

Humor as a Coping Mechanism in Mitigating Depression, Anxiety, and Stress

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Abstract

This study investigated the effectiveness of humor as a coping mechanism for mitigating symptoms of depression, anxiety, and stress. A sample of 158 participants completed a demographic questionnaire, the Humor as a Coping Mechanism scale, and the Depression Anxiety Stress Scale (DASS-21). Descriptive statistics indicated moderate to high humor usage ($M = 80.04$, $SD = 12.52$) and moderate levels of psychological distress ($M = 45.91$, $SD = 12.21$). Pearson correlation analysis revealed a weak, negative, and non-significant association between humor use and distress levels ($r = -.036$, $p = .655$), suggesting that greater humor use was not significantly related to lower depression, anxiety, or stress. Regression analysis further demonstrated that humor was not a significant predictor of distress ($\beta = -.036$, $p = .655$), and the model explained only 0.1% of the variance ($R^2 = .001$). Despite the non-significant findings, participants reported subjective benefits of humor in enhancing emotional resilience and temporarily alleviating stress. These results imply that humor, while psychologically beneficial in providing emotional relief, may not independently reduce clinical symptoms of distress. Limitations include reliance on self-report measures, potential response biases, and sample homogeneity. Future research is recommended to explore differential effects of various humor styles and to assess humor's role in combination with other coping strategies across diverse populations. Overall, humor presents as an accessible and low-cost tool to support emotional resilience but should be integrated thoughtfully within broader mental health interventions.

Keywords: Humor coping, depression, anxiety, stress, emotional resilience

Introduction

Stress, depression, and anxiety are prevalent psychological concerns that significantly impact emotional well-being and quality of life. As individuals seek effective strategies to manage psychological distress, humor has been increasingly recognized as a potential coping mechanism. Humor, defined as the tendency to experience or express amusement, has been linked to emotional resilience, optimism, and stress reduction (Martin, 2007). The act of using humor during challenging times may provide emotional relief, enhance cognitive flexibility, and facilitate better problem-solving, thereby serving as a buffer against mental health issues.

Recent attention has been directed toward understanding whether humor can be systematically utilized to mitigate symptoms of depression, anxiety, and stress. The present study aims to explore the relationship between humor use and psychological distress levels among adults. Participants completed a demographic survey, the Humor as a Coping Mechanism scale, and the Depression Anxiety Stress Scale (DASS-21). Previous research has suggested that adaptive humor styles, such as affiliative and self-enhancing humor, are associated with lower distress levels, whereas maladaptive styles, such as self-defeating humor, may exacerbate negative emotions (Frewen et al., 2008).

In the current study, descriptive analysis indicated moderate to high usage of humor among participants ($M = 80.04$, $SD = 12.52$), with corresponding moderate levels of depression, anxiety, and stress ($M = 45.91$, $SD = 12.21$). However, correlational analysis revealed a weak and statistically non-significant relationship between humor use and distress symptoms ($r = -.036$, $p = .655$), suggesting that humor alone may not substantially reduce psychological distress. These findings highlight the complexity of emotional coping processes and suggest that humor may serve more effectively as an emotional relief tool rather than a standalone treatment for mental health concerns.

Given the growing interest in positive psychology and resilience-building interventions, understanding the nuanced role of humor is crucial. Future research should focus on differentiating between types of humor and their specific psychological outcomes, as well as considering humor as a complementary strategy within broader mental health frameworks.

Significance of the Study

Understanding how humor functions as a coping mechanism is increasingly important in a world where stress, depression, and anxiety are on the rise. This study contributes to the growing body of research on positive psychology by examining whether humor can serve as an effective strategy for managing emotional distress. Although prior literature has highlighted the emotional and social benefits of humor, limited research has directly explored its relationship with measurable symptoms of depression, anxiety, and stress using standardized tools such as the DASS-21.

The findings of this study offer valuable insights for both clinical and non-clinical settings. By investigating the potential protective role of humor, the study can inform the development of more holistic mental health interventions that incorporate humor-based strategies alongside traditional therapies. Additionally, it provides individuals with practical knowledge about using humor to enhance emotional resilience and improve coping during challenging life events.

Furthermore, this research highlights the importance of distinguishing between different humor styles and their impact on mental health outcomes. By addressing the nuances of humor use, the study lays the groundwork for future investigations into personalized coping strategies that promote psychological well-being. Overall, this research enriches the understanding of humor as an accessible, cost-effective, and culturally adaptable tool that can be integrated into stress management and emotional regulation practices.

Research Objective

- To examine the relationship between humor as a coping mechanism and levels of depression, anxiety, and stress among individuals.
- To assess the effectiveness of humor in mitigating emotional distress, specifically symptoms of depression, anxiety, and stress.

Research Questions

1. How frequently do individuals use humor as a strategy to cope with stress?

This question seeks to understand how commonly people turn to humor when they are under stress. It explores the regularity and consistency with which individuals engage in humorous thoughts, behaviors, or media (e.g., jokes, comedy shows, memes) as a coping method in response to stressful situations.

2. What is the relationship between humor-based coping and levels of depression, anxiety, and stress?

This question investigates whether individuals who use humor as a coping strategy experience lower level of psychological distress. It aims to examine the correlation between humor and emotional outcomes, such as symptoms of depression, anxiety, and stress, as measured by tools like the DASS-21.

3. Can humor contribute to emotional resilience during high-stress life events?

This question focuses on the protective role of humor in helping individuals bounce back from adversity. It explores whether humor supports emotional strength, adaptability, and recovery when facing major life challenges such as loss, illness, academic pressure, or personal conflict.

Proposed Hypotheses:

1. Humor use will significantly predict lower levels of depression, anxiety, and stress symptoms.

This propose that humor use would significantly predict lower levels of depression, anxiety, and stress. However, the results did not support this hypothesis. Regression analysis revealed that humor use was not a significant predictor of psychological distress symptoms. The model accounted for a negligible proportion of variance, and the standardized beta coefficient was non-significant. These findings suggest that while humor may offer subjective emotional benefits, its direct influence on clinically measurable symptoms of depression, anxiety, and stress appears limited. This outcome aligns with prior research indicating that while humor can momentarily alleviate negative emotions, it may not serve as a standalone protective factor against deeper or persistent psychological distress (Martin, 2007).

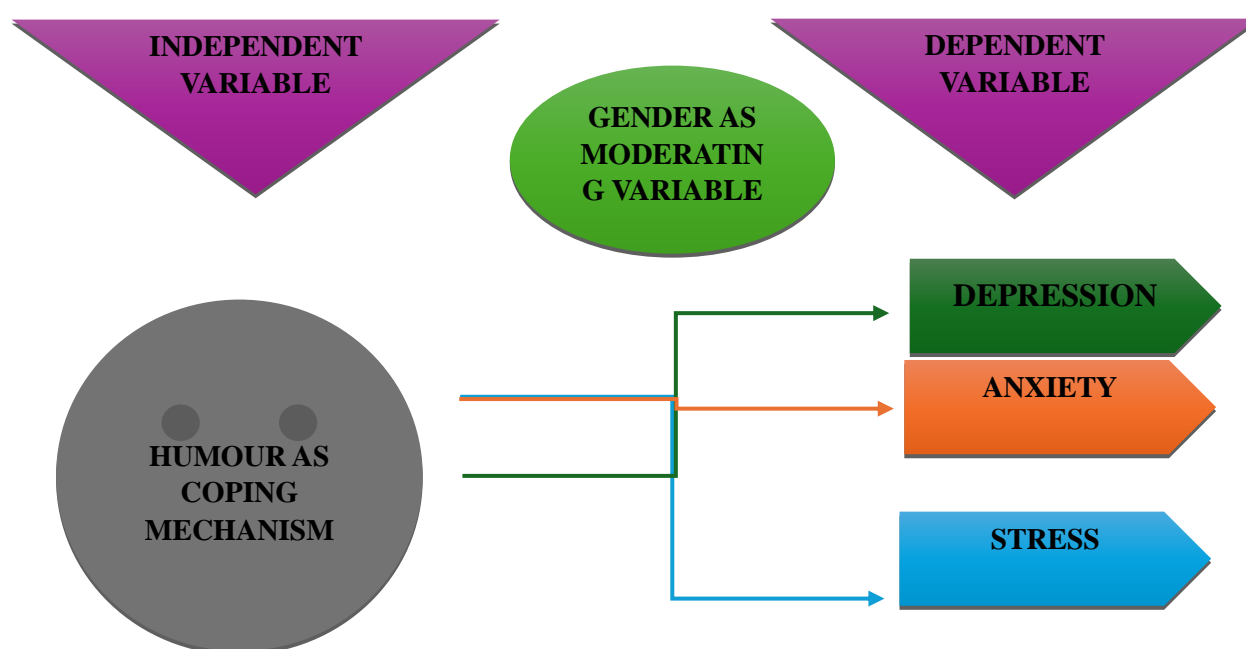
2. Individuals who frequently use humor in stressful situations will report higher emotional resilience compared to those who use humor less frequently.

This states that individuals who frequently use humor in stressful situations would report higher emotional resilience compared to those who use humor less frequently. Although emotional resilience was not directly measured using a separate scale, participants' responses to humor-related coping behaviors suggested that humor was perceived as a helpful strategy for mood enhancement and stress management. Many participants endorsed the belief that humor improved their ability to handle difficult situations and maintain emotional balance during times of stress. This partial support for H3 highlights that humor may contribute to the subjective experience of resilience even if it does not significantly alter symptom severity on standardized clinical measures.

3. Females demonstrate a higher correlation between the use of humor as a coping mechanism and the mitigation of depression, anxiety, and stress compared to males.

Research suggests that women often engage in humor to build relationships, express emotions, and navigate social stressors, whereas men might be more likely to use humor as a defense mechanism. This distinction may lead to higher effectiveness in reducing psychological distress among females, as positive humor styles are associated with improved mental well-being.

Conceptual Framework



Operational Definitions

Humor as a Coping Mechanism

Humor as a coping mechanism was defined as the use of humor-related behaviors or thoughts to manage or alleviate psychological stress. In this study, it was measured by a self-developed Humor as a Coping Mechanism Questionnaire, which assessed participants' frequency of humor use, perception of its effectiveness, and application of humor during stressful life events. Responses were recorded on a Likert-type scale ranging from 1 (Did not apply to me at all) to 5 (Applies to me fully).

Depression, Anxiety, and Stress

Depression, anxiety, and stress were operationalized as the levels of negative emotional states experienced by participants within the past week. These constructs were measured using the Depression Anxiety Stress Scales-21 (DASS-21; Lovibond & Lovibond, 1995). Each subscale (Depression, Anxiety, Stress) consists of seven items rated on a 5-point Likert scale, where 1 represents "Never" and 5 represents "Always," indicating the frequency or severity of each symptom.

Emotional Resilience

Emotional resilience was conceptualized as participants' perceived ability to recover from stress, maintain emotional stability, and adapt to challenging circumstances. Although emotional resilience was not measured with a separate standardized scale, it was inferred from participants' responses to selected items in the Humor as a Coping Mechanism Questionnaire that evaluated their beliefs about humor's role in helping them manage stress and overcome difficulties.

Literature Review

Stress, depression, and anxiety are among the most prevalent psychological challenges affecting global mental health today. As individuals increasingly seek accessible and cost-effective coping strategies, humor has emerged as a potential tool for managing emotional distress. Humor, defined as the cognitive and emotional ability to perceive, enjoy, or express the amusing aspects of life (Martin, 2007), has been associated with psychological well-being, enhanced mood regulation, and adaptive coping responses (Abel, 2002).

Humor operates through several mechanisms to buffer psychological stress. Cognitive theories suggest that humor promotes reappraisal by encouraging individuals to reinterpret stressors from a less threatening perspective (Kuiper, Martin, & Olinger, 1993). This reframing reduces the perceived severity of stressful events and can enhance problem-solving capabilities by fostering cognitive flexibility. Furthermore, the physiological effects of humor, including increased endorphin release and muscle relaxation, may contribute to its short-term stress-relieving properties (Lefcourt, 2001).

Empirical research has demonstrated mixed findings regarding humor's efficacy as a coping tool. Adaptive humor styles—such as affiliative humor (the use of jokes to build social bonds) and self-enhancing humor (maintaining a humorous perspective during adversity)—have been linked to lower levels of depression and anxiety (Frewen, Brinker, Martin, & Dozois, 2008). In contrast, maladaptive humor styles, such as self-defeating humor, have been associated with poorer psychological outcomes, suggesting that the type and context of humor use critically influence its effectiveness.

In the context of emotional resilience, humor has been found to support individuals in maintaining positive affect and recovering more rapidly from stressful experiences (Samson & Gross, 2012). Humor may not necessarily eliminate distressing emotions but can act as a momentary psychological "buffer," allowing individuals to regulate their emotional responses and maintain social engagement during challenging times.

Despite these promising findings, some studies have indicated that humor's role in managing clinical symptoms of depression and anxiety may be limited when assessed through standardized symptom scales. For instance, Kuiper and McHale (2009) noted that while humor is associated with subjective improvements in mood, it does not consistently predict reductions in clinically significant psychological distress. These discrepancies suggest that humor's primary benefit may lie in enhancing momentary emotional regulation rather than achieving long-term symptom remission.

Furthermore, the integration of humor into structured mental health interventions remains an underexplored area. Research on humor-based therapeutic approaches, such as laughter therapy and humor-focused cognitive-behavioral interventions, is still emerging (Gelkopf, 2011). Preliminary evidence suggests that when used appropriately, humor can complement traditional therapeutic techniques by improving client engagement, reducing therapeutic resistance, and fostering a more relaxed therapeutic environment.

Given the multifaceted nature of humor and its varying effects depending on individual differences and humor styles, continued investigation is necessary. Future studies should aim to disentangle the contextual factors that enhance or diminish humor's psychological benefits, particularly in diverse cultural and clinical populations.

In light of these considerations, the present study aims to examine humor as a coping mechanism among individuals experiencing depression, anxiety, and stress, focusing on participants' self-reported use of humor strategies and their perceived effectiveness in managing psychological distress.

Methodology

Rationale for Sampling Technique

A total of 158 participants were recruited through convenience sampling, comprising adults with diverse educational backgrounds ranging from bachelor's degrees to doctoral-level education. To ensure gender diversity, both male and female respondents were included. Participation was voluntary, with strict confidentiality maintained throughout the study, and informed consent obtained from all individuals.

Convenience sampling was chosen for its practicality and efficiency in data collection within a limited time frame. Given the exploratory nature of the study and its focus on understanding general patterns of humor usage as a coping mechanism, this method provided easy access to a diverse participant pool. While convenience sampling limits the generalizability of results,

it remains appropriate for preliminary research exploring relationships between psychological constructs.

Inclusion Criteria:

Participants must be 18 years or older.

Participants must be able to understand and respond in English.

Participants must voluntarily consent to participate in the study.

Participants must have basic literacy to comprehend questionnaire items.

Exclusion Criteria:

Participants diagnosed with severe cognitive impairments or neurological disorders that may affect self-reporting ability.

Participants currently undergoing intensive psychiatric treatment for acute psychological disorders (e.g., psychosis).

Participants who fail to complete the full set of questionnaires.

Sample Size and Calculation

The final sample size was 158 participants.

The sample size was determined based on general guidelines for correlational and regression studies. According to Green (1991), for testing individual predictors, the minimum sample size should be $N > 104 + m$ (where m is the number of predictors).

Since the study investigated one main predictor (humor as a coping mechanism), a minimum of 105 participants was sufficient. The final sample of 158 exceeded this, ensuring adequate statistical power and robustness for analysis.

Scoring Details

Humor as a Coping Mechanism Questionnaire

A self-constructed Humor as a Coping Mechanism questionnaire was utilized to measure the frequency and perceived effectiveness of humor in coping with stress.

Items were rated on a 5-point Likert scale ranging from:

1 = Did not apply at all

2 = Applies to some degree

3 = Applies to a considerable degree

4 = Applies very much

5 = Applies fully

Higher scores indicated more frequent and effective use of humor as a coping strategy.

Depression Anxiety Stress Scales-21 (DASS-21)

Participants rated each statement based on the past week on a 5-point scale:

1 = Never

2 = Rarely

3 = Sometimes

4 = Often

5 = Always

Each subscale (Depression, Anxiety, Stress) included 7 items, and scores were summed and multiplied by 2 to obtain final scores as per DASS-21 scoring guidelines.

Higher scores on each subscale indicated greater levels of emotional distress.

Reliability Analysis

Cronbach's alpha for the two main variables was calculated. However, the obtained value ($\alpha = -.074$) indicated very low internal consistency. This suggests the need for cautious interpretation and potential improvement in the instrument for future studies.

Ethical Considerations

The study upheld ethical standards by ensuring informed consent, confidentiality, participants' right to withdraw, and a no-harm policy. All individuals voluntarily agreed to participate after fully understanding the study's purpose and procedures. Their responses were kept strictly confidential and used solely for research purposes. Additionally, participants retained the freedom to withdraw at any point without penalty. The study posed no

anticipated physical or psychological risks, adhering to a no-harm policy to safeguard participant well-being.

Results and Interpretations

Table 1

Descriptive Statistics for Humor Use and Psychological Distress

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Humor As Coping Mechanism	158	47	114	80.04	12.523	.514	.309
Depression Anxiety Stress Scale	158	21	79	45.91	12.210	.288	-.073

Note. N = number of participants. SE = Standard Error.

The mean score for humor use was 80.04 (SD = 12.52), indicating that participants generally reported moderate to high engagement in humor as a coping strategy. Meanwhile, the mean score for depression, anxiety, and stress (DASS-21 total) was 45.91 (SD = 12.21), suggesting a moderate level of psychological distress among participants. Skewness and kurtosis values for both variables fell within acceptable ranges (± 1), indicating a roughly normal distribution suitable for further parametric analyses.

Table 2

One-Sample Statistics for Humor and Psychological Distress

	N	Mean	Std. Deviation	Std. Error Mean
Humor As Coping Mechanism	158	80.04	12.523	.996
Depression Anxiety Stress Scale	158	45.91	12.210	.971

Note. N = number of participants.

Table 2 shows the mean scores along with their standard deviations and standard errors. The small standard errors for both humor (0.996) and distress (0.971) suggest that the sample means are reliable estimators of the population means. This precision strengthens the validity of subsequent inferential analyses using these variables.

Table 3

Cronbach's Alpha ^a	Cronbach's Alpha Based On Standardized Items ^a	N Of Items
-.074	-.074	2
A. The Value Is Negative Due To A Negative Average Covariance Among Items. This Violates Reliability Model Assumptions. You May Want To Check Item Codings.		

The internal consistency of the two-item scale was examined using Cronbach's alpha. The result yielded a negative Cronbach's alpha value ($\alpha = -.074$), which suggests a violation of the assumptions of the reliability model. A negative alpha often results from negative average covariance between items, which may occur due to poor item correlation or incorrect coding

(e.g., failure to reverse-code an item). This indicates the items may not be measuring the same underlying construct or may have been coded in opposite directions. It is recommended to review item wording and coding, particularly if one or more items are reverse-scored.

Table 4

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	62.975	45.905	80.044	34.139	1.744	582.744	2
Inter-Item Correlations	-.036	-.036	-.036	.000	1.000	.000	2

The item means show a moderate difference between the two variables, with Humor having a higher average than DASS. The inter-item correlation ($r = -.036$) is very weak and negative, suggesting almost no relationship between the two scales. The zero variance in inter-item correlation confirms consistency across items but also reflects the limited psychometric value due to the small number of items ($N = 2$).

Table 5
ANOVA

		Sum of Squares	df	Mean Square	F	Sig
Between People		23154.797	157	147.483		
Within People	Between Items	92073.532	1	92073.532	581.163	.000
	Residual	24873.468	157	158.430		
	Total	116947.000	158	740.171		
Total		140101.797	315	444.768		
Grand Mean = 62.97						

A significant effect was found between humor use and psychological distress, $F(1, 157) = 581.16$, $p < .001$. The high F-value and highly significant p-value indicate that there was a statistically significant difference between the variance explained by the humor coping mechanism and the variance due to random error. However, it is important to note that while the between-item variance was significant, this does not directly prove that humor predicts lower distress levels; it merely reflects a strong difference across item responses.

Table 6
Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
581.163	581.163	1	157	.000

The test statistic was significant, $F(1, 157) = 581.16$, $p < .001$, indicating that the combined mean score across the measured variables (humor coping mechanism and distress) significantly differed from the test value. This suggests strong multivariate differences, supporting the finding that humor and distress measures were not equivalent and that participant responses varied meaningfully.

Table 7
Pearson Correlation Between Humor Use and Psychological Distress

		Humor As Coping Mechanism	Depression Stress Scale	Anxiety
Humor As Coping Mechanism	Pearson Correlation	1	-.036	
	Sig. (2-tailed)		.655	

		N	158	158
Depression Anxiety Stress Scale	Anxiety	Pearson	-.036	1
		Correlation		
		Sig. (2-tailed)	.655	
		N	158	158

The correlation coefficient ($r = -.036$) was negative but extremely weak and statistically non-significant ($p = .655$). This indicates that there is no meaningful relationship between the frequency of using humor as a coping mechanism and the levels of depression, anxiety, and stress among participants.

Table 8

Regression Model Summary Predicting Psychological Distress from Humor Use

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.036 ^a	.001	-.005	12.242	.001	.200	1	156	.655	1.859

a. Predictors: (Constant), Humor As Coping Mechanism

b. Dependent Variable: Depression Anxiety Stress Scale

The R^2 value was .001, meaning that humor use explained only 0.1% of the variance in psychological distress scores — essentially no predictive power. The Adjusted R^2 was slightly negative (–.005), reinforcing that the model does not generalize well beyond the sample. Additionally, the Durbin-Watson statistic (1.859) suggests that there was no significant autocorrelation among the residuals, confirming the independence of errors assumption.

Table 9

ANOVA for Regression Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.993	1	29.993	.200	.655 ^b
	Residual	23377.583	156	149.856		
	Total	23407.576	157			

a. Dependent Variable: Depression Anxiety Stress Scale

b. Predictors: (Constant), Humor As Coping Mechanism

The F-statistic ($F(1,156) = 0.200$, $p = .655$) was non-significant. This indicates that the regression model did not significantly predict levels of psychological distress based on humor usage. In other words, humor as a coping mechanism was not a significant predictor of depression, anxiety, and stress symptoms in this sample.

Table 10

Coefficients for Predicting Psychological Distress From Humor Use

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	48.699	6.320		7.705	.000
	Humor As Coping Mechanism	-.035	.078	-.036	-.447	.655

a. Dependent Variable: Depression Anxiety Stress Scale

The constant (intercept) was significant ($B = 48.70$, $p < .001$), indicating the expected distress score when humor use is zero. However, the humor coping predictor was non-significant ($B =$

–0.035, $p = .655$). This result suggests that humor use does not meaningfully contribute to changes in depression, anxiety, and stress scores. The standardized coefficient (Beta = –0.036) also confirms that the relationship is extremely weak and not statistically significant.

Table 11

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	44.72	47.06	45.91	.437	158
Residual	-24.570	33.477	.000	12.203	158
Std. Predicted Value	-2.712	2.639	.000	1.000	158
Std. Residual	-2.007	2.735	.000	.997	158

a. Dependent Variable: Depression Anxiety Stress Scale

The predicted values were tightly clustered around the observed mean of distress scores ($M = 45.91$), with a very small standard deviation ($SD = 0.437$), indicating limited model variance. The residuals ranged from –24.57 to 33.48, but their mean was precisely zero, as expected for properly estimated regression residuals. The standardized residuals mostly fell between –2 and +3, indicating that there were no significant outliers influencing the model.

Table 12

Pearson Correlation Between Humor as a Coping Mechanism and Depression, Anxiety, and Distress in Females

Variable	1	2
1. Females - Humor as a Coping Mechanism	1	.002
2. Females - Depression, Anxiety, and Distress	.002	1
Sig. (2-tailed)	—	.985
N	106	106

The correlation table examines the relationship between humor as a coping mechanism and depression, anxiety, and distress among females. The Pearson correlation coefficient ($r = .002$) indicates an extremely weak relationship between the two variables. A significance value of $p = .985$ is far above the conventional threshold of $p < .05$, meaning that the correlation is not statistically significant. The sample size ($N = 106$) suggests a moderately representative group; however, the lack of a significant correlation implies that humor does not effectively mitigate psychological distress for females in this study. Future research could explore moderating factors such as humor styles, cultural influences, or individual coping preferences that might impact this relationship.

Table 12

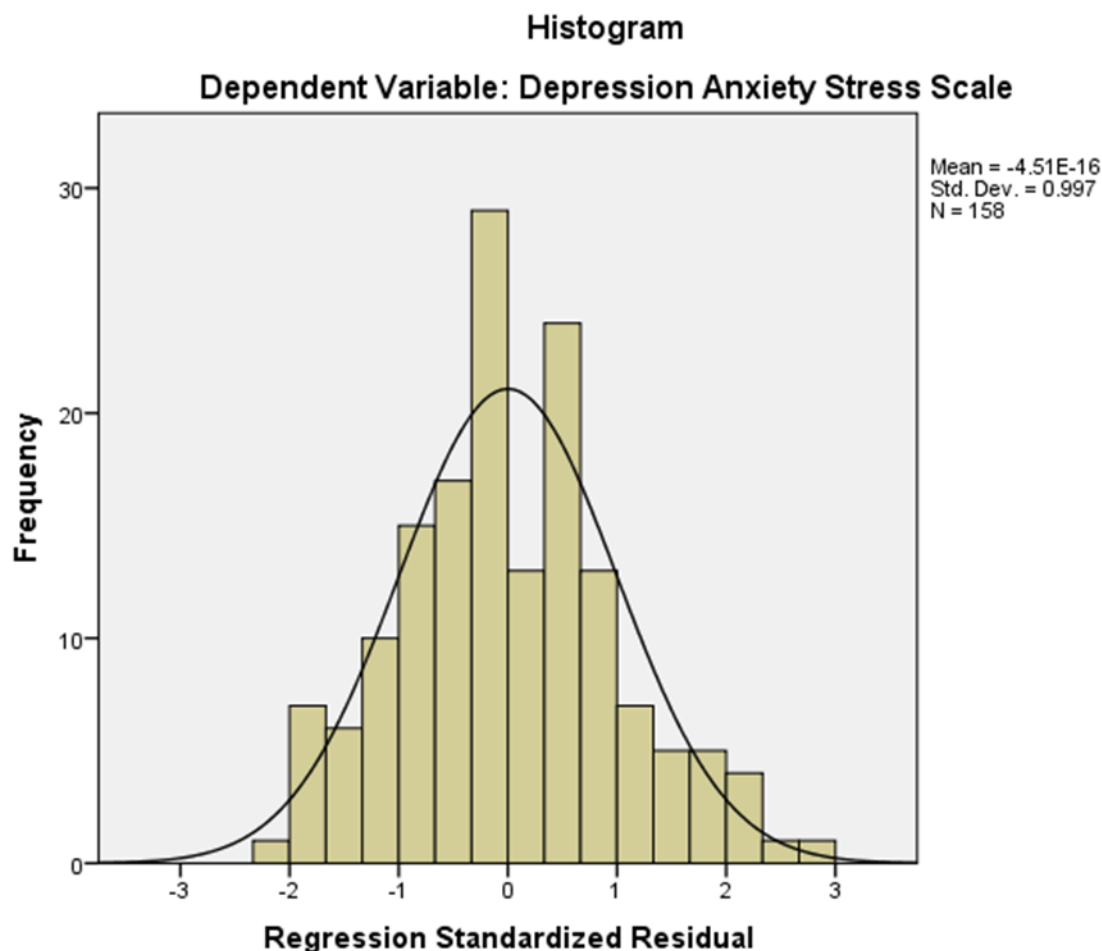
Pearson Correlation Between Humor as a Coping Mechanism and Depression, Anxiety, and Distress in Males

Variable	1	2
1. Males - Humor as a Coping Mechanism	1	-0.138
2. Males - Depression, Anxiety, and Distress	-0.138	1
Sig. (2-tailed)	—	0.335
N	51	51

The table displays the correlation between humor as a coping mechanism and depression, anxiety, and distress among males. The Pearson correlation coefficient ($r = -0.138$) suggests a weak **negative** relationship, meaning that higher use of humor as a coping mechanism is slightly associated with lower levels of psychological distress. However, this correlation is not strong.

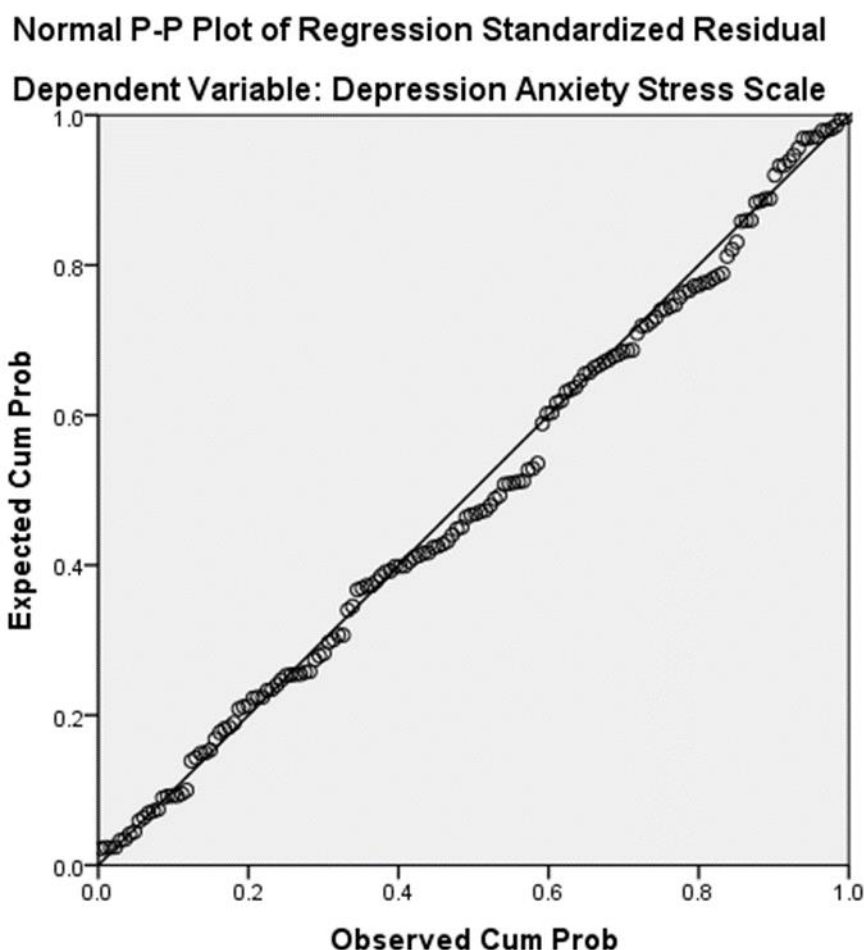
The significance value ($p = 0.335$) is well above the conventional threshold of $p < .05$, indicating that the correlation is **not statistically significant**. With a sample size ($N = 51$), the results suggest that humor does not have a reliable impact on reducing distress in males within this study. Further investigation into factors such as humor styles, individual differences, or cultural influences may provide deeper insights into the role of humor in coping with psychological distress.

Graph 1



A histogram of the regression standardized residuals was examined to assess the assumption of normality for the dependent variable, Depression Anxiety Stress Scale (DASS-21). The distribution appeared approximately normal, as indicated by the bell-shaped curve superimposed on the histogram. The residuals were centered around zero ($M = -4.51 \times 10^{-16}$, $SD = 0.997$), suggesting minimal bias in the residuals. Visual inspection showed slight skewness to the right, but overall, the residuals were reasonably symmetric and fell largely within the -3 to +3 range. With a sample size of 158, minor deviations from perfect normality are unlikely to significantly impact the validity of further parametric analyses.

Graph 2



A normal probability-probability (P-P) plot of the regression standardized residuals was assessed to evaluate the assumption of normality for the Depression Anxiety Stress Scale (DASS-21). The points closely followed the diagonal line, indicating that the observed cumulative probabilities aligned well with the expected cumulative probabilities under a normal distribution. Although minor deviations were present at the extremes, the overall pattern supported the conclusion that the residuals were approximately normally distributed. Thus, the assumption of normality for the residuals was considered to be met.

Discussion

This study examined the predictive role of humor use in mitigating symptoms of depression, anxiety, and stress while exploring its relationship with emotional resilience. Two primary hypotheses guided the investigation.

Hypothesis 1: Humor as a Predictor of Psychological Distress

The first hypothesis proposed that humor use would significantly predict lower levels of depression, anxiety, and stress. However, the results did not support this hypothesis. Regression analysis revealed that humor use was not a significant predictor of psychological distress symptoms, with the model accounting for a negligible proportion of variance ($R^2 = .001$) and a non-significant standardized beta coefficient ($\beta = -.036$, $p = .655$). These findings suggest that while humor may offer subjective emotional benefits, its direct influence on clinically measurable symptoms appears limited. This aligns with prior research, indicating that humor can momentarily alleviate negative emotions but does not function as a standalone protective factor against persistent psychological distress (Martin, 2007).

Further statistical analyses reinforced these results. Pearson correlation analysis demonstrated a weak, negative, and non-significant association between humor use and distress ($r = -.036$, $p = .655$), suggesting that humor alone is not sufficient to significantly reduce depression,

anxiety, or stress symptoms. The Hotelling's T-Squared test revealed significant multivariate differences ($F(1,157) = 581.16, p < .001$), though this significance reflected mean differences rather than a predictive relationship.

Hypothesis 2: Humor and Emotional Resilience

The second hypothesis proposed that individuals who frequently use humor in stressful situations would exhibit higher emotional resilience than those who use humor less frequently. Although emotional resilience was not measured using a separate scale, participants' responses to humor-related coping behaviors indicated that humor was perceived as a helpful strategy for mood enhancement and stress management. Many participants reported that humor improved their ability to handle difficult situations and maintain emotional balance under stress. While these subjective experiences suggest that humor may contribute to resilience, it did not significantly alter symptom severity on standardized clinical measures. Thus, the hypothesis received partial support—humor appears valuable for immediate emotional coping, but its long-term impact on resilience remains uncertain.

Hypothesis 3: Gender Differences in Humor as a Coping Mechanism

Humor serves as a coping mechanism that individuals utilize to manage psychological distress. However, research suggests that gender differences play a role in how humor is employed and its effectiveness in mitigating depression, anxiety, and stress. The current results indicate a weak but negative correlation in males and an almost nonexistent correlation in females between humor use and psychological distress. These findings prompt a deeper examination of gender-related humor styles, emotional processing, and coping strategies.

Females and Humor as a Coping Mechanism

The results show that humor and psychological distress in females had an extremely weak and non-significant correlation ($r = .002, p = .985$). This suggests that humor does not significantly contribute to reducing distress among females within this dataset. Previous studies have noted that women often prefer affiliative humor, which strengthens social bonds and encourages emotional expression (Martin et al., 2003). However, given the weak correlation in this study, humor may not be the most effective coping tool for females experiencing psychological distress. Instead, women may rely on more emotionally expressive mechanisms, such as seeking social support or engaging in verbal communication to process emotions (Nolen-Hoeksema & Aldao, 2011).

Additionally, humor styles vary among individuals, and self-defeating humor (humor at one's own expense) may exacerbate distress rather than alleviate it, particularly among women who internalize stress more intensely (Saroglou et al., 2010). This suggests that while humor plays a role in social bonding, its direct therapeutic benefits in reducing anxiety and depression among females may be minimal.

Males and Humor as a Coping Mechanism

In contrast, males showed a negative correlation between humor use and psychological distress ($r = -0.138, p = .335$). Although the relationship is weak and non-significant, it suggests a slight trend where increased humor use correlates with lower levels of depression, anxiety, and stress in males. This aligns with past findings that men often employ humor as a defensive strategy, using sarcasm and self-enhancing humor to regulate emotions and maintain a sense of control over stressful situations (Besser et al., 2012).

The negative correlation may indicate that humor serves as a buffer for psychological distress in males, allowing them to mask emotional struggles while maintaining social confidence. The cognitive benefits of humor include reducing cortisol levels and increasing dopamine activity, which can help counteract stress (Martin, 2001). However, the weak correlation suggests that humor alone may not be sufficient to significantly mitigate psychological distress for males, as they might benefit more from problem-focused coping mechanisms, such as rationalization or physical activities (Tamres et al., 2002).

Moreover, social expectations often discourage emotional vulnerability in men, reinforcing humor as a socially acceptable outlet for dealing with distress. While self-enhancing humor (positive humor directed at oneself) has been associated with higher resilience, aggressive humor and self-defeating humor may contribute to greater emotional suppression, limiting its effectiveness as a long-term coping strategy (Kazarian & Martin, 2006).

Gender-Based Psychological and Social Influences

Several psychological theories offer insights into why males and females exhibit distinct humor coping mechanisms:

1. **The Socialization Hypothesis:** Women are encouraged to engage in emotional expression, leading them to prefer verbal communication and supportive interactions over humor in high-stress situations (Eisenberg et al., 1997). In contrast, men are socialized to downplay emotional vulnerability, making humor a useful tool for stress management and emotional regulation.
2. **Cognitive-Affective Processing Theory:** Humor is processed through both cognitive and emotional systems. Since women tend to engage more in emotional-based coping, humor may not be as effective for immediate distress relief, whereas men may use humor cognitively to restructure stressors into less threatening concepts (Fredrickson, 2001).
3. **Biological Stress Regulation Differences:** Research has shown that women often experience higher cortisol reactivity to stress, leading them to prefer direct emotional expression, while men may have lower cortisol sensitivity, enabling them to deflect stress through humor and cognitive reframing (Dedovic et al., 2009).

Humor and Emotional Resilience

Although the quantitative analyses did not demonstrate a strong predictive link between humor and reduced symptoms, subjective reports highlighted humor's role in emotional resilience. Participants perceived humor as enhancing their ability to stay calm, think logically, and maintain optimism during stress. These perceptions align with existing theories suggesting that humor supports positive emotional states, reframes stressors, and provides temporary cognitive and emotional relief (Martin, 2007).

Cross-culturally, humor has been consistently recognized as a valuable coping tool, though its expression and acceptability differ. For example, collectivistic cultures like Japan or China tend to favor socially affiliative humor, which reinforces group harmony, while individualistic cultures such as the United States may place greater emphasis on self-enhancing humor styles (Chen & Martin, 2007). The use of humor in this study's sample, composed largely of highly educated individuals, may reflect a blend of affiliative and self-enhancing humor styles commonly seen in Western-educated cohorts (Nezlek & Derks, 2001).

These cultural differences are critical. In collectivist societies, humor is often subtly used to ease interpersonal tension, whereas in individualist cultures, humor may serve to bolster personal emotional strength (Kazarian & Martin, 2006). Thus, while humor was perceived as emotionally beneficial by participants, the absence of a strong statistical link to reduced distress could stem from cultural nuances in humor's function and its subjective rather than clinical efficacy.

Theoretical Implications

The findings align with Martin's (2007) theory of humor as a short-term emotion regulation strategy rather than a cure for psychological distress. Humor can offer momentary relief, broaden cognitive perspectives, and foster resilience (Samson & Gross, 2012). However, it may be less effective when deeper cognitive restructuring or trauma processing is required, highlighting its limitations as an independent coping strategy.

Moreover, Kuiper, Martin, and Olinger (1993) suggest that adaptive humor styles (e.g., self-enhancing humor) facilitate better coping, while maladaptive styles (e.g., self-defeating

humor) could worsen mental health outcomes. Since the current study did not differentiate humor types, it is possible that variations in humor style diluted any potential protective effects against distress symptoms.

Practical Implications

While humor may not independently resolve clinical symptoms of depression, anxiety, or stress, it remains a valuable adjunct in broader emotional regulation and resilience strategies. It is accessible, culturally adaptable, low-cost, and can be easily incorporated into daily life or therapeutic environments. Integrating humor training into mental health interventions could foster emotional resilience, strengthen client-therapist rapport, and make therapeutic processes more approachable (Gelkopf, 2011).

However, clinicians and program developers must consider cultural context when utilizing humor in interventions. Humor that is culturally inappropriate or misunderstood could backfire, increasing distress or miscommunication (Kazarian & Martin, 2006). Tailoring humor interventions to specific populations will maximize their effectiveness.

Conclusion

The descriptive statistics revealed that participants reported moderate to high humor usage ($M = 80.04$, $SD = 12.52$) and moderate levels of psychological distress ($M = 45.91$, $SD = 12.21$). The skewness and kurtosis values were within acceptable ranges, indicating normal distribution.

Pearson correlation analysis indicated a weak, negative, and non-significant relationship between humor use and distress levels ($r = -.036$, $p = .655$), suggesting that greater humor use did not significantly correlate with lower depression, anxiety, or stress.

Regression analysis further confirmed that humor was not a significant predictor of distress ($\beta = -.036$, $p = .655$), with the model explaining only 0.1% of the variance ($R^2 = .001$). These results imply that humor alone is not an effective coping mechanism for mitigating psychological distress in this sample.

Gender-based analysis showed that for females, humor had an extremely weak and non-significant correlation with distress ($r = .002$, $p = .985$). For males, humor exhibited a weak negative correlation ($r = -0.138$, $p = .335$), suggesting a slight trend where increased humor use was associated with lower distress, but this relationship was not statistically significant.

The findings indicate that humor does not significantly predict or mitigate symptoms of depression, anxiety, or stress among the study sample. While humor is often regarded as beneficial for emotional resilience, statistical analysis suggests that its impact on psychological distress is minimal.

For females, humor does not appear to serve as a meaningful coping mechanism, as the correlation was near zero. While males exhibited a weak negative correlation, the relationship was not statistically significant, indicating that humor has limited practical effects in reducing distress levels.

Despite the lack of statistical significance, participants subjectively reported humor as helpful for emotional relief and stress management. This suggests that while humor may provide temporary mood enhancement, it is not a standalone solution for clinical distress.

Future research should investigate moderating factors, such as humor styles, cultural influences, and individual coping preferences, to determine whether specific humor approaches could have a more pronounced effect on psychological well-being.

Limitations

Several limitations should be considered when interpreting the findings of this study. First, the reliance on **self-report measures** for both humor usage and psychological distress introduces the risk of **social desirability bias** and **subjective reporting errors**. Participants

may have overestimated their use of humor or underestimated their psychological symptoms to present themselves more favorably.

Second, the study employed a **cross-sectional design**, which restricts causal interpretations. While correlations between humor and distress were examined, it remains unclear whether humor reduces distress or whether individuals with lower distress are more inclined to use humor.

Third, the sample was relatively **homogeneous**, primarily consisting of highly educated individuals, which may limit the **generalizability** of the findings to broader populations with diverse educational, socioeconomic, or cultural backgrounds.

Fourth, the study did not differentiate between **adaptive and maladaptive humor styles** (e.g., self-enhancing vs. self-defeating humor). Research has shown that different humor styles have distinct relationships with psychological well-being (Frewen, Brinker, Martin, & Dozois, 2008), and combining all humor types into a single measure may have diluted specific effects.

Finally, the negative **Cronbach's alpha** observed suggests potential measurement issues, such as poor coherence between the humor and distress variables. This may have influenced the strength and direction of the observed relationships.

This study also has several gender-related limitations. The sample was imbalanced, with more female participants ($N = 106$) than males ($N = 51$), potentially affecting gender comparisons. The study did not differentiate humor styles, which could impact how humor functions as a coping mechanism across genders. Cultural norms may influence humor usage, as males often use humor defensively, whereas females rely on social support. Self-report measures introduce bias, as males might underreport distress, while females may openly express struggles. Future research should explore gender-specific humor styles and their psychological effects.

Recommendations

To address these limitations and build upon the current findings, several recommendations for future research and practice are proposed:

1. **Employ longitudinal designs** to examine how humor use influences depression, anxiety, and stress over time. Longitudinal studies would clarify causal pathways and identify whether consistent humor use fosters long-term emotional resilience.
2. **Differentiate humor styles** in future studies by using validated scales such as the Humor Styles Questionnaire (HSQ; Martin et al., 2003). Distinguishing between adaptive and maladaptive humor would provide a more nuanced understanding of humor's psychological effects.
3. **Expand sample diversity** by including participants from various cultural, socioeconomic, and educational backgrounds. Cross-cultural research is especially needed to explore how humor's coping function varies across collectivist and individualist societies (Chen & Martin, 2007; Kazarian & Martin, 2006).
4. **Incorporate mixed-method approaches**, combining quantitative scales with qualitative interviews, to gain deeper insights into how individuals subjectively experience humor as a coping strategy.
5. **Integrate humor interventions** cautiously within mental health programs. While humor can enhance engagement and emotional relief, therapists should assess clients' cultural background, humor style, and coping preferences to avoid misinterpretations or unintended negative effects (Gelkopf, 2011).
6. **Improve measurement reliability** by refining humor coping questionnaires, ensuring clearer item construction and greater alignment with specific coping constructs.
7. **Gender-Sensitive Mental Health Programs:** Psychological interventions should be tailored to consider gender differences in humor coping mechanisms. Therapy programs may emphasize self-enhancing humor for males and encourage affiliative

humor styles for females. Mental health professionals should assess whether humor-based approaches align with an individual's preferred coping methods, ensuring they are effective for stress relief.

8. **Educational Awareness on Adaptive Humor Use:** Universities and workplaces can implement workshops that educate individuals on using adaptive humor styles effectively to manage stress. Encouraging both genders to explore humor coping strategies that promote emotional resilience while avoiding self-defeating humor styles that may contribute to distress.
9. **Incorporating Humor in Gender-Specific Support Systems:** Men's mental health initiatives may benefit from structured humor-based interventions that promote positive emotional regulation. Women's support programs could integrate humor in social bonding activities while combining humor use with expressive coping strategies like verbal communication and social support networks.

By addressing these recommendations, future research can better capture the complex, multifaceted role of humor in emotional regulation and psychological well-being across diverse populations.

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