



COGNITIVE DISTORTIONS AND SELF-ESTEEM AMONG YOUNG ADULTS

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ABSTRACT:

The present study examined the relationship between cognitive distortions and self-esteem among young adults. A quantitative correlational design was employed with a sample of 230 participants (aged 18–30 years) recruited through convenience sampling from educational institutions. Data were collected using the Cognitive Distortion Scale (CDS) and the Rosenberg Self-Esteem Scale (RSES). Pearson's correlation analyses revealed statistically significant negative relationships between overall cognitive distortions and self-esteem ($r = .22, p < .01$), as well as between specific distortion domains — self-criticism ($r = .19, p < .01$), self-blame ($r = .19, p < .01$), and helplessness ($r = .17, p < .05$) — and self-esteem. The findings support Beck's cognitive theory, indicating that maladaptive thinking patterns are meaningfully associated with diminished self-worth. Implications for cognitive-behavioural interventions and directions for future research are discussed.

KEYWORDS:

COGNITIVE DISTORTIONS, SELF-ESTEEM, YOUNG ADULTS, SELF-CRITICISM, HELPLESSNESS, COGNITIVE-BEHAVIOURAL THEORY.

PAPER ACCEPTED DATE:

PAPER PUBLISHED DATE:

21st April 2026

22nd April 2026

INTRODUCTION

The way individuals interpret and assign meaning to their experiences plays a central role in shaping their emotions, behaviours, and psychological wellbeing. Among the many cognitive processes examined in psychological research, cognitive distortions and self-esteem have received sustained attention due to their robust associations with mental health outcomes. Cognitive distortions refer to systematic patterns of biased or irrational thinking that reinforce negative emotions and maladaptive behaviours (Beck, 1976). Self-esteem, by contrast, reflects the overall evaluation that individuals hold about themselves — the degree to which a person feels confident, valuable, and worthy (Rosenberg, 1965).

The relationship between these two constructs is theoretically significant. Beck's (1976) cognitive triad posits that individuals experiencing psychological distress hold negative views of the self, the world, and the future — all of which are closely tied to self-esteem. When individuals habitually interpret situations through distorted cognitive frameworks, such as catastrophizing minor setbacks or engaging in pervasive self-blame, these interpretations may gradually erode their sense of self-worth. Over time, such cycles can result in chronically low self-esteem (Jelinek et al., 2019; Liu et al., 2021).

Young adulthood is a particularly important developmental window in which cognitive patterns related to identity, competence, and self-worth are forming and consolidating. This stage is marked by academic pressures, career uncertainty, social comparison, and identity exploration

— all of which may heighten vulnerability to distorted thinking (Orth et al., 2010; Masselink et al., 2019). Despite the intuitive and theoretical link between cognitive distortions and self-esteem, empirical research examining this relationship systematically — particularly in non-clinical young adult samples within collectivistic cultural contexts such as India — remains limited.

The present study aims to address this gap by examining the relationship between overall cognitive distortions and specific distortion domains (self-criticism, self-blame, and helplessness) with global self-esteem in a sample of young adults.

METHOD

PARTICIPANTS

The sample comprised 230 young adults (aged 18–30 years; $M_a^{ge} = 21.7$ years) recruited via convenience sampling from educational institutions and social networks. The majority of participants were between 21–23 years of age (40%), followed by those aged 18–20 (33%) and 24–26 (27%). Both male and female participants were included. Individuals who did not provide informed consent or who left substantial portions of the questionnaires incomplete were excluded.

MEASURES

Cognitive Distortion Scale (CDS). The CDS is a 40-item self-report instrument measuring five domains of maladaptive thinking: Self-Criticism (SC), Self-Blame (SB), Helplessness (HLP), Hopelessness (HOP), and

Preoccupation with Danger (PWD). Items are rated on a 5-point Likert scale (1 = never to 5 = always), with higher scores reflecting greater distortion. The scale demonstrates strong internal consistency, with subscale Cronbach's alpha values ranging from .79 to .84 and a total scale alpha of .91.

Rosenberg Self-Esteem Scale (RSES). The RSES is a widely validated 10-item scale measuring global self-esteem on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree). Negatively worded items are reverse scored; higher total scores indicate higher self-esteem. Cronbach's alpha in the current sample was .88, consistent with published norms.

PROCEDURE

Ethical approval was obtained prior to data collection. Participants were approached either in person or via online platforms and provided written informed consent. Questionnaires were administered in paper-and-pencil or digital format, with no time limit. Participants were assured of confidentiality and the right to withdraw without penalty. Data were scored according to the respective scale manuals, and Pearson's correlation analyses were conducted to test the hypotheses.

RESULTS

DESCRIPTIVE STATISTICS

Descriptive statistics for all study variables are presented in Table 1. Participants reported moderate levels of overall cognitive distortions (M = 96.97, SD = 24.44) and moderate self-esteem (M = 12.07, SD = 1.23).

TABLE 1: DESCRIPTIVE STATISTICS FOR STUDY VARIABLES (N = 230)

Variable	M	SD	Min	Max
Cognitive Distortions (Total)	96.97	24.44	40	200
Self-Criticism	14.20	5.96	8	40
Self-Blame	15.35	5.37	8	40
Helplessness	15.33	5.60	8	40
Self-Esteem (RSES)	12.07	1.23	10	40

Note. CDS = Cognitive Distortion Scale; RSES = Rosenberg Self-Esteem Scale.

CORRELATIONAL ANALYSES

To test the four hypotheses, Pearson's correlation coefficients were computed between each distortion domain and self-esteem scores. Results are summarized in Table 2.

TABLE 2: CORRELATIONS BETWEEN COGNITIVE DISTORTION DOMAINS AND SELF-ESTEEM (N = 230)

Variable	r	P
Self-Criticism & Self-Esteem	.19	<.01

Self-Blame & Self-Esteem	.19	<.01
Helplessness & Self-Esteem	.17	<.05
Total Cognitive Distortions & Self-Esteem	.22	<.01

Note. All correlations are in the expected negative direction per hypotheses.

As hypothesised, self-criticism was significantly associated with self-esteem (r = .19, p <.01), supporting Hypothesis 1. Self-blame was similarly related to self-esteem (r = .19, p <.01), supporting Hypothesis 2. Helplessness showed a significant negative relationship with self-esteem (r = .17, p <.05), supporting Hypothesis 3. Finally, overall cognitive distortions were significantly related to self-esteem (r = .22, p <.01), supporting Hypothesis 4. All relationships were in the expected negative direction, indicating that higher distortion scores were associated with lower self-esteem.

DISCUSSION

The present study examined the relationship between cognitive distortions and self-esteem among young adults. Consistent with cognitive theory (Beck, 1976) and prior empirical work (Liu et al., 2021; Yavuzer, 2015), all four hypotheses were supported: self-criticism, self-blame, helplessness, and overall cognitive distortions each showed significant negative associations with self-esteem.

The finding that self-criticism was particularly associated with lower self-esteem aligns with theoretical models suggesting that harsh self-evaluation operates as a mechanism that reinforces negative self-beliefs. When individuals habitually focus on their perceived shortcomings, these interpretations may become internalized as stable self-schemas — stable cognitive structures through which subsequent experiences are filtered (Jelinek et al., 2019). Similarly, the relationship between self-blame and self-esteem suggests that the attribution of negative outcomes to personal inadequacy, rather than situational factors, may gradually construct a narrative of incompetence that undermines self-worth.

The association between helplessness and lower self-esteem is consistent with models of learned helplessness, wherein perceived inability to influence outcomes erodes confidence and motivation (Garnefski & Kraaij, 2020). In young adulthood — a stage characterized by consequential decisions regarding education, career, and relationships — feelings of helplessness may be particularly damaging to emerging self-concepts.

The finding that overall cognitive distortions correlated significantly with self-esteem (r = .22) replicates and extends prior research conducted in Turkish (Yavuzer, 2015) and Chinese (Liu et al., 2021) student samples, suggesting a degree of cross-cultural consistency in this relationship. This is noteworthy given that the present study was conducted in an Indian context, where self-worth is often shaped by collectivistic values, family expectations, and academic achievement (Orth & Robins, 2019). The findings suggest that while cultural context

shapes the content of self-evaluation, the cognitive mechanisms through which distortions erode self-esteem may be broadly applicable.

Practically, these findings have clear implications for psychological intervention. Cognitive-behavioural therapy (CBT), which targets the identification and restructuring of distorted thoughts, may be particularly well-suited to improving self-esteem in young adult populations. Campus-based counselling services and mental health awareness programmes may benefit from incorporating components that help students recognise and challenge self-critical, self-blaming, and helpless thinking patterns.

Several limitations warrant consideration. The use of convenience sampling and a cross-sectional design limits causal inference and generalizability. As the study cannot establish whether cognitive distortions lead to lower self-esteem or vice versa, future longitudinal research is needed to clarify the directional nature of this relationship. Additionally, self-report measures are subject to response biases, and future research should consider supplementing questionnaire data with interview-based or experience-sampling methods. The sample also primarily comprised students aged 18–23, limiting generalizability to broader young adult populations.

CONCLUSION

This study demonstrates that cognitive distortions — particularly self-criticism, self-blame, and helplessness — are significantly associated with lower self-esteem among young adults. The findings support the theoretical proposition that maladaptive thinking patterns shape the lens through which individuals evaluate themselves, and highlight the importance of targeting cognitive processes in efforts to promote psychological wellbeing. Addressing distorted thinking patterns in clinical and educational settings may represent a meaningful pathway to strengthening self-esteem and fostering psychological resilience in young adults.

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