

Original Research Article

Beyond AI Use: Examining The Predictive Quality of AI Dependency & Distress Intolerance in Avoidance Coping Among Young Adults in Mumbai

Nisar Saiyed¹ and Sneha Singh²

¹Independent Practice, Mumbai, India

²Department of Psychology, Guru Nanak College, Mumbai, India

Corresponding author E-mail: saiyednisar72@gmail.com,¹ sneha@gncasc.org²

Received: 10 September, 2026 | Accepted: 24 September, 2026 | Published: 3 October, 2026

Abstract

Background: As the reliance on AI keeps growing, it becomes important to understand its psychological implications. The study contributes to the growing literature on AI and mental health by investigating the predictive quality of AI dependency and distress tolerance in the use of avoidance coping in response to stressful situations.

Aims: The present research aims to examine the predictive relationship between AI dependency, distress intolerance and avoidance coping among young adults in Mumbai.

Method: 90 participants from Mumbai (60 Females, 29 Males) who were aged between 18-25 years ($M=20.8$, $SD=2.38$) and used AI apps like ChatGPT and Gemini, were selected using convenience sampling. All participants completed the Generative AI Dependency Scale (Goh et al., 2025), Distress Tolerance Scale (Simons & Gaher, 2005) and Ways of Coping Scale-Revised (Folkman & Lazarus, 1985). Correlation and simple linear regression was computed for statistical analysis.

Results: Findings of the research indicate that AI dependency showed a significant positive correlation with avoidance coping ($p < .01$) and hence was a statistically significant predictor. Furthermore, distress intolerance showed a weak correlation with avoidance coping and was therefore not a statistically significant predictor ($p > .05$) of avoidance coping.

Conclusion: The findings of this study highlight the predictive role of AI dependency in the use of avoidance coping when faced with stressful situations. The role of distress tolerance in avoidance coping needs to be studied further in a more diverse and larger population. The findings may help develop strategies that promote healthy coping skills in stressful situations in the era of increasing AI use.

Keywords: *AI Dependency, Distress Intolerance, Avoidance Coping, Young Adults*

Introduction

With rapid advancement of technology, especially artificial intelligence (AI), there is a change in ways individuals obtain information and solve problems. Today, AI is not only used for obtaining information, but also for seeking reassurance and emotional support. AI tools provide immediate convenience and efficiency causing an increase in reliance on AI and as this reliance keeps growing, it becomes important to understand its psychological effects and implications. The present study explores the relationship between three variables- AI dependency, distress intolerance and avoidance coping, highlighting understanding of these variables in context of increasing AI use.

AI dependency refers to over reliance on AI systems for cognitive, emotional or practical support, thus resulting in increasing AI use for decision making, reassurance seeking, problem solving and emotional regulation (Goh et al., 2025). Research suggests frequent AI use may cause decline in independent problem solving (Goh et al., 2025), and also has effects on critical thinking abilities as mediated by increased cognitive offloading (Gerlich, 2025). Furthermore, using AI for emotional support may contribute to emotional dependence and reduction in social interaction (Fang et al., 2025). Recent findings on AI dependency highlight its associations with maladaptive coping patterns such as procrastination and reduced self-regulation (Goh et al., 2025) while emotional dependence on AI may encourage avoidance (Huang et al., 2025).

Distress intolerance refers to an individual's perceived inability to tolerate negative physical or emotional states and the tendency to avoid distressing experiences (Simons & Gaher, 2005). This ability is found to be associated with various psychological difficulties, such as anxiety, depression and difficulties with emotion regulation (Leyro et al., 2010). Research on distress intolerance has found that individuals with lower tolerance may experience greater emotional reactivity and difficulties in managing stressful situations (Zvolensky et al., 2010). Previous research has found its associations with avoidance behaviors and emotional disengagement, although these relationships may differ depending on psychological and situational factors (McHugh et al., 2013; Sandel-Fernandez et al., 2023).

Avoidance coping during stressful situations refers to using a coping response aimed at reducing contact with stressful situations through distraction, withdrawal, denial or disengagement (Carver et al., 1989). Although this provides temporary emotional relief, persistent use of avoidance coping is linked with poorer psychological adjustment, higher distress and reduced problem-solving abilities (Holahen et al., 2005). Recent research suggests that using digital technologies like AI-based tools may act as alternative coping resources which allows individuals

to avoid distress. Additionally, distress intolerance may also contribute to avoidance coping by increasing the motivation to escape negative emotional states (Leyro et al., 2010). While extensive literature has studied these variables independently, findings about whether AI dependency and distress intolerance predicts use of avoidance coping during stressful situations in broader settings such as diverse socio-economic settings, especially in Indian context are limited. The present research aims to address the gaps by combining a model exploring the relationship between AI dependency, distress intolerance and avoidance coping among emerging young adults in Mumbai.

Hypotheses Of The Study

H1. AI Dependency will be a significant predictor of Avoidance Coping among young adults

H2. Distress Intolerance will be a significant predictor of Avoidance Coping among young adults.

Methodology

Participants

The total number of participants, selected through convenience sampling, in the study were 90 (60 Females, 29 Males). All participants were young adults, have been using AI apps such as ChatGPT & Gemini and residing in Mumbai. The age range of the sample was 18 to 25 years ($M=20.8$, $SD=2.38$).

Research Tools

Generative AI Dependency Scale (Goh et al., 2025). AI Dependency was measured using Generative AI Dependency Scale, published by Goh et al. in 2025. The scale consists of 11 items, measuring three dimensions- cognitive preoccupation, negative consequences and withdrawal. Responses are marked on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) with higher score indicating higher dependency. The scale includes excellent internal consistency with Cronbach's Alpha of (.93) and good test-retest reliability with an ICC of 0.87 (Goh et al., 2025).

Distress Tolerance Scale (Simons & Gaher, 2005). Distress Intolerance was measured using Distress Tolerance Scale, published by Simons & Gaher in 2005. The scale consists of 15 items, measuring four dimensions- tolerance, appraisal, absorption and regulation. Responses are marked on a 5-point Likert scale ranging from 1 (Strongly Agree) to 5 (Strongly Disagree) with higher score indicating higher distress tolerance. The scale demonstrated good test-retest reliability over a 6 months interval ($r = 0.61$) (Simons & Gaher, 2005).

Ways of Coping Scale- Revised (Folkman & Lazarus, 1985). Avoidance Coping was measured using Escape-Avoidance subscale of Ways of Coping Scale- Revised, published by Folkman & Lazarus in 1985. The scale consists of 66 items and has eight subscales. The Escape-Avoidance subscale has 8 items and responses are marked on a 4-point Likert scale ranging from 0 (does not apply and/or not used) to 3 (used a great deal). The scale demonstrated acceptable to good internal consistency with Cronbach's Alpha ranging from 0.61 to 0.79 in the community sample and from 0.59 to 0.88 in the students' sample (Folkman & Lazarus, 1985).

Procedure

Convenience sampling technique was employed with the help of online google forms to collect responses from participants. The questionnaire included an introductory message explaining the vital information about the study, assuring confidentiality and obtaining informed consent followed by demographic questions, research tools and post task questions for contextual information about potential confounding variables. The data obtained was

statistically analyzed using correlation and simple linear regression. All ethical considerations were followed throughout the research.

Results

The purpose of the study was to investigate the predictive relationship between AI dependency, distress intolerance and avoidance coping. Out of 102 young adults who filled the form, 90 were selected as the final sample. Statistical analysis was completed using Microsoft Excel and JASP software version 0.17.1. Descriptive statistics were computed for all the three variables and age. Inferential statistics used in the study were Pearson's Product-Moment correlation and Simple Linear Regression.

Table 1. Descriptive statistics for the variables

Variables	Statistics					
	N	Mean	SD	Range	Min	Max
AID	90	2.36	1.04	4.50	1	5.50
DI	90	41.2	11.03	48	18	66
AC	90	13.13	4.72	21	3	24

Note: AID = AI Dependency, DI = Distress Intolerance, AC =Avoidance Coping.

Table 1 describes the descriptive statistics of variables including range, mean, standard deviation, minimum and maximum values obtained from a sample of 90 participants with a mean age of 20.8, and SD of 2.38.

Table 2. Pearson Product Moment Correlation Coefficient between the variables (N=90)

Variables	AI Dependency	Distress Intolerance	Avoidance Coping
AI Dependency	-	-	-
Distress Intolerance	0.129	-	-
Avoidance Coping	0.273**	0.029	-

Note: Pearson's Correlation is significant at the * $p < .05$, ** $p < .01$ and *** $p < .001$.

Table 2 represents the values obtained after computing correlation. The correlation between AI dependency and avoidance coping is a strong positive correlation ($r = 0.273$, $p < .01$). The correlation between distress intolerance and avoidance coping was found to be a weak positive correlation ($r = 0.029$, $p > .05$). Based on correlational analysis, simple linear regression between AI dependency and avoidance coping was calculated. Regression analysis was not computed between distress intolerance and avoidance coping because of absence of statistically significant correlation between the variables.

Table 3.1. Model Summary table for AI Dependency predicting Avoidance Coping

Model	R	R ²	Adjusted R ²	RMSE	R ² Change	F Change	df1	df2	p
H ₀	0	0	0	4.72	0	-	0	89	-
H ₁	0.249	0.062	0.055	4.57	0.074	7.067	1	88	.009

Note: Dependent Variable: Avoidance Coping; Predictor: AI Dependency

Table 3.2. ANOVA Table for AI Dependency predicting Avoidance Coping

Model		Sum of Squares	df	Mean Square	F	p
H ₁	Regression	147.8	1	147.8	7.067	.009
	Residual	1841	88	20.92		
	Total	1988	89			

Note: Dependent Variable: Avoidance Coping; Predictor: AI Dependency

Table 3.3. Coefficients Table for AI Dependency predicting Avoidance Coping

Model		Unstandardized	Standard Error	Standardized	t	p
H ₀	(Intercept)	13.13	0.492		26.36	< .001
H ₁	(Intercept)	10.22	1.199		8.522	< .001
	AI Dependency	1.235	0.464	0.272	2.658	.009

Note: Dependent Variable: Avoidance Coping; Predictor: AI Dependency

Table 3.1, 3.2 and 3.3 represent regression analysis for AI Dependency predicting Avoidance Coping. The $F = 7.067$; $p = .009$, signifies that AI Dependency significantly predicts Avoidance Coping ($p < .001$). The unstandardized coefficient ($\beta = 1.235$) and standardized coefficient ($\beta = 0.272$) for AI Dependency was found to be statistically significant with Avoidance Coping ($t = 2.658$; $p = .009$).

Discussion

The aim of the current study is to investigate the predictive relationship between AI dependency, distress intolerance and avoidance coping. Hence, correlation and regression analysis were conducted. The first hypothesis of the study was that AI dependency will be a significant predictor of avoidance coping among young adults. The correlation found was a strong positive correlation ($r = 0.273$, $p < .01$). The results of simple linear regression showed that AI dependency was found to be a significant predictor of avoidance coping ($p < .001$) and the results were inline with the first hypothesis of the study.

These findings are consistent with the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), proposing that avoidance coping may be used when an individual appraises stress as a severe threat, while finding their coping resources inadequate and when AI becomes a readily available resource for reassurance, coping and

problem solving, individuals may therefore increasingly rely on it instead of confronting the stressors. Supporting this interpretation, Goh et al. (2025) found generative AI dependency being associated with higher procrastination, cognitive failures, reduced critical thinking and poorer task performance indicating independent self-regulation difficulties.

Furthermore, Fang et al (2025) also found higher chatbot use associated with greater emotional dependence, problematic AI use and lower socialization. Huang et al. (2026) further found in a longitudinal study that anxiety and depression predicted increased AI dependence, particularly when AI was being used for escape or social interaction. From the perspective of Reinforcement Theory (Skinner, 1953), avoidance coping can be explained through negative reinforcement. When faced with stressful situations, AI provides immediate relief and this instant removal of discomfort acts as a powerful reward thus strengthening the habit of avoidance and overreliance on AI. Lastly, Compensatory Internet Use Theory (Kardefelt-Winther, 2014) suggests that technology may be used to escape distress and fulfil unmet needs, potentially reinforcing avoidance coping.

The second hypothesis of the study was that distress intolerance will be a significant predictor of avoidance coping among young adults. The correlation found was an insignificant and weak positive correlation ($r = 0.029$, $p > .05$). Regression analysis was not computed between distress intolerance and avoidance coping because of absence of statistically significant correlation between the variables and therefore, the results were not inline with the second hypothesis of the study.

This insignificant relation between distress intolerance and avoidance coping during stressful situations can be explained by the conceptualization of distress intolerance as a vulnerability factor displaying inability to tolerate distress rather than a significant determinant of coping behavior (Leyro et al., 2010). Furthermore, McHugh et al. (2013) in a study found that the relationship between distress intolerance and avoidance was influenced by difficulties in emotion regulation, indicating that distress intolerance alone may not determine coping responses. Similarly, Sandel-Fernandez et al. (2023) investigated effects of distress intolerance and daily emotion regulation, finding that its associations with emotional disengagement varied depending on negative affect intensity, thus suggesting a context-dependent effect.

The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) also proposes that coping depends on individuals' appraisal of stressors and perceived coping resources, which may also explain that distress intolerance alone may not be sufficient to determine avoidance coping. Distress intolerance may also influence coping through other psychological mechanisms like emotion regulation difficulties, anxiety sensitivity or psychological flexibility rather than a direct pathway (Leyro et al., 2010). Investigating these factors may provide clearer understanding of the relationship between distress intolerance and avoidance coping. Lastly, contextual factors such as the type and intensity of the stressor, degree of social support, and existing coping skills may also influence whether distress intolerance leads to avoidance coping during stressful situations.

Conclusion

The aim of the study was to investigate the predictive relationship between AI dependency, distress intolerance and avoidance coping among emerging young adults. Findings of the study indicated that AI dependency was strongly correlated with avoidance coping and was found to be a statistically significant predictor ($p < .001$) of avoidance coping. Meanwhile, distress intolerance showed an insignificant correlation with avoidance coping ($p > .05$) and was therefore not a statistically significant predictor. The study has certain limitations; the sample predominantly

includes female participants limiting the generalizability of the findings. Online self-report measures were used to collect data which increases vulnerability to social desirability bias and uncontrolled external environment. Lastly, in the Ways of Coping Scale-Revised, participants were asked to report coping in response to a particular stressful situation, however lack of verification of a specific stressor may have led to variability in measurement of avoidance coping. The findings may help in development of strategies and interventions that promote healthy coping skills rather than overreliance on AI during stressful situations.

References

- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267–283.
- Fang, C. M., Liu, A. R., Danry, V., Lee, E., Chan, S. W. T., Pataranutaporn, P., Maes, P., Phang, J., Lampe, M., Ahmad, L., & Agarwal, S. (2025). *How AI and human behaviors shape psychosocial effects of chatbot use: A longitudinal randomized controlled study*. MIT Media Lab.
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48(1), 150–170.
- Gerlich, M. (2025). AI Tools in Society: Impacts on Cognitive Offloading and the Future of Critical Thinking. *Societies*, 15(1), 6. <https://doi.org/10.3390/soc15010006>
- Goh, Adalia & Hartanto, Andree & M. Majeed, Nadyanna. (2025). Generative Artificial Intelligence Dependency: Scale Development, Validation, and its Motivational, Behavioral, and Psychological Correlates. *Computers in Human Behavior Reports*. 20. 100845. 10.1016/j.chbr.2025.100845.
- Holahan, C. J., Moos, R. H., Holahan, C. K., Brennan, P. L., & Schutte, K. K. (2005). Stress Generation, Avoidance Coping, and Depressive Symptoms: A 10-Year Model. *Journal of Consulting and Clinical Psychology*, 73(4), 658–666.
- Huang S, Lai X, Ke L, et al. AI technology panic-is AI dependence bad for mental health? A cross-lagged panel model and the mediating roles of motivations for AI use among adolescents. *Psychol Res Behav Manag*. 2024; 17:1087-1102.
- Kardefelt-Winther, D. (2014). A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Computers in Human Behavior*, 31, 351–354.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Leyro, T. M., Zvolensky, M. J., & Bernstein, A. (2010). Distress tolerance and psychopathological symptoms and disorders: A review of the empirical literature among adults. *Psychological Bulletin*, 136(4), 576–600.
- McHugh, R. K., Reynolds, E. K., Leyro, T. M., & Otto, M. W. (2013). An examination of the association of distress intolerance and emotion regulation with avoidance. *Cognitive Therapy and Research*, 37(2), 363–367.
- Sandel-Fernandez, D. B., Pearlstein, J. G., Swerdlow, B. A., & Johnson, S. L. (2023). Who disengages from emotion and when? An EMA study of how urgency and distress intolerance relate to daily emotion regulation. *Emotion*, 23(4), 1102–1114.

- Simons, J. S., & Gaher, R. M. (2005). The Distress Tolerance Scale: Development and validation of a self-report measure. *Motivation and Emotion*, 29(2), 83-102.
- Skinner, B. F. (1953). *Science and human behavior*. Macmillan.
- Zhang, Y., Zhao, D., Hancock, J. T., Kraut, R., & Yang, D. (2025). The rise of AI companions: How human-chatbot relationships influence well-being. *arXiv e-prints*, arXiv-2506. Zhang, S.,
- Zhao, X., Zhou, T., & Kim, J. H. (2024). Do you have AI dependency? The roles of academic self-efficacy, academic stress, and performance expectations on problematic AI usage behavior. *International Journal of Educational Technology in Higher Education*, 21(1), 34.
- Zvolensky, M. J., Vujanovic, A. A., Bernstein, A., & Leyro, T. (2010). Distress Tolerance: Theory, Measurement, and Relations to Psychopathology: Theory, Measurement, and Relations to Psychopathology. *Current Directions in Psychological Science*, 19(6), 406-410.