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## Translation, Cultural Adaptation, and Psychometric Validation of the Urdu Perceived Stigmatization Questionnaire Among Acid Attack Survivors in Pakistan

|                           |                                                                                                                                                                                                                                                                                                                         |
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### Abstract

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No culturally adapted and psychometrically validated Urdu instrument is currently available to assess perceived stigmatization among individuals with visible disfigurements in Pakistan. Therefore, this study aimed to translate, culturally adapt, and evaluate the psychometric properties of the Perceived Stigmatization Questionnaire (PSQ) in Urdu (PSQ-Urdu). Following standard forward-backward translation and cultural adaptation procedures, a cross-sectional study was conducted on a sample of 133 acid attack survivors recruited using purposive sampling from different burn care centers and rehabilitation organizations in Pakistan. Participants completed the PSQ-Urdu and RSES Urdu version. Furthermore, visibility of burn scars was included as a clinical characteristic to examine its association with perceived stigmatization. The PSQ-Urdu version showed excellent internal consistency reliability, i.e.,  $\alpha = .91$ ,  $\omega = .93$ , with high reliability across its subscales:  $\alpha = 0.90$ ,  $\omega = .91$  for absence of friendly behavior,  $\alpha = .93$ ,  $\omega = .95$  for staring behavior, and  $\alpha = .90$ ,  $\omega = .96$  for hostile behavior. Furthermore, a strong negative correlation ( $r = -.85^{**}$ ) between perceived stigmatization and self-esteem provides evidence for good construct validity. Additionally, a moderate positive association between PSQ-U and visibility of burn scars provided evidence of validity based on associations with a relevant clinical characteristic. Exploratory factor analysis using principal axis factoring with Promax rotation supported a three-factor structure consistent with the original PSQ (KMO = .94; Bartlett's test of sphericity,  $\chi^2(210) = 4166.24$ ,  $p < .001$ ), explaining 85.34% of the total variance. The findings provide evidence for the PSQ-Urdu as a reliable and valid instrument to assess perceived stigmatization among the Urdu-speaking population with visible disfigurements. However, the use of purposive sampling and recruitment from selected burn care and rehabilitation centers may limit the generalizability of the findings. The availability of this instrument may facilitate clinical assessment and psychosocial research in Pakistan.

**Keywords:** Perceived stigmatization, psychometric validation, Urdu translation, visible disfigurement, acid attack survivors

## Introduction

Acid violence may constitute a severe form of domestic violence, causing not only physical injuries but also substantial psychological, social, and economic aftereffects. Unlike other forms of adverse traumatic experience, acid attacks cause permanent physical disfigurement, which can significantly influence physical appearance, interpersonal relationships, and psychological well-being (Goswami & Handa, 2020). The aftereffects of such traumatic experiences are not limited to physical injury but continue across survivors' lives due to long-lasting medical treatments and social withdrawal. Although it is a global issue, it is most frequently reported in South Asian countries including India, Bangladesh, and Pakistan. These attacks are most commonly associated with domestic conflicts and gender-based power inequalities (Patel, 2014). The permanent scars resulting from the attack may further expose survivors to negative social reactions, making visible disfigurement not only a physical injury but also an important psychosocial challenge (Van Loey & Van Son, 2003). Acid attack survivors with visible disfigurement may be exposed to negative social experiences, including staring, discrimination, and social rejection, which hinder their social reintegration (Ismail et al., 2020). Therefore, the consequences of acid attacks are not limited to physical injury but also represent societal challenges that influence survivors' psychological adjustment.

The most prominent psychosocial barrier experienced by survivors is perceived stigmatization. Stigma refers to a social process through which individuals with visible distinctive characteristics that are devalued within a particular social context may experience negative social evaluation. It is a multidimensional concept with different forms. Enacted stigma refers to actual stigmatizing behaviors; anticipated stigma is based on expected future rejection. Internalized stigma occurs when individuals adopt negative societal beliefs about socially devalued characteristics and apply them to themselves. In contrast, perceived stigmatization concerns individuals' perceptions that they are being

International "Journal of Academic Research for Humanities (JARH) 6(3)" negatively evaluated because of stigmatized characteristics. This distinction is particularly relevant to visible disfigurement because perceptions of others' reactions may influence psychological adjustment. Perceived stigmatization refers to an individual's perception of being devalued, discriminated against, and judged based on physical disfigurement (Ismail et al., 2020). For acid attack survivors, perceived stigmatization may arise from negative experiences of social rejection, staring, negative social comments, and discriminatory behavior (Ismail et al., 2020). Such experiences may make social interactions more difficult and contribute to loneliness and reduced social participation (Qazi et al., 2019). Repeated perceptions of being devalued because of one's appearance may also negatively influence self-identity and social worth. Muldoon et al. (2019) described that stigmatizing experiences may influence psychological distress and lower social confidence. Therefore, it's important to examine perceived stigmatization among acid attack survivors to understand the psychosocial aftereffects of the attack.

Self-esteem represents another important psychological outcome, influenced by perceived stigmatization among acid attack survivors. Self-esteem refers to an individual's overall evaluation of their self-worth (Baumeister et al., 2003). It is a self-concept involving an organized set of evaluations of one's perceptions and beliefs (Rosenberg, 1965). Following an acid attack, survivors experience severe physical and psycho-emotional trauma. The scars resulting from the attack have strong negative effects on self-esteem (Bennis et al., 2017). For individuals with visible disfigurement, self-evaluation may be particularly driven by interpersonal experiences because appearance can become an important component of social interaction (Thompson & Kent, 2001). Permanent scars resulting from acid attacks may challenge survivors' perceptions of themselves, particularly when accompanied by negative reactions from others. Experiences of social

rejection and discrimination may reinforce negative self-evaluations (Asif et al., 2024). Moreover, empirical evidence has shown that stigma is directly associated with low self-esteem among individuals with burn injuries (Wu et al., 2023). These findings provide empirical support for examining the relationship between perceived stigmatization and self-esteem among acid attack survivors in the present study.

Acid attack survivors experience substantial psychological challenges that can cause long-lasting psychological issues, as explained by Asif et al. (2024) in the form of psycho-emotional symptoms such as depression, anxiety, stress, and mainly PTSD. More broadly, researches showed that perceived stigmatization has strong links with psychological distress and problematic interpersonal functioning (Rumsey & Harcourt, 2004). These findings suggest that perceived stigmatization may influence multiple dimensions of psychosocial adjustment beyond the immediate experience of negative social reactions. These psychological difficulties, along with social stigma, may result in worthlessness and loss of identity (Jain et al., 2025).

Despite the importance of perceived stigmatization and its psychosocial impacts on individuals with visible differences, the availability of culturally appropriate instruments for its assessment remains limited in Pakistan. The assessment of perceived stigma is essential for appropriately identifying negative experiences and developing culturally relevant psychosocial interventions. Without an appropriate assessment tool, researchers and clinicians may face challenges in understanding the extent and nature of stigma of individuals with visible disfigurements within the Pakistani cultural context. The Perceived Stigmatization Questionnaire (PSQ), developed by Lawrence et al. (2006), is a widely used instrument designed to assess stigma-related experiences among individuals with visible differences, particularly burn survivors. The PSQ assesses perceived stigmatization through three dimensions: absence of friendly behavior, confusing/staring behavior, and hostile behavior. Unlike general

International "Journal of Academic Research for Humanities (JARH) 6(3)" stigma measuring tools, the PSQ specifically targets interpersonal experiences associated with visible disfigurement, making it particularly relevant for individuals whose appearance has been altered due to trauma, including acid attacks. The PSQ has been used across different cultures to measure perceptions of stigmatization among individuals with visible differences. However, in Pakistan, where Urdu is the national language, there is a lack of validated tools to measure perceived stigmatization.

Although the original Perceived Stigmatization Questionnaire consists of a three-factor structure, subsequent psychometric studies suggest that its factor structure may vary across cultural contexts. Dutch validation study identified a four-factor solution rather than the original three-factor structure, showing that the dimensional structure of perceived stigmatization may vary across populations and cultures (Willemse et al., 2021). This cross-cultural variation provides a basis to empirically examine the structural properties of the PSQ when adapting it for use in a new culture and language. Within Pakistan, the psychometric properties and factor structure of the PSQ have not been established among individuals with visible disfigurements. Therefore, the present study aimed not only to translate and culturally adapt the PSQ into Urdu but also to examine its reliability, construct validity, and underlying factor structure among Pakistani acid attack survivors.

More specifically, no culturally adapted and psychometrically validated Urdu-language version of the PSQ has been established for individuals with visible disfigurement in Pakistan. This gap hinders the ability of researchers and policymakers to gather accurate data and develop targeted interventions for stigmatized individuals. Acid attack survivors represent a meaningful population for the validation of this tool because they commonly experience visible disfigurement resulting from interpersonal violence. Although the PSQ was originally developed among burn survivors, its focus on

interpersonal reactions to visible differences makes it conceptually relevant to acid attack survivors; however, its measurement properties should be empirically examined rather than assumed to generalize across these populations. Previous research has highlighted the need and significance of cultural adaptation in the translation process to ensure that items are culturally appropriate and comprehensible to the target population (Gjersing et al., 2010). Therefore, this study contributes to filling this gap in the literature by translating the PSQ into Urdu and evaluating its reliability and validity.

### Research Objectives

1. To translate and culturally adapt the 21-item Perceived Stigmatization Questionnaire into Urdu for acid attack survivors in Pakistan.
2. To evaluate the content validity and internal consistency of the PSQ Urdu.
3. To examine the relationship between PSQ scores and visibility of burn scars.
4. To assess construct validity through its association with Urdu self-esteem scores.
5. To examine its factor structure through EFA.

### Research Questions

1. Does the PSQ Urdu demonstrate adequate cultural and content validity among Pakistani acid attack survivors?
2. Does the PSQ Urdu demonstrate satisfactory internal consistency?
3. Is perceived stigmatization associated with the visibility of burn scars?
4. Is perceived stigmatization negatively associated with self-esteem?
5. Does its factor structure correspond to the theoretical dimensions of the original PSQ?

### Method

#### Sample

A cross-sectional survey research design was employed to collect the data. A sample of 133 female acid-attack survivors was recruited through non-probability purposive sampling from different burn centers and rehabilitation organizations, including Depilex-Smileagain Foundation, Al-Khidmat Foundation, Nishtar Burn Center (Multan), CMH Multan, and CMH Karachi. Purposive sampling was employed because acid

attack survivors are difficult to access and rarely found. For EFA, the adequacy of sample size was evaluated by considering the strength of factor loadings, number of items in each factor, and communalities. In the present study, the three factors were defined by 5-8 items in each factor, with factor loadings ranging from .52 to .98, and extraction communalities from .61 to .96, which support the adequacy of the recruited sample size for factor analysis.

Participants were eligible if they had experienced an acid attack, had visible scars resulting from the attack, and had completed at least six months since the incident at the time of data collection to ensure that they had had adequate time to adjust and potentially reintegrate into society. Survivors with accidental acid burns or those who had experienced the attack within the previous six months were excluded from the study.

### Instruments

The following instruments were used to collect the data.

#### Rosenberg self-esteem scale (RSES)

Rosenberg (1965) developed the instrument, most commonly used to measure self-esteem. This instrument has been validated across different cultures and languages and demonstrates good psychometric properties (Gnambs, 2018). RSES consists of 10 items. It is a self-reported questionnaire. This scale is a 4-point Likert-type scale and ranges from score 0-3. Participants rate from strongly disagree (0) to strongly agree (3). Items 2, 5, 6, 8, and 9 are reverse-coded. RSES is best known for its good internal consistency, reported by the author as 0.90 (Gnambs, 2018). In the present research, the RSES Urdu is used, which was translated and adapted by Rizwan et al. (2017) and shows good reliability, with Cronbach's alpha of 0.93.

#### Perceived Stigmatization Questionnaire (PSQ-21)

Lawrence et al. (2006) developed a well-established tool used to assess the perception of stigmatization by people having visible scars on their bodies. This scale was developed in the US and shows good psychometric properties

among people with visible differences, i.e., pediatric and adult burn survivors.

PSQ consists of 21 items with three different factors that contribute to examining the perception of people who perceive them as a stigma in society. The three factors: (i) Social acceptance (item # 1, 5, 7, 9, 12, 15, 17 & 20) consists of reverse-coded items and measures the absence of friendly behavior; (ii) Confused/Staring behavior (item # 3, 4, 6, 10, 13, 14, 19 & 21) measures social discomfort & (iii) Hostile behavior (item # 2, 8, 11, 16 & 18) counts the social rejection. The PSQ is a self-report questionnaire on which a participant rates from 0 (Never) to 5 (Always) according to their agreement with the statements. A higher score indicates higher perceived stigmatization. Perceived Stigmatization Questionnaire shows good psychometric properties in terms of internal consistency, factor structure, and measurement across the sample of visible differences. Cronbach's alpha reliability for the total score of PSQ is .93, for the subscale of the absence of friendly behavior is .91, for the subscale of confused/ staring behavior is .92, and for the hostile behavior subscale is  $\alpha=.88$  (Lawrence et al., 2006).

### **Translation and Adaptation of Perceived Stigmatization Questionnaire in Urdu**

The TRAPD approach was used to translate the scale, which is described in the literature as the best-suited method to address the shortcomings of the forward and backward translation method (Walde & Vollm, 2023). It allows us to detect flaws in translation for contextual adaptation within the culture, which the translation and back-translation method did not address.

#### **Phase I Translation**

First, the PSQ was translated into a target language, i.e., Urdu, by 2 independent bilingual experts. By synthesizing both forward translations, the final draft of the questionnaire was then presented to the Expert Panel for endorsement; the expert panel (consisting of 5 Faculty members) reviewed and revised the context and sentence structure of the draft. The

final draft of the translated version of PSQ in Urdu is then back-translated into English by an independent bilingual expert who has no prior knowledge about the PSQ. In this way, the PSQ-URDU final version will be obtained with the help of bilingual experts and expert panel advice.

#### **Phase-II Review**

The final translation was reviewed by the author of the PSQ (Lawrence) to avoid any contextual mistakes. The author pointed out contextual mistakes in 5 items (items # 4, 12, 16, 17 & 21). To revise these items, the complete procedure of the Forward and Backward Translation is repeated, and the final draft is synthesized after review by the author of the PSQ.

#### **Phase-III Adjudication**

It refers to the compilation of the final translation in the target language, after conducting the review process by the author as well as the discussion with an expert panel. Adjudication of the contextual framework of items, as well as the structural formation concerning the cultural aspect, is necessarily practiced when the final version of the PSQ-URDU is formed.

#### **Phase-IV Pre-test**

After formation of the final version of the PSQ-URDU, the questionnaire was first administered to a small sample to avoid any misconception or confusion either in context or construct. As the scale is designed for individuals with visible differences, for pilot testing, a small sample of Acid Attack Survivors was taken to complete the questionnaire as pre-testing of an instrument before administering it to a larger sample. It was noted that all of the items were easily understandable. There were no clarification issues in the sentence structure and no need for further amendment. However, if any of the participants were confused in understanding the contextual meaning of the statement, proper instructions were given to them for clarification. After pilot testing of the PSQ-Urdu, this scale was further applied to a comparatively large sample of acid attack



survivors N=133 to check its psychometric properties and validation empirically. The entire translation process and its progressive stages are comprehensively documented.

### Data Collection

After approval of the Ethical Review Board Committee from the Department of Applied Psychology, The Women University Multan, the necessary permissions were obtained from the administrations of organizations where acid attack survivors were rehabilitated, ensuring compliance with ethical standards. Informed consent of the participants was obtained before data collection. Participants were informed about the nature and purpose of the research, the voluntary nature of their participation, as well as their right to withdraw at any time. Participants were guaranteed that their data would be kept strictly confidential.

### Results

**Table 1**

Demographic Characteristics of the Sample (N = 133)

| Characteristics                      | n   | Percentage |
|--------------------------------------|-----|------------|
| Gender                               |     |            |
| Female                               | 133 | 100%       |
| Marital Status                       |     |            |
| Unmarried                            | 35  | 26.3%      |
| Married                              | 43  | 32.3%      |
| Divorced                             | 48  | 36.1%      |
| Widow                                | 7   | 5.3%       |
| Time passed to Acid Attack.          |     |            |
| Less than 1 year                     | 18  | 13.5%      |
| 2 years                              | 21  | 15.8%      |
| 3 years                              | 16  | 12%        |
| 4 years                              | 14  | 10.5%      |
| 5 years                              | 13  | 9.8%       |
| 6-8 years                            | 17  | 12.8%      |
| 9-11 years                           | 10  | 7.5%       |
| 12-14 years                          | 6   | 4.5%       |
| 15 years & above                     | 18  | 13.5%      |
| Visibility of Scars                  |     |            |
| Face                                 | 18  | 13.5%      |
| Face & Neck                          | 46  | 34.6%      |
| Face, Neck, Hand & Feet              | 43  | 32.3%      |
| Face, Neck, Hand, Feet & other parts | 26  | 19.5%      |
| Perpetrators                         |     |            |
| Prefer not to say                    | 36  | 27.1%      |
| Husband                              | 54  | 40.6%      |

|                      |    |       |
|----------------------|----|-------|
| Neighbor / Relatives | 38 | 28.6% |
| Father               | 4  | 3%    |
| Fiancé               | 1  | 0.8%  |

### Psychometric Properties of PSQ-URDU

#### Content Validity

This was reviewed by an expert panel in the field of Psychology. The experts evaluated the translated scale and verified that all items were relevant and accurately addressed the construct. The experts agreed that the scale adequately covered the key aspects of the construct and that the language used was clear and comprehensible.

**Table 2**

Descriptive Statistics of Perceived Stigmatization Questionnaire and Self-esteem among Acid Attack Survivors (N=133).

| Scales                       | M     | SD    | Range     |          | Skewness | Kurtosis |
|------------------------------|-------|-------|-----------|----------|----------|----------|
|                              |       |       | Potential | Actual   |          |          |
| PSQ                          | 56.54 | 22.77 | 21 – 98   | 21 – 105 | .23      | -1.37    |
| Absence of friendly behavior | 20.41 | 10.46 | 8 – 40    | 8 – 40   | .39      | -1.29    |
| Confused/Staring behavior    | 23.03 | 7.83  | 8 – 39    | 8 – 40   | -.02     | -.80     |
| Hostile behavior             | 13.09 | 6.39  | 5 – 24    | 5 – 25   | .33      | -1.53    |
| RSES                         | 17.46 | 8.07  | 0 – 30    | 2 – 28   | -.42     | -1.37    |

Note. M = Mean, SD = Standard Deviation, PSQ = Perceived Stigmatization Questionnaire, RSES= Rosenberg Self-esteem scale

Table 2 shows indices for normal distribution, i.e., skewness and kurtosis. The skewness values for PSQ (0.233) and RSES (–0.424) were close to zero, while the kurtosis values were –1.373 and –1.376, respectively. These values show no substantial departure from normality and support the use of parametric analyses (Kim, 2013).

#### Internal Consistency within the items (Cronbach's Alpha)

**Table 3**

Alpha reliabilities and McDonald's omega of PSQ

| Scales                                 | M     | SD    | No. of items | $\alpha$ | $\omega$ |
|----------------------------------------|-------|-------|--------------|----------|----------|
| Perceived Stigmatization Questionnaire | 56.54 | 22.77 | 21           | .91      | .93      |
| Absence of Friendly Behavior           | 20.41 | 10.46 | 8            | .90      | .91      |
| Confused / Staring Behavior            | 23.03 | 7.83  | 8            | .93      | .95      |
| Hostile Behavior                       | 13.09 | 6.39  | 5            | .90      | .96      |
| Rosenberg Self-Esteem Scale            | 17.46 | 8.07  | 10           | .93      |          |

Table 3 showed that PSQ-Urdu demonstrated excellent internal consistency, with Cronbach's  $\alpha = .91$  and McDonald's  $\omega = .93$ . The subscales also showed high internal consistency, with alpha coefficients ranging from .90 to .93 and omega coefficients ranging from .91 to .96. Overall, the alpha and omega coefficients provide consistent evidence of strong internal consistency reliability for the PSQ-Urdu and its subscales.

**Table 4**

Correlation Coefficient of Variables (N = 133)

| Scales                       | 1      | 2      | 3      | 4      | 5      | 6 |
|------------------------------|--------|--------|--------|--------|--------|---|
| Visible burn scars           | -      |        |        |        |        |   |
| PSQ                          | .40**  | -      |        |        |        |   |
| Absence of friendly behavior | .42**  | .95**  | -      |        |        |   |
| Staring behavior             | .25**  | .89**  | .75**  | -      |        |   |
| Hostile behavior             | .40**  | .90**  | .82**  | .72**  | -      |   |
| Self-esteem                  | -.46** | -.85** | -.93** | -.73** | -.81** | - |

Note. \* $p < 0.05$ , \*\* $p = 0.01$ . PSQ= Perceived Stigmatization Questionnaire

Table 4 shows that perceived stigmatization is strongly negatively associated with self-esteem,  $r = -.85$ , 95% CI  $[-.89, -.80]$ ,  $p < .001$ , indicating a strong negative association.

### Construct validity

PSQ shows a strong negative association with self-esteem ( $r = -.85^{**}$ ), providing evidence for construct validity.

**Table 5**

Reliability analysis: corrected item-total correlation and Cronbach's alpha if the item is

| Impact of PSQ | Item    | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---------------|---------|----------------------------------|----------------------------------|
| 1.            | Item 1  | 0.90                             | 0.96                             |
| 2.            | Item 2  | 0.73                             | 0.98                             |
| 3.            | Item 3  | 0.75                             | 0.95                             |
| 4.            | Item 4  | 0.63                             | 0.94                             |
| 5.            | Item 5  | 0.89                             | 0.96                             |
| 6.            | Item 6  | 0.73                             | 0.96                             |
| 7.            | Item 7  | 0.90                             | 0.98                             |
| 8.            | Item 8  | 0.82                             | 0.95                             |
| 9.            | Item 9  | 0.86                             | 0.94                             |
| 10.           | Item 10 | 0.69                             | 0.96                             |
| 11.           | Item 11 | 0.87                             | 0.96                             |
| 12.           | Item 12 | 0.90                             | 0.98                             |
| 13.           | Item 13 | 0.78                             | 0.95                             |
| 14.           | Item 14 | 0.87                             | 0.94                             |
| 15.           | Item 15 | 0.93                             | 0.96                             |
| 16.           | Item 16 | 0.84                             | 0.96                             |
| 17.           | Item 17 | 0.79                             | 0.98                             |
| 18.           | Item 18 | 0.88                             | 0.95                             |
| 19.           | Item 19 | 0.84                             | 0.94                             |
| 20.           | Item 20 | 0.92                             | 0.96                             |
| 21.           | Item 21 | 0.84                             | 0.97                             |

Table 5 shows that the corrected item-total correlation coefficient ranged from 0.63 to 0.93.

**Table 6**

Factor Analysis of the Urdu-translated Perceived Stigmatization Questionnaire (PSQ-Urdu).

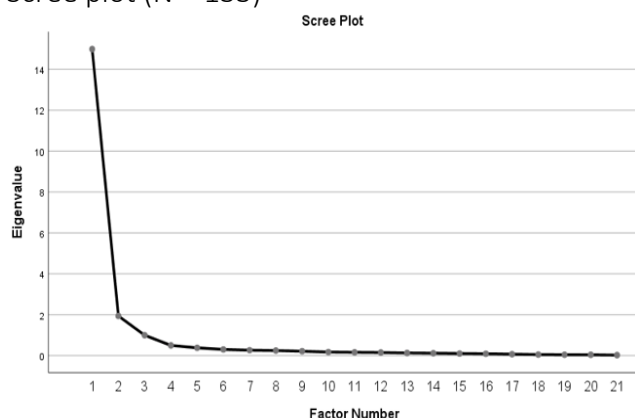
| PSQ Items                                              | Factor loading |   |   |
|--------------------------------------------------------|----------------|---|---|
|                                                        | 1              | 2 | 3 |
| <b>Factor 1: Absence of Friendly Behavior</b>          |                |   |   |
| People are friendly with me. (R)                       | .98            |   |   |
| People are nice to me. (R)                             | .84            |   |   |
| People I don't know say "Hi" to me. (R)                | .92            |   |   |
| People are relaxed around me. (R)                      | .82            |   |   |
| People I don't know smile at me in a friendly way. (R) | .83            |   |   |
| People are kind to me. (R)                             | .94            |   |   |
| Strangers are polite to me. (R)                        | .94            |   |   |
| People treat me with respect. (R)                      | .86            |   |   |
| <b>Factor 2: Confusing / Staring behavior</b>          |                |   |   |

|                                                                 |     |     |     |
|-----------------------------------------------------------------|-----|-----|-----|
| People avoid looking at me.                                     |     | .94 |     |
| People I don't know act surprised or startled when they see me. |     | .82 |     |
| People don't know what to say to me.                            |     | .90 |     |
| People feel sorry for me.                                       |     | .88 |     |
| People don't know how to act around me.                         | -   | .88 |     |
| People do "double takes" or turn around to look at me.          | .41 | .64 |     |
| People I don't know stare at me.                                |     | .56 |     |
| People seem embarrassed by my looks.                            | -   | .60 |     |
|                                                                 | .42 |     |     |
| <b>Factor 3: Hostile behavior</b>                               |     |     |     |
| People call me names.                                           |     |     | .84 |
| People laugh at me.                                             |     |     | .93 |
| People pick on me.                                              |     |     | .78 |
| People bully me.                                                |     |     | .69 |
| People make fun of me.                                          |     |     | .51 |

The extraction method for factor analysis was principal axis factoring; Promax with Kaiser Normalization rotation. The data were suitable for factor analysis ( $KMO = .94$ ; Bartlett's test of sphericity,  $\chi^2 (210) = 4166.24$ ,  $p < .001$ ), explaining 85.34% of the total variance. Further, Table 5 indicates that all items demonstrated primary factor loadings  $\geq .40$  (Knehta et al., 2019). Two items (CB14 and CB19) showed cross-loadings on Factors 1 and 2; however, both demonstrated stronger primary loadings on Factor 2 (.644 and .568, respectively), consistent with their intended confused/staring behavior dimension as that of their original scale. Overall, the three-factor structure was consistent with the original PSQ dimensions.

**Figure 1**

Scree plot (N = 133)



The above figure shows a significant decline in eigenvalues after the third factor, which indicates the three-factor structure and aligns with the theoretical framework of the original PSQ. The "elbow criterion" to retain the underlying factors is the best-suited method to identify the number of factors, i.e., where the line in the scree plot considerably loses its slope (Cattell, 1966).

### Discussion

The aim of the study was the translation and adaptation of the Perceived Stigmatization Questionnaire into the Urdu language to make it a culturally appropriate and valid tool for measuring the perception of stigmatization by acid attack survivors in Pakistan. The PSQ-Urdu measures the subjective experience of perceived stigmatization. Overall, the findings provide preliminary evidence supporting the reliability and validity of the PSQ-Urdu for assessing perceived stigmatization among female acid attack survivors in Pakistan; however, further validation is required before generalizing this scale to all Urdu-speaking individuals with visible disfigurements. The scale has good content validity and is relevant to the culture of Pakistan. The internal consistency of the Urdu version of the scale, the Cronbach's alpha coefficient of the overall scale, is ( $\alpha = 0.91$ ,  $\omega = .93$ ). The findings are comparable to the original English version ( $\alpha = 0.86$ ) of the scale as well as other translated versions of the scale in different countries, like in Brazil ( $\alpha = 0.88$ ) (Freitas et al., 2018), and Canada ( $\alpha = 0.93$ ) (Lawrence et al., 2011). These findings are also consistent with contemporary research indicating that perceived stigmatization is associated with important psychosocial outcomes among individuals with visible disfigurement. Wu et al. (2023) found that stigma is strongly associated with low self-esteem among burn survivors, supporting the relevance of examining the relationship between perceived stigmatization and self-esteem in the present study. Moreover, the PSQ-Urdu demonstrated a strong negative correlation with RSES-Urdu ( $r = -0.85$ ), similar to



the score acquired in the Brazil scale. This strong association is consistent with evidence that perceived stigmatization can be related to self-esteem and other aspects of psychosocial adjustment.

The three-factor structure identified in the Pakistani sample largely reproduced the structure of the original PSQ, comprising absence of friendly behavior, confused/staring behavior, and hostile behavior. The factor loadings were generally strong, ranging from .516 to .989, indicating that the items correspond to their respective factors. This finding is consistent with the original three-factor structure of the PSQ. However, evidence from other cultural adaptations shows that the factor structure of the PSQ may vary across different cultural contexts. For instance, the Dutch validation claims a four-factor structure in which the original absence of friendly behavior dimension was divided into two factors concerning strangers and other people (Willemse et al., 2021). In comparison, the Pakistani data retained the original three-factor organization, suggesting structural replication rather than a modification of the overall PSQ structure. Therefore, findings of the present study support the original three-factor structure of the scale in the Pakistani sample, but it can vary across different cultures. However, the cross-loadings reported in Table 6 for CB14 and CB19 suggest that the boundaries between absence of friendly behavior and confused/staring behavior subscales may not be entirely distinct in the Pakistani context. CB14 and CB19 demonstrated primary loadings of .644 and .568, respectively, on the confused/staring behavior factor, while also showing cross-loadings of -.410 and -.414 on the absence of friendly behavior factor. These items were therefore retained according to their stronger primary loadings and theoretical consistency with the confused/staring behavior dimension. Such overlap may reflect interpersonal behavior towards individuals with visible scars, which is shaped by the cultural and social interpretations of physical appearance. In Pakistan, where physical appearance, social relationships, and societal acceptance can

influence social behaviors, negative experiences such as staring, avoidance, reduced friendliness, and perceived hostility may carry interconnected social meanings. For acid attack survivors, these negative experiences may hinder the survivors' reintegration into society. Thus, while the overall PSQ structure was reproduced, the observed item-level overlap and the differences observed across cultural adaptations highlight the importance of considering cultural context when interpreting perceived stigmatization. These strong associations among all three PSQ-Urdu subscales may reflect the interconnected nature of perceived social responses to visible disfigurement, as staring, reduced friendliness, and hostility may occur within the same interpersonal encounters and may consequently be experienced as related forms of stigmatizing behavior. Therefore, the high inter-factor correlations may indicate substantial conceptual relatedness among the dimensions rather than demonstrating that the subscales are entirely redundant. Nevertheless, these strong associations suggest that the boundaries between specific forms of perceived stigmatization should be considered when interpreting individual subscale scores. Besides the high intercorrelation between the PSQ-Urdu subscales, the total PSQ score may provide a more appropriate measurement of overall perceived stigmatization in the context of Pakistan. Although the analysis supported the three-factor structure of the PSQ-Urdu, the strong correlation among the factors demonstrates that the subscales may not be completely distinct. Therefore, future studies should use CFA with comparatively larger and independent samples to further confirm its three-factor structure and the distinctiveness of its subscales.

The PSQ-Urdu may also have practical implications in clinical settings for acid attack survivors or for those having visible disfigurement, due to which they often perceive stigmatization in societal interactions. This tool can also be used to identify individuals who

perceive high stigmatization, which can further help mental health professionals to address stigma-related psychological distress and provide appropriate psychosocial interventions. It may also contribute to monitoring changes in perceived stigmatization during psychological treatment. In addition, the findings may provide the baseline for developing cognitive-behavioral interventions which can address social concerns, negative beliefs, and challenges related to perceived stigma. However, further research is needed to determine its clinical utility and establish appropriate screening and outcome thresholds.

### Conclusion

The present study contributes to the existing literature regarding the usefulness of PSQ across different cultural contexts. The Urdu-translated version of the PSQ demonstrates satisfactory evidence for the reliability and validity to assess the perceived stigmatization among the recruited sample of female acid attack survivors in Pakistan. However, recruitment of the sample through a purposive sampling method, largely through burn centers and rehabilitation organizations, limits interpretations of the findings to psychometric utility within this specific population rather than established validity for all Urdu-speaking individuals with visible disfigurements. The translated Perceived Stigmatization Questionnaire (PSQ) in Urdu may provide a useful tool for policymakers and healthcare professionals seeking to understand perceptions of stigmatization among acid attack survivors within the Pakistani cultural context. This may be useful for the development of targeted interventions and programs aimed at improving the quality of life and psychosocial well-being of individuals affected by the stigma due to their visible disfigurement in Pakistan. The findings of our study provide baseline data that can be used in future research in this area to further examine the applicability and psychometric performance of the PSQ-Urdu across diverse populations and settings. Given the high intercorrelated subscales, the total PSQ score is recommended as the primary indicator of perceived stigmatization in

this population until further independent replication using larger and more diverse samples, along with confirmatory factor analysis and further confirmatory validation, to establish the stability of the factor structure and broader generalizability of the instrument.

### Limitations and Recommendations

It is acknowledged that the sample size was small, particularly concentrated in urban areas such as Multan, Lahore, and Karachi. Furthermore, most of the participants were those who had been taken care of by a social welfare organization, while victims who experienced acid attack violence but were not linked to any welfare society. This may cause biases in the research. It was difficult to approach the victims of acid attacks without the help of any organization or welfare society because most of the cases remained unreported due to the fear of shame for the victims and their families as well. The victims who are supported by any social welfare organization are more likely to develop themselves to deal with their life challenges as compared to those who still believe in shame to the point of shame for their whole family and are burdened by social pressure. The sample can be biased to some extent as not represent the complete characteristics of the targeted population. Future research could target data that will be more representative of the population. Although quantitative research has its advantages in the form of generalizability, qualitative interviews could penetrate deep into the phenomenon and can shed light on perspectives that remain unfolded during quantitative study. So, one of the limitations of the research is its quantitative research method. So, qualitative interviews with in-depth insights could shed light on those perspectives that remain silent in quantitative research. Future researchers should employ qualitative interviews to gain deeper insights into the experiences and perspectives of acid attack survivors. Furthermore, a mixed-method research design could also be used in future research, which will provide more in-depth

knowledge about this phenomenon.

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## References

- Asif, S., Khan, S., Butt, T. A., Mehmood, A., Zulfikar, A., & Mubashar, T. (2024). Psychosocial indicators of suicidal ideation among acid attack survivors. *International Journal of Human Rights in Healthcare*, 17(2), 210–220. <https://doi.org/10.1108/IJHRH-06-2022-0056>
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological science in the public interest*, 4(1), 1–44. <https://doi.org/10.1111/1529-1006.01431>
- Bennis, I., Thys, S., Filali, H., De Brouwere, V., Sahibi, H., & Boelaert, M. (2017). Psychosocial impact of scars due to cutaneous leishmaniasis on high school students in Errachidia province, Morocco. *Infectious Diseases of Poverty*, 6(1), 46.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1(2), 245–276. [https://doi.org/10.1207/s15327906mbr0102\\_10](https://doi.org/10.1207/s15327906mbr0102_10)
- Freitas, N. de O., Forero, C. G., Caltran, M. P., Alonso, J., Dantas, R. A. S., Piccolo, M. S., Farina, J. A., Jr., Lawrence, J. W., & Rossi, L. A. (2018). Validation of the Perceived Stigmatization Questionnaire for Brazilian adult burn patients. *PLoS ONE*, 13(1), e0190747. <https://doi.org/10.1371/journal.pone.0190747>
- Gjersing, L., Caplehorn, J. R., & Clausen, T. (2010). Cross-cultural adaptation of research instruments: Language, setting, time and statistical considerations. *BMC Medical Research Methodology*, 10(1), 13.
- Gnambs, T., Scharl, A., & Schroeders, U. (2018). The structure of the Rosenberg Self-Esteem Scale. *Zeitschrift für Psychologie*. <https://doi.org/10.1027/2151-2604/a000317>
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall.
- Goswami, S., & Handa, R. K. (2020). The peril of acid attacks in India and susceptibility of women. *Journal of Victimology and Victim Justice*, 3(1), 72–92. <https://doi.org/10.1177/2516606920927247>
- Ismail, S., Guriro, S., & Lakho, M. K. (2020). Acid violence in Pakistan: A study on women victims of acid attacks in Karachi. *Global Social Sciences Review*, 5(3), 326–332. [https://doi.org/10.31703/gssr.2020\(V-III\).34](https://doi.org/10.31703/gssr.2020(V-III).34)
- Jain, A., Sharma, P., Afsar, M., Ghosh, R., & Kaur, H. (2025). Surviving an acid attack is half the battle, living life is another half: A qualitative enquiry from India. *Human Arenas*, 1–23.
- Kim, H. Y. (2013). Statistical notes for clinical researchers: International “Journal of Academic Research for Humanities (JARH) 6(3)” assessing normal distribution (2) using skewness and kurtosis. *Restorative dentistry & endodontics*, 38(1), 52. <https://doi.org/10.5395/rde.2013.38.1.52>
- Knekta, E., Runyon, C., & Eddy, S. (2019). One size doesn't fit all: Using factor analysis to gather validity evidence when using surveys in your research. *CBE—Life Sciences Education*, 18(1), rm1. <https://doi.org/10.1187/cbe.18-04-0064>
- Lawrence, J. W., Fauerbach, J. A., Heinberg, L. J., Doctor, M., & Thombs, B. D. (2006). The reliability and validity of the Perceived Stigmatization Questionnaire (PSQ) and the Social Comfort Questionnaire (SCQ) among an adult burn survivor sample. *Psychological Assessment*, 18(1), 106–111. <https://doi.org/10.1037/1040-3590.18.1.106>
- Malta, M., Gomes de Jesus, J., LeGrand, S., Seixas, M., Benevides, B., Silva, M. D. D., ... & Whetten, K. (2020). "Our life is pointless...": Exploring discrimination, violence and mental health challenges among sexual and gender minorities from Brazil. *Global Public Health*, 15(10), 1463–1478. <https://doi.org/10.1080/17441692.2020.1767676>
- Muldoon, O. T., Haslam, S. A., Haslam, C., Cruwys, T., Kearns, M., & Jetten, J. (2019). The social psychology of responses to trauma: Social identity pathways associated with divergent traumatic responses. *European Review of Social Psychology*, 30(1), 311–348. <https://doi.org/10.1080/10463283.2020.1711628>
- Patel, M. (2014). A desire to disfigure: Acid attack in India. *International Journal of Criminology and Sociological Theory*, 7(2), 1–11.
- Qazi, R., Khan, S., Akhtar, T., & Butt, T. A. (2019). Psychosocial correlates of suicidal ideation in acid attack survivors. *Pakistan Journal of Physiology*, 15(4), 31–34.
- Rizwan, M., Malik, S., Malik, N. J., & Siddiqui, R. S. (2017). Urdu Rosenberg self-esteem scale: An analysis of reliability and validity in Pakistan. *Sociology International Journal*, 1(2), 56–61. <https://doi.org/10.15406/sij.2017.01.00010>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Rumsey, N., & Harcourt, D. (2004). Body image and disfigurement: Issues and interventions. *Body Image*, 1(1), 83–97. [https://doi.org/10.1016/S1740-1445\(03\)00005-6](https://doi.org/10.1016/S1740-1445(03)00005-6)
- Thompson, A. R., & Kent, G. (2001). Adjusting to disfigurement: Processes involved in dealing with being visibly different. *Clinical Psychology Review*, 21(5), 663–682. [https://doi.org/10.1016/S0272-7358\(00\)00056-8](https://doi.org/10.1016/S0272-7358(00)00056-8)
- Van Loey, N. E., & Van Son, M. J. (2003). Psychopathology and psychological problems in patients with burn scars: epidemiology and management. *American journal of clinical dermatology*, 4(4), 245–272.
- Walde, P., & Völm, B. A. (2023). The TRAPD approach as a method for questionnaire translation. *Frontiers in Psychiatry*, 14, 1199989. <https://doi.org/10.3389/fpsy.2023.1199989>
- Willemse, H., Geenen, R., & Van Loey, N. E. (2021). Reliability and structural validity of the Dutch version of the perceived stigmatization questionnaire in adults with burns. *Burns*, 47(6), 1381–1388. <https://doi.org/10.1016/j.burns.2020.11.017>
- Wu, X., Hu, Y., & Hu, A. (2023). Living with Stigma and low self-esteem among individuals with burn injuries: a cross-sectional study. *Journal of Burn Care & Research*, 44(3), 573–579. <https://doi.org/10.1093/jbcr/irac023>