

RESEARCH ARTICLE

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Translation and Cultural Adaptation of the Dysfunctional Attitude Scale (DAS) into Urdu

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ABSTRACT

Background: Dysfunctional attitudes are negative, unhelpful beliefs that play a central role in emotional distress and are a core component of Beck's cognitive theory of depression. The 35-item Dysfunctional Attitude Scale (DAS-35), developed by Mathers Clinic, has been used in research and applied settings to assess dysfunctional attitudes; however, evidence supporting its psychometric performance in clinical populations remains limited.

Objectives: To translate, culturally adapt, and evaluate the psychometric properties of the Urdu version of the DAS-35 in a Pakistani sample.

Method: Ethical approval was obtained from the institutional review board of the University of Malakand (Ref: UOM/PSY/191; 03-02-2026). A multi-method cross-sectional design was used across three phases. First, the DAS-35 was translated into Urdu following MAPI guidelines for linguistic validation. Second, the translated version was pre-tested with 100 bilingual university students. Third, the final Urdu version was administered to 600 participants (300 individuals with elevated depressive symptoms and 300 from the general population) aged 15–65 years. The Urdu version of the Hospital Anxiety and Depression Scale (HADS) was used to assess convergent validity and classify participants based on depressive symptom severity. Internal consistency, discriminative validity, convergent validity, gender differences, and confirmatory factor analysis (CFA) were conducted using SPSS 27 and R (lavaan package).

Results: Internal consistency ranged from $\alpha = .47$ to $.68$, with lower values for the Approval and Achievement subscales. Participants endorsed dysfunctional attitudes across all seven domains, with Entitlement and Approval showing the highest means. Three subscales (Approval, Love, and Perfectionism) and nine items significantly differentiated between the elevated symptom and general population groups. Significant negative correlations were observed between DAS-35 subscales and HADS scores, supporting convergent validity. No gender differences emerged at the subscale level, although four items showed significant differences. CFA of the seven-factor model indicated poor fit ($\chi^2(539)=2931.27$, $p<.001$; CFI=.57; TLI=.53; RMSEA=.086; SRMR=.085). Four items had factor loadings below .30, particularly in Approval and Achievement domains.

Conclusion: The Urdu DAS-35 demonstrated preliminary reliability and evidence of convergent and discriminative validity. However, support for the original seven-factor structure was limited. Cultural factors may influence the expression and organization of dysfunctional attitudes, suggesting the need for item revision or alternative factor structures.

Keywords: Dysfunctional Attitude Scale; Depression; Anxiety; Psychometric validation; Urdu translation; Cultural adaptation; Pakistan

INTRODUCTION

It is now well understood in both the academic and public debate that beliefs are a major determinant of behaviour and emotional outcomes, while interventions aimed at beliefs can result in changes to behaviour (Macnamara & Burgoyne, 2025). But there are psychological antecedents to this idea. Ellis (1977) suggested that irrational and rigid beliefs are central to the emotional and behavioural distress. Drawing on this, Beck (1972) proposed that those who are prone to depression have maladaptive schemas which are triggered by negative life events and negative thinking. These schemas underlie depressive thinking and their observable expression is dysfunctional attitudes.

Dysfunctional attitudes are found to be more common in depressed individuals than in non-depressed people (Kürümlüoğlu & Tanrıverdi, 2022). This correlation between maladaptive thinking and psychopathology is of interest in two psychotherapy approaches, namely, Cognitive Behavioural Therapy (CBT) and Rational Emotive Behaviour Therapy (REBT), both of which directly aim to address such thinking to alleviate symptoms (Bhattacharya et al., 2023; King et al., 2024).

Considering their clinical importance, adequate assessment of dysfunctional attitudes is of paramount importance. One of the most commonly used scales to assess dysfunctional beliefs in cognitive research is the Dysfunctional Attitude Scale (DAS; Weissman & Beck, 1978). The original version of this scale had 100 items, but shorter versions have been developed with 40 items (Floyd et al., 2004) and 17 items (de Graaf et al., 2009). The use of these versions has included investigations regarding cognitive vulnerability and psychotherapy outcomes. The 35-item version developed by Mathers Clinic (n.d.), however, has been little empirically evaluated; and there is limited research on its psychometric properties in clinical populations.

Cultural context influences the development of cognitive constructs like beliefs and attitudes. Culture can affect what people notice, reject, and internalize, which in turn can impact cognitive schemas (Cerulo et al., 2021). Further evidence of this variation comes from a cross-cultural perspective. However, there are meaningful differences between, for example, Pakistani and Iranian students in dysfunctional attitudes, specifically in perfectionism, approval and autonomy (Fouladgar et al., 2017). In a similar fashion, Turkish samples show that only some DAS domains are related to depression (Şahin & Şahin, 1992).

These results highlight the need for cultural adaptation and translation of psychological instruments. Cultural adaptation will help to increase the accuracy of the measurement and add to the clinical relevance and accessibility (Efremov, 2025). Since dysfunctional attitudes are central to depression and an Urdu version of DAS-35 did not exist, the aim of the present study was to translate, culturally adapt and evaluate the psychometric properties for use in Pakistan.

METHODOLOGY

The design of the study was multi method through purposive sampling in three stages.

In the first stage, Urdu translation of Dysfunctional Attitude Scale (DAS-35; Mathers Clinic, n.d) was done according to the guidelines of MAPI (MAPI Institute, 2019). Forward translation and review were done by two expert panels (n = 5) consisting of experts in CBT, mental health, linguistics, education, and cultural studies to assure conceptual and cultural equivalence. The translated items were then reviewed by an independent review panel for clarity, cultural appropriateness, and consistency with the original construct. Two bilingual researchers then back-translated the text to check for accuracy and make any needed revisions.

The translated scale was pre-tested in the second phase with 100 bilingual university students (aged 18-30) obtained from academic networks and student groups. All participants gave written informed consent. Input in this stage was used to improve the clarity and the linguistic appropriateness of the items.

Finally, a completed Urdu version of the DAS-35 was administered to 600 participants (15-65 years) with higher depression symptoms and general population. The Elevated symptom group were selected from the Out Patient Department of Mayo Hospital Lahore. The inclusion criteria for this group were at least five years of formal education and a HADS score of 8 or higher, which is considered the recommended cut-off score for clinically significant symptoms. Formal diagnostic interviews or independent verification of psychiatric diagnoses were not employed, and thus, the group classification should be understood as indicative of depressive symptomatology identified via screening and not necessarily confirmed clinical diagnoses. Participants with substance use disorders (DSM-5 criteria) or severe cognitive dysfunction (e.g., intellectual disability or dementia) or active psychotic symptoms were excluded.

The clinical participants were enrolled from the Outpatient Department of Mayo Hospital Lahore and non-clinical participants were recruited through internet. Google Forms were circulated on WhatsApp, email and University

networking in Lahore. The Urdu DAS-35 (Lodhi et al., 2020) and HADS (Zigmond & Snaith, 1983) were included in the survey package along with informed consent and demographic information.

The DAS-35 is a self-report instrument that measures dysfunctionality in seven areas: Approval, Love, Achievement, Perfectionism, Entitlement, Omnipotence and Autonomy. There are 5 items in each domain, scored on a 5-point Likert scale from -2 (strongly agree) to +2 (strongly disagree). The domain scores can range from -10 to +10 with higher scores indicating more adaptive beliefs, and lower (negative) scores reflecting greater cognitive vulnerability.

The HADS consists of 14 items that are self-reported and evaluate two dimensions, anxiety and depression, with scores for each subscale on a 0-21 range. A score of 8 or higher is considered clinically significant symptoms (Zigmond & Snaith, 1983). The Urdu version of this study had good reliability ($\alpha = 0.84$; Lodhi et al., 2020).

Ethical clearance was also secured from the IRB of University of Malakand (Ref: UOM/PSY/191, dated 03-02-2026). Permission was also obtained from Mathers Clinic to translate and adapt the DAS-35, and from the original authors of the HADS. The participation was voluntary, confidential, with informed consent, and participants were reminded of their right to withdraw at any time.

Descriptive statistics, reliability (Cronbach's alpha) and independent-samples t-tests for group differences, and correlation analyses, were performed using IBM SPSS version 27. Confirmatory factor analysis (CFA) was conducted in R utilizing the lavaan package to assess the factor structure and to compare it with the original theoretical model (Weissman & Beck, 1978).

RESULTS

The total participants were 600 subjects aged from 15 to 65 years ($M = 27.21$, $SD = 7.71$) and were equally divided between the university student group ($n = 300$) and the clinical/outpatient group ($n = 300$). The sample included more women ($n = 383$; 63.83%) than men ($n = 217$; 36.17%). Most participants were graduates ($n = 392$; 65.33%), followed by under matric ($n = 126$; 21.00%), intermediate ($n = 75$; 12.50%), and uneducated individuals ($n = 7$; 1.17%). The majority belonged to a middle socioeconomic class ($n = 379$; 63.17%), followed by lower ($n = 177$; 29.50%) and upper class ($n = 44$; 7.33%). Most participants resided in urban areas ($n = 490$; 81.67%), with 110 (18.33%) from rural regions. Regarding marital status, 362 (60.30%) were single, 230 (38.33%) were married, and 8 (1.33%) were separated, divorced, or widowed.

Using HADS cut-off scores (≤ 8), there were 536 (89.33%) participants who were classified as having at least mild symptoms of depression and/or anxiety.

In the university students (excluding the outpatient/clinical group), 78.67% ($n = 236$) were also above the HADS cut-off, which means there was a high prevalence of increased symptoms in this sub-group. Higher proportions were observed among females (91.64%; $n = 351$) compared to males (85.25%; $n = 185$). All upper class participants (100 %; $n = 44$) met the cut-off as compared to 91.82 % ($n = 348$) of middle class participants and 81.36 % ($n = 144$) of lower class participants. The prevalence of the urban participants (91.84%, $n = 450$) was also higher than that of the rural participants (78.18%, $n = 86$).

The results of the descriptive analysis showed that all seven domains of the DAS-35 were endorsed. The mean scores for Entitlement, Approval, Achievement, Omnipotence, Perfectionism, Autonomy and Love are presented in Table 1, with Entitlement having the highest mean score.

Internal consistency was low to acceptable (Hair et al., 2013) with less reliable scores for the Approval ($\alpha = .56$) and Achievement ($\alpha = .47$) subscales.

Table 1
Descriptive Statistics for Study Measures (N = 600)

Measure	M	SD	α coefficient
DAS			
Approval	-2.71	3.91	.56
Love	-1.46	4.68	.68
Achievement	-2.39	3.85	.47
Perfectionism	-1.93	4.06	.59
Entitlement	-2.99	3.98	.62

Measure	M	SD	α coefficient
Omnipotence	-2.25	4.11	.60
Autonomy	-1.78	4.32	.62
HADS	26.33	12.35	.96
Anxiety	12.73	6.38	.92
Depression	13.61	6.32	.92

Independent-samples t-tests indicated that only nine of the 35 DAS items significantly differentiated between participants with elevated symptoms and those from the general population. Item 17 showed the highest t-value, whereas Item 21 showed the largest mean difference.

For several items (Items 2, 7, 10, and 21), both groups reported negative mean scores; however, individuals with elevated symptoms consistently showed more maladaptive attitudes.

At the subscale level, three of the seven domains (Approval, Love, and Perfectionism) significantly differentiated between groups, with Love showing the strongest statistical effect and Approval showing the largest mean difference (Table 2).

Table 2
Discriminative DAS Items (N = 600)

Item	Not depressed n = 144 HADS-D < 8 M (SD)	Depressed n = 456 HADS-D ≥ 8 M (SD)	p
2. It is best to give up my own interests in order to please other people.	-0.25 (1.19)	-0.53 (1.29)	.022
3. I need other people's approval in order to be happy.	0.18 (1.39)	-0.23 (1.49)	.003
7. If others dislike you, you are bound to be less happy.	-0.16 (1.24)	-0.42 (1.36)	.033
9. If a person I love does not love me, it means I am unlovable.	0.42 (1.43)	-0.12 (1.52)	<.001
10. Being isolated from others is bound to lead to unhappiness.	-0.17 (1.40)	-0.56 (1.35)	.003
15. If I fail at my work, then I am a failure as a person.	0.28 (1.35)	-0.08 (1.48)	.007
17. It is shameful for a person to display weakness.	0.19 (1.27)	-0.39 (1.45)	<.001
21. If I strongly believe I deserve something, I have reason to expect that I should get it.	-0.40 (1.23)	-0.69 (1.29)	.017
30. I should be able to please everybody.	0.11 (1.26)	-0.20 (1.44)	.013
Subscale			
Approval	-2.09 (3.77)	-2.90 (3.94)	.030
Love	-0.26 (4.13)	-1.84 (4.78)	<.001
Perfectionism	-1.23 (3.58)	-2.16 (4.17)	.010

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed)

Independent-samples t-tests revealed no significant gender differences across DAS-35 subscales. However, four individual items showed significant gender differences (Table 3).

Table 3
Gender Difference Across DAS Items (N = 600)

Item	Male n = 217 M (SD)	Female n = 383 M (SD)	p
3. I need other people's approval in order to be happy.	-0.32 (1.43)	-0.03 (1.49)	.018

Item	Male n = 217 M (SD)	Female n = 383 M (SD)	p
6. I cannot find happiness without being loved by another person.	-0.44 (1.36)	-0.16 (1.48)	.020
21. If I strongly believe I deserve something, I have reason to expect that I should get it.	-0.78 (1.22)	-0.52 (1.30)	.019
27. If I criticise the way someone does something and they become angry or depressed, this means I have upset them.	-0.72 (1.20)	-0.45 (1.33)	.013

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed)

Pearson correlation analysis ($\alpha = .05$, 95% CI) indicated that HADS total and HADS-A scores were significantly associated with all seven DAS subscales. HADS-D scores were significantly correlated with six subscales, with Autonomy showing the only non-significant association (Table 4).

Table 4

Correlation Between HADS and DAS-35 (N = 600)

Variable	Approval	Love	Achievement	Perfectionism	Entitlement	Omnipotence	Autonomy
HADS-A	-.18***	-.29***	-.12**	-.20***	-.09*	-.12**	-.12**
HADS-D	-.17***	-.25***	-.13**	-.19***	-.10*	-.13**	-.07
HADS total	-.18***	-.28***	-.13**	-.20***	-.10*	-.13**	-.10*

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-tailed)

Confirmatory factor analysis was conducted using the lavaan package in R to evaluate the hypothesized seven-factor structure of the DAS-35. Maximum likelihood estimation was used, as assumptions of normality were met.

Model fit indices indicated poor overall fit. The chi-square test was significant ($\chi^2 = 2931.27$, $df = 539$, $p < .001$). Comparative fit index (CFI = .57) and Tucker–Lewis index (TLI = .53) were below acceptable thresholds ($\geq .90$). RMSEA (.086, 90% CI [.083, .089]) exceeded recommended limits, and SRMR (.085) was slightly above the suggested cut-off. Overall, these results suggest limited support for the proposed seven-factor structure in the Urdu version of the DAS-35 (Table 5).

Table 5

Model Fit Indices for the Seven-Factor CFA Model DAS-35

Fit index	Value	Cut-off for acceptable fit
χ^2 (df = 539)	2931.27, $p < .001$	Nonsignificant desirable
CFI	.57	$\geq .90$
TLI	.53	$\geq .90$
RMSEA	.086, 90% CI [.083, .089]	$\leq .08$
SRMR	.085	$\leq .08$

Most items demonstrated acceptable standardized factor loadings within their respective domains. However, four items within the Approval and Achievement subscales showed weak loadings (Item 1 = .20, Item 11 = .18, Item 12 = .15, Item 13 = .12), all below the conventional threshold of .30.

Overall, factor loadings ranged from 0.12 to 0.72. The Love, Entitlement, Autonomy, and Omnipotence subscales demonstrated moderate to strong loadings, supporting partial construct validity. Perfectionism showed acceptable but variable loadings, whereas Approval and Achievement showed weaker and less stable patterns.

Latent variances were significant for most factors, with the exception of Achievement, which appeared unstable. Strong inter-factor correlations were also observed, particularly between Approval and Autonomy ($r = .83$) and Approval and Love ($r = .87$), suggesting potential construct overlap (Table 6).

Table 6
Standardized Factor Loadings for the Urdu DAS-35 Seven-Factor CFA Model

Factor	Item	Loading	SE
Approval	DAS01	.20	.05
	DAS02	.48	.04
	DAS03	.57	.04
	DAS04	.38	.05
	DAS05	.63	.04
Love	DAS06	.64	.03
	DAS07	.64	.03
	DAS08	.45	.04
	DAS09	.60	.04
	DAS10	.38	.04
Achievement	DAS11	.18	.13
	DAS12	.15	.10
	DAS13	.12	.09
	DAS14	.72	.07
	DAS15	.66	.07
Perfectionism	DAS16	.56	.05
	DAS17	.56	.04
	DAS18	.30	.06
	DAS19	.31	.06
	DAS20	.57	.04
Entitlement	DAS21	.51	.04
	DAS22	.41	.05
	DAS23	.57	.04
	DAS24	.43	.04
	DAS25	.60	.04
Omnipotence	DAS26	.42	.05
	DAS27	.55	.04
	DAS28	.43	.04
	DAS29	.45	.04
	DAS30	.55	.05
Autonomy	DAS31	.48	.04
	DAS32	.49	.04
	DAS33	.45	.05
	DAS34	.50	.05
	DAS35	.58	.04

Overall, the seven-factor model demonstrated limited construct validity in the Urdu adaptation of the DAS-35. While certain domains (Love, Autonomy, and Entitlement) showed acceptable psychometric properties, others (particularly Approval and Achievement) performed weakly. These findings suggest that future research should consider item refinement, alternative factor structures, or higher order/bifactor models to improve model fit and construct representation.

DISCUSSION

This study aimed to translate and culturally adapt the Urdu version of DAS-35 to be used with a population in Pakistan. Generally, people with higher depressive symptoms showed higher dysfunctional attitudes (DA) than the general population. Only a subset of items and subscales, however, significantly distinguished between the groups, indicating a low sensitivity of some of the items in this cultural context compared to the results reported for Western and Turkish samples (de Graaf et al., 2009; Şahin & Şahin, 1992).

Some items showed higher associations with the depressive symptoms. The largest *t* value was found for Item 17 and the largest mean difference between groups was found for Item 21. More specifically, the beliefs captured in this study question, such as in Item 21, having to do with personal deservingness and entitlement, may conceptually relate to cognitive patterns of fairness and reward expectations (Song et al., 2018).

Patterns of response also indicated that both groups reported similar kinds of beliefs; however, those with higher levels of depressive symptoms did report greater intensity and rigidity. This pattern suggests that dysfunctional attitudes may not be qualitatively different among groups but rather that they may be more or less. This interpretation supports the cognitive models of the depression as an amplification of preexisting schemas, and not as completely different schemas (LeMoult & Gotlib, 2019).

On the subscale level, Approval, Love and Perfectionism were the most relevant domains. This is in line with previous studies which have identified the interpersonal dependency and high self-standards as cognitive vulnerability factors (Ebrahimi et al., 2013; Fouladgar et al., 2017; Şahin & Şahin, 1992). It is interesting to note that both groups had scores that were generally in the adaptive direction on a number of subscales, indicating that these beliefs are perhaps fairly common across this cultural group and that there were more extreme differences between the groups than directional differences.

The original seven factor structure of the DAS-35 was not supported by confirmatory factor analysis to a great extent for the Urdu version. Previous studies have found comparable inconsistencies in factor structure (Brown et al., 2023; de Graaf et al., 2009) in which alternative models and poor item performance are often reported. Approval and Achievement were the lowest domains in terms of reliability and factor loadings in the current study. Love, Autonomy, Entitlement, and Omnipotence, by contrast, exhibited relatively good psychometric properties. High inter-factor correlation coefficients also suggested a high degree of commonality among factors and that a more parsimonious structure or higher order model might be more appropriate to represent dysfunctional attitudes in this population.

At the subscale level, gender analyses showed no significant differences, however, a few significant item level differences were noted. This is consistent with earlier studies that have indicated little gender differences in dysfunctional attitudes at the construct level (Şahin & Şahin, 1992). However, there is some variation at the item level, which might be gender or culture specific nuances in the interpretation of some beliefs and could be explored further.

In sum, this study is an initial Urdu translation of the DAS-35 and provides preliminary support for the applicability of dysfunctional attitudes in a Pakistani context. The results also indicate that culturally embedded cognitive structures may not be adequately captured by simply translating western developed measures. Approval, Love and Perfectionism seem to be fairly common among both groups, indicating some degree of cultural approval of these beliefs. It may, therefore, be the strength and hardness of these attitudes that separates the groups.

Limitations and Future Directions

There are a few caveats to be noted. Generalizability is limited due to the use of purposive sampling and a high percentage of participants scoring above the HADS threshold limit. Furthermore, a single screening cut-off may introduce some measurement error and decrease the diagnostic accuracy. The high inter-factor correlation also indicates the presence of construct overlap and may affect the uniqueness of the proposed subscales. Furthermore, test-retest reliability was not measured and only one confirmatory factor model was examined.

Future studies should include exploratory factor analysis and test for other structural models (higher order and bifactor analysis). Scale performance may improve with item refinement or removal, especially in the Approval/Achievement

domains. Further validation using larger and more representative community samples is also needed. Longitudinal studies would help to elucidate the long-term stability and treatment sensitivity of dysfunctional attitudes.

CONCLUSION

This study gives some preliminary evidence for the applicability of dysfunctional attitudes in a Pakistani context and points to significant psychometric constraints of the Urdu DAS-35. The scale showed several areas that were not structurally valid and the level of sensitivity of the items was also limited, despite the fact that there was a consistent pattern of maladaptive beliefs being related to higher depressive symptoms. The results indicate that the Dysfunctional Attitudes construct is culturally relevant, but may need more than just direct linguistic translation to refine the construct's measurement. Future research that involves culturally based adaptations of items and model refinement will be critical to enhance its research and clinical utility.

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