al., 2000). Previous studies have associated exposure to ACEs with difficulties in stress regulation, emotional instability, and maladaptive coping strategies (Burke et al., 2005; Adinoff et al., 2005). Childhood adversity has also been linked to changes in biological and psychological responses to stress, particularly in the regulation of systems involved in adapting to stressful situations (Cohen et al., 2006; Lovallo et al., 2000). These difficulties may continue as individuals move into later developmental periods, particularly as they encounter increasing demands and responsibilities. College students face academic pressures, changing interpersonal relationships, and greater independence, which may place additional demands on their ability to manage stress and adjust to new circumstances. At the same time, exposure to ACEs does not result in the same outcomes for all individuals, as some develop adaptive coping strategies and resilience despite adverse circumstances (Ellis et al., 2011; McEwen et al., 2012). Thus, although ACEs occur during childhood, their psychological implications may not be confined to childhood and may remain relevant to students' functioning during the college years.

Self Esteem

As previously mentioned, the effects of early developmental circumstances may extend into young adulthood, including the college years. **Self-esteem is one aspect of psychological functioning that becomes relevant during this period.** It refers to how individuals evaluate their own worth and capabilities (Mruk, 2006). Rosenberg (1965) described self-esteem as a global evaluation of the self that develops through life experiences and continues to change across the lifespan (Lubow, 2009). Experiences of success, failure, acceptance, and rejection may influence these evaluations and shape how individuals view their competence and worth (Mruk, 2006). Among college students, lower self-esteem has been associated with greater academic anxiety and difficulties in adjustment (Croyle et al., 2012; Dan et al., 2014; Peleg, 2009). Higher self-esteem, on the other hand, has been associated with greater motivation, adaptability, confidence, and healthier interpersonal relationships (Moore & Shell, 2017; Korhonen et al., 2018; Fingerman et al., 2016). Students with lower self-esteem may also experience self-doubt, anxiety, reduced participation, and difficulties in forming supportive relationships (Bettis et al., 2017; Moore & Shell, 2017).

The development of self-esteem begins before college and is influenced by early social and developmental circumstances. Experiences of rejection, criticism, limited support, or negative reinforcement may contribute to negative self-perceptions and beliefs about one's competence (Hart et al., 2003; Shek & Leung, 2017; Over & Uskul, 2016). Consistent support and positive reinforcement, in contrast, may contribute to a more positive self-concept (Rosenberg, 1965; Fairlamb & Juhl, 2020). Self-esteem may be viewed as a global evaluation of the self, although perceptions of the self can also develop across academic, social, emotional, and physical domains (Shavelson et al., 1976; Barbot, 2019). For college students, these evaluations are formed within a period marked by academic demands, changing relationships, and increasing independence. Understanding self-esteem within this period is therefore relevant to examining students' psychological functioning and adjustment.

Adverse Childhood Experiences and Self-Esteem Among College Students

Research has demonstrated an association between adverse childhood experiences (ACEs) and self-esteem among young adults and college students. In a national probability sample of 1,924 college students in Taiwan, Shen (2009) found that participants who experienced both interparental violence and child physical maltreatment during childhood reported lower adult self-esteem than those who experienced one or neither form of family violence. More recently, Yun et al. (2025) found a significant negative correlation between ACEs and self-esteem among 451 Chinese vocational college students ($r = -.54, p < .01$), with greater ACE exposure associated with lower self-esteem. These findings provide empirical support for examining the association between childhood adversity and self-esteem among college students. Given the developmental importance of self-evaluation during the college years, the present study examines adverse childhood experiences and self-esteem among college students.

Research Questions

1. What is the demographic profile of the college students participating in the study?
2. What is the prevalence and distribution of adverse childhood experiences (ACEs) among the participants?
3. What are the levels of self-esteem among the participants?
4. Is there a significant association between ACE score categories and self-esteem levels among the participants?

Theoretical Framework

The present study is anchored on Sociometer Theory, developed by Leary and colleagues, which conceptualizes self-esteem as an internal monitoring system that tracks an individual's perceived social acceptance and relational value. The theory proposes that experiences signaling acceptance, rejection, approval, or devaluation are reflected in changes in self-esteem (Leary, 2005). Empirical research has continued to support the relevance of interpersonal relationships to self-esteem, including evidence that perceptions of relationship quality are associated with self-worth (Perinelli et al., 2021). Sociometer Theory provides a relevant framework for examining the association between adverse childhood experiences and self-esteem among college students because many ACEs involve disruptions in early interpersonal and family relationships. Experiences such as abuse, neglect, household dysfunction, rejection, and inadequate support can constitute social experiences through which individuals receive cues about their relational value and acceptance. From a sociometer perspective, repeated experiences of devaluation or disrupted social acceptance are relevant to the development and maintenance of self-esteem. Thus, the theory provides a theoretical basis for examining whether differences in ACE exposure are associated with differences in self-esteem among college students, without assuming that ACEs causally determine self-esteem.

Conceptual Framework

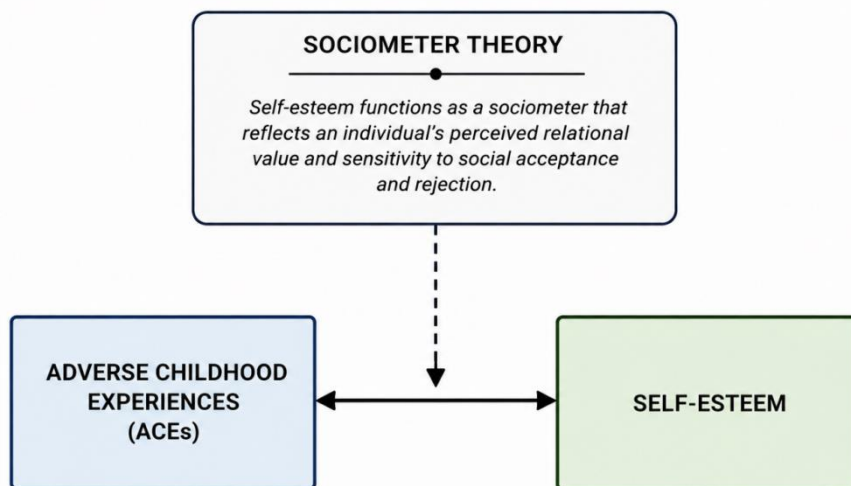


Figure 1. Conceptual framework on relationship between adverse childhood experiences and self-esteem among college students

The study is anchored on Sociometer Theory proposed by Leary et al. (1995). The theory views self-esteem in relation to how individuals perceive their acceptance and value in their relationships with others. Leary et al. (1995) proposed that self-esteem serves as an interpersonal monitor, reflecting changes in perceived social acceptance or rejection. Experiences that communicate acceptance and value may therefore support positive self-evaluation, whereas experiences of rejection or diminished relational value may be associated with lower self-esteem.

This view is relevant when considering adverse experiences during childhood, particularly those that occur within the family and household. Abuse, neglect, and family dysfunction may affect early interpersonal relationships and the way individuals come to view themselves. Zilioli et al. (2016) examined childhood adversity and self-esteem across the life span and found that greater childhood adversity was associated with lower self-esteem. The authors also considered the sociometer hypothesis in explaining this association. Magro et al. (2019) likewise found support for the role of interpersonal experiences in self-esteem development among children. These findings are consistent with the view that experiences within important social relationships may be reflected in later self-evaluation.

In this study, the theory is used to examine whether the adverse childhood experiences reported by college students are associated with their current self-esteem. The focus on college students is relevant because experiences that occurred earlier in development may continue to be reflected in how individuals evaluate themselves during young adulthood. The theory thus provides the basis for examining the association between the two variables, while the cross-sectional design of the study limits the interpretation to association rather than causation.

Hypothesis

Null Hypothesis (H_0): There is no significant association between adverse childhood experiences (ACEs) and self-esteem levels among college students.

Alternative Hypothesis (H_1): There is a significant association between adverse childhood experiences (ACEs) and self-esteem levels among college students.

Significance of the Study

The study's exploration of the relationship between adverse childhood experiences (ACEs) and self-esteem among college students holds significant implications for the educational sector. Understanding this relationship is crucial for several reasons:

- 1. Enhanced Support Services:** By identifying how ACEs impact self-esteem, educational institutions can better tailor their support services to address the unique needs of students affected by early adversities. This insight can lead to the development of targeted counseling and mental health programs that help improve self-esteem and overall well-being among students.
- 2. Early Intervention Strategies:** The findings can inform the creation of early intervention strategies within universities. Recognizing the signs of low self-esteem linked to ACEs allows for proactive measures, such as workshops or support groups, that can mitigate the negative effects of past adversities on current academic and personal functioning.
- 3. Improved Academic Outcomes:** Students with higher self-esteem are often better equipped to handle academic challenges and engage more fully in their educational experience. By addressing the impact of ACEs on self-esteem, institutions can foster an environment that promotes academic success and personal growth.
- 4. Policy Development:** The study's results can contribute to the development of institutional policies aimed at creating a more inclusive and supportive educational environment. Understanding the role of ACEs in affecting students' self-esteem can lead to policies that better accommodate and support students who face these challenges.
- 5. Informed Faculty Training:** Insights from the study can be used to train faculty and staff to recognize and address the effects of ACEs on students. Educators who are aware of the impact of early adversities on self-esteem can be more empathetic and supportive, enhancing the overall educational experience for affected students.

Scope And Delimitations

Scope: The present study examined the association between Adverse Childhood Experiences (ACEs) and self-esteem among college students enrolled at a single university. It described the participants' exposure to ACEs based on the types and number of adverse experiences reported and assessed their self-esteem using the Adverse Childhood Experiences (ACE) Questionnaire and the Coopersmith Self-Esteem Inventory (CSEI) – Adult Version. The study also collected information on age, gender, and academic year. The analysis focused on whether ACE score categories were associated with self-esteem levels among the participants. A total of 2,000 students were targeted for participation, with the final sample based on the responses obtained during data collection.

Delimitations

- 1. Single-University Setting.** The study included only college students from one university. A single institutional setting was chosen to provide a defined student population and a common educational context for examining ACEs and self-esteem.
- 2. Focus on ACEs and Self-Esteem.** The study focused on two primary variables: adverse childhood experiences and self-esteem. Other psychological, social, academic, and environmental factors were not included as primary variables so that the investigation remained focused on the association between ACEs and self-esteem.
- 3. Standardized Instruments.** The ACE Questionnaire was used to assess childhood adversity, while the CSEI–Adult Version was used to assess self-esteem. Using the same instruments across participants provided a consistent basis for scoring and comparing the two variables.

4. ACE Score as the Measure of Exposure. ACE exposure was represented by the number of adverse experiences reported through the ACE Questionnaire. Participants were grouped according to their ACE score categories for the analysis. The study therefore focused on the number of ACE categories reported rather than examining the severity or clinical impact of each individual adverse experience.

5. Cross-Sectional Design. Data were collected at a single point in time from college students. The design allowed the study to examine the association between participants' reported exposure to adverse childhood experiences and their current level of self-esteem. It did not involve follow-up assessment or examination of changes in self-esteem over time.

6. Selected Demographic Characteristics. The study included age, gender, and academic year as demographic characteristics. These variables were collected to describe the participants and provide context for the study population. Other demographic and background characteristics were not included in the analysis.

Definition Of Key Terms

1. Adverse Childhood Experiences (ACEs): In this study, Adverse Childhood Experiences (ACEs) are operationalized as the presence or absence of specific traumatic events experienced during childhood, as measured by the Adverse Childhood Experiences (ACE) Questionnaire. The questionnaire includes binary questions (e.g., "Yes" or "No") regarding experiences such as emotional abuse, physical neglect, sexual abuse, domestic violence, and parental substance abuse. Each affirmative response to a question about a particular type of adversity is recorded to determine the overall ACE score for each participant.

2. Self-Esteem: Self-esteem in this study is operationalized using the Coopersmith Self-Esteem Inventory (CSEI) – Adult Version, which assesses self-esteem through a series of binary responses ("Like me" or "Unlike me"). The CSEI evaluates self-esteem across different domains, such as academic, social, and personal aspects. The total self-esteem score is derived from the sum of responses, providing a measure of the participant's overall self-esteem level.

3. Demographic Profile: The demographic profile in this study is operationalized as the collection of specific participant characteristics, including age, gender, and academic year. This information is gathered through a demographic questionnaire included in the study's survey. The demographic data help to categorize and analyze how these characteristics may influence the relationship between ACEs and self-esteem.

4. Severity or Number of ACEs: The severity or number of adverse childhood experiences is operationalized by counting the total number of affirmative responses on the ACE Questionnaire. Each type of adversity is scored individually, and the total number of ACEs is summed to reflect the cumulative severity. This total is used to assess the relationship between the extent of adversity and self-esteem levels.

5. Cross-Sectional Design: The cross-sectional design in this study refers to the research method where data on ACEs, self-esteem, and demographic factors are collected from participants at a single point in time. This design allows for an analysis of the relationships between ACEs and self-esteem within the studied population but does not account for changes over time or establish causality.

METHOD

Research Design

The study employed a cross-sectional, non-experimental research design to examine the association between adverse childhood experiences (ACEs) and self-esteem among college students. Data were collected at a single point in time, and the variables were examined as they occurred naturally without intervention or manipulation by the researchers. This design was appropriate for the study because it allowed the researchers to examine the two variables within the participants' existing circumstances and determine whether an association existed between reported ACE exposure and current self-esteem. A similar design was used by Ansar et al. (2023) in examining adverse childhood experiences and self-esteem among undergraduate students. Their study also

examined these variables within a naturally occurring setting and collected data at one point in time. Consistent with this approach, the present study used a cross-sectional design to examine the association between ACEs and self-esteem among college students without making a causal claim.

Research Participants

The selected university had an estimated population of approximately 8,000 college students during the period of the study. Based on the sample size table of Krejcie and Morgan (1970), a population of this size corresponds to a recommended minimum sample of 367 participants at a 95% confidence level and a 5% margin of error. The study obtained responses from 1,015 college students, exceeding the recommended minimum. The participants came from different age groups, genders, and academic years within the selected university. Stratified random sampling was used to select participants from the identified groups within the student population. This approach allowed the different strata of the student population to be represented in the sample (Creswell & Creswell, 2018). The resulting sample provided sufficient observations for examining the association between adverse childhood experiences and self-esteem among college students.

Research Materials / Instruments

The study used two instruments to obtain the data: the Adverse Childhood Experiences (ACE) Questionnaire and the Coopersmith Self-Esteem Inventory (CSEI) – Adult Version. The ACE Questionnaire asked respondents to indicate whether they had experienced specific forms of adversity during childhood, such as emotional abuse and physical neglect, using “Yes” or “No” responses (Felitti et al., 1998). The questionnaire has been widely used in research on childhood adversity, with previous studies reporting evidence of its reliability and validity (Anda et al., 2006).

The Coopersmith Self-Esteem Inventory (CSEI) – Adult Version measured self-esteem through “Like me” or “Unlike me” responses to statements concerning the respondents' perceptions of themselves (Coopersmith, 1981). Previous research has reported evidence supporting the instrument's reliability and construct validity across different populations (Hills et al., 2011). The two instruments were selected because they corresponded directly to the variables examined in the study: ACE exposure and self-esteem.

Data Gathering Procedure

Data collection was conducted from October to November 2024 at a single university. After the classes were selected through the fishbowl random-selection procedure, invitations to participate were distributed through the available class group chats of the selected classes. Students who received the invitation were provided with information regarding the study and were asked to provide informed consent before participation. Participation was voluntary. Participants completed the ACE Questionnaire and the CSEI–Adult Version during the same survey session. The instruments were administered using standardized instructions. Researchers were available to clarify procedural or instructional questions without directing participants' responses.

After data collection, completed responses were compiled and anonymized. ACE responses were scored to obtain cumulative ACE scores, while CSEI responses were scored to determine self-esteem levels. The resulting data were organized according to the categories specified for statistical analysis.

Data Analysis

Descriptive statistics were used to summarize the participants' demographic characteristics, ACE score categories, and self-esteem levels. Frequencies and percentages were used to describe categorical variables, while mean and standard deviation were used to summarize age. A Chi-Square Test of Independence was conducted to determine whether a significant association existed between ACE score categories and self-esteem levels. The test examined whether the distribution of self-esteem levels differed across the ACE score categories. Statistical significance was evaluated at the 0.05 level.

RESULTS

Demographic Profile of the Participants

Table 1. Demographic Profile of the College Students Participating in the Study (N=1,1015)

Characteristic	<i>n</i>	%	<i>M</i>	<i>SD</i>
Age (18-24)	1,015	—	19.02	1.68
Sex				
Female	647	63.7	—	—
Male	368	36.3	—	—
Year Level				
1st year	647	63.7	—	—
2nd year	245	24.1	—	—
3rd year	86	8.5	—	—
4th year	37	3.6	—	—
Number of Siblings				
None	107	10.5	—	—
1–2	554	54.6	—	—
3–4	276	27.2	—	—
5 and above	59	5.8	—	—
Other/unspecified	19	1.9	—	—
Birth Order				
Only child	107	10.5	—	—
First-born	413	40.7	—	—
Middle child	171	16.8	—	—
Youngest	318	31.3	—	—
Other/unspecified	6	0.6	—	—
Monthly Family Income (₱)				
Below 20,000	397	39.1	—	—
20,001–40,000	308	30.3	—	—

40,001–60,000	138	13.6	—	—
60,001–80,000	80	7.9	—	—
80,001–100,000	32	3.2	—	—
100,000 and above	60	5.9	—	—

A total of **1,015 college students (table 1)** participated in the study. Participants' ages ranged from 18 to 31 years ($Md = 18$; $M = 19.02$, $SD = 1.68$). Females comprised the majority of the sample (63.7%), while males accounted for 36.3%. Most respondents were first-year students (63.7%), followed by second-year (24.1%), third-year (8.5%), and fourth-year students (3.6%). In terms of family structure, 54.6% reported having one to two siblings, 27.2% had three to four siblings, and 10.5% reported having none. Birth order distribution showed that first-born participants represented 40.7%, youngest children 31.3%, middle children 16.8%, and only children 10.5%. Monthly family income was largely concentrated below ₱40,000, with 39.1% reporting below ₱20,000 and 30.3% reporting ₱20,001–₱40,000. The sample was predominantly composed of younger college students, females, and first-year enrollees. Frequency distributions also indicate that most participants came from families with at least one sibling and from lower to lower-middle income brackets. These distributions indicate that the dataset reflects a relatively homogeneous early-college population, which provides the demographic context in which adverse childhood experiences and self-esteem were examined. The demographic profile serves as a descriptive baseline for understanding the participants included in the analysis of the relationship between adverse childhood experiences and self-esteem among college students.

Prevalence and Distribution of Adverse Childhood Experiences

Table 2. Prevalence of Specific Adverse Childhood Experiences

Adverse Childhood Experience	<i>n</i>	%
Emotional abuse	417	41.1
Physical abuse	281	27.7
Emotional neglect	253	24.9
Parental separation	220	21.7
Domestic violence	205	20.2
Mental illness in household	174	17.1
Substance abuse in household	152	15.0
Sexual abuse	83	8.2
Incarceration of household member	37	3.6

Emotional abuse was the most frequently reported adverse childhood experience, reported by 417 participants (41.1%). This was followed by physical abuse (27.7%, $n = 281$) and emotional neglect (24.9%, $n = 253$). Parental separation and domestic violence were reported by 21.7% ($n = 220$) and 20.2% ($n = 205$) of the participants, respectively. Mental illness in the household (17.1%, $n = 174$) and substance abuse in the household (15.0%, $n = 152$) were reported less frequently. Sexual abuse was reported by 8.2% ($n = 83$), while incarceration of a household member had the lowest reported prevalence at 3.6% ($n = 37$). Overall, emotional abuse was the most commonly reported ACE in the sample, while incarceration of a household member was the least reported.

Table 3. Distribution of ACE Scores

ACE Score Category	<i>n</i>	%
3 and below	784	77.2
4 and above	231	22.8
Total	1,015	100.0

Most participants reported **three or fewer ACEs (77.2%, $n = 784$)**, while **22.8% ($n = 231$)** reported four or more ACEs (see Table 3). The larger proportion reporting three or fewer ACEs reflects the variation in ACE exposure described in the literature, as responses to childhood adversity are not uniform across individuals (Ellis et al., 2011; Danese & McEwen, 201). At the same time, the 22.8% who reported four or more ACEs indicates that multiple adverse experiences were present among a substantial portion of the sample, consistent with the characterization of ACEs as involving multiple forms of abuse, neglect, and household dysfunction (Cohen et al., 2006; Burke et al., 2005). The distribution also falls within the broader variation reported among university students, where ACE prevalence differs across populations and study characteristics (Majid et al., 2023; Hamilton et al., 2024). However, the finding that 77.2% of participants reported three or fewer ACEs should not be interpreted as an absence or minimal presence of childhood adversity. A lower ACE score indicates fewer categories of adverse experiences were reported, but it does not establish that the experiences were inconsequential or that participants were unaffected by them. ACEs encompass different forms of abuse, neglect, and household dysfunction, and exposure to adversity can vary considerably across individuals (Cohen et al., 2006; Burke et al., 2005; Ellis et al., 2011; Danese & McEwen, 201). Thus, the 77.2% with scores of three and below should be understood as a distribution of reported ACE exposure rather than an indicator of the absence of childhood adversity.

Levels of Self-Esteem among the Participants

Table 4. Levels of Self-Esteem Among the Participants

Self-Esteem Level	<i>n</i>	%
Low	313	30.8
Medium	658	64.8
High	44	4.3
Total	1,015	100.0

It can be seen from **table 4** that most participants were classified as having medium self-esteem (64.8%, $n = 658$), followed by low self-esteem (30.8%, $n = 313$) and high self-esteem (4.3%, $n = 44$). The predominance of medium self-esteem is relevant to the developmental context of college students, for whom self-esteem is associated with identity formation, increasing autonomy, and adjustment to academic and social demands (Mruk, 2006; Rosenberg, 1965). The proportion of participants with low self-esteem is also consistent with the literature linking lower self-esteem among college students with self-doubt, anxiety, reduced participation, and difficulties in forming supportive relationships (Croyle et al., 2012; Dan et al., 2014; Bettis et al., 2017; Moore & Shell, 2017). These findings can also be considered in relation to participants' reported childhood experiences, as previous research indicates that abuse, neglect, rejection, criticism, and inadequate support can contribute to negative beliefs about competence and self-worth that persist into later developmental periods (Hart et al., 2003; Nida & Saylor, 2017; Fairlamb & Juhl, 2020). This provides the basis for examining whether ACE exposure is associated with self-esteem levels in the succeeding analysis.

Association Between ACE Score Categories and Self-Esteem Levels

Table 5. Association Between ACE Score Categories and Self-Esteem Levels Among Participants

ACE Score Category	Low	Medium	High	Total
3 and below	268 (34.2)	478 (60.9)	38 (4.8)	784
4 and above	45 (19.5)	180 (77.9)	6 (2.6)	231
Total	313 (30.8)	658 (64.8)	44 (4.3)	1,015

It can be seen from Table 5 that among participants with three or fewer ACEs, 34.2% had low self-esteem, 60.9% had medium self-esteem, and 4.8% had high self-esteem. Among those with four or more ACEs, 19.5% had low self-esteem, 77.9% had medium self-esteem, and 2.6% had high self-esteem. The Pearson Chi-Square Test of Independence showed a significant association between ACE score categories and self-esteem levels, $\chi^2(2, N = 1,015) = 22.501, p < .001$. The predominance of medium self-esteem should not, however, be interpreted as indicating that most participants had an optimal level of self-evaluation. Within the college context, self-esteem is relevant to identity formation, increasing autonomy, and adjustment to academic and social demands (Mruk, 2006; Rosenberg, 1965). The literature further associates higher self-esteem with motivation, adaptability, and confidence, while lower self-esteem has been associated with self-doubt, anxiety, reduced participation, and difficulties in forming supportive relationships (Croyle et al., 2012; Dan et al., 2014; Bettis et al., 2017; Moore & Shell, 2017). Thus, the large proportion of participants classified with medium self-esteem may indicate that many students were functioning within a moderate range of self-evaluation rather than demonstrating particularly strong self-regard. This is relevant when considered alongside their ACE exposure, particularly because experiences of abuse, neglect, rejection, criticism, and inadequate support have been associated with negative beliefs about competence and self-worth (Hart et al., 2003; Nida & Saylor, 2017; Fairlamb & Juhl, 2020). The significant association therefore warrants consideration of how childhood experiences may be related to the level of self-evaluation students bring into the developmental demands of college, rather than interpreting the result simply as a distinction between “low” and “high” self-esteem. The present finding establishes an association between ACE score category and self-esteem level, but does not establish that ACE exposure caused the observed self-esteem levels.

Table 6. Chi-Square Test of Independence Between ACE Score Categories and Self-Esteem Levels

Test	χ^2	<i>df</i>	<i>p</i>
Pearson Chi-Square	22.501	2	< .001

The Pearson Chi-Square Test of Independence showed a statistically significant association between ACE score categories and self-esteem levels, $\chi^2(2, N = 1,015) = 22.501, p < .001$ (see Table 6). This indicates that the distribution of self-esteem levels differed according to ACE score category and that the observed pattern was unlikely to have occurred by chance alone. The finding provides empirical support for examining childhood adversity in relation to self-evaluation among college students, particularly because self-esteem is shaped through accumulated life experiences and is relevant to students' developing sense of competence, autonomy, and personal worth (Mruk, 2006; Rosenberg, 1965). The finding is also relevant to the interpersonal nature of the experiences represented by ACEs. Abuse, neglect, rejection, criticism, and inadequate support may provide experiences through which individuals develop beliefs about their competence and self-worth (Hart et al., 2003; Nida & Saylor, 2017; Fairlamb & Juhl, 2020). From the perspective of Sociometer Theory, these experiences are particularly relevant because self-esteem functions as an indicator of perceived relational value, responding to experiences of acceptance, rejection, approval, and devaluation (Leary, 2005). The present finding therefore suggests that childhood adversity and self-esteem cannot be treated as entirely independent aspects of college students' psychological functioning. Although the cross-tabulation does not show a simple pattern in which greater ACE exposure corresponds directly to lower self-esteem, the significant association indicates that the

distribution of self-esteem varies across levels of ACE exposure. This is important for understanding college students because self-esteem is connected with motivation, adaptability, confidence, academic participation, and social adjustment (Croyle et al., 2012; Dan et al., 2014; Bettis et al., 2017; Moore & Shell, 2017). Thus, the central contribution of the present finding is not that ACEs determine self-esteem, but that students' histories of childhood adversity are statistically related to how self-esteem is distributed during the college years.

CONCLUSION

The demographic profile shows that the study was composed mainly of **young, female, and first-year college students**, with a mean age of 19.02 years. The predominance of first-year students places much of the sample at an early stage of college, where students are adjusting to increased academic demands, greater autonomy, and new social environments. The predominance of students from families reporting lower monthly incomes also provides an important socioeconomic context for understanding their experiences. These characteristics describe the population represented in the study and provide context for interpreting the subsequent findings on ACE exposure and self-esteem.

Emotional abuse was the most prevalent adverse childhood experience among the participants, followed by physical abuse and emotional neglect. Other reported experiences included parental separation, domestic violence, mental illness and substance abuse in the household, sexual abuse, and incarceration of a household member. The findings indicate that the participants experienced varied forms of childhood adversity, with emotional abuse representing the most commonly reported form. Most participants reported **three or fewer ACEs (77.2%)**, while **22.8% reported four or more ACEs**. This indicates variation in the number of adverse childhood experiences reported by the participants. The larger proportion with three or fewer ACEs should not be interpreted as an absence or insignificance of adversity, since the ACE score reflects the **number of reported ACE categories**, rather than the severity or impact of those experiences.

Most participants were classified as having **medium self-esteem (64.8%)**, followed by **low self-esteem (30.8%)**, while only **4.3%** were classified as having high self-esteem. The findings indicate that medium self-esteem was the predominant level among the participants; however, it should not be regarded as an optimal level of self-evaluation for college students. The proportion with low self-esteem also indicates that a considerable group of students may experience difficulties in their perceptions of personal worth and competence. The small proportion with high self-esteem further indicates that strong positive self-evaluation was uncommon among the participants.

The findings established a **statistically significant association between ACE score categories and self-esteem levels**, $\chi^2(2, N = 1,015) = 22.501, p < .001$. This indicates that self-esteem levels were distributed differently across the two ACE score categories. However, the distribution did not show a simple pattern in which a higher ACE score corresponded to lower self-esteem. The finding therefore demonstrates that **ACE exposure and self-esteem were associated among the participants**, while the nature of this association cannot be interpreted as causal based on the present study.

RECOMMENDATIONS

The findings establish that college students in the sample have experienced various forms of adverse childhood experiences, with emotional abuse emerging as the most prevalent. Given that these experiences are present within the student population, the university should ensure that accessible and confidential psychological and guidance services are available to students who may need support related to adverse childhood experiences. Such services may provide opportunities for students to seek assistance, understand their experiences, and develop appropriate coping strategies without requiring disclosure of personal experiences as a condition for receiving general student support.

The finding that 22.8% of participants reported four or more ACEs, together with the presence of ACEs among the broader sample, also indicates the value of early identification and appropriate referral mechanisms within student support services. Screening or assessment, where ethically and professionally appropriate, may help identify students who could benefit from further support; however, the number of ACEs should not be used alone

to determine psychological need because a lower ACE score does not indicate that an experience was insignificant or without impact.

The finding that 64.8% of participants had medium self-esteem, while 30.8% had low self-esteem and only 4.3% had high self-esteem, indicates a need to address self-esteem within the college student population. The predominance of medium self-esteem may serve as an early indicator that many students may not yet have a strong level of self-evaluation needed to support competence, autonomy, confidence, and adjustment to the demands of college life. The university may therefore strengthen student development and psychological support initiatives that help students build stronger perceptions of competence, personal worth, autonomy, and confidence, with more focused support available to students who demonstrate low self-esteem.

The finding of a significant association between ACE score categories and self-esteem levels indicates that childhood adversity should be considered when understanding the psychological experiences of college students. The university may strengthen accessible, confidential, and developmentally appropriate psychological and guidance services that allow students to receive support when difficulties related to childhood experiences and self-esteem emerge. Such support should not be based solely on the number of ACEs reported, but should consider the student's individual experiences, present functioning, and need for assistance. The findings also support the need to extend ACE research to other college student populations and educational settings. Examining students across different universities, programs, year levels, and contexts may provide a broader understanding of how adverse childhood experiences are experienced and how they relate to students' psychological functioning. Such research can help institutions identify student needs more accurately, strengthen appropriate support systems, and develop interventions that are responsive to the actual experiences of their students. The present study provides a basis for continuing this work so that ACE research can move beyond documenting exposure toward informing meaningful support for college students.

Building on the present findings concerning adverse childhood experiences and self-esteem, future studies may examine these variables across different universities, student populations, and educational settings to determine whether a similar association is observed in other contexts. More detailed measures of ACEs and self-esteem may also be considered, particularly those that capture the frequency or severity of adverse experiences and provide a broader assessment of self-esteem. Longitudinal and qualitative approaches may further clarify how childhood adversity is associated with self-esteem over time and how students understand and cope with these experiences. Including factors such as socioeconomic status, peer support, and resilience may also help explain why students with similar ACE histories differ in their levels of self-esteem. Intervention-based studies may then examine whether counseling, peer support, or resilience-focused programs can support self-esteem and psychological well-being among students with histories of adverse childhood experiences.

REFERENCES

1. Ansar, F., Naveed, H., Khattak, A., & Khan, S. A. (2023). Frequency of anger and its potential relationship with self-esteem and adverse childhood experiences among medical and sociology undergraduate students in Pakistan. *Pakistan Journal of Medical Sciences*, 39(2), 524–528. <https://doi.org/10.12669/pjms.39.2.6113>
2. Bettis, A. H., Coiro, M. J., England, J., Murphy, L. K., Zelkowitz, R. L., Desjardins, L., Eskridge, R., Adery, L. H., Yarboi, J., Pardo, D., & Compas, B. E. (2017). Prevention of mental health problems in college students. *Journal of American College Health*, 65(5), 313–322.
3. Burke, H., Davis, M., Otte, C., & Mohr, D. (2005). Depression and cortisol responses to psychological stress. *Psychoneuroendocrinology*, 30, 846–856.
4. Cohen, H., Zohar, J., Gidron, Y., Matar, M., & Belkind, D. (2006). Blunted HPA axis response to stress. *Biological Psychiatry*, 12, 1208–1218.
5. Croyle, K. L., Weimer, A. A., & Eisenman, R. (2012). Context of assessment changes relationships between test anxiety and related variables. *International Journal of Adolescence and Youth*, 17(1), 11–20. <https://doi.org/10.1080/02673843.2011.645625>
6. Dan, O., Bar Ilan, O., & Kurman, J. (2014). Attachment, self-esteem and test anxiety in adolescence and early adulthood. *Educational Psychology*, 34(6), 659–673. <https://doi.org/10.1080/01443410.2013.814191>

7. Danese, A., & McEwen, B. S. (2012). Adverse childhood experiences, allostasis, allostatic load, and age-related disease. *Physiology & Behavior*, 106(1), 29–39. <https://doi.org/10.1016/j.physbeh.2011.08.019>
8. Del Giudice, M., Ellis, B. J., & Shirlcliff, E. A. (2011). Adaptive calibration model of stress responsivity. *Neuroscience & Biobehavioral Reviews*, 35, 1562–1592.
9. Ellis, B. J., Boyce, W. T., Belsky, J., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2011). Differential susceptibility to the environment: An evolutionary-neurodevelopmental theory. *Development and Psychopathology*, 23, 7–28.
10. Fairlamb, S., & Juhl, J. (2020). Death thoughts predict increased depression for those with low self-worth. *Death Studies*, 46(4), 1021–1026. <https://doi.org/10.1080/07481187.2020.1793432>
11. Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & 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.
12. Flaherty, E. G., Thompson, R., Dubowitz, H., Harvey, E. M., English, D. J., Proctor, L. J., & Runyan, D. K. (2013). Adverse childhood experiences and child health in early adolescence. *JAMA Pediatrics*, 167(7), 622–629. <https://doi.org/10.1001/jamapediatrics.2013.22>
13. Hamilton, J., Welham, A., Morgan, G., & Jones, C. (2024). Exploring the prevalence of childhood adversity among university students in the United Kingdom: A systematic review and meta-analysis. *PLOS ONE*, 19(8), e0308038. <https://doi.org/10.1371/journal.pone.0308038>
14. Harter, S. (2015). *The construction of the self* (2nd ed.). Guilford Press.
15. Hart, D., Atkins, R., & Fegley, S. (2003). Personality and development in childhood: A person-centered approach. *Monographs of the Society for Research in Child Development*, 68, 1–109.
16. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
17. Leary, M. R. (2005). Sociometer theory and the pursuit of relational value: Getting to the root of self-esteem. *European Review of Social Psychology*, 16(1), 75–111. <https://doi.org/10.1080/10463280540000007>
18. Lubow, M. A. (2009). *The relationship between self-esteem and self-silencing* [Doctoral dissertation].
19. Majid, M., Ab Rahman, A., & Taib, F. (2023). Adverse childhood experiences and health risk behaviours among the undergraduate health campus students. *Malaysian Journal of Medical Sciences*, 30(1), 152–161. <https://doi.org/10.21315/mjms2023.30.1.13>
20. Magro, S. W., Utesch, T., Dreiskämper, D., & Wagner, J. (2019). Self-esteem development in middle childhood: Support for sociometer theory. *International Journal of Behavioral Development*, 43(2), 118–127. <https://doi.org/10.1177/0165025418802462>
21. McEwen, B. S., & Seeman, T. (1999). Protective and damaging effects of mediators of stress: Elaborating and testing the concepts of allostasis and allostatic load. *Annals of the New York Academy of Sciences*, 896, 30–47.
22. Miller, G. E., Chen, E., & Parker, K. J. (2011). Psychological stress in childhood and the development of disease. *Psychological Bulletin*, 137, 959–997.
23. Moore, L. E., & Shell, M. D. (2017). Parental support and self-esteem. *Psi Chi Journal of Psychological Research*, 22, 131–140.
24. Mruk, C. J. (2006). *Self-esteem research, theory, and practice*. Springer.
25. Mwakanyamale, A. A., Wande, D. P., & Yizhen, Y. (2018). Multi-type child maltreatment: Prevalence and its relationship with self-esteem among secondary school students in Tanzania. *BMC Psychology*, 6, 35. <https://doi.org/10.1186/s40359-018-0244-1>
26. Nida, S. A., & Saylor, C. F. (2017). Ostracism in children and adolescents. In K. D. Williams & S. A. Nida (Eds.), *Ostracism, exclusion, and rejection* (pp. 192–206). Routledge.
27. Peckins, M., Susman, E., & Negriff, S. (2015). Cortisol profiles and stress adaptation. *Development and Psychopathology*, 27, 1461–1470.
28. Perinelli, E., Alessandri, G., Cepale, G., & Fraccaroli, F. (2022). The sociometer theory at work: Exploring the organizational interpersonal roots of self-esteem. *Applied Psychology*, 71(1), 76–102. <https://doi.org/10.1111/apps.12312>
29. Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.

30. Shen, A. C.-T. (2009). Self-esteem of young adults experiencing interparental violence and child physical maltreatment: Parental and peer relationships as mediators. *Journal of Interpersonal Violence*, 24(5), 770–794. <https://doi.org/10.1177/0886260508317188>
31. van der Kolk, B. A. (2005). Developmental trauma disorder: Toward a rational diagnosis for children with complex trauma histories. *Psychiatric Annals*, 35(5), 401–408.
32. Waehrer, G. M., Miller, T. R., Silverio Marques, S. C., Oh, D. L., & Burke Harris, N. (2020). Disease burden of adverse childhood experiences across 14 states. *PLOS ONE*, 15(1), e0226134. <https://doi.org/10.1371/journal.pone.0226134>
33. Wright, M. O. D., Crawford, E., & Castillo, D. (2017). Childhood emotional maltreatment and psychological distress. *Child Abuse & Neglect*, 65, 76–94.
34. Yan, Z., Zhang, L., & Lu, Y. (2024). Adverse childhood experiences and self-esteem among adolescents: The mediating role of social capital. *Journal of Adolescence*. <https://doi.org/10.1002/jad.12361>
35. Yun, A., Cai, Y., & Hu, Y. (2025). The relationship between Chinese vocational college students' adverse childhood experience and meaning in life: The mediating role of self-esteem and the moderating role of humorous coping. *Frontiers in Psychology*, 16, 1467780. <https://doi.org/10.3389/fpsyg.2025.1467780>
36. Zilioli, S., Slatcher, R. B., Chi, P., Li, X., Zhao, J., & Zhao, G. (2016). Childhood adversity, self-esteem, and diurnal cortisol profiles across the life span. *Psychological Science*, 27(9), 1249–1265. <https://doi.org/10.1177/0956797616658287>