

Psychological Flexibility as a Transdiagnostic Predictor of Mental Health Problems in Indian Young Adults

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Abstract

Psychological flexibility refers to responding adaptively to difficult internal experiences while remaining engaged with present circumstances and personally meaningful values. It has been proposed as a transdiagnostic process relevant to depression, anxiety, and stress. This study examined associations between psychological inflexibility and these indicators of psychological distress among Indian young adults aged 18–30 years. A quantitative, cross-sectional correlational design was used. An online questionnaire included demographic questions, the Acceptance and Action Questionnaire–II (AAQ-II), and the Depression Anxiety Stress Scales–21 (DASS-21). Of 122 responses received, 112 met the study's eligibility criteria and were included in the primary analysis. Descriptive statistics, Cronbach's alpha, Pearson correlations, and three simple linear regression models were computed. AAQ-II total scores were weakly and negatively correlated with depression scores ($r = -0.197$, $p = 0.037$), while correlations with anxiety ($r = -0.041$, $p = 0.664$) and stress ($r = -0.005$, $p = 0.957$) were not statistically significant. The depression model explained approximately 3.9% of the variance ($R^2 = 0.039$); anxiety and stress models were not significant. Because higher conventional AAQ-II scores indicate greater psychological inflexibility, the negative depression association was unexpected and requires verification of item wording, response coding, and scoring before substantive interpretation. The results do not provide consistent support for psychological inflexibility as a predictor across all three outcomes. Findings are limited by the cross-sectional self-report design and lower internal consistency estimates for the DASS-21 anxiety and stress subscales.

1. Introduction

Young adulthood is a period of substantial personal, educational, occupational, and interpersonal transition. Academic demands, career uncertainty, family expectations, financial concerns, and changing relationships may contribute to psychological distress. Depression, anxiety, and stress are often studied as distinct outcomes, yet they may share psychological processes that influence how individuals respond to difficult thoughts, feelings, and life events.

Psychological flexibility is commonly understood as the capacity to remain in contact with the present moment and to adapt behaviour in ways consistent with personal values, even when uncomfortable thoughts and emotions are present. Acceptance and Commitment Therapy (ACT) places this capacity at the centre of its model, emphasizing acceptance, cognitive defusion, present-moment awareness, self-as

context, values, and committed action [1]. From this perspective, psychological well-being does not require the complete absence of distress; rather, it involves responding flexibly instead of becoming dominated by or persistently avoiding internal experiences.

A transdiagnostic perspective focuses on processes that may be relevant across multiple forms of psychological difficulty. Psychological inflexibility and experiential avoidance have been discussed as processes potentially associated with a range of mental health problems [2, 3]. However, findings from one population or measure cannot automatically be generalized to another. The present study therefore examined the relationship between AAQ-II scores and depression, anxiety, and stress among Indian young adults aged 18–30 years.

2. Related Research Work

The ACT model proposes that psychological flexibility develops through interacting processes including acceptance of internal experiences, observing thoughts without treating them as literal truths, maintaining awareness of the present, clarifying values, and taking value-consistent action. These processes are intended to support adaptive behaviour in the presence of emotional discomfort [1].

Kashdan and Rottenberg [2] described psychological flexibility as a fundamental aspect of health and discussed its relevance to emotional regulation and adaptation across different contexts. Bond and colleagues [3] reported preliminary psychometric evidence for the AAQ-II as a measure of psychological inflexibility and experiential avoidance. This distinction is important: under conventional scoring, higher AAQ-II totals indicate greater inflexibility or avoidance, rather than greater flexibility.

Reviews of ACT research have described its application across a range of mental health concerns and identified psychological flexibility as a proposed mechanism of change [4]. Research has also explored psychological flexibility and mindfulness in relation to depression, anxiety, somatization, and general psychological distress in nonclinical college samples [5]. These findings provide a rationale for examining multiple distress outcomes together, but they do not establish that the same pattern will occur in every cultural or demographic group.

The dissertation motivating the present article identified a need for further research involving Indian young adults, whose experiences may be shaped by cultural expectations, family relationships, educational pressures, and employment uncertainty. The current study addresses this question through a cross-sectional analysis of self-reported psychological inflexibility, depression, anxiety, and stress.

3. Aim and Objectives

The aim was to examine psychological flexibility, operationalized through AAQ-II scores, in relation to depression, anxiety, and stress among Indian young adults.

The objectives were to assess AAQ-II and DASS-21 scores in the sample; examine associations between AAQ-II totals and depression, anxiety, and stress; and evaluate whether AAQ-II totals statistically predicted each distress outcome in separate simple regression models.

4. Research Methodology

4.1 Research Design and Participants

A quantitative, cross-sectional correlational design was employed. Data were collected through an online questionnaire. A total of 122 responses were received. Participants were included in the primary analysis if they had voluntarily consented, identified as Indian citizens, and were aged 18–30 years inclusive.

Following screening, 112 responses were retained and 10 were excluded because one or more eligibility criteria were not met.

4.2 Measures

Demographic information sheet. Participants provided information including age, gender, nationality, residence, education, occupational status, and marital status.

Acceptance and Action Questionnaire–II (AAQ-II). The seven-item measure was used to assess psychological inflexibility and experiential avoidance. Responses were summed using the study's assumed 1–7 coding, producing a total score. Under conventional scoring, higher totals indicate greater psychological inflexibility; accordingly, the variable is referred to here as the AAQ-II total or psychological inflexibility score [3].

Depression Anxiety Stress Scales–21 (DASS-21). The 21 items were assigned to the standard seven item depression, anxiety, and stress subscales. Each raw subscale score ranged from 0 to 21. The analyses reported here used raw sums; conventional severity comparisons with the original DASS ranges require doubling each DASS-21 subscale total [6]. DASS-21 scores are self-reported symptom indicators and are not, by themselves, clinical diagnoses.

4.3 Procedure and Ethics

Participation was voluntary and the questionnaire included participant information and consent. Responses were described as confidential and intended for academic research. The source dissertation does not provide a separate ethics committee approval number; therefore, no approval number is reported in this article.

4.4 Data Analysis

Data were screened against the eligibility criteria. Descriptive statistics included means, standard deviations, medians, and ranges. Internal consistency was assessed using Cronbach's alpha. Pearson product-moment correlations were calculated between AAQ-II totals and each DASS-21 raw subscale. Three separate unadjusted simple linear regression models were fitted, with AAQ-II total as the predictor and depression, anxiety, or stress as the outcome. Statistical significance was evaluated at $p < 0.05$.

5. Results

5.1 Participant Screening and Descriptive Statistics

Of 122 submitted responses, 112 participants were included in the primary analysis. The mean AAQ-II total was 25.82 (SD = 9.57; median = 22; range = 10–48). The mean depression raw score was 11.24 (SD = 3.99; median = 11; range = 1–21), the mean anxiety raw score was 11.28 (SD = 3.67; median = 11; range = 0–20), and the mean stress raw score was 11.05 (SD = 3.46; median = 11; range = 2–19). The means should not be directly compared because the measures represent different constructs and may have different score distributions.

5.2 Internal Consistency

The AAQ-II showed high internal consistency (7 items; $\alpha = 0.932$). The DASS-21 depression subscale showed $\alpha = 0.752$. The anxiety and stress subscales showed lower estimates ($\alpha = 0.658$ and $\alpha = 0.623$, respectively). These estimates should be interpreted in light of the administered measure version, item functioning, and sample characteristics.

Measure	Items	Cronbach's alpha
AAQ-II	7	0.932
DASS-21 Depression	7	0.752
DASS-21 Anxiety	7	0.658
DASS-21 Stress	7	0.623

Table 1. Internal Consistency Estimates for the Study Measures

5.3 Correlation Analysis

AAQ-II totals were weakly and negatively correlated with depression raw scores, $r(110) = -0.197$, $p = 0.037$. The correlation with anxiety was not statistically significant, $r(110) = -0.041$, $p = 0.664$. The correlation with stress was also not statistically significant, $r(110) = -0.005$, $p = 0.957$. The association was therefore not statistically significant across all three outcomes.

Association	Pearson r	p-value	Decision
AAQ-II and depression	-0.197	0.037	Significant at .05
AAQ-II and anxiety	-0.041	0.664	Not significant
AAQ-II and stress	-0.005	0.957	Not significant

Table 2. Pearson Correlations Between AAQ-II Total and DASS-21 Raw Subscales

5.4 Regression Analysis

The depression regression model was statistically significant, $F(1, 110) = 4.45$, $p = 0.037$, and explained approximately 3.9% of the variance in depression scores ($R^2 = 0.039$). AAQ-II total was a negative predictor ($B = -0.082$, 95% CI $[-0.159, -0.005]$). The anxiety model was not statistically significant, $F(1, 110) = 0.19$, $p = 0.664$, $R^2 = 0.002$. The stress model was also not statistically significant, $F(1, 110) = 0.00$, $p = 0.957$, R^2 approximately 0.000.

Outcome	R^2	B	95% CI for B	Model p
Depression	0.039	-0.082	$[-0.159, -0.005]$	0.037
Anxiety	0.002	-0.016	$[-0.088, 0.057]$	0.664
Stress	0.000	-0.002	$[-0.070, 0.067]$	0.957

Table 3. Simple Linear Regression Models Predicting DASS-21 Raw Scores From AAQ-II Total

6. Discussion

The study examined whether AAQ-II scores were associated with depression, anxiety, and stress in Indian

young adults. The results showed a weak negative association with depression and no statistically significant association with anxiety or stress. Consequently, the findings did not provide consistent support for the proposition that AAQ-II scores predicted all three outcomes in the expected direction.

The direction of the depression association requires particular caution. Under conventional AAQ-II scoring, higher scores represent greater psychological inflexibility and experiential avoidance [3]. A negative correlation between these scores and depression is therefore contrary to the commonly expected direction. It should not be interpreted as evidence that greater psychological inflexibility protects against depression. The item wording administered, response anchors, numeric coding, reverse-scoring decisions, and calculation of total scores should be checked against the original dataset before any substantive interpretation is made.

The depression model was statistically significant but explained only a small proportion of outcome variance. Statistical significance does not necessarily indicate a strong or clinically meaningful association. The nonsignificant anxiety and stress models suggest that AAQ-II total did not explain meaningful variation in those outcomes in this sample using the present analysis. Differences in measurement reliability may also affect observed associations, particularly for the anxiety and stress subscales, whose internal consistency estimates were lower.

The theoretical literature proposes that psychological flexibility may be relevant across different forms of distress [2, 4, 5]. However, the present results do not demonstrate a consistent transdiagnostic pattern. The findings should be understood as results from one cross-sectional sample using self-report measures, rather than as a definitive test of the broader ACT model. The study did not assess an ACT intervention and cannot show that increasing flexibility causes reductions in symptoms.

7. Limitations and Recommendations

Several limitations should be considered. First, the cross-sectional design does not establish temporal order or causation. Second, all variables were self-reported, and responses may be affected by recall, interpretation, or response-style effects. Third, the sample was limited to eligible Indian young adults who completed an online questionnaire, which may limit representativeness. Fourth, the DASS-21 anxiety and stress subscales had relatively low internal consistency estimates in this sample. Fifth, the unexpected negative AAQ-II–depression association makes verification of scoring and response coding essential. Finally, the models were unadjusted and did not account for potential demographic or contextual covariates.

Future research should verify item coding and scoring before analysis, use clearly documented and validated measure versions, and recruit larger and more diverse samples. Longitudinal studies could clarify whether changes in psychological flexibility precede changes in distress. Future work could also examine potential influences such as emotion regulation, coping, social support, family expectations, and academic or occupational stress. Intervention studies would be needed to evaluate whether programmes targeting psychological flexibility are associated with changes in mental health outcomes.

8. Conclusion

In this sample of 112 Indian young adults, AAQ-II totals were weakly and negatively associated with depression, while associations with anxiety and stress were not statistically significant. The depression regression model explained approximately 3.9% of variance, and the anxiety and stress models were not significant. These findings do not provide consistent evidence that psychological inflexibility predicted

all three mental health outcomes. Because the observed depression association was in an unexpected direction, scoring and coding procedures should be verified before drawing substantive conclusions. The study highlights the importance of careful measurement and further research on psychological flexibility and distress among Indian young adults.

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