

Development of Culturally-specific Family Criticism Scale and Emotional Over-involvement Scale

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The current study was conducted to develop the indigenous scales of family criticism and emotional over involvement in Pakistani community in the context of expressed emotion theory. To generate items for the scales, four focus groups were conducted with students, housewives, class II, and class IV workers. To establish the psychometric properties, these scales were administered to a sample of 500 participants belonging to different socio-economic status, professions, residential areas, and both genders. Exploratory Factor Analysis generated two factors for Perceived Criticism Scale namely Cultural and Religious Aspects of Criticism and Gender Related Criticism and three factors of Emotional Over-involvement Scale namely Self Sacrificing Behavior, Overprotective Behavior, and Cultural Conceptualization of Emotional Over-involvement. Reliability and factor analyses of both scales indicated that these scales are reliable and valid to measure family criticism and emotional over-involvement in social interactions of Pakistani families.

Keywords: Expressed emotions, scales, criticism, emotional over-involvement, culture

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For over 30 years, it has been known that emotional characteristics of family environment influence the severity of severe mental illnesses, such as schizophrenia. The concept of Expressed Emotions (EE) refers to a cluster of such emotional characteristics expressed by key relatives towards family members and includes Critical Comments (CC), Emotional Over-involvement (EOI), Hostility, Warmth, and Positive Comments. The first three have been consistently shown to be powerful predictors of relapse for patients with schizophrenia in nearly all parts of the world including UK (Brown, Carstairs, Monch, Birley, & Wing, 1972); USA (Vaughn et al., 1984); Australia (Parker, Johnston, & Hayward, 1988); Egypt (Kamal, 1995); China (Phillips & Xiang, 1995); Iran (Mottaghipour, Pourmand, Maleki, & Davidian, 2001); Japan (Mino, Inoue, Tanaka, & Tsuda, 1997); and India (Wig et al., 1987). These associations have also been found in ethnic minority groups living in other countries, for example, among Asian families in the UK (Hashemi & Cochrane, 1999) and Mexican descents in USA (Karno et al., 1987).

Although there is consensus about the link between relapse and high EE across all cultural groups, there are some interesting cultural differences as well, especially in the range of EE scores in different cultures (Hashemi & Cochrane, 1999; Moline, Singh, Morris, & Meltzer, 1985). Considerably, higher rates of EE have been reported from Egypt (Kamal, 1995); Israel (Heresco-Levy, Greenberg, & Dasberg, 1990); Japan (Mino et al., 1997); and China (Phillips & Xiang, 1995). This in itself is not surprising, since relatives' emotional responses to an ill family member are determined by emotional expressions and their behavioural manifestation in interpersonal interactions, which are likely to vary across cultures. Hence, if there are cultural differences in how emotions are expressed in non clinical families in the general population, this is likely to influence how EE is rated in clinical samples in that population.

In cultures across the Indian subcontinent, the self is perceived and experienced in a network and relational context rather than autonomous (Neki, 1975). It has been argued that in such cultures, the boundaries of the self are not restricted within the self, but extend into immediate family and wider society. Interdependence is prized over independence, and structured interdependent relationships are essential constituents of the sense of self. Patients often describe themselves in relational, usually familial terms (Singh, 2003). High EOI in such cultures may be a norm and a manifestation of family protection for a vulnerable individual in a social setting devoid of a welfare state support.

In this paper, we argue that the current conceptualization of EE is not culturally sensitive, since, in some cultures high EE and criticism is a norm within the general population, and hence, any assessment of EE in a clinical sample needs to take this into account. Such family patterns of emotional expression are true for many cultures including Hispanic (Murillo, 1976); Mexican-Americans (Karno et al., 1987); Egyptians (Kamal, 1995); and Pakistanis living abroad (Hashemi & Cochrane, 1999) or in their home land (Ikram, Suhail, Jafri, & Singh, 2011). In a Pakistani study, thirty key family members of schizophrenic patients were interviewed by using Camberwell Family Interview (CFI; Brown, Carstairs, & Topping, 1962) and the overall ratings on EE and ratings on hostility obtained from Pakistan appeared to be higher as compared to majority of the findings reported from other countries (Ikram et al., 2011). Similarly, how much expression of anger or involvement is normal or subnormal can not be agreed upon across cultures. For example, anger is readily shown in Israel and failure to show one's anger is considered a sign of weakness (Heresco-Levy et al., 1990). Thus criticism and hostility may bring false-positives from Israel and EOI from the Indian subcontinent (including Pakistani), Mexican, and Egyptian studies. As the normative levels of overt expressions of emotions may differ between cultures, it is essential to measure culturally acceptable levels of overt emotions that an individual can tolerate or expect in a given culture.

Camberwell Family Interview (Brown et al., 1962) is a semi-structured interview schedule often used to obtain information about family circumstances three months preceding a patient's admission to hospital for a psychotic episode, and also to observe a relative's behavior in the interview situation. Its limitation is lengthy administration and scoring. The Five Minute Speech Sample (Magana et al., 1986) is a brief measure of EE in which a relative is asked to speak for five minutes uninterruptedly about the patient and the quality of relative's relationship with the patient (Magana et al., 1986). This is less labour-intensive than CFI but lacks the richness of CFI and is hence limited in scope.

To measure family emotional climate indirectly from the recipients' (patients) perspective, Shields, Franks, Harp, and McDaniel (1992) developed the Family Emotional Involvement and Criticism Scale. It consists of two subscales namely Perceived Criticism and Intensity of Emotional Involvement. These two factors are analogous to CC and EOI, the two main factors of EE that are assessed through CFI. The authors of the scale have reported the sufficient construct and criterion validity. Level of Expressed Emotion Scale (Cole & Kazarian, 1988) assesses the following four characteristic attitudes of

significant others: Intrusiveness, Emotional Response, Attitude toward Illness, and Tolerance/Expectations.

All these instruments had good psychometric properties but their development was made in the clinical context and not for community sample. Secondly, these instruments could not cater the cultural variations found with reference to CC and EOI in Pakistan.

To the best of our knowledge, there are no studies that have assessed EE constructs such as EOI and CC in the general population in different cultures to determine cultural norms in non-clinical populations. Without such normative data, it is not possible to account for cultural differences when assessing EE in non Western clinical populations. This is particularly important so that mental health services can provide culturally sensitive and appropriate care to immigrant families in the West, and therapies such as Behavioural Family Intervention to reduce EE is tailored appropriately for different cultural groups. The current study aimed to develop scales of family criticism and emotional over-involvement and establish their psychometric properties in Pakistani context.

Method

The present research comprised three phases. In Phase I, four focus groups were conducted to generate items for family criticism and emotional over-involvement scale. Preliminary versions of scales were constructed by writing items from the main themes extracted from focus groups. In Phase II, face validation of scale was carried out by subject matter experts. In Phase III, psychometric properties of these scales were established by administering the newly developed scales on community sample in Lahore, Pakistan.

Phase I: Focus Group Discussion for Item Generation

Sample. For focus group conduction, the sample consisted of 32 participants in four focus groups. These focus groups were conducted with students (age range = 18-32 years; $M = 24.62$; $SD = 4.27$); housewives (age range = 20-50 years; $M = 45.50$; $SD = .89$); class IV workers (age range = 25-50 years; $M = 41.0$; $SD = 3.40$), and class II workers (age range = 25-60 years; $M = 43.83$; $SD = 9.30$). They belonged to different socioeconomic status, professions, residential areas, and both genders. The inclusion criterion for the participants was the age of 18 years and above. All participants were residing in Lahore, the provincial capital, at the time of the study.

Measures. Focus group protocol of 12 items was constructed before the conduction of focus groups. The contents of these items were based upon different components of EE. Questions were asked to identify those behaviours which were criticized in Pakistani families. Different questions pertaining to EOI behaviours including self sacrificing and over protective behaviors were also included. For example, *Pakistani gharano mein tanqeed ka rukhjan kis had tak hai? Tanqeed keun ki jati hai?, Jazba-e-qurbani ka izhar kaisay kia jata hai?* [To what extent is the trend of making criticism in Pakistani families? Why is criticism made? How are self sacrificing behaviours demonstrated?]

Qualitative data obtained from every focus group was analyzed by using Interpretative Phenomenological Analysis approach. First transcript was read line by line and codes were assigned to the entire data. Then codes similar in content were grouped together to make categories. Finally categories were inspected to understand underlying themes. These categories were different facets of CC and EOI which were already conceived from EE theory. Main themes of the focus group discussions were used to generate items for two scales.

Apart from focus group discussions, 3 items of Family Criticism Scale (FCS) were also taken from the statements of high EE family members included in a previous Pakistani study (Ikram et al., 2011). These items were related to socially embarrassing behaviours which are criticized in Pakistani families. For example, making fun of family members, arguing with family members, and showing disobedience are criticized.

Procedure. Participants of all focus groups were informed in advance about the topic of discussion, its purpose, venue, date, and timing through invitation letter and informed consent was taken from focus group participants. The focus group discussion was initiated by the introduction of the researcher, research topic, and main rules of focus group discussion. The instructions given to participants were the main rules of discussion (such as 1. Allow all members to speak. 2. Only one member can speak at a time. 3. Do not interfere when one member is sharing one's views. 4. Show respect to comments given by group members. However, you may agree as well as disagree with other members).

Each focus group discussion was opened with an ice breaker followed by questions based upon the components of EE. The first question was answered by everyone and then the discussion became fluent and the participants started communicating to each other directly. The first author acted as a moderator to keep the discussion

in flow. The focus group discussion was ended by requesting a concluding remark from all, the participants. To record focus group discussions, two methods were used i.e., discussions were audio recorded and two post graduate students were requested to take the notes of the discussions. Refreshments were provided to group participants at the end.

Table 1

Analyses of All Focus Group Discussions about Emotional Expressions in Family Interactions (N = 32)

| Categories and Subcategories | Codes |
|--|--|
| Family Criticism | |
| Criticism on Socially Undesirable Behaviors | Adopting fashions in dressing. Participation in performing arts; especially musical activities. Arguing with elders Misbehaving with elders Poor hygiene |
| Criticism on Religiously Undesirable Behaviors | Not performing basic Islamic activities, i.e., not saying prayers and reciting Holy Quran. |
| Perceived Criticism among Boys | Showing interest in stereotyped female activities, e.g., playing with dolls. Choosing stereotyped female subjects like Psychology. On being less active On being less aggressive On character Coming home late On smoking On earning less money as compared to other males. |
| Perceived Criticism among Girls | On being more talkative. On being more energetic and playful. On not performing household tasks. |
| Emotional Over-involvement | Shown by over-caring. Culture expects that everything should be left to take care of the patient. Parents prefer the sick children over their normal ones. Other siblings are expected to take care of the patient. It is expected that everyone should ask about the health of patient. |
| <i>Continued...</i> | |

| Categories and Subcategories | Codes |
|--------------------------------|---|
| Display of Emotional Responses | It is a way to show concern towards the patient. Over caring is considered a good thing in our culture. Family members give preferential treatment to sick people. Pakistani cultural expectations exist for display of emotional responses. |
| Self sacrificing Behaviors | Caregivers try to be selfless. They stop taking care of themselves. Some sisters don't marry. Some brothers' sale land. At times fathers leave their job. Fathers do extra job. A widow didn't remarry. |
| Overprotective Behaviors | Imposing unnecessary restrictions on girls: In the interaction with boys. To discuss their future life partner. To visit friends' homes. To go to recreational trips. To go out of the city for official assignment |

Focus group participants believed that family members in Pakistan criticize socially as well as religiously undesirable behaviours. Similarly, some gender specific behaviours are also criticized among girls and boys. EOI, another important domain of expressed emotion is demonstrated by over caring, displaying exaggerated emotional responses, self sacrificing, and over protective behaviours (see Table 1).

Phase II: Face Validation by Subject Matter Experts

The preliminary versions of Family Criticism Scale (FCS) and Emotional Over-Involvement Scale (EOIS) consisted of 41 and 28 items, respectively. The scales were given to five professionals, four psychologists and a professor of Urdu. They were instructed to assess conceptual meaning rather than latent meaning of scale items. Psychologists also identified item relevance and item comprehensibility. Professor of Urdu edited the language of these items. After excluding overlapping items identified by expert, both FCS and EOIS were left with 23 and 21 items, respectively.

Phase III: Psychometric Properties of Scales

Sample. These scales were administered to a convenient sample of 500 participants (age range = 18-70 years; $M = 28.28$; $SD = 10.92$) who belonged to all walks of life. Majority of the participants were educated with at least 12 years of education (88%), unmarried (63%), and employed (49%). Number of men (47.2%) and women (52%) was quite compatible to each other. They belonged to different socioeconomic status, professions, and residential areas. The inclusion criterion for the participants was the age of 18 years and above. All participants were residing in Lahore at the time of the study (see details in Table 2).

Table 2

Demographic Characteristics of the Sample (N = 500)

| Variables | | <i>f</i> | % |
|--|---------------------------|----------|------|
| Formal education | Matric and below Matric | 63 | 12.6 |
| | Intermediate & Graduation | 225 | 45 |
| | Post Graduation | 196 | 39 |
| | Missing cases | 16 | 3.2 |
| Gender | Male | 236 | 47.2 |
| | Female | 260 | 52 |
| | Missing cases | 4 | 8 |
| Marital Status | Married | 176 | 35.2 |
| | Unmarried | 314 | 62.8 |
| | Missing cases | 10 | 2 |
| Age (in years) | 18-30 | 348 | 69.6 |
| | 31-45 | 87 | 17.6 |
| | 46-60 | 37 | 7.4 |
| | 61-80 | 9 | 1.8 |
| | Missing cases | 19 | 3.8 |
| Nature of Work | Employed | 243 | 48.6 |
| | Student | 153 | 30.6 |
| | Housewife | 41 | 8.2 |
| | Missing cases | 63 | 12.6 |
| Monthly Family Income (in Pakistani Rupees) | Less than 10,000 | 70 | 14 |
| | 10,000-20,000 | 76 | 15.2 |
| | 21,000-30,000 | 77 | 15.4 |
| | 31,000-40,000 | 40 | 8 |
| | 41,000-50,000 | 59 | 11.4 |
| | 51,000-100,000 | 35 | 7 |
| | More than 100,000 | 14 | 2.8 |
| | Missing cases | 129 | 25.8 |

Instruments. The initial version of FCS and EOIS comprised 23 items and 21 items, respectively. Response format of scale items was 4-point ranging from *almost never* (1) to *almost always* (4). Examples of some items of FCS are: *safai (cleanliness) ka munasib khial na rakhnay per ghar walay aitraz kartey hein; gharelu kam kaj na karney par larkion (girls) ko bura bhala kaha jata hai; larkon (boys) key cigarette peenay per napasandeedi ka izhar kia jata hai*. [Family members criticize for not taking care of cleanliness; Girls are criticized for not doing household tasks; Boys are criticized on smoking]. High scores on this scale mean high family criticism perceived by Pakistani community. Examples, of some items from EOIS are: *Pakistani gharon mein ghar walon ka zarrorat se zeida khayal acha samjah jata hai; tafreehi maqat ke sair (visit) say mana kia jata hai. Jazbay qurbani kay izhar kay leya auratein soney ka zewar (gold jewellery) baich deitein hein*. [Over caring is considered good in Pakistani families; Girls are not allowed to have recreational visits; Women sell gold jewellery to express self sacrificing behaviours].

Procedure. In order to establish psychometric properties of FCS and EOIS, both of these scales were administered to a convenient sample of 500 participants. Informed consent was taken from the participants and confidentiality of their responses was also assured. These scales were self-report and self-administered.

Results

In order to determine the construct validity, initially factor analysis was employed on 23 items of FCS by using principal component method without rotation. The initial solution generated a five-factor solution, where most of the items were loaded on one factor and the remaining ones on four separate factors. These five factors had eigen values greater than 1.0, together explaining 36% of variance. KMO was .82 indicating that sample size was adequate for factor structure detection. Bartlett's test of sphericity was significant $\chi^2 (253, N = 500) = 2674.3, p < .001$. Considering the trend of the data, two factor solution with varimax rotation was demanded. The resulting two factors were named as Cultural and Religious Aspects of Criticism and Gender Related Criticism. The first factor deals with criticism made on violation of religious guidelines and cultural norms while the second factor refers to behaviours which are specifically criticized among boys and girls. The first factor had 9 items and the

second one had 12 items. The factors were named by the consensus of authors of the study keeping in view the conceptual framework and contents of items. The criterion for item selection as per factor loading was .35. Two items did not load on any factor, so they were excluded. This was also confirmed from reliability analysis where exclusion of one item increased alpha from .81 to .83. The final FCS consisted of 21 items. Together these factors contributed to 31.63% in total variance (see Table 3).

Table 3

Factor Loadings and Item Total Correlations on FCS (N = 500)

| Item No. | Key Contents of Items | <i>r</i> | F1 9 Items | F2 12 Items |
|----------|--|----------|---------------|----------------|
| 1 | Carelessness of health | .33 | .49 | .07 |
| 2 | Useless spending of money | .42 | .52 | .19 |
| 3 | Ignoring Islamic duties like prayer | .46 | .54 | .25 |
| 4 | Not following personal hygiene | .47 | .64 | .15 |
| 5 | Talking loudly to elders | .50 | .72 | .10 |
| 6 | Saying bad about family members | .43 | .65 | .09 |
| 7 | Arguing with elders | .45 | .66 | .13 |
| 8 | Not obeying elders | .52 | .68 | .20 |
| 9 | Interaction of boys and girls | .30 | .36 | .17 |
| 10 | Unsatisfactory work | .37 | .21 | .41 |
| 11 | Fashionable dress | .49 | .28 | .52 |
| 12 | Taking part in performing arts | .40 | .20 | .50 |
| 13 | Girls for taking interest in sports | .32 | -.07 | .65 |
| 14 | Girls for not doing household tasks | .46 | .22 | .55 |
| 15 | Girls for not covering heads | .40 | .16 | .53 |
| 16 | Boys taking interest in girls activities | .37 | .13 | .50 |
| 17 | Boys opting favourite subjects of girls | .25 | -.17 | .61 |
| 18 | Boys showing anger towards mother | .34 | .29 | .40 |
| 19 | Boys character on staying late at night | .42 | .26 | .44 |
| 20 | Boys for smoking | .45 | .36 | .36 |
| 21 | Boys for comparatively earning less | .29 | .09 | .38 |
| | Eigen Value | | 5.13 | 1.82 |
| | % Variance | | 23.35 | 8.28 |
| | Cumulative % | | 23.35 | 31.63 |

Note. F1 = Cultural and Religious Aspects of Criticism; F2 = Gender related Criticism

KMO for EOIS was .82 indicating that sample size was adequate for factor structure detection. Bartlett's test of sphericity was significant χ^2 (190, $N = 500$) = 2747.3, $p < .001$. Factor analysis of EOIS generated four factors without rotation. However, two factors had just one or two items loaded. Considering this, a three-factor

solution with varimax rotation was demanded. The resulting three factors were named as Self Sacrificing Behavior, Over Protective Behavior, and Cultural Conceptualization of Emotional Over-involvement by keeping in view the main contents of items present in it. The first factor had 10 items, second factor had 6 items, and third factor had 5 items. Among these three factors, the factor of Self Sacrificing Behavior contributed to major variation, i.e., 22% in emotional over-involvement scores. The resulting three factors altogether contributed to 44% of the variance produced in EOI scores (see Table 4).

Table 4

Factor Loadings and Item Total Correlations on EOIS (N = 500)

| Item No. | Key Contents of Items | <i>r</i> | F1 | F2 | F3 |
|----------|-------------------------------------|----------|------------|------------|------------|
| | | | 10 Items | 6 Items | 5 Items |
| 1 | EOI culturally expected | .20 | .20 | -.02 | .47 |
| 2 | Over-caring considered good | .21 | .23 | -.03 | .71 |
| 3 | Crying on severe illness | .40 | .24 | -.09 | .39 |
| 4 | Extra care of ill children | .33 | .35 | .05 | .73 |
| 5 | Care by healthy siblings | .20 | .19 | -.00 | .68 |
| 6 | Not going friends home | .34 | .37 | .67 | .03 |
| 7 | Not going recreational trips | .31 | .35 | .79 | -.18 |
| 8 | Not going out of city | .40 | .43 | .70 | -.07 |
| 9 | Not going for shopping alone | .38 | .41 | .77 | -.04 |
| 10 | Not going for driving alone | .37 | .41 | .75 | -.24 |
| 11 | Sacrifice for relationship survival | .21 | .11 | .33 | .25 |
| 12 | Not taking care of oneself | .32 | .56 | -.27 | -.24 |
| 13 | Giving money | .42 | .47 | -.10 | -.00 |
| 14 | Selling land | .34 | .64 | -.31 | -.32 |
| 15 | Doing part time job | .42 | .73 | -.41 | -.21 |
| 16 | Leaving social activities | .43 | .67 | -.36 | -.11 |
| 17 | Women leaving job | .50 | .68 | -.18 | -.17 |
| 18 | Sister not marrying | .50 | .69 | -.13 | -.28 |
| 19 | Sacrificing sleep | .48 | .47 | -.21 | .29 |
| 20 | Widow not remarrying | .48 | .63 | -.18 | -.08 |
| 21 | Wife selling gold | .44 | .50 | -.12 | .38 |
| | Eigen Value | | 4.58 | 2.56 | 2.11 |
| | % Variance | | 22.00 | 12.56 | 10.06 |
| | Cumulative % | | 22.00 | 34.56 | 44.62 |

Note. F1 = Cultural Conceptualization of EOI; F2 = Over protective Behaviours; F3 = Self Sacrificing Behaviours

EOIS had three subscales which were Cultural Conceptualization of EOI, Over Protective Behaviours, and Self Sacrificing Behaviours. Two subscales of EOIS were named on two components of EOI and third subscale was named by keeping in view the main contents of items present in it. High scores on this scale mean high family emotional over-involvement perceived by Pakistani community. Administration of both scales took 10-15 minutes. Final version of both FCS and EOIS had 21 items with 4-point rating ranging from *almost never* (1) to *almost always* (4). Both scales had no item of reverse scoring.

Internal consistency of the scales was computed by Cronbach's alpha coefficients.

Table 5

Descriptive Statistics and Psychometric Properties of FCS and EOIS and their subscales (N = 500)

| Scales and Subscales | No. of Items | α | M | SD | Range | |
|--|--------------|----------|-------|------|-----------|--------|
| | | | | | Potential | Actual |
| FCS | 21 | .83 | 65.0 | 7.95 | 21-84 | 35-84 |
| Subscales of FCS | | | | | | |
| Religious and Social Aspects of Criticism | 9 | .78 | 29.35 | 4.06 | 9-36 | 16-36 |
| Gender Related Criticism | 12 | .75 | 35.83 | 5.09 | 12-48 | 19-48 |
| EOIS | 21 | .80 | 58.29 | 7.61 | 21-84 | 33-84 |
| Subscales of EOIS | | | | | | |
| Cultural Conceptualization of Emotional Over-Involvement | 5 | .61 | 15.0 | 2.20 | 5-20 | 8-20 |
| Over Protective Behaviours | 6 | .80 | 14.25 | 3.16 | 6-24 | 5-20 |
| Self Sacrificing Behaviours | 10 | .82 | 25.41 | 5.03 | 10-40 | 10-40 |

Note. FCS = Family Criticism Scale; EOIS = Emotional Over Involvement Scale

The results showed high reliability coefficients for the FCS and its subscales. The EOIS and its two subscales, namely Over Protective Behavior and Self Sacrificing Behaviors were also found to be highly reliable. However, the subscale of Cultural Conceptualization of Emotional Over-Involvement (EOI) showed a low reliability index (see Table 5).

Table 6

Inter-correlations of FCS and EOIS and their Subscales (N = 500)

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|------|------|------|------|------|------|
| 1. Religious and Social Aspects of Criticism | - | .50* | .83* | .44* | .25* | .22* | .39* |
| 2. Gender Related Criticism | | - | .89* | .33* | .41* | .29* | .47* |
| 3. Family Criticism Scale | | | - | .44* | .39* | .30* | .50* |
| 4. Cultural Conceptualization of Emotional Over Involvement | | | | - | .59* | .26* | .54* |
| 5. Over Protective Behaviours | | | | | - | .20* | .61* |
| 6. Self Sacrificing Behaviours | | | | | | - | .84* |
| 7. Emotional Over Involvement Scale | | | | | | | - |

* $p < .01$

Table 6 indicates that FCS had strong and significant relationship with both of its subscales. However, both of its subscales were moderately related to each other. It means that although these constructs are somewhat related to each other, yet they have some specific features which distinguish them from one another. EOIS was moderately related to two of its subscales; Cultural Conceptualization of Emotional Over-involvement and Over Protective Behaviours whereas it has high correlation with self Sacrificing behavior.

Table 7

Percentile Scores for FCS and EOIS and their Subscales (N = 500)

| Scales and Subscales | Percentiles | | | | |
|--|-------------|----|----|----|----|
| | 5 | 25 | 50 | 75 | 95 |
| Family Criticism Scale | 52 | 60 | 66 | 71 | 78 |
| Subscales of FCS | | | | | |
| Religious and Social Aspects of Criticism | 22 | 27 | 30 | 33 | 35 |
| Gender Related Criticism | 27 | 33 | 36 | 39 | 45 |
| EOIS | 44 | 54 | 58 | 63 | 70 |
| Subscales of EOIS | | | | | |
| Cultural Conceptualization of Emotional Over-Involvement | 12 | 15 | 16 | 18 | 20 |
| Over Protective Behaviours | 9 | 12 | 15 | 16 | 20 |
| Self Sacrificing Behaviours | 16 | 23 | 26 | 29 | 33 |

Note. FCS = Family Criticism Scale; EOIS = Emotional Over Involvement Scale

The percentile scores of FCS indicate that a person with the raw score range of 52-60 would be considered as less critical (1SD unit

below the mean), 61-71 moderately critical and 72-78 as highly critical (1 *SD* unit above the mean). The percentile scores of EOIS indicate that a person with the raw score range of 44-54 would be considered as less emotionally over-involved (1 *SD* unit below the mean), 55-63 moderate emotionally over-involved, and 64-70 as highly emotionally over-involved (1 *SD* unit above the mean) (see Table 7).

Discussion

This is the first attempt to develop indigenous measures to assess family criticism and emotional over-involvement in Pakistani community. Psychometric properties of FCS and EOIS indicate that both measures are reliable as indicated by their high alpha co-efficient and valid to assess the prevalence of criticism and emotional over-involvement in Pakistani families. Factor analysis was employed to establish the construct validity of both measures. Briggs and Cheek (1986) made it a strong case to apply factor analysis to any new scale as a first step in its validation based on the assumption that a single scale ought to measure a single concept. Committee approach was also used to check the face validity of items and the appropriateness of language used in scale items was checked by an expert of Urdu language. FCS included the items reflecting the significant role of culture, religion, and gender in family criticism. Therefore, two subscales of FCS emerged after factor analysis was named as Cultural and Religious Aspects of Criticism and Gender Related Criticism. Among these two subscales, subscale of Cultural and Religious Aspects of Criticism had higher eigen values obtained through factor analysis. It shows that in FCS, major variance is explained by social and religious factors. This means that Pakistani families criticize more when deviance is made from religious guidelines and cultural norms. For example, some FCS items had religious basis like making of criticism for not offering prayers, misbehaving with elders, talking to them loudly, and disobeying them. Some other items were based upon the behaviours which are criticized on social grounds like showing carelessness towards health and ignorance of personal hygiene. It is interesting to note that the similar behaviours were criticized by the key relatives of schizophrenic patients, thus indicating that Pakistani families are socialized to practice criticism on social, cultural, and religious basis (Ikram et al., 2011).

The second scale was EOIS which had three subscales and were named as Self Sacrificing Behavior, Over protective Behavior and

Cultural Conceptualization of Emotional Over-involvement. Among these, three subscales, the subscale of sacrificing behaviours was found to be responsible for producing major variations in EOI scores. One possible reason for this may be that half of the items of the Emotional Over-involvement Scale were about self sacrificing behaviours. It indicates that self sacrificing behaviours are considered as an important element of family interactions. It is expected that females especially mothers should sacrifice for the survival of family relationships. This subscale had items indicating sacrifice in the form of giving money, selling land or any other precious article like gold, leaving social activities, lessening professional responsibilities, and sacrificing one's own pleasures. Similarly, over protection for girls was also found embedded in the cultural canvas of Pakistani families. This subscale emerged as second most significant factor contributing to significant variance in EOI scores. This subscale had items showing over-protection by not allowing the girls to visit friends' homes and shopping malls alone and going to other cities and recreational trips.

A tentative comparison of these newly developed measures FCS and EOIS with an existing measure Family Emotional Over-involvement and Perceived Criticism indicates the strong role of culture and religion in Pakistani measures. In contrast, the items of later one had mentioned family criticism by finding faults with friends and complaining about money handling and disapproval of their acts. Similarly, the items of emotional involvement were about the knowledge of family members about the thoughts and feelings of their wards or closed ones in advance (Nelis, Rae, & Liddell, 2006).

Apart from psychometric properties, both measures had certain other distinguishing features. The format of items in FCS and EOIS was indirect as the items of the said scales were written from the perspective of general Pakistani families. It was done because people feel more comfortable while responding to the attitudinal trends of general Pakistani families rather than their own families. An important feature of these scales was that they were developed in national language i.e. Urdu. Another significant feature of these scales was their short length as both the scales had 21 items.

These scales are developed in the cultural context of Pakistan. They are culturally different from those developed in Western countries as people in West value independence and personal autonomy. Secondly, women are not expected to devote their full lives for their families. However, in Pakistan, cultural norms and religious guidelines have strong influence in family interactions and women are expected to show self sacrificing behaviours.

Limitations and Future Recommendations

The present study has certain limitations which can be considered in future studies. The data was gathered from only one city of Pakistan, i.e., Lahore and in future it can be collected from various large cities of Pakistan to generalize the results on Pakistani people. This study has employed only exploratory factor analysis and it is suggested to run confirmatory factor analysis on FCS and EOIS. The study has established only factorial validity and it is recommended to determine the convergent and discriminant validity of these scales.

Implications

These measures would help EE researchers to determine cultural baseline of the relevant behaviors in Pakistani families. Knowledge about these baseline behaviors would facilitate their understanding of pathological overt emotions in Pakistani cultural context, which would eventually be linked with predicting the course of mental illness in patients.

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