

# External Shame and Self-Criticism in Married Women: the Mediating Role of Cognitive Fusion and Experiential Avoidance

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## Abstract

**Background:** Self-criticism is one of the psychological impairments with inappropriate consequences for all members of a family, especially women. It is affected by various factors. The present study aimed to assess the mediating role of cognitive fusion and experiential avoidance in the correlation between self-criticism and external shame.

**Methods:** The present research utilized the structural equation modeling. The statistical population included all the married women aged 20 to 60 years in Bandar Abbas, Iran in 2022, out of whom 293 were selected via available sampling. For data collection, self-critical questionnaires (Louise, 2004), external shame questionnaire (Gross et al., 1994), cognitive fusion questionnaire (Gilanders et al., 2014), and experiential avoidance questionnaire (Bund et al., 2011) were used. The data were analyzed using correlation and path analysis methods via SPSS Version 26 and AMOS Version 24.

**Results:** The results indicated that external shame ( $P < 0.001$ ), cognitive fusion ( $P < 0.001$ ), and experiential avoidance ( $P < 0.001$ ) had a direct, significant, and positive effect on self-criticism. The results of a path analysis revealed that external shame through cognitive fusion ( $P < 0.001$ ) had a significant indirect effect on self-criticism. Furthermore, external shame had a significant indirect effect on self-criticism through experiential avoidance ( $P < 0.001$ ).

**Conclusions:** The results suggested that psychologists and counselors reduce the psychological impairment threatening the family system by holding educational workshops and performing individual and group therapies.

**Keywords:** Shame, Women, Avoidance, Cognitive fusion, Self-criticism

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## 1. Introduction

Women include half of the population of any society (1). They are also important members of the family system (2). A woman, as a wife, creates a warm and emotional environment for family members. Thus, they should have good mental health for playing such roles (3). After marriage, there are significant changes in the conditions and lives of women creating various roles for them, such as being devoted, being the ideal spouse, motherhood and employment, and raising children (4). These changes and new conditions and expectations arising from marital relationship on one hand (5), and failure in attachment, peace, and care in times of distress, on the other hand, provides the ground for self-criticism and self-deprecation in women (6).

Self-criticism is among the safety-seeking and compensatory approaches (6). According to Austin and colleagues (7), self-criticism was a self-orientation entailing negative self-evaluation,

harsh self-scrutiny, and excessive concerns regarding personal failure. Through self-criticism, the self can be corrected, improved, or persecuted for failures (8). Hence, it is an explicit self-critical cognition along with feelings of shame, guilt, or anger. Such internalized defense approaches and the resultant emotions can often get fused (8). Also, self-criticism has never been effective as a solution to personal problems (9).

Self-criticism in women has a number of consequences, such as women's distance from the marital relationship and intimacy (2). Various mechanisms are involved in explaining self-criticism in women. Acceptance and commitment therapy (ACT) is one of the newest approaches developed and addressed in the third wave of therapies (10) in order to create a rich, comprehensive, value-oriented life with high psychological flexibility for individuals (11). In this approach, it is believed that irrational and rigidly formed behaviors are driven by psychological reactions, such as cognitive fusion and experiential avoidance (12).

Cognitive fusion (CF) was described by Gillanders and co-workers (13) as a tendency for cognition-affected overly-regulated behavior. An individual's "fused" experience and behavior are controlled by thoughts; thus, the person will have less sensitiveness to direct results in the surrounding environment. Unpleasant mood states (such as sadness) can be elicited via CF with negative self-referential thoughts, including 'I am not adequate'. Hence, effective actions become less probable, resulting in the use of uncooperative avoidance approaches, like worrying, thought suppression, or rumination for reducing discomfort (14). Furthermore, experiential avoidance (EA) is a maladaptive psychological tendency. It happens when people are relatively doubtful to admit their unwanted inner experiences (memories, thoughts, emotions, or feelings) (15). People with experiential avoidance try to remove, avoid, or overwhelm unwanted personal experiences (12). Cognitive fusion and experiential avoidance are correlated with "mutual deduction". These features interact with each other and intensify patients' negative psychological emotions (10). When people have pathological cognitive fusion, psychological flexibility is reduced and mental problems occur (16-18).

Therefore, the recent structures in the explanation of self-criticism are cognitive fusion and experiential avoidance. Self-criticism is formed and reinforced as a function of a set of different interactions, emotions, and expressions between couples in a marital relationship (6). Shame is one of the most important types of negative and self-conscious emotional experiences associated with the desire to withdraw, a sense of self-control, and a disgusted evaluation of oneself (such as a feeling of self-hatred) (19). It is also associated with shrinking, humiliation, worthlessness, and helplessness (20) and is interpreted as a kind of expression of negative self-evaluation (21). Shame is a fundamental form of self-criticism of women in a marital relationship (Gilbert, 2010). There are internalized and externalized aspects of shame (6). In the present study, external shame in the causal model was studied, meaning thoughts and feelings, and how a person is seen in the minds of others (20).

Accordingly, there seems to be a correlation between shame and self-criticism. Moreover, the feeling of shame leads to the continuation of self-criticism (6). However, this correlation can

be affected by cognitive fusion and experiential avoidance. In other words, people with a huge deal of experience in cognitive fusion and avoidance have a state of misjudgment and misinterpretation in the correlation. They avoid the experience of negative emotions affecting the clear interactions of people involved in the correlation. These people are not able to accept their pain. They less try to accept negative emotions and consider them as a part of their being, which affects the quantity and quality of the correlation between shame and self-criticism as a non-effective strategy. Accordingly, the present study sought to predict self-criticism in a structural model based on external shame mediated by cognitive fusion and experiential avoidance in married women in Bandar Abbas, Iran. The initial research model was shaped as follows (Figure 1):

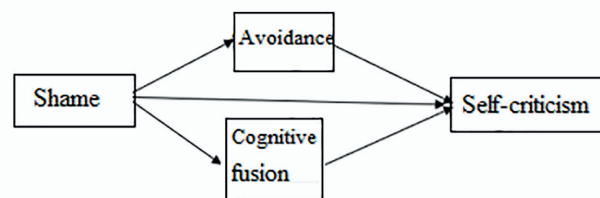


Figure 1: The figure shows the proposed model.

## 2. Methods

The present descriptive study included a structural equation modeling.

### 2.1. Participants

We included all the married women aged 20 to 60 years in Bandar Abbas (2022), Iran, as the statistical population of the research. We used the Kline method for selecting the sample. According to Kline (22), a typical sample size in projects where SEM is used is about 200 cases. Kline (22) suggested that the N/q ratio should be 20 to 1, or 20 cases for each estimated parameter in the model. Correspondingly, we selected 293 married women as the sample through available sampling based on the number of estimated parameters in the model. The women were reminded that the questionnaire data will be utilized in the research activity and contribution to this study is completely voluntary.

### 2.2. Data Collection

The following questionnaires were used for data collection:

### 2.2.1. The Levels of Self-Criticism Scale

Thompson and Zuroff (23) developed this scale in 2004, with 22 questions for evaluating self-criticism and also questions on a seven-point Likert scale from 0 (not at all sure) to 6 (quite sure). Questions 6-8, 11-12, 16-20, and 21 possess a reverse score. The higher the scores on this scale, the higher the level of self-criticism (24). Yamaguchi and Kim (25) obtained the reliability of the questionnaire utilizing Cronbach's alpha technique for a total score of 0.90. Rezaei and Jahan calculated the Cronbach's alpha as 0.90 (26). Cronbach's alpha coefficient was 0.81 in the study of Yousefi Moridani and colleagues (24). To examine the convergence validity of this tool, the scale of interpersonal problems was used, and the correlation coefficients between the subscales of self-criticism levels and the subscales of the questionnaire of positive and meaningful interpersonal problems were calculated (27). Furthermore, in the study of Saadati and colleagues (28), in order to check the divergent validity of this scale, its correlation with self-efficacy and happiness scales was examined. The results showed the negative and significant relationship of self-criticism with self-efficacy and happiness. Therefore, the divergent validity of the scale was confirmed. The Cronbach's alpha coefficient of this scale was 0.86 in the present work.

### 2.2.2. External Shame Scale

Goss and colleagues (29) developed the external shame scale, consisting of 18 items for measuring the external shame. The subjects were requested to represent the frequency of shame experiences on a five-point scale (0=Never to 4=Almost Always) of their experiences and feelings to items, such as "I think that other people look down on me" and "I feel as if other people see me as not quite good" (30). This scale had a Cronbach's alpha of 0.92 according to Goss and colleagues (29). Pinto-Gouveia and co-workers (30) calculated the Cronbach's alpha to be 0.89. The internal reliability was 0.93 in the study of Troop and colleagues (31). Cronbach's alpha coefficient was used by Foroughi and colleagues (32) for the reliability of the scale. The results of the construct validity of this scale, conducted with the method of factor analysis of the question with complete information led to the extraction of one factor that was extracted in the original form of the scale (33). Foroughi and colleagues (32) also found that the external shame scale has a positive

and significant correlation with perfectionism (0.17), a positive and significant correlation with negative effects (0.51), and a negative and significant correlation with self-compassion (0.21). They reported a reliability of 0.93 for this scale. We found the Cronbach's alpha coefficient of 0.93 for this scale in the present study.

### 2.2.3. Cognitive Fusion Scale

Cognitive Fusion Questionnaire (CFQ) (34): The CFQ is a seven-point, seven-item Likert-type scale (1=Never true, 7=Always) that measured the general cognitive fusion. A larger degree of cognitive fusion is reflected by higher scores. Based on the English validation, the CFQ had good reliability, a one-factor structure, convergent, temporal stability, divergent, discriminant validity, and sensitivity to therapeutic effects. Strong positive correlations were represented by the CFQ with experiential avoidance measures, depression and anxiety symptoms, frequency of negative thoughts, and burnout. On the other hand, CFQ scores represented negative correlations with measures of life satisfaction and mindfulness skills. The cultural sensitivity of the Spanish version of CFQ was enhanced by a small pilot study. 10 Colombian undergraduates were requested to rate item simplicity and clarity and recommend possible alterations for adapting the language to the Colombian culture. The items were rated by the undergraduates as highly understandable. They proposed minor alterations to the wording of certain items mostly associated with gender (35). The scale originally represented very good internal reliabilities (alphas between 0.88 and 0.93 across five specimens) as well as in a validation study in Portugal (alphas between 0.89 and 0.94 across three specimens (36). Fooladvand (37) found Cronbach's alpha coefficient of 0.70. In the research of Soltani and colleagues (38), it was shown that the Cognitive Fusion Questionnaire has good validity and reliability (0.92) in Iran and can be used for evaluating cognitive fusion. In the research by Akbari and colleagues (39), the correlation coefficient of this questionnaire with commitment and acceptance questionnaire and Southampton mindfulness questionnaire was obtained as 0.72 and 0.70, respectively. The Cronbach's alpha coefficient of this scale was 0.75 in the present study.

### 2.2.4. Experiential Avoidance Scale

The Acceptance and Action Questionnaire

(AAQ II): This scale was developed by Tyndall and colleagues. (40). The Italian version of this questionnaire (41) is the most common self-reported questionnaire that measured experiential avoidance. It comprises 10 items, rated on a seven-point Likert scale. The higher the scores on this scale, the higher experiential avoidance and lower psychological flexibility (42). The test-retest reliability is moderate (0.61) and the internal consistency is good ( $\alpha$ : 0.83) (43). Reshadat and co-workers (44) found the Cronbach's alpha coefficient of 0.79. We found the Cronbach's alpha coefficient of 0.73 for this scale.

### 2.3. Data Analysis

The research data were analyzed using the statistical approaches of path analysis and correlation coefficient through Amos software version 24 and SPSS version 26.

### 3. Results

Mainly, the present study was performed on 293 married women aged 20 to 60 years, with 15.70% being in the age range of 20-30 (n=46), 56.00% in the range of 31-40 (n=164), and 28.30% over the age of 40 (n=83). Based on the education level, 12.30% had a high school certificate, 38.60% held a diploma and post-diploma degree, 34.10% had a Bachelor's degree, and 15.00% had a Master's degree or higher. The inclusion criteria were a minimum age of 18, having at least a high school certificate, ability to read and write, not having acute mental and physical illnesses, non-use of drugs or alcohol, having at least one year of marriage experience, and commitment to answering the questionnaire honestly. The exclusion criterion, on the other hand, would be not filling the questionnaires.

As presented in Table 1, the mean and standard deviation were  $15.66 \pm 11.55$  for the external shame method,  $12.97 \pm 5.83$  for experiential avoidance,

$37.35 \pm 8.41$  for cognitive fusion, and  $66.00 \pm 10.83$  for self-criticism. Table 1 shows a significantly positive correlation ( $P = 0.001$ ) between external shame and self-criticism. Moreover, there is a significantly positive correlation between cognitive fusion and experiential avoidance, and self-criticism ( $P = 0.001$ ).

Using the path analysis technique, the hypothesis of the research was investigated and the model was tested. Figure 2 illustrates the diagram of the path and the coefficients yielded by the modified model. Based on the values achieved for the indexes (Table 2), the data were fitted with the model proposed in the research. It can be said that the Chi-square index on the degree of freedom was in the desired condition ( $X^2/df = 2.98$ ). Additionally, we obtained the Adjusted Goodness of Fit Index (AGFI) as 0.91, good fit index (GFI) as 0.92, the root mean square error of approximation (RMSEA) as 0.08, and the comparative fit goodness index (CFI) as 0.93, which denote the optimal fit of the suggested model.

According to Table 3 and Figure 2, the direct path from external shame to cognitive fusion was  $\beta = -0.48$ ,  $P = 0.001$ , which was  $\beta = -0.18$ ,  $P = 0.001$  from external shame to self-criticism, and  $\beta = 0.80$ ,  $P = 0.001$  from cognitive fusion to experiential avoidance. Meanwhile, from shame to self-criticism, it was  $\beta = 0.16$ ,  $P = 0.001$ , and  $P = 0.001$ ,  $\beta = 0.60$  from experiential avoidance to self-criticism. Thus, cognitive fusion and experiential avoidance can be positively predicted through external shame. There is a positive and significant correlation between external shame and self-criticism

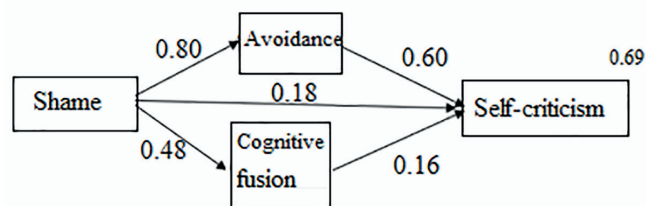


Figure 2: The figure shows the structural model to self-criticism in the married women.

Table 1: Demographic characteristics of the study participants and correlation matrix of the research components

Variable	Mean	Std. Deviation	1	2	3	4
External shame	15.66	11.55	-			
Cognitive fusion	37.35	8.41	$r = 0.48^{**}$ $P < 0.001$	-		
Experiential avoidance	12.97	5.83	$r = 0.66^{**}$ $P < 0.001$	$r = 0.57^{**}$ $P < 0.001$	-	
Self-criticism	66.00	10.83	$r = 0.55^{**}$ $P < 0.001$	$r = 0.60^{**}$ $P < 0.001$	$r = 0.51^{**}$ $P < 0.001$	-

\* $P < 0.05$ ; \*\* $P < 0.01$

**Table 2:** Indicators correlated with structural equations in self-criticism of the married women

Test name	Desired value	Observed value	Condition
X <sup>2</sup> /df	3>	2.98	Favorable
RMSEA	10.0<	0.08	Favorable
GFI	90.0<	0.92	Favorable
AGFI	90.0<	0.91	Favorable
CFI	90.0<	0.93	Favorable

RMSEA: Root mean square error index, GFI: Goodness of fit index, AGFI: Adjusted Goodness of Fit Index, CFI: Comparative Fit Index

**Table 3:** The direct, indirect, and total predictive effects of self-criticism through cognitive fusion and experiential avoidance

Variables	Direct effect	Indirect effect	Total effect
External shame - cognitive fusion	B (0.48) P (0.001)	-	B (0.49)
External shame - experiential avoidance	B (0.80) P (0.02)	-	B (0.83)
External shame - self-criticism	B (0.18) P (0.01)	-	B (0.18)
Cognitive fusion - self-criticism	B (0.16) P (0.031)	-	B (0.26)
Experiential avoidance - self-criticism	B (0.60) P (0.031)	-	B (0.60)
External shame - cognitive fusion - self-criticism	-	B (0.19) P (0.001)	-
External shame - experiential avoidance - self-criticism	-	B (0.10) P (0.001)	-

through cognitive fusion. This is also true for external shame through the experiential avoidance with self-criticism.

#### 4. Discussion

In the present study, the mediating role of cognitive fusion and experiential avoidance in the correlation between external shame and self-criticism was examined in married women. The results showed that the effect of external shame on self-criticism is direct, positive, and significant. In a study consistent with that of Asgariyan and Rezaei Kheirabadi (19), a significant correlation was revealed between external shame and the feeling of hatred in individuals with self-criticism. The compassion therapy of Gilbert (6) showed that once a person suffers from a sense of external shame and comparing, his/her self-esteem and value decrease. Hence, self-loathing, used as a framework for self-assessment, leads to no positive evaluation. This evaluation is accompanied by self-blame and destructive behaviors, gradually increasing self-criticism and persisting over time (6).

The results also showed the direct, positive, and significant effect of cognitive fusion on self-criticism. In a study consistent with that of Dinis and colleagues (45), it was revealed that those with high levels of cognitive fusion experience more self-criticism and suffer more psychological damages.

Moreover, according to the findings, the effect of experiential avoidance on self-criticism was direct,

positive, and significant, which is in agreement with earlier findings in this field. Experiential avoidance is an important component in the formation and maintenance of many psychological disorders and self-criticism (15, 18).

Based on the results, external shame through cognitive fusion affects self-criticism. Cognitive fusion with cognitive distortions and negative evaluations of reality, which is associated with external shame, intensifies self-criticism. To specify this finding, it can be concluded that cognitive fusion constantly engages an individual with negative internal evaluation whereas external reality has a positive correlation with external shame. This issue intensifies self-criticism in an individual. The study also revealed that the external shame due to experiential avoidance has a significant and indirect effect on self-criticism. To explain these findings, it can be concluded that the external shame creates a set of negative emotions increasing experiential avoidance. Negative emotions also deprive individuals from a constructive experience of that emotion and will give no space to them to manage that experience in the right way; thus, this negative process will raise the psychological tensions and further evokes safety-seeking strategies, such as self-criticism.

##### 4.1. Limitations

Along with the results, the present study had some limitations, which should be considered in generalizing the findings. Selecting the women in

Bandar Abbas as the sample and the use of self-report questionnaires were the biggest limitations herein. So, the results should be generalized with caution. It is suggested to use other methods of data collection, such as interviews and qualitative research methods. It could also be recommended to repeat the study in other samples in future research.

## 5. Conclusions

The present study provides worthy evidence for the hypothesis that cognitive fusion and experiential avoidance can mediate the correlation between external shame and self-criticism. Based on these findings, it was recommended that in providing counseling to women with high self-criticism, the role of experiential avoidance would be considered and interventions such as ACT should be used in order to moderate experiential avoidance and reduce self-criticism. Furthermore, by teaching effective strategies to reduce self-criticism in women, we can help increase their quality of marital life, and have better interaction with their children, ultimately boosting their mental health.

## Ethical Approval

The Ethics Review Board approved the present study with the code of IR.HUMS.REC.1401.010 and we have obtained written informed consent from the participants as well.

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**Conflict of Interest:** None declared.

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