

A Comparative Study of Psychological Distress and Self-Compassion among Young Adults with Varying Levels of Adverse Childhood Experiences

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Abstract: Background: Adverse childhood experiences (ACEs) may be associated with psychological functioning in young adulthood. This study examined differences in psychological distress and self-compassion between young adults with lower and higher levels of adverse childhood experiences and explored associations among these variables. Methods: A quantitative comparative-correlational design was used with 200 young adults recruited through convenience sampling. The sample comprised 100 participants in the lower-CAE group and 100 in the higher-CAE group. The Kessler Psychological Distress Scale (K10), Self-Compassion Scale (SCS), and Childhood Adverse Experiences Questionnaire (CAQ) were used. Data were analysed using descriptive statistics, independent-samples *t*-tests, and Pearson's product-moment correlations. Results: The higher-CAE group reported significantly greater psychological distress ($M = 29.53$, $SD = 8.74$) than the lower-CAE group ($M = 24.43$, $SD = 8.31$), $t(198) = -4.23$, $p < .001$, with the mean difference calculated as lower minus higher. The lower-CAE group reported significantly higher self-compassion ($M = 88.00$, $SD = 20.58$) than the higher-CAE group ($M = 76.85$, $SD = 19.16$), $t(198) = 3.97$, $p < .001$. ACE scores were positively correlated with psychological distress ($r = .378$, $p < .001$) and negatively correlated with self-compassion ($r = -.394$, $p < .001$). Self-compassion was negatively correlated with psychological distress ($r = -.416$, $p < .001$). Conclusions: The findings indicate significant group differences and associations among ACEs, psychological distress, and self-compassion in this sample. The correlational and comparative design does not establish causation.

Keywords: Adverse childhood experiences; psychological distress; self-compassion; young adults; correlation

1. Introduction

Childhood is an important period for emotional, social, and psychological development. Adverse childhood experiences (ACEs) refer to harmful or stressful experiences during childhood, including abuse, neglect, violence, family conflict, and household dysfunction. Such experiences may be associated with later emotional and psychological functioning, although outcomes vary between individuals.

Psychological distress refers to a broad range of emotional difficulties, commonly involving symptoms associated with anxiety and depression. It is not, by itself, equivalent to a psychiatric diagnosis. Young adulthood is a period of transition that may involve changes in education, work, relationships, and personal independence. Understanding factors associated with distress during this period is therefore important.

Self-compassion involves responding to personal difficulty with kindness and understanding rather than harsh self-judgment, recognizing that suffering is part of common human experience, and maintaining balanced awareness of difficult emotions. Neff's conceptualization describes self-kindness, common humanity, and mindfulness alongside their contrasting processes of self-judgment, isolation, and over-identification (Neff, 2003). Self-compassion may be relevant to how individuals respond to emotional difficulty, but its relationship with childhood adversity and distress should be examined empirically.

The present study examined psychological distress and self-compassion among young adults with lower and higher levels of adverse childhood experiences. It also examined the relationships between adverse childhood experiences

and psychological distress, self-compassion and psychological distress, and adverse childhood experiences and self-compassion.

2. Objectives

- 1) To examine whether psychological distress differs between young adults with higher and lower levels of adverse childhood experiences.
- 2) To examine whether self-compassion differs between young adults with higher and lower levels of adverse childhood experiences.
- 3) To examine the relationship between adverse childhood experiences and psychological distress.
- 4) To determine the relationship between self-compassion and psychological distress.
- 5) To examine the relationship between adverse childhood experiences and self-compassion.

3. Method

3.1 Research Design and Participants

The dissertation describes the study as a quantitative comparative-correlational study. A convenience sampling technique was used to recruit 200 young adults. The sample included 100 participants classified in the lower adverse childhood experiences (CAE) group and 100 in the higher CAE group. The dissertation gives different age ranges in different sections (18–35 years in the introduction and 18–30 years in the methodology); this manuscript therefore uses the broader term “young adults” and does not assign a single age range.

3.2 Measures

The Kessler Psychological Distress Scale (K10) was used to assess non-specific psychological distress. The dissertation describes the K10 as a 10-item self-report screening measure, with higher total scores indicating greater distress.

The Self-Compassion Scale (SCS) was used to assess self-compassion. The dissertation describes the 26-item scale as covering six components: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. Negatively worded items are reverse-scored according to the scale scoring procedure.

The Childhood Adverse Experiences Questionnaire (CAQ), referred to as CAE in the analysis, was used to assess adverse childhood experiences. The dissertation describes a 30-item measure scored from 0 to 4 per item, with higher total scores indicating greater reported childhood adversity.

3.3 Procedure and Statistical Analysis

Participants completed the study questionnaires as described in the dissertation. The data were analysed using descriptive statistics, independent-samples t-tests to compare the lower- and higher-CAE groups, and Pearson's product-moment correlation to examine associations among the study variables. The reported significance threshold was $p < .05$. Results below are reproduced from the dissertation's analysis chapter and have not been independently recalculated from the raw dataset.

4. Results

4.1 Descriptive Statistics

For the total sample ($N = 200$), the dissertation reported a mean adverse childhood experiences score of 60.93 ($SD = 25.12$), a mean psychological distress score of 26.98 ($SD = 8.88$), and a mean self-compassion score of 82.43 ($SD = 20.60$).

Table 1: Descriptive statistics for study variables

Variable	N	Mean	SD
Adverse childhood experiences	200	60.93	25.12
Psychological distress	200	26.98	8.88
Self-compassion	200	82.43	20.60

4.2 Group Difference in Psychological Distress

An independent-samples t-test was reported to compare psychological distress between participants with lower and higher CAE scores. The lower-CAE group had a mean distress score of 24.43 ($SD = 8.31$), while the higher-CAE group had a mean of 29.53 ($SD = 8.74$). The difference was statistically significant, $t(198) = -4.23$, $p < .001$. The reported mean difference (lower minus higher) was -5.10 , with a 95% confidence interval from -7.48 to -2.72 .

Table 2: Psychological distress by CAE group

CAE group	N	Mean distress	SD
Lower CAE	100	24.43	8.31
Higher CAE	100	29.53	8.74

The results indicate that the higher-CAE group reported greater psychological distress than the lower-CAE group. The first null hypothesis was rejected.

4.3 Group Difference in Self-Compassion

The lower-CAE group had a mean self-compassion score of 88.00 ($SD = 20.58$), compared with 76.85 ($SD = 19.16$) in the higher-CAE group. This difference was statistically significant, $t(198) = 3.97$, $p < .001$. The reported mean difference (lower minus higher) was 11.15, with a 95% confidence interval from 5.61 to 16.69.

Table 3: Self-compassion by CAE group

CAE group	N	Mean self-compassion	SD
Lower CAE	100	88.00	20.58
Higher CAE	100	76.85	19.16

The lower-CAE group reported higher self-compassion than the higher-CAE group. The second null hypothesis was rejected.

4.4 Correlations Among Study Variables

Pearson's product-moment correlations were used to examine the relationships among adverse childhood experiences, psychological distress, and self-compassion. All three reported correlations were statistically significant at $p < .001$.

Table 4: Correlations among study variables

Variables	N	Pearson's r	p
Adverse childhood experiences and psychological distress	200	.378	< .001
Self-compassion and psychological distress	200	-.416	< .001
Adverse childhood experiences and self-compassion	200	-.394	< .001

Adverse childhood experiences were positively associated with psychological distress ($r = .378$), indicating that higher adversity scores tended to accompany higher distress scores. Self-compassion was negatively associated with psychological distress ($r = -.416$), indicating that higher self-compassion scores tended to accompany lower distress scores. Adverse childhood experiences were also negatively associated with self-compassion ($r = -.394$). Accordingly, the third, fourth, and fifth null hypotheses were rejected.

5. Discussion

The findings showed significant differences in psychological distress and self-compassion between the lower- and higher-CAE groups. Participants in the higher-CAE group reported greater psychological distress, whereas participants in the lower-CAE group reported higher self-compassion. These findings suggest that, within this sample, greater reported childhood adversity was associated with less favourable scores on both psychological outcomes.

The correlation analysis was consistent with the group comparisons. Adverse childhood experiences had a positive association with psychological distress and a negative association with self-compassion. Self-compassion was

negatively associated with psychological distress. Taken together, the pattern of results suggests that these variables are related in the expected directions in this sample. However, correlation does not show that one variable causes another, and the study design does not establish whether self-compassion reduces distress or whether childhood adversity directly produces later distress.

From an applied perspective, the results support considering childhood experiences and self-compassion when exploring psychological distress among young adults. They do not, however, establish the effectiveness of any intervention. Longitudinal and intervention-based studies would be needed to examine temporal relationships and determine whether changes in self-compassion are followed by changes in distress.

6. Limitations and Future Directions

The study used convenience sampling, which may limit the extent to which the findings generalize to young adults beyond the sample. The design was comparative and correlational, so causal conclusions cannot be drawn. The age range is not reported consistently across the dissertation's sections. Future research may use larger and more diverse samples, longitudinal designs, examine types of adverse childhood experiences separately, and assess additional variables such as social support, coping, resilience, and emotion regulation. Intervention studies may also examine whether self-compassion-focused programmes are associated with changes in psychological distress.

7. Conclusion

In this sample of 200 young adults, the higher-CAE group reported significantly greater psychological distress and lower self-compassion than the lower-CAE group. Adverse childhood experiences were positively associated with psychological distress and negatively associated with self-compassion, while self-compassion was negatively associated with psychological distress. These findings indicate meaningful associations among the variables but should not be interpreted as evidence of causation.

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