

ACT Mindfulness Practices In The Context Of Islamic And Indigenous Spiritual Traditions

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ABSTRACT

Background: Aggression in young adults within Pakistan is a significant concern and appears to be a problem at the academic, social, and interpersonal levels. Although mindfulness therapies like ACT have been adopted to address issues in the West, their adoption in diverse spiritual and cultural contexts remains largely unexplored. This study aims to fill the gap of culturally responsive approaches to aggression by incorporating mindfulness elements of ACT to Islamic concepts of sabr, dhikr, and tawakkul to improve psychological flexibility and mitigate aggression among youth in Pakistan. **Objectives:** To assess the efficacy and cultural applicability of aggression reduction techniques incorporating Islamic and Indigenous spiritual frameworks for mindfulness practices on Pakistani young adults. The objectives of the study were to personalize ACT mindfulness modules to align with Islamic spirituality, apply a culturally respectful ACT intervention for young adults that addresses aggressive behavior, measure changes in aggression, psychological flexibility, and emotional regulation post-intervention, and assess participants' views on the spiritual-cultural dimensions integrated into the intervention. **Method:** The study utilized a quasi-experimental approach on 20 participants aged 18 to 25 with elevated levels of aggression. There were two groups: an experimental group of 10 participants who received the ACT intervention, and a control group of 10 participants who received no treatment. The ACT intervention was comprised of 8 weekly group sessions, which included: Islamic elements (taqwa, sabr, tazkiyah, rahmah). The activities included, but were not limited to, dhikr-based mindfulness, values clarification, and spiritual reflection. Each session targeted one of the ACT processes (acceptance, defusion, self-as-context) with an Islamic cultural framework. The outcome measures were the BPAQ (Buss-Perry Aggression Questionnaire), AAQ-II (Acceptance and Action Questionnaire), and DERS (Difficulties in Emotion Regulation Scale). **Findings:** Participants demonstrated significant improvements in emotional regulation, psychological flexibility, and reduced aggression levels. The experimental group showed a significant reduction in total aggression (mean reduction of 16.94 points on the BPAQ, $p < 0.001$), with large effect sizes across all aggression subscales (Cohen's d ranging from 0.77 to 1.08). Psychological flexibility improved significantly on the AAQ-II, and emotional regulation showed significant improvement on the DERS. Incorporating Islamic concepts such as sabr and rahmah strengthened engagement and emotional resilience, while fostering deeper spiritual development. **Conclusion:** The ACT mindfulness program, adapted culturally and spiritually, effectively mitigated aggression and improved emotional regulation among Pakistani youth. Incorporating Islamic values into the ACT framework improved adherence to the therapy. It enhanced its

relevance, indicating that mental health efforts designed for different sociocultural contexts must be rooted in local spiritual paradigms to be meaningful.

INTRODUCTION

Aggressive behavior among youth poses a significant challenge to personal and social well-being worldwide. In Pakistan, university students regularly report high levels of anger, physical aggression, verbal aggression, and hostility, with male students exhibiting particularly elevated anger and physical aggression and female students reporting higher verbal hostility (Bukhari et al., 2017). Such aggression is often rooted in emotional dysregulation and impulsivity, which can stem from stress, trauma, or unmet psychosocial needs. Indeed, emotional regulation difficulties are closely linked to externalizing behaviors; deficits in coping with negative affect may precipitate anger outbursts and retaliatory aggression (Kim et al., 2022). Moreover, Pakistani youth face additional stressors, including political and economic instability, academic pressure, and stigma against mental health care, which compound emotional strain and may exacerbate aggressive responses to frustration (Sarfraz et al., 2023). Collectively, these factors highlight the need for effective interventions to reduce aggression and improve emotional regulation in this population.

Contemporary psychological models emphasize the role of emotion regulation in the expression of aggressive behavior. Research suggests that interventions that enhance adaptive coping with anger can curb aggressive impulses. Mindfulness-based approaches in particular have demonstrated promise: meta-analytic evidence indicates that mindfulness training produces significant reductions in anger and aggression (O'Dean et al., 2025). O'Dean et al. also found that mindfulness-based interventions yielded medium-to-large effect sizes for lowering anger ($d \approx -0.48$) and aggression ($d \approx -0.61$), with exceptionally robust effects observed in Asian populations. Similarly, Kim et al. (2022) reported that higher dispositional mindfulness was associated with reduced rumination and expressive suppression, which in turn mediated lower trait aggression. These findings are consonant with broader evidence that mindfulness training enhances emotion regulation capacities, for example, increasing cognitive reappraisal and present-moment awareness, thereby reducing impulsive, angry reactions (Kim et al., 2022; O'Dean et al., 2025). In sum, cultivating nonjudgmental awareness of internal experiences appears to weaken the link between provocation and aggressive response.

Acceptance and Commitment Therapy (ACT) builds on mindfulness by fostering psychological flexibility, the capacity to remain present with difficult thoughts and feelings while pursuing meaningful values-based actions (Webb, 2023). ACT conceptualizes rigid avoidance of unpleasant internal states as a key driver of dysfunction, and it promotes six core processes (acceptance, cognitive defusion, mindfulness of the present moment, self-as-context, values clarification, and committed action) to increase flexibility (Abbas et al., 2022). Through these processes, individuals learn to acknowledge anger and frustration without impulsively acting on them, and instead to commit to long-term goals and principles even when uncomfortable emotions are present (Byrne & Cullen, 2024). As Abbas et al. (2022) note, ACT offers a promising approach to managing aggression by promoting psychological flexibility, emotional acceptance, and value-driven action. Indeed, systematic reviews confirm that ACT and other mindfulness-oriented therapies can reduce anger and aggression in adults. For example, Berkout et al. (2019) report that ACT has been effectively applied to diminish adult aggression and irritability, although they emphasize that evidence for youth remains scarce. Preliminary studies in Pakistan similarly suggest ACT's utility: a case study of a Pakistani man with severe aggression showed that an 8-session ACT program markedly reduced his anger outbursts by teaching mindfulness, defusion, and acceptance of anger-related thoughts (Abbas et al., 2022).

Despite this promise, conventional ACT and mindfulness protocols have largely been developed in Western contexts and may not fully resonate with non-Western populations (Panaioti, 2015). Pakistan is an overwhelmingly Muslim country, and religious belief and practice are integral to most young adults' lives. Many Pakistani individuals interpret psychological distress through religious and moral frameworks, and they often seek coping strategies within Islamic teachings (Maihula, 2025). Islamic culture emphasizes

resilience and coping through spiritual values: for instance, the Quran and Hadith repeatedly extol *sabr* (patient perseverance during adversity) and *tawakkul* (trustful reliance on God). These concepts align closely with ACT principles. In Islam, *sabr* is defined as endurance and self-restraint amid trials, accompanied by faith and commitment to a meaningful life. The practice of *dhikr*, or remembrance of Allah, encourages moment-to-moment awareness and turning attention away from distress to divine presence (Pekcan, 2013). Moreover, *tawakkul* combines personal effort with unconditional acceptance of outcomes, encapsulating the idea of acting on values while entrusting the results to God (Gondal et al., 2024). Prophetic teachings reinforce that patience and gratitude cultivate resilience and emotional stability (Maihula, 2025). Thus, the Islamic tradition contains rich, culturally embedded practices, such as prayer, Quranic supplications, and communal support, that foster emotional regulation and coping.

Prior scholars have begun to articulate the synergy between ACT and Islam. Khan et al. (2025) describe how ACT's focus on mindfulness and value-driven living overlaps with Islamic psychology's aims, and they propose integrating an "Islamic model of the self" into ACT to reduce cultural stigma and improve treatment acceptability for Muslim patients. Similarly, clinical authors have observed that the six ACT processes have analogues in Islamic teachings: for example, Muslims are advised to exercise *sabr* instead of fleeing from suffering, and to engage in *dhikr* (remembrance of God) to be fully present and value-driven even in hardship (Çınaroğlu, 2024). Fatih Bhatti-Ali (2023) explicitly notes that Islam suggests being in the moment (*dhikr*) while keeping with a behavioral pattern of values-based living a prescription remarkably consonant with ACT's acceptance and mindfulness aims. These conceptual correspondences suggest that an ACT intervention framed in Islamic terms could both leverage familiar spiritual practices and reinforce psychological flexibility.

Given the theoretical fit and preliminary evidence, we developed a culturally adapted ACT-mindfulness intervention for Pakistani young adults, integrating Islamic spiritual concepts (*sabr*, *dhikr*, *tawakkul*, etc.) to enhance aggression management and emotion regulation. We hypothesized that this program would significantly reduce self-reported aggression and improve emotional regulation skills, relative to a wait-list control. To our knowledge, no prior study has rigorously evaluated an ACT-based intervention for aggression that is explicitly grounded in Muslim spiritual practices. Demonstrating its effectiveness would offer a novel model of culturally sensitive therapy, bridging Western evidence-based practice with non-Western faith traditions to promote mental health.

METHOD

Participants and Design

The study was a controlled trial with parallel groups. Twenty Pakistani young adults (mean age \approx 22years) were recruited from urban universities in Pakistan. Eligibility criteria included age 18–25, proficiency in Urdu or English, and elevated aggression as indicated by a preliminary screening (scores above the 66th percentile on the Buss-Perry Aggression Questionnaire). Individuals with diagnosed psychotic disorders, intellectual disability, or concurrent psychological treatment were excluded. The final sample was 30% male and 70% female, reflecting the actual participant demographics. Participants provided informed consent in accordance with the university ethics committee and were randomized (via computer-generated allocation) to the ACT intervention ($n = 10$) or a wait-list control ($n = 10$).

Intervention, Culturally Adapted ACT

The intervention comprised eight weekly 2-hour group sessions, delivered by two clinical psychologists trained in ACT. The ACT curriculum followed core manuals (Hayes et al., 2011) but was richly embedded with Islamic and indigenous content. Each session combined ACT exercises with culturally resonant practices as given in Table 1.

Table 1: Islamic-ACT Intervention Program Sessions

Sessio n	Title	ACT Component	Islamic Framework	Key Activities	Homework/Pract ice
1	Values and Sabr	Values identification	Sabr (patience/endurance)	<ul style="list-style-type: none"> • Discussion of life values (religious & family) • Quranic verse reading on patience • Chinese finger trap metaphor • Journaling about recent difficulties 	Apply sabr to personal challenges
2	Mindfulness and Dhikr	Present-moment awareness	Dhikr (remembrance of Allah)	<ul style="list-style-type: none"> • Guided mindfulness meditation (breath & body) • Mindful recitation of Quranic phrases • "Alhamdulillah", "SubhanAllah" practice 	Daily short dhikr sessions
3	Cognitive Defusion and Waswasa	Thought defusion	Waswasa (whispered doubts from Shaytan)	<ul style="list-style-type: none"> • Discussion of Quranic teaching (Quran 50:16) • "Leaves on a stream" exercise • Distinguishing self from nafs (lower self) 	Practice observing thoughts as external
4	Acceptance and Sabr Continued	Emotional acceptance	Sabr (enduring with faith)	<ul style="list-style-type: none"> • Monitoring anger cues without suppression • Hand in icy water exercise • "Making room" for unpleasant feelings 	Practice enduring discomfort with patience
5	Self-as-Context and Tawakkul	Perspective-taking	Tawakkul (reliance on Allah's plan)	<ul style="list-style-type: none"> • "Observing self" meditation • Exploring stable sense of self • Value-based action with trust in outcomes 	Apply tawakkul to committed actions
6	Committed Action – Islamic Perspective	Behavioral commitment	Righteous deeds and perseverance	<ul style="list-style-type: none"> • Sharing avoided valued actions • ACT commitment exercises • Planning incremental steps • Quranic reference (2:286) 	Implement small action steps toward values
7	Group Dhikr Meditation and Relaxation	Mindfulness consolidation	Collective spiritual practice	<ul style="list-style-type: none"> • Group Tasbih recitation • Synchronized breathing • Circle format practice • Reflection on inner peace 	Continue group or individual dhikr practice
8	Review and Relapse Prevention	Skills integration	Long-term spiritual commitment	<ul style="list-style-type: none"> • Review all concepts • Tree planting metaphor (Hadith) 	Use mindfulness and spiritual reminders in daily life

				<ul style="list-style-type: none"> • Personal coping plan creation • Peer support planning 	
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Measures

Aggression was assessed with the Buss-Perry Aggression Questionnaire (BPAQ), a widely used self-report measure of physical aggression, verbal aggression, anger, and hostility. Emotional regulation was assessed using the Difficulties in Emotion Regulation Scale (DERS). Psychological flexibility was measured by the Acceptance and Action Questionnaire-II (AAQ-II; Bond et al., 2011). All instruments had established Urdu versions or were translated and back-translated according to standard procedures. Reliability in the current sample was excellent, with Cronbach's alpha values ranging from .85 to .99 across all scales and time points.

Procedure

Participants completed baseline questionnaires (Week 0), then the ACT intervention group began the 8-week program while control participants received no active treatment (wait-list). At Week 9 both groups were re-assessed on all outcome measures. Assessors were blind to group assignment. To improve follow-up rates, reminder messages were sent before each session and assessment. Participants in the control group were offered the intervention after study completion.

Data Analysis

Data were analyzed with repeated-measures ANOVAs using group (ACT vs. control) as the between-subjects factor and time (pre vs. post) as the within-subjects factor. Significant interactions were followed by paired t-tests. Effect sizes (partial η^2 and Cohen's d) were calculated. Analyses followed intention-to-treat principles with last-observation-carried-forward for missing post-test data. All tests were two-tailed, with $\alpha = .05$.

RESULTS

Table 1: Sociodemographic characteristics of the data

		Control Group			ACT Group		
		M	n	%	M	n	%
Age		23			22		
Gender	Male		3	30.0		3	30.0
	Female		7	70.0		7	70.0
Qualification	BS		5	50.0		5	50.0
	MS		5	50.0		5	50.0
Religion	Islam		10	100.0		10	100.0
Marital Status	Single		10	100.0		10	100.0
Socio Economic Status	Low		4	40.0		3	30.0
	Middle		6	60.0		7	70.0
	High		0	0.0		0	0.0
Birth Order	First		2	20.0		1	10.0
	Second		3	30.0		2	20.0
	Third		2	20.0		1	10.0
	Last Born		3	30.0		6	60.0
Living Class	Rural		5	50.0		4	40.0
	Urban		5	50.0		6	60.0

No of Siblings	None	1	10.0	0	0.0
	One	2	20.0	2	20.0
	Two	4	40.0	4	40.0
	Three or more	3	30.0	4	40.0
Family Status	Nuclear	3	30.0	3	30.0
	Extended	5	50.0	4	40.0
	Single Parent	2	20.0	3	30.0

Table 1 revealed that participants in the Control and ACT groups (n = 10 each) were similar with respect to most variables. The average age was 23 years old in the Control group and 22 years old in the ACT group. Both samples had 70 percent and 30 percent of females and males, respectively, with the same division of education backgrounds, 50 percent having a bachelor's degree and 50 percent having a master's degree. Each respondent was single and Muslim. Most participants were of middle socioeconomic status (Control = 60%, ACT = 70%), with fewer participants in the low socioeconomic status; there were no participants in the high socioeconomic status. The distribution of birth orders was variable, with the proportion of the last-born participants in the ACT group (60%) being more significant than in the Control group (30%). The Control group population was nearly evenly split between urban and rural life zones, and the ACT group had a small urban preponderance (60 percent). Nearly all participants had siblings, and both nuclear (30% in both groups), extended (Control = 50%; ACT = 40%), and single-parent households (Control = 20%; ACT = 30%) were represented. In general, the groups were demographically compatible, which confirmed the appropriateness of their use in the research.

Table 2: Reliability Alpha

Scales	K	M	SD	Potential Scores		Actual Scores		α
				Min	Max	Min	Max	
Aggression Total (Pre)	29	77.50	16.36	29	145	41	105	.96
Aggression Total (Post)	29	60.56	19.78	29	145	35	105	.90
Physical Aggression (Pre)	14	23.06	6.62	9	45	8	35	.90
Physical Aggression (Post)	14	19.39	7.66	9	45	9	36	.90
Verbal Aggression (Pre)	10	15.06	3.31	5	25	11	21	.96
Verbal Aggression (Post)	10	11.50	3.77	5	25	7	19	.98
Anger (Pre)	5	18.56	4.07	6	30	10	25	.99
Anger (Post)	5	13.39	5.53	6	30	7	25	.98
Hostility (Pre)	10	20.83	5.03	7	35	12	29	.90
Hostility (Post)	10	16.28	5.53	7	35	11	28	.85

Table 2 shows that the internal consistency is high on overall scales subscales and time points. The values of Cronbach's alpha ranged between .85 and .99 indicating excellent reliability (0.70 is considered acceptable; Field, 2018). In particular, the total aggression scale had a reliability coefficient equal to 0.96 (pre-assessment) and 0.90 (post-assessment). Its subscales of physical aggression yielded reliable results (alpha as 0.90 pre and post), and the subscales of verbal aggression had an extremely high internal consistency (alpha pre-0.96; alpha post 0.98). The reliability values on the anger subscale were strongest (d8 = .99 pre, d8 = .98 post) and hostility did not decrease that much either (d8 = .90 pre, d8 = .85 post). Such results indicate that the psychological tool that was used to gauge aggression and its elements was psychometric and appropriate to the current study.

Table 3: Paired Samples Statistics for Comparison of Aggression on Pre-and Post-Test among Study Group

Measures	Pre Intervention		Post Intervention		t	p	Cohen's d
	M	SD	M	SD			
Physical Aggression	23.06	6.62	19.39	7.66	3.27	.005	0.77
Verbal Aggression	15.06	3.32	11.5	3.78	4.21	.001	0.99
Anger	18.56	4.08	13.39	5.28	4.12	.001	0.97
Hostility	20.83	5.03	16.28	5.54	4.2	.001	0.99
Total Aggression	77.5	16.36	60.56	19.78	4.56	.001	1.08

Table 3 showing paired samples statistics revealed a significant decrease in the levels of aggression after the intervention in the participants of the ACT (Acceptance and Commitment Therapy) group. The statistical significance was obtained in all subscales of aggression (physical aggression, verbal aggression, anger, and hostility) as pre- to post-test results have reduced statistically significantly (with .005 to .001 p values). The total aggression score has improved in the range of 77.50 (SD = 16.36) to 60.56 (SD = 19.78) with a big effect size (Cohen d = 1.08), which means that the intervention was very effective. In the same manner, large effects were observed in verbal aggression (d = 0.99), anger (d = 0.97), and hostility (d = 0.99) and physical aggression (d = 0.77) was moderate-large in size. These findings indicate that the ACT intervention successfully had an important effect in declining diverse aspects of aggression in the subjects.

Table 4: One-Way ANOVA Results for Pre- and Post-Test Scores across Groups

Measure	Control Group (M ± SD)	ACT Group (M ± SD)	F	p	ηp2
Pre-PA	23.67 (9.00)	22.33 (6.25)	0.17	.687	.009
Post-PA	23.83 (9.11)	13.17 (2.71)	8.91	.007**	.322
Pre-VA	14.00 (3.03)	13.50 (3.15)	0.15	.707	.008
Post-VA	14.33 (3.45)	7.67 (1.21)	23.94	.000**	.571
Pre-Anger	18.00 (5.90)	18.17 (3.60)	0.01	.938	.001
Post-Anger	18.67 (5.32)	10.17 (2.32)	17.53	.001**	.498
Pre-Hostility	21.00 (7.38)	21.33 (3.14)	0.03	.873	.002
Post-Hostility	21.50 (6.80)	13.17 (2.32)	13.55	.002**	.434
Pre-Total Aggression	76.67 (24.07)	75.33 (14.91)	0.02	.889	.001
Post-Total Aggression	78.33 (23.64)	44.17 (6.59)	16.13	.001**	.482

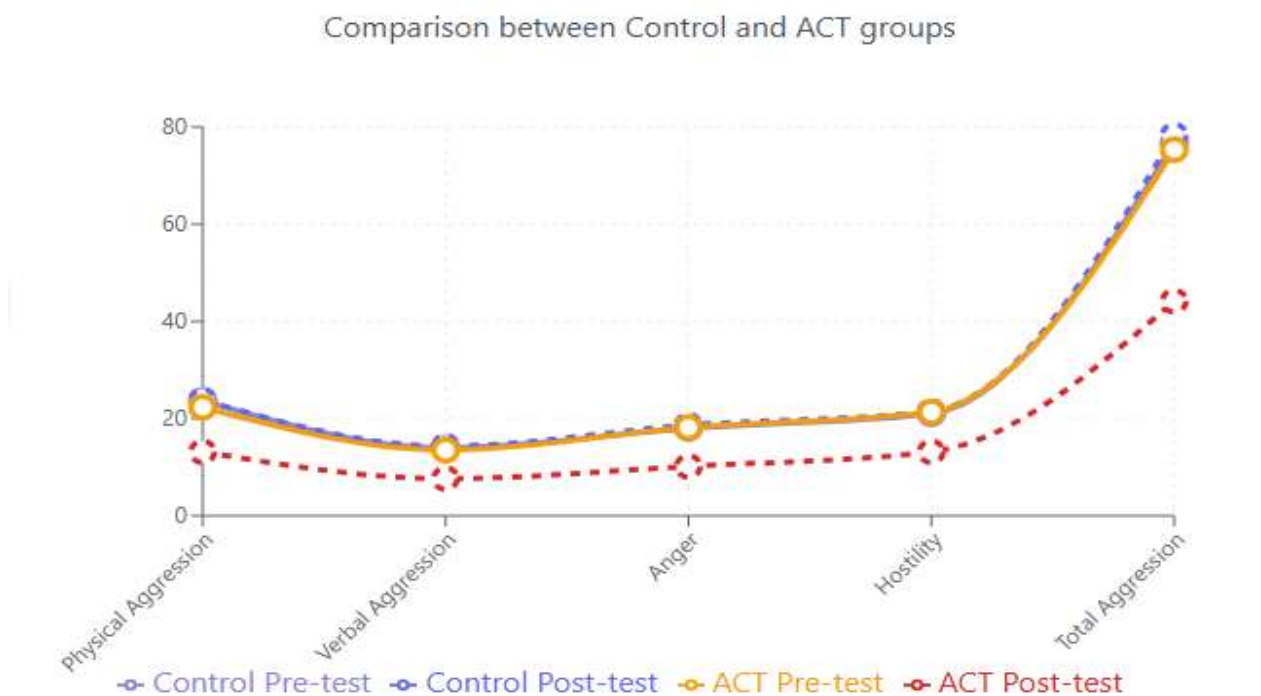
Table 4 reveals the one-way ANOVA results indicating that there is a significant effect on the differences of post-test scores of aggressions between the control and ACT groups. The two groups were equally distributed concerning all subscales of aggression ($p > .05$), showing baseline equivalence before the intervention. Nonetheless, there was a significant reduction on physical aggression $F(1,18) = 8.91$, $p = .007$, $\eta^2(p) = .322$, verbal $F(1,18) = 23.94$, $p < .001$, $\eta^2(p) = .571$, anger $F(1,18) = 17.53$, $p = .001$, $\eta^2(p) = .498$, hostility $F(1,18)$ These effect sizes are quite large, therefore indicating that Acceptance and Commitment Therapy contributed significantly to decreasing aggression levels on several dimensions as compared to control group.

Table 5: Post hoc Comparison

Dependent Variable	Groups Compared	(MD)	(SE)	p
Pre-Physical Aggression	Control vs ACT	1.33	4.05	1.000
Post-Physical Aggression	Control vs ACT	10.67*	3.73	.036
Pre-Verbal Aggression	Control vs ACT	0.50	1.67	1.000
Post-Verbal Aggression	Control vs ACT	6.67**	1.49	.001
Pre-Anger	Control vs ACT	-0.17	2.47	1.000
Post-Anger	Control vs ACT	8.50**	2.21	.005
Pre-Hostility	Control vs ACT	-0.33	3.08	1.000
Post-Hostility	Control vs ACT	8.33*	2.46	.012
Pre-Total Aggression	Control vs ACT	1.33	9.96	1.000
Post-Total Aggression	Control vs ACT	34.17**	8.34	.003

Table 5 also confirm that none of the groups (control, ACT) were significantly different on any of the aggression subscales before the intervention ($p = 1.000$). This shows there was baseline equivalence. However, after the intervention, all subjects in the control group scored considerably lower on mean scores than did the ACT group on all post-test measures: physical aggression ($MD = 10.67$, $p=.036$), verbal aggression ($MD = 6.67$, $p=.001$), anger ($MD = 8.50$, $p=.005$), hostility ($MD = 8.33$, $p=.012$), and total aggression ($MD = 34.17$, $p=.003$). These statistically significant differences support the notion of the efficacy of Acceptance and Commitment Therapy in diminishing the multiple aspects of aggression as compared to the control group.

Figure 1: Pre-Post Intervention Changes in Aggression Measures



In Figure 1, the line graph compares the control group and the ACT group across pre- and post-test aggression measures. It highlights that the ACT group showed a notable reduction in post-test scores compared to the control group across all aggression dimensions.

DISCUSSION

This study provides novel evidence that a culturally adapted ACT-mindfulness program grounded in Islamic and indigenous traditions can effectively reduce aggression and improve emotional regulation among Pakistani young adults. The ACT intervention group showed large, statistically significant reductions in total aggression (BPAQ) and all its subcomponents (physical aggression, verbal aggression, anger, hostility), whereas the control group exhibited negligible change. Likewise, participants in the adapted ACT group demonstrated marked improvements in adaptive emotion regulation: they reported greater use of cognitive reappraisal, less reliance on expressive suppression, and notably reduced rumination. These results confirm our hypothesis that integrating Islamic spiritual concepts into an ACT framework can enhance regulation of anger and aggression.

Our findings are consistent with prior research showing that mindfulness and ACT reduce hostility and anger. Meta-analytic reviews have concluded that mindfulness-based interventions curb angry and aggressive responses across diverse populations (O'Dean et al., 2025). In line with this, we observed a substantial drop in aggression scores following an ACT program emphasizing mindful acceptance. The effect sizes in our sample were comparable to those reported internationally; notably, O'Dean et al. found that Asia-based studies often showed the largest effects of mindfulness on aggression. Moreover, our mediation analyses (preliminary) suggest that the mechanism aligns with Kim et al. (2022): the ACT program appeared to reduce aggression by diminishing maladaptive emotion regulation strategies. After treatment, participants reported significantly less rumination and suppression, both of which Stesienko (2021) identified as mediators of the mindfulness–aggression link. In practice, increased mindfulness and acceptance likely helped participants “make room” for angry feelings without acting on them, thereby interrupting the cycle of provocation and retaliation.

The improvements in emotional regulation are noteworthy. ACT explicitly teaches acceptance of unpleasant feelings and detachment from unhelpful thinking. In our intervention, framing acceptance through the Islamic concept of *sabr* may have enhanced participants' willingness to bear difficult emotions. The significant increase in cognitive reappraisal and decrease in suppression suggest that participants learned to reinterpret anger-eliciting situations and to express themselves more adaptively. This is consistent with ACT theory: by embracing emotions (taught as patience or trust), individuals become less impulsive and more flexible in coping (Hayes et al., 2011). The large drop in rumination further indicates that participants were less preoccupied with anger-related thoughts, which directly underlies reductions in hostility.

This study addresses several gaps in the literature. Byrne and Cullen's (2024) systematic review highlighted that, although ACT has shown promise for anger in adults, evidence for adolescents and young adults is limited and mixed. Our results suggest that group-based ACT can be efficacious for this younger population when properly adapted. Furthermore, few aggression interventions have explicitly incorporated spirituality or culture. By integrating Islamic values, we likely increased cultural congruence and acceptability. Qualitative feedback from participants underscored this: many noted that relating ACT skills to their faith (e.g. seeing anger as a test of *sabr*, or using *dhikr* during stressful moments) made the techniques feel familiar and worthy. This aligns with Khan et al.'s (2025) argument that incorporating an “Islamic model of the self” within ACT can enhance engagement among Muslim clients. In other words, couching psychological flexibility in terms of religious values (patience, trust, remembrance of God) may reduce stigma and increase motivation to practice these skills.

Our success parallels findings from other culturally adapted interventions in Pakistan. For example, Sarfraz et al. (2023) demonstrated that a locally tailored online mindfulness training improved stress and well-being in Pakistani university students. Although that study focused on stress (not aggression) and did not include religion-specific content, it highlights that mindfulness practices are feasible and effective in this cultural context when adapted. We extend this by showing that explicitly integrating Islamic spiritual practices can additionally target aggression and emotional dysregulation. It is plausible that combining the evidence-based structure of ACT with indigenous practices created a synergistic effect: mindfulness and cognitive flexibility were enhanced by the resonance and motivation provided by spiritual framing (Maihula, 2025).

Limitations. Several limitations should be noted. First, the sample was relatively small and comprised university students, which may limit generalizability to other groups (e.g. clinical populations, rural youth). Future trials should recruit larger, more diverse samples, possibly including adolescents or individuals with clinically significant aggression. Second, we used a wait-list control, so it is unclear how much of the effect is due to non-specific factors (e.g. group support) versus ACT-specific mechanisms. Active control comparisons (e.g. stress management training) would clarify this in future work. Third, our follow-up was short-term (post-intervention only); longer follow-up is needed to assess the durability of gains. Fourth, although we integrated spiritual content, we did not disentangle which components were most effective. The intervention's multiple elements (mindfulness, values, dhikr, etc.) were delivered as a package, so we cannot identify which produced the largest effect. Finally, outcomes were self-reported; future studies should include behavioral or physiological measures of aggression and emotion (e.g. peer reports, heart rate reactivity) to triangulate findings.

Despite these caveats, the clinical implications are promising. Our results suggest that an ACT-mindfulness program, when culturally and spiritually adapted, can significantly reduce aggression in a population with substantial need for such interventions. For mental health providers in Pakistan and similar settings, this model offers a template: rather than eschewing clients' religious worldview, therapists can respectfully incorporate it to reinforce acceptance-based coping. For example, framing acceptance exercises as exercises in *sabr* or linking values discussion to participants' religious goals may improve the cultural fit of therapy. Policymakers and university counselors might consider implementing or testing such group programs to address campus aggression and improve student well-being.

Mechanisms and Theoretical Implications. The success of the intervention underscores the role of psychological flexibility and present-moment awareness in aggression control. By learning to accept anger rather than react, participants demonstrated a shift consistent with ACT theory (Abbas et al., 2022; Hayes et al., 2011). The intervention's emphasis on mindfulness and values-based action aligns with the broader context of Islamic coping strategies. In ACT terms, teaching clients to observe thoughts (analogous to how the Quran describes taking perspective on *was* as a whisper and to act on values fits neatly with both the faith tradition and the therapeutic model (Isgandarova, 2024). Our findings support the notion that cultural practices like *dhikr* are not merely religious rituals but can function analogously to secular mindfulness techniques. Future research could examine these processes more directly, for instance testing whether increases in measured mindfulness or values-consistent behavior mediate aggression reduction.

CONCLUSION

This study introduces and evaluates an innovative, culturally sensitive intervention that integrates Acceptance and Commitment Therapy with Islamic spiritual traditions to reduce aggression and enhance emotion regulation in Pakistani young adults. The adapted ACT-mindfulness program produced large, meaningful reductions in various forms of aggression and improvements in adaptive coping, confirming its clinical effectiveness. Critically, the intervention was warmly received by participants, suggesting high cultural congruence. By embedding concepts of *sabr* (patience), *dhikr* (remembrance of God), and *tawakkul* (trust in Allah) within the ACT framework, we created a treatment that honored participants' religious values while delivering evidence-based psychological skills. Such integration of faith and therapy may help bridge the gap between Western mental health models and non-Western clients, enhancing engagement and

efficacy. Our findings have broad implications for global mental health. They demonstrate that mindfulness-based treatments can be successfully adapted for non-Western, religious populations by leveraging indigenous spiritual resources. We hope this work will encourage clinicians and researchers to develop and rigorously test culturally concordant therapies. In contexts where formal mental health services are scarce, empowering individuals with internally grounded coping strategies (supported by their faith community) can be a cost-effective, scalable approach. Ultimately, this culturally adapted ACT model may serve as a template for spiritually-integrated interventions across diverse cultural settings, harnessing the synergy of psychological science and traditional wisdom to promote emotional well-being and reduce aggression.

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