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Original Article

The Comparison of Acceptance and Commitment Therapy and the Unified Protocol in Improving Distress Tolerance in Women with Social Anxiety

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Abstract

Background: Social Anxiety Disorder (SAD), a widespread psychiatric issue, involves excessive fear of judgment and social withdrawal, which markedly diminishes quality of life. The aim of this study was to compare Acceptance and Commitment Therapy (ACT) and Unified Protocol (UP) in improving distress tolerance in women with SAD.

Methods: A quasi-experimental pretest-posttest design, including a three-month follow-up and control group, was used. The participants comprised 45 women diagnosed with SAD in Ahvaz, Iran, during 2024, selected through convenience sampling technique and randomly allocated (simple randomization) to three groups: ACT (n=15), UP (n=15), and control (n=15). The experimental groups received eight weekly 90-minute sessions of the assigned therapy; the control group had no intervention. Distress tolerance was measured with the Distress Tolerance Scale (DTS). Analysis involved repeated-measures ANOVA, Bonferroni post-hoc tests, Shapiro-Wilk, Levene's, and Mauchly's tests via SPSS version 27.

Results: Both ACT and UP significantly improved distress tolerance across all subscales—Tolerance (ACT: 13.46±0.92 vs. 10.76±1.21, UP: 13.40±0.51 vs. 10.76±1.21), Absorption (ACT: 14.07±1.03 vs. 10.80±1.01, UP: 14.00±0.66 vs. 10.80±1.01), Appraisal (ACT: 28.07±0.80 vs. 22.03±1.80, UP: 27.27±1.28 vs. 22.03±1.80), and Regulation (ACT: 12.07±0.59 vs. 9.47±0.64, UP: 12.16±0.70 vs. 9.47±0.64)— as compared with the control group (all P=0.001). No significant differences were observed between the effectiveness of the two interventions. Also, follow-up assessments confirmed the sustained efficacy of both treatments.

Conclusion: Both ACT and UP are effective in enhancing distress tolerance in women with SAD, highlighting the value of transdiagnostic interventions targeting core emotional processes. These findings support their application in clinical settings to alleviate SAD symptoms.

Keywords: Acceptance and Commitment Therapy, Anxiety, Stress, Women

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1. Introduction

Social Anxiety Disorder (SAD) is among the most common and impairing psychiatric disorders, severely affecting social, professional, and educational performance (1). SAD manifests as marked and ongoing anxiety in social or performance contexts open to others' evaluation, commonly resulting in acute distress and evasive actions (2). For many women, this disorder manifests as an overwhelming fear of being negatively evaluated, judged, or humiliated, leading to a constricted life and a marked reduction in their overall quality of life (3). While occasional anxiety in social settings is a normal human experience, for those with SAD, this anxiety is disproportionate to the actual threat, causing them to view even benign social interactions as a source of threat and danger. This pervasive fear can lead to a cycle of anticipatory anxiety, in-situation distress, and post-event rumination, trapping individuals in a state of chronic unease and self-consciousness (4). The challenges faced by women with SAD are particularly significant, as societal expectations often place a high value on social connectedness and emotional expression, making their avoidance behaviors more conspicuous and distressing (5). Consequently, these women often suffer in silence, leading to higher rates of comorbidity with other conditions such as depression and substance use disorders (6).

In addition to primary symptoms of SAD, distress tolerance—a vital transdiagnostic element—serves as a core mechanism in diverse emotional disorders (7). It denotes the ability to endure negative emotional and physical states without resorting to avoidance or escape behaviors (8),

extending beyond passive endurance to an active engagement in staying present and modulating internal experiences. Evidence links low distress tolerance to heightened severity and longevity of anxiety and depressive symptoms (9, 10). Among individuals with SAD, this deficit amplifies views of anxiety as unbearable, thereby intensifying social avoidance and diminishing readiness to challenge fears (11). This vicious cycle maintains the disorder, as avoidance prevents the individual from learning that their feared outcomes are unlikely or manageable. The Distress Tolerance Scale (DTS), a widely used psychometric tool, measures this construct across four dimensions: Tolerance (the ability to endure distress), Absorption (the tendency to become absorbed by negative feelings), Appraisal (one's cognitive evaluation of distress), and Regulation (efforts to manage and reduce distress) (12). Targeting this fundamental skill is therefore considered a promising avenue for improving a range of emotional disorders, including social anxiety.

To counter the drawbacks of conventional symptom-centered therapies, two innovative process-focused interventions have arisen: Acceptance and Commitment Therapy (ACT) and the Unified Protocol (UP) for Transdiagnostic Treatment of Emotional Disorders. ACT, drawing from behavioral and mindfulness foundations, fosters psychological flexibility by guiding acceptance of aversive internal states alongside value-guided behaviors (13). Rather than eradicating anxiety, it promotes mindful awareness, acceptance, and defusion from anxious thoughts and emotions. Accumulating studies validate the efficacy of ACT for diverse anxiety disorders, evidencing symptom alleviation and boosted psychological health (14, 15). For instance, Petersen and Pimentel (16) found that ACT was effective in reducing the components of psychological inflexibility in students with various anxiety disorders, highlighting its broad applicability.

Similarly, UP represents a significant shift in treatment by addressing the core emotional processes that underlie multiple emotional disorders, rather than focusing on specific diagnostic categories (17). UP teaches individuals to identify and respond to their emotional experiences in a new, more adaptive way, emphasizing the concept of "emotional exposure" to decrease emotional avoidance and increase distress tolerance. Previous research (18, 19) reported that UP is effective in reducing symptoms of social anxiety and difficulties with emotional regulation. The transdiagnostic nature of UP makes it particularly relevant for individuals with comorbid conditions, a common occurrence in SAD (20). While both ACT and UP target similar underlying mechanisms, such as emotional avoidance and distress, there is a need for research directly comparing their effectiveness, particularly on a specific transdiagnostic factor like distress tolerance in a population as distinct as women with SAD.

While the efficacy of both ACT and UP has been individually established, a critical gap remains in the literature regarding a direct, head-to-head comparison of their effects on distress tolerance in a specific population like women with SAD. Previous studies focused on general symptom reduction or have not specifically measured the impact on distress tolerance and its subscales (8, 19). Therefore, the present study was necessary to address this gap by providing empirical evidence on the comparative effectiveness of ACT and the UP on distress tolerance in this specific population. The primary aim of this study was to compare the effects of these two modern process-based interventions and determine whether one is more effective than the other in enhancing distress tolerance and its subscales.

2. Methods

2.1. Design

This was a quasi-experimental study with a pretest-posttest design, a three-month follow-up, and a control group.

2.2. Selection and Description of Participants

The target population encompassed all women diagnosed with social anxiety disorder (SAD) in Ahvaz, Iran, during 2024. The sample size was calculated via G*Power, with α=0.05, power=0.95, and an effect size derived from prior research (21) reporting mean tolerance scores of 13.46±1.92 (ACT) and 10.76±1.21 (control). Accounting for possible dropout, 45 individuals were recruited through convenience sampling technique and allocated randomly (simple randomization through a random number generator) to three groups (n=15 each) (Figure 1).

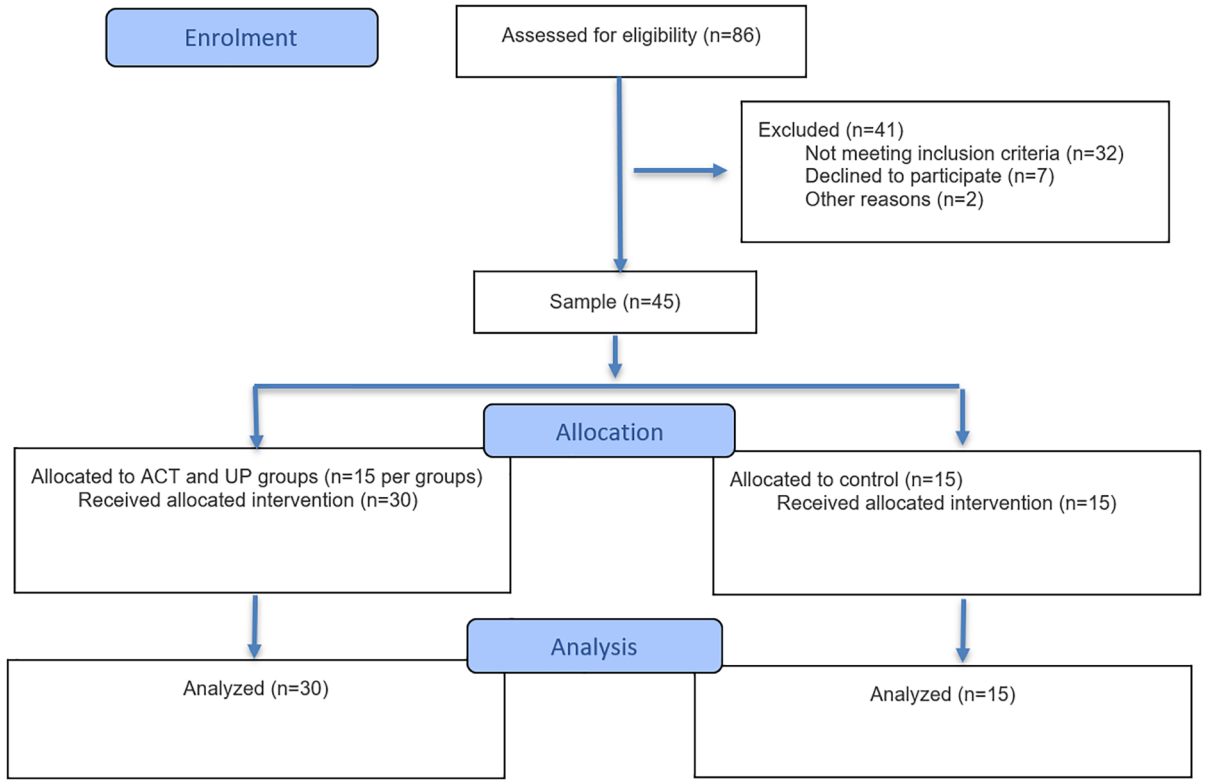

Figure 1: The figure shows the CONSORT flow diagram of the study.

The inclusion criteria required a confirmed SAD diagnosis via DSM-5 structured clinical interview. The exclusion criteria were: concurrent psychotherapy, psychotropic drug use, comorbid severe psychiatric conditions (e.g., psychosis, bipolar disorder), or missing over two sessions.

2.3. Data Collection and Measurements

The Distress Tolerance Scale (DTS), a 15-item self-report measure created by Simons and Gaher (12), uses a 5-point Likert scale (1=strongly disagree to 5=strongly agree) to evaluate four subscales: Tolerance, Absorption, Appraisal, and Regulation. Elevated total scores reflect stronger distress tolerance. Azizi's (22) validation of the Persian DTS yielded a Cronbach's alpha of 0.89, alongside a Content Validity Index (CVI) of 0.96 and Content Validity Ratio (CVR) of 0.93. This study reported a Cronbach's alpha of 0.91, confirming excellent internal reliability.

2.4. Procedure

Following participant selection, recruitment was conducted through advertisements in local mental health clinics and community centers in Ahvaz, Iran, targeting women diagnosed with SAD. A total of 86 women were screened using a structured clinical interview for DSM-5 to confirm SAD diagnosis. The remaining 45 participants were randomly assigned by assigning each a number and using a random number generator to allocate them to one of the three groups: ACT (n=15), UP (n=15), and control (n=15). Pretest data were collected from all groups using the Distress Tolerance Scale (DTS). The experimental groups attended eight weekly 90-minute group sessions of their respective interventions at the Family Counseling Center of Ahvaz, Iran, while the control group received no intervention. All participants in the experimental groups attended every session, ensuring full adherence to the intervention protocols. Post-test data were collected after the interventions concluded, and a three-month follow-up assessed long-term effects in the experimental groups. To ensure consistency, all sessions for both treatment groups were conducted by the same clinical psychologist, who was trained in both ACT and UP.

2.5. Interventions

The experimental groups participated in a

structured program of eight weekly, 90-minute sessions held at the Family Counseling Center of Ahvaz, Iran. Both the ACT and UP interventions were administered in a group therapy. The content, purpose, and homework assignments for the ACT and UP interventions, along with examples of participants' experiences with homework, are detailed in Tables 1 and 2, respectively.

2.6. Data Analysis

For data analysis, we used SPSS version 27, incorporating Shapiro-Wilk for normality evaluation, Levene's test for variance homogeneity, and ANCOVA for intergroup posttest and follow-up comparisons (with pretest as covariate). Bonferroni corrections addressed pairwise contrasts, with significance at $P<0.05$.

3. Results

This study enrolled 45 women with SAD, equally allocated to three groups: ACT (n=15), UP (n=15), and control (n=15). Table 3 details the demographic characteristics of the participants. No intergroup differences emerged in age (P=0.987), marital status (P=0.678), or education (P=0.614), confirming equivalent baselines.

Table 1: Summary of acceptance and commitment therapy (ACT) sessions

Session	Content	Purpose	Homework and Participant Experiences
1	Introduction to ACT: Introduction to the philosophy and core principles of ACT; Concepts such as the "struggle switch" and "creative hopelessness" are explored to help participants recognize the ineffectiveness of trying to control internal experiences	To familiarize participants with the framework of ACT and shift their perspective on managing anxiety	Homework: Reflect on personal attempts to control anxiety and their outcomes. Experience: Participants reported feeling surprised that their efforts to suppress anxiety often worsened their distress, noting this insight as a new perspective.
2	Acceptance: Introduction to the concept of actively accepting unwanted emotions. Participants engage in mindfulness exercises like the "Leaves on a Stream" or "Sky and Clouds" metaphor to practice non-judgmental acceptance.	To encourage the acceptance of emotions rather than avoidance, fostering emotional openness	Homework: Practice the "Leaves on a Stream" exercise daily, imagining thoughts as leaves floating away. Experience: Several participants found it challenging but reported reduced anxiety when they stopped fighting their thoughts.
3	Cognitive Defusion: Techniques to help participants observe their thoughts rather than getting entangled in them; Exercises like "labeling thoughts" or "thoughts on a screen" are used to reduce the power of thoughts.	To reduce the impact of negative thoughts by viewing them as separate from the self	Homework: Label anxious thoughts (e.g., "I'm having the thought that I'll fail") during social situations. Experience: One participant noted that labeling thoughts helped her feel less overwhelmed in group discussions.
4	Present Moment Awareness: Mindfulness practices and exercises to increase awareness of present sensory experiences; Participants learn to be present without judgment, for example, through mindful eating.	To enhance focus on the present moment, reducing rumination on past or future events	Homework: Engage in a daily mindful activity (e.g., mindful walking). Experience: Participants enjoyed mindful eating exercises, reporting greater awareness of sensory experiences and less preoccupation with social fears
5	Self-as-Context: Introduction of the "observing self," a stable, safe part of the self that is separate from ever-changing thoughts and feelings. This provides a secure anchor for participants.	To develop a sense of self that is distinct from transient emotional states	Homework: Practice noticing the "observing self" during moments of anxiety. Experience: A participant described feeling "grounded" when focusing on her observing self during a stressful social encounter.
6	Values: Identification and clarification of personal core values, which serve as an internal compass; Participants learn the difference between goals and values and how to live a value-driven life.	To guide behavior toward meaningful, value-aligned actions despite anxiety	Homework: Write a list of personal values and one action to align with them. Experience: Participants found value clarification empowering, with one taking steps to join a social club aligned with her value of connection.
7	Committed Action: Taking small, concrete steps towards living a life aligned with one's values, even in the presence of anxiety; Participants create action plans for a meaningful life.	To translate values into actionable steps, building resilience against anxiety	Homework: Implement one value-driven action and reflect on the experience. Experience: A participant reported successfully attending a family gathering, feeling proud despite initial anxiety.
8	Integration and Relapse Prevention: Review of the six core processes of ACT and their application in daily life; Participants learn strategies for coping with future challenges and maintaining progress.	To consolidate skills and prepare for sustained application post-intervention	Homework: Create a relapse prevention plan with coping strategies; Experience: Participants felt confident in using mindfulness and values to manage future anxiety triggers.

ACT: Acceptance and Commitment Therapy

Table 2: Summary of unified protocol for transdiagnostic treatment of emotional disorders (UP) sessions

Session	Content	Purpose	Homework and Participant Experiences
1	Introduction to UP and the Emotional Model: Introduction to the integrated model of emotions and the role of emotional avoidance. Behavioral patterns related to emotional disorders are discussed.	To provide a framework for understanding emotions and their role in SAD	Homework: Track emotional responses in a journal; Experience: Participants found journaling eye-opening, identifying patterns of avoidance in social settings.
2	Awareness of Emotions: Enhancing moment-to-moment emotional awareness through self-monitoring and emotional journaling exercises	To increase recognition of emotional triggers and responses	Homework: Continue journaling, noting physical and emotional sensations; Experience: One participant noted increased awareness of physical tension during anxiety, aiding self-regulation.
3	Cognitive Reappraisal and Restructuring: Teaching participants to identify and challenge inaccurate appraisals of emotions; Cognitive restructuring is practiced with a focus on emotional experiences.	To modify maladaptive thoughts about emotions, promoting adaptive appraisals	Homework: Practice reappraising a negative thought (e.g., "Everyone is judging me"); Experience: Participants reported reduced fear after reappraising thoughts about social judgment.
4	Emotional Avoidance: Identifying different types of avoidance (behavioral and cognitive) and their role in perpetuating emotional problems.	To highlight avoidance patterns and their impact on maintaining SAD	Homework: Identify one avoidance behavior and attempt to face it; Experience: A participant avoided eye contact but practiced maintaining it, feeling less anxious over time.
5	Increasing Emotional Tolerance: Specific exercises to build the ability to tolerate emotion, such as interoceptive exposure to unpleasant physical sensations	To enhance tolerance of uncomfortable emotions through exposure	Homework: Perform interoceptive exposure (e.g., rapid breathing) and record reactions; Experience: Participants found exposure to physical sensations uncomfortable but reported increased tolerance.
6	Exposure to Emotion-Eliciting Situations: Designing and implementing gradual exposure exercises to feared social situations to decrease avoidance	To reduce avoidance through direct engagement with feared situations	Homework: Engage in a low-level exposure task (e.g., initiating a conversation); Experience: One participant initiated a conversation with a colleague, feeling accomplished despite initial fear.
7	Full Exposure and Integrated Practice: Continued exposure therapy and integration of all learned skills in more complex, real-life situations	To apply skills in challenging social contexts, building confidence	Homework: Complete a complex exposure task (e.g., giving a presentation); Experience: Participants reported reduced anxiety after practicing presentations in group settings.
8	Consolidation and Relapse Prevention: Review of skills, planning for future use, and strategies for managing potential setbacks	To ensure long-term skill application and resilience against setbacks	Homework: Develop a plan to maintain skills post-intervention; Experience: Participants felt prepared to use exposure and reappraisal strategies in daily life.

SAD: Social Anxiety Disorder

Table 3: Demographic characteristics of the participants across groups

Variable	ACT (n=15)	UP (n=15)	Control (n=15)	P
Age (years, Mean ± SD)	31.87 ± 6.12	31.95 ± 5.78	32.14 ± 5.56	0.987
Marital Status, n (%)				
Single	8 (53.3%)	6 (40.0%)	8 (53.3%)	0.678
Married	7 (46.7%)	9 (60.0%)	7 (46.7%)	
Education, n (%)				
High School	9 (60.0%)	10 (66.7%)	11 (73.3%)	0.614
University	6 (40.0%)	5 (33.3%)	4 (26.7%)	

ACT: Acceptance and Commitment Therapy; UP: Unified Protocol; SD: Standard Deviation

The mean and standard deviation values, and P values for distress tolerance scores and its subscales across all groups at pretest, posttest, and follow-up are presented in Table 4. Pretest scores were similar across groups, indicating a well-matched baseline. Post-intervention, both ACT and UP groups showed significant increases in mean scores for all subscales and total distress tolerance compared with the control group, along with improvements maintained at follow-up.

Prior to conducting the primary analyses, assumptions for ANCOVA were examined. The Shapiro-Wilk test confirmed that data distribution was not significantly different from normal ($P>0.05$ for all variables). Levene's test indicated homogeneity of variances ($P>0.05$ for all variables).

Table 4: Descriptive statistics for distress tolerance and its subscales across all groups

Variable	Stage	ACT	UP	Control	P (between-group)
		Mean ± SD	Mean ± SD	Mean ± SD	
Tolerance	Pre-test	10.93 ± 1.63	10.87 ± 1.06	10.80 ± 1.01	0.964
	Post-test	13.46 ± 1.92	13.40 ± 0.51	10.76 ± 1.21	0.001
	Follow-up	13.07 ± 1.22	13.13 ± 0.83	10.83 ± 0.86	0.001
	P (within-group)	0.001	0.001	0.883	-
Absorption	Pre-test	11.00 ± 0.93	10.73 ± 0.88	10.87 ± 1.06	0.741
	Post-test	14.07 ± 1.03	14.00 ± 0.66	10.80 ± 1.01	0.001
	Follow-up	14.07 ± 0.80	13.53 ± 0.64	10.87 ± 0.99	0.001
	P (within-group)	0.001	0.001	0.854	-
Appraisal	Pre-test	22.13 ± 0.92	21.73 ± 0.96	21.87 ± 1.64	0.672
	Post-test	28.07 ± 0.80	27.27 ± 1.28	22.03 ± 1.80	0.001
	Follow-up	27.00 ± 1.13	26.80 ± 1.27	22.37 ± 1.64	0.001
	P (within-group)	0.001	0.001	0.177	-
Regulation	Pre-test	9.80 ± 0.86	10.07 ± 1.10	9.80 ± 1.08	0.717
	Post-test	12.07 ± 0.59	12.16 ± 0.70	9.47 ± 0.64	0.001
	Follow-up	11.73 ± 0.59	11.67 ±0.98	9.38 ± 0.69	0.001
	P (within-group)	0.001	0.001	0.215	-
Distress Tolerance (Total)	Pre-test	53.87 ± 2.26	53.40 ± 2.01	53.34 ± 2.38	0.827
	Post-test	67.67 ± 1.70	66.83 ± 1.68	53.06 ± 2.20	0.001
	Follow-up	65.87 ± 1.94	65.13 ± 1.92	53.45 ± 1.69	0.001
	P (within-group)	0.001	0.001	0.740	-

ACT: Acceptance and Commitment Therapy; UP: Unified Protocol

Table 5: Bonferroni post-hoc comparisons for pairwise differences in distress tolerance and its subscales

Variable	Groups	Mean Difference	SE	P
Tolerance	ACT and Control	2.66	0.33	0.001
	ACT and UP	0.67	0.33	0.999
	UP and Control	2.60	0.33	0.001
Absorption	ACT and Control	3.26	0.33	0.001
	ACT and UP	0.06	0.33	0.999
	UP and Control	3.20	0.33	0.001
Appraisal	ACT and Control	5.33	0.36	0.001
	ACT and UP	0.80	0.36	0.095
	UP and Control	4.53	0.36	0.001
Regulation	ACT and Control	2.26	0.27	0.001
	ACT and UP	0.06	0.27	0.999
	UP and Control	2.60	0.27	0.001
Distress Tolerance (Total)	ACT and Control	13.86	0.69	0.001
	ACT and UP	0.93	0.69	0.562
	UP and Control	12.93	0.69	0.001

ACT: Acceptance and Commitment Therapy; UP: Unified Protocol; SE: Standard Error

ANCOVA was conducted to compare posttest and follow-up scores across groups, with pretest scores as covariates. The main effect of group was significant for all distress tolerance subscales and the total score (P=0.001), indicating differences in adjusted mean scores across the three groups. To further explore these effects, Bonferroni post-hoc tests were conducted. The results, presented in Table 5, showed that both ACT and UP groups had significantly higher adjusted posttest and follow-up scores for distress tolerance and all subscales were compared with the control group (P=0.001). No significant differences were found between the ACT and UP groups (P>0.05), suggesting comparable effectiveness.

4. Discussion

The present study investigated the comparative effectiveness of ACT and the UP in enhancing distress tolerance among women with SAD in Ahvaz, Iran. The study findings revealed

that both interventions significantly improved distress tolerance across all subscales—Tolerance, Absorption, Appraisal, and Regulation—compared with the control group, with effects sustained at the three-month follow-up. Notably, no significant differences were observed between ACT and UP, suggesting equivalent efficacy in this population. These results underscore the value of process-based, transdiagnostic approaches in addressing core emotional mechanisms underlying SAD, offering clinicians flexible therapeutic options (7, 17).

The significant improvements in distress tolerance align with the theoretical frameworks of both ACT and UP. ACT, rooted in the concept of psychological flexibility, encourages individuals to accept distressing emotions and thoughts while pursuing value-driven actions (13). By employing mindfulness techniques, such as cognitive defusion and present-moment awareness, ACT helps individuals reframe their relationship with anxiety, reducing its perceived intensity and enhancing their capacity to tolerate distress (16, 23). In this study, participants' engagement in exercises like "Leaves on a Stream" facilitated a non-judgmental stance toward anxious thoughts, as evidenced by their reports of reduced emotional overwhelm during social interactions. This aligns with Sarabadani and colleagues (24), who found that acceptance-based interventions significantly improve distress tolerance in anxiety disorders by decreasing psychological inflexibility. Similarly, UP targets maladaptive emotional responses through emotional awareness, cognitive reappraisal, and exposure-based techniques (17, 25). The structured exposure tasks in UP, such as interoceptive and situational exposures, enabled participants to confront and tolerate anxiety-provoking stimuli, breaking the cycle of avoidance central to SAD (19, 26, 27). Participants' experiences with exposure homework, such as initiating conversations, suggest that UP effectively desensitized them to feared social situations, consistent with Nikdanesh and co-workers (28), who reported the efficacy of UP in improving emotional regulation in SAD.

The lack of significant differences between ACT and UP suggests that both interventions target shared mechanisms, such as reducing emotional avoidance and fostering adaptive emotional processing (17, 23). This similarity in effectiveness likely stems from a shared foundational focus: both therapies prioritize altering how individuals relate to their internal experiences, rather than merely attempting to eliminate symptoms. For instance, ACT's focus on acceptance and UP's emphasis on emotional exposure both counteract the avoidance behaviors that perpetuate SAD, enabling participants to engage more fully in social contexts (11). The cultural setting of Ahvaz city, Iran, where social connectedness is highly valued, likely amplified the group-based intervention effects, as participants reported feeling supported by peers, enhancing their willingness to practice distress tolerance skills (7). The sustained effects at follow-up indicate that participants internalized these skills, applying them effectively in real-world settings, which underscores the durability of process-based interventions (19).

Several factors may have influenced the observed improvements in distress tolerance. Social support, a critical modulator of emotional resilience, likely played a role, as participants in group settings benefited from peer encouragement, potentially enhancing treatment outcomes (7). In the collectivist culture of Ahvaz, Iran, familial and community support may have further reinforced participants' ability to tolerate distress, as suggested by Li and co-workers (7). Prior treatment history could also affect responsiveness; participants with unsuccessful past therapies might have approached these interventions with initial skepticism, though full attendance suggests high engagement (10). Personality traits, such as high neuroticism, may exacerbate distress intolerance, making the focus of ACT and UP on emotional acceptance particularly relevant for this population (11).

The findings are consistent with prior studies. Petersen and Pimentel (16) demonstrated the efficacy of ACT in reducing psychological inflexibility in anxiety disorders, while Farchione and colleagues (19) confirmed the effectiveness of UP in enhancing emotional regulation in SAD. Barlow and co-workers (17) similarly found that transdiagnostic approaches yield robust outcomes across emotional disorders. Katz and co-workers (11) reported that distress tolerance improvements may depend on intervention intensity or participant characteristics, such as baseline anxiety severity, which could explain minor differences in subscale scores (e.g., Appraisal) between ACT and UP in this study.

The equivalent efficacy of ACT and UP suggests

that clinicians can select either approach based on client preferences or therapist expertise, particularly in resource-constrained settings like Ahvaz, Iran, where access to specialized treatments may be limited. The group format, facilitated at Ahvaz Family Counseling Center, likely fostered a sense of community, enhancing participants' commitment to the interventions. The focus of this study on women addresses a critical gap, given their heightened vulnerability to SAD due to societal pressures (5). However, the exclusive focus on distress tolerance may overlook other outcomes, such as symptom severity (27).

4.1. Limitations

This study had certain limitations that should be considered. First, the sample was restricted to women in Ahvaz, Iran, which may limit the generalizability of the study results due to cultural factors, such as societal expectations around gender roles that could influence distress tolerance. Second, the reliance on self-report measures like DTS introduces potential response bias, as participants may overestimate improvements due to social desirability. Third, the study did not assess additional factors like social support or personality traits that could mediate treatment outcomes. No implementation limitations were encountered, as both ACT and UP followed standardized, manualized protocols delivered by a trained psychologist, and full participant attendance ensured consistent intervention delivery.

5. Conclusions

This study demonstrated the efficacy of both ACT and the UP in enhancing distress tolerance among women with social anxiety disorder. Critically, the comparable effectiveness of ACT and UP suggests that transdiagnostic and process-based approaches are highly valuable for this population, providing equally viable therapeutic options for clinical practice. The study provide valuable insights for clinicians and researchers, informing treatment selection and potentially leading to more targeted and effective therapeutic interventions for women with SAD.

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Authors' Contribution

Nasrin Amiri: Substantial contributions to the conception and design of the study; acquisition, analysis, and interpretation of data; drafting the manuscript and reviewing the it critically for important intellectual content. Fariba Hafezi: Substantial contributions to the conception and design of the study; interpretation of data; reviewing the work critically for important intellectual content. Amal Sharifi Fard: Substantial contributions to the design of the study; interpretation of data; reviewing the work critically for important intellectual content. Parviz Asgari: Substantial contributions to the methodology, statistical analysis and interpretation of data; reviewing the work critically for important intellectual content. All authors have read and approved the final manuscript and collectively agree to be accountable for every aspect of the work, ensuring that any questions related to the accuracy or integrity of the study are appropriately addressed.

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Ethical Approval

The Ethics Committee of Islamic Azad University, Ahvaz Branch, Ahvaz, Iran approved the present study with the code of IR.IAU.AHVAZ.REC.1403.410. Also, written informed consent was obtained from the participants.

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