Development and Validation of Interpersonal Patterns Scale for Married Couples

Sabiha Dar*[1], Dr. Shazia Hasan[2]

[1,2] Department of Psychology, University of Central Punjab, Lahore (54782), Pakistan,
*Corresponding Author's Email: sabiha.dar7@yahoo.com, dr.shaziahasan@ucp.edu.pk

Abstract

Marital relationships in Pakistan are shaped by collectivist cultural norms, extended family involvement, and traditional gender roles, necessitating culturally sensitive tools to assess interpersonal patterns (IPs). Existing Western scales, such as the Dyadic Adjustment Scale, often fail to capture these nuances, highlighting the need for an indigenous Interpersonal Patterns Scale (IPS) tailored for Pakistani married couples. This study aimed to develop and validate the IPS to measure adaptive and maladaptive IPs within Pakistan's socio-cultural context, addressing a critical gap in marital research. A mixed-method design was employed, combining qualitative and quantitative approaches. In Phase 1, phenomenological interviews with 18 married individuals and three therapists generated an initial pool of 77 items, refined to 37 through thematic analysis. Phase 2 established content validity using a Content Validity Index (CVI) with three expert therapists. A pilot study in Phase 3 tested the scale's user-friendliness with 20 participants. In Phase 4, psychometric properties were assessed with 300 married individuals (150 couples) using Exploratory Factor Analysis (EFA), alongside concurrent validity with the ENRICH Marital Satisfaction Scale and Revised Adult Attachment Scale. EFA revealed a two-factor structure: Healing Interpersonal Pattern (29 items, $\alpha = .97$) and Sociocultural Interpersonal Pattern (8 items, $\alpha = .89$), explaining 58.46% of the variance. The scale demonstrated strong content validity (S-CVI = 1.00), split-half reliability ($r = .80$–$.85$), and concurrent validity, with Healing IPs positively correlated with marital satisfaction ($r = .69$, $p < .01$) and close attachment style ($r = .21$, $p < .01$), and Sociocultural IPs linked to anxious attachment style ($r = .34$, $p < .01$). The IPS effectively captures Pakistan-specific marital dynamics, offering a reliable tool for research and clinical interventions.

Introduction

Marriage is a basic social institution in human relations by a complex and progressing social model with an intimate dependence on interpersonal patterns (IPs). These patterns of partners' regular behaviors, communication styles and emotional exchanges with others in relationships are critical in determining relationship quality, stability and satisfaction (Sathyamurthy et al., 2024). These evolving patterns based on cultural values, societal norms and relational histories are the subject of marital dynamics. There is an urgent need for culturally compatible tools to measure IPs in Pakistan where traditional norms, extended family systems, and prescribed gender roles play a controlling role in the marital interactions. However, existing Western developed scales fail to measure the differences between non-Western vs. Western marital structures most especially in collectivist societies. The aim of this article is to explore the development and validation of an indigenous Interpersonal Patterns Scale designed for married couples, a significant gap in marital research. Marital outcomes are greatly influenced by interpersonal patterns. Repeated research finds that adaptive IPs — communication that fosters emotional bonds, constructive conflict resolution -- enhance spouses' satisfaction with and longevity in the marriage (Johnson et al., 2022). On the contrary, criticism, defensiveness and emotional withdrawal also lead to marital distress and dissolution (Wrench et al., 2021). Marital relationships in Pakistan are deeply rooted

within collectivist cultural frameworks with regard to extensive family and societal influences (Tianqi & Jinhao, 2024). These factors may contribute to stabilize marital or vice versa that may cause marital stress due to interference (Dillon & Beechler, 2010; Edirisingha et al., 2022). But understanding these patterns is key to designing interventions to strengthen marital bonds and to improve relationship quality. Karl Tomm's (2014) interpersonal patterns model has a complete model for IPs categorization, identification of six types as pathologizing, healing, wellness, sociocultural, transforming and deteriorating. Destructive exchanges, such as criticism, contempt, defensiveness, and stonewalling, promote deterioration of emotive intimacy and escalation of conflicts (Lavner et al., 2016), and thus classify as pathologizing interpersonal patterns (PIPs). Often times these cycles are set in motion from unresolved emotional needs or relational issues which cause emotional detachment. In contrast, healing interpersonal patterns (HIPs) involve empathizing, validating, and constructing conflict resolution that restores relationships through emotional intimacy (Eastwick et al., 2019). Positive communication, mutual support and shared activities are the wellness interpersonal patterns (WIPs) which give rise to marital satisfaction and resilience (Beech, 2017). Strong relationships are developed among couples that express appreciation and manage problems collaboratively (Gómez-López et al., 2019). Marital dynamics are influenced by sociocultural interpersonal patterns (SCIPs), which is the effect of the influence of the cultural norm and social structure. Indirect communication is often prioritized in collective societies because of family harmony and social acceptance (Uddin, 2015). It can result in suppressed emotions, unresolved conflicts, due to extended family interactions and traditional kinds of gender roles (Lavner et al., 2016). Transformed interpersonal patterns (TIPs) involve cycles of initiating and receiving human reactive feedback, collaborative problem solving, and how relatable growth and development occurs (Feeney & Collins, 2015). Deteriorating interpersonal patterns (DIPs), including declining capability and levels of conflict, and emotional disconnection weaken marital stability and satisfaction (Wrench et al., 2021). These patterns indicate that marital interactions are dynamic, and assessment tools need to be tailored. The IPs heavily influence marital adjustment, which is a continuous process of negotiating roles, responsibilities, and expectations. Emotional intimacy, voice communication and conflict resolution are the key dimensions of adjustment (Abreu-Afonso et al., 2022; Kamali et al., 2020). Arranged marriages in Pakistan, especially those based on familial rather than a personal compatibility makes unique challenges for adjustment. Initial emotional intimacy may be lacking for couples, as couples often need shared and mutually supported experiences to develop satisfaction over time (Akhtar et al., 2017). Dynamics also become complicated by traditional gender roles and extended family involvement, which provide either support or stress, depending on the nature of interactions (Asim et al., 2024). These cultural factors emphasize the limitation of Western tools of assessment for assessing collectivistic marital nuances. Valuable insights regarding marital dynamics are provided by modern models of interpersonal patterns. As previously described, Karl Tomm's (2014) model for IPs' categorizing into pathologizing, healing, wellness, sociocultural, transforming, and deteriorating patterns. In Olson's Circumplex Model (1989), healthy family and marital functioning requires high balance in both cohesion and flexibility. Moderate flexibility allows families to change while remaining stable while rigid and overly flexible systems prove uncontrollable to change (Olson, 2011). Within his Structural Model (1974), Minuchin sees families as figures in transition, enormous amounts of stress created by unusual or external forces, or that filter through all the members of the system. Families resist alternative solutions also under stress, and then pathology occurs, because of this adaptive IPs are needed. Self-Differentiation Model (1978) of Bowen is concerned about the balance between the autonomy and the connection in the family systems. Higher self-differentiation enables individuals to control emotions while in relationships leading to IPs that are healthier. According to the development of Watzlawick, Bavelas, and Jackson's MRI Interactional Model (1967), poor communication worsens family dysfunction. First and second order changes are what therapists wish to implement in family structures to not address past problems but rather maladaptive patterns (Goldenberg et al., 2016). Based on Beavers dimensional model (1985), adaptive families are

perceived to have healthier IPs relative to the inflexible or chaotic systems (Beavers & Hampson, 2000). Together, these models portray the significance of IPs in marital processes and the proposition for culturally relevant measurement tool. In Non-Western contexts this has special implications because it entails measuring IPs and it requires valid and reliable scales. Existing tools (such as the Dyadic Adjustment Scale (Spanier, 1976)) are individual autonomy and direct communication that may not resonate with Pakistan's collectivist values. Interpersonal problems are assessed by the Inventory of Interpersonal Problems Circplex Scales (IIP-C) (Horowitz et al., 2000) but it is not culturally specific for Pakistani couple. The Communication Patterns Questionnaire-Short Form (CPQ) (Crenshaw et al., 2018) measures communication clarity and support, however, it does not fully cover extended family dynamics or indirect communication. The issues with this scale are further highlighted by the fact that an indigenous scale is needed, which accounts for both adaptive and maladaptive IPs within the cultural framework. These gaps are addressed by developing the Interpersonal Patterns Scale for married couples. This scale seeks to adjudicate IPs in accordance with Tomm's (2014) categories, combined with the results of collectivist norms, extended family involvement, arrangements, and also family dynamics. It is altogether different from Western scales; it is concerned for indirect communication, family issues and gender role expectations. Design of the scale is about identifying important domains of healthy and unhealthy IPs, which include mutual support, emotional withdrawal, and escalation of conflict. The inclusion of items that represent Pakistan's sociocultural context is important to achieve cultural relevance and applicability in therapeutic settings. Empirical research supports the significance of IPs in marital outcomes. Wijnberg-Wijnberg-Williams et al. (2015) found that couples with positive communication patterns, such as active listening and validation, reported higher satisfaction over time. Conversely, criticism and defensiveness predicted distress and dissolution. In collectivistic culture, studies highlight the dual role of extended family involvement. Saqib Lodhi et al. (2019) noted that in-law interference in joint family systems increased relational stress, while supportive family dynamics fostered wellness patterns. These findings emphasize the need for a scale that captures both the supportive and intrusive aspects of family involvement. The proposed scale has significant implications for couples counseling. By identifying specific IPs, clinicians can tailor interventions to address problematic patterns, such as teaching communication skills to couples exhibiting pathologizing behaviors (Brigance et al., 2024). For couples in joint family systems, guidance on managing in-law involvement can promote wellness patterns (Hussain & Hayee, 2024). The scale also supports preventive interventions, such as premarital counseling, by identifying potential conflict areas and fostering adaptive IPs like collaborative problem-solving. In arranged marriages, interventions can focus on building emotional intimacy through shared activities and mutual support. The scale's development addresses the unique challenges of arranged marriages in collectivistic culture, where initial emotional unfamiliarity can hinder adaptive IPs (Rasool, 2024). Research by Akhtar, et al. (2017) suggests that couples who engage in wellness patterns achieve satisfaction over time, highlighting the scale's potential to guide interventions. Additionally, the scale accounts for the impact of traditional gender roles, which can create power imbalances if expectations differ (Asim et al., 2024). By assessing how couples navigate these roles, the scale provides insights into relational dynamics and informs targeted interventions. The Interpersonal Patterns Scale also contributes to marital research by offering a culturally sensitive tool for studying Pakistani couples. Existing scales, developed in Western contexts, often overlook the interplay of family, culture, and societal norms in non-Western settings (Ahmad et al., 2020). This scale enables researchers to explore how IPs evolve in collectivist societies and their impact on marital outcomes. Longitudinal studies using the scale can track changes in IPs over time, providing insights into factors that promote resilience or distress.

Method

Research Design

Mixed-Method research design was utilized in this research; Qualitative research design was used for the purpose of exploring phenomenology of Interpersonal pattern and exploring the navigation

of marital dynamics in south Asian couples. Furthermore, Quantitative method was used to establish psychometric properties of Interpersonal Pattern Scale.

Setting
This research was carried out with couples. To keep the data homogenous, married couples were chosen for the study, divorced individuals and separated or newlywed individuals were excluded from the study.

Ethical Considerations
Research ethics were followed during the data collection and all of the phases of the research. First, permission from the university was taken to conduct the research. Furthermore, during the interview phase, verbal consent was taken from the individuals to conduct and record the interview. The recorded interviews were handled with care and the confidentiality and anonymity of the participants was assured. Furthermore, during quantitative data collection written consent was taken. Plagiarism and usage of Artificial Intelligence was avoided. Permission was taken from the authors of the scales which are utilized in the research. Truthful and honest reporting of the results was also ensured. The scale was developed in 4 major phases: Phase 1 explained how the phenomenology of Interpersonal pattern was explored. In phase 2 content validity was established, in phase 3 pilot study was conducted, and in phase 4 psychometric properties of scale were established.

Phase 1: Item Generation Phase
The item generation phase looks into the process of gathering and organization the expression and manifestation of interpersonal patterns in a marital relationship.

Participants. For the purpose of exploring phenomenology, the participants were married couples (Males= 9, Females= 9) age ranging from 24 years to 37 years (M= 31.11; SD= 3.86), the duration of marriage ranged from 3 years to 5 years (M= 4.22; SD= .97). Purposive Sampling method was used to recruit married individuals. To further deepen the research Interviews from three therapists were also conducted, with experience ranging from 8 years to 10 years. Participants were interviewed using an open-ended phenomenological approach.

Procedure. After getting approval from the institution, participants were approached and briefed regarding the aim and objective of the research. Verbal consent was obtained, and interview was conducted, furthermore participants were briefed regarding their right to confidentiality, anonymity as well as right to withdraw from research. An open-ended phenomenology approach was utilized for conducting the interview. The interpersonal Pattern was operationalized by considering the Tamm (2017) as "The repetitive or recurrent interactions between two or more persons, distinguished by an observer (often a systemic therapist), which highlight the coupling between two classes of behaviors, attitudes, feelings, ideas, or beliefs, that tend to be mutually enabling and mutually reinforcing". The phenomenology question which was asked was "Can you describe the recurring interpersonal way of interacting with your husband/wife, that felt particularly familiar or automatic, whether in conflict, closeness, or communication where both of you seemed to fall into familiar roles? The phenomenology question that was asked from the couple therapist was "Can you describe what kind of ways of interpersonal interaction that couples use in conflict, or while communication that are repetitive/Recurring?". It was an open-ended interview, so further questions were asked from the participants to clear any ambiguity or vagueness in response. The interviews were recorded and transcribed later on. Afterwards, the verbatim from the interviews were converted. For each interview a separate list of phrases/ items was generated. An initial item pool of 77 items. From this initial item pool, the items that had similar meaning, the items that were ambiguous or overlapping were merged. After that, the final scale had 37 items, this was given the name Interpersonal Pattern Scale (Appendix B).

Phase II: Content Validity Index
In the content validity phase the Content Validity Index (CVI) for Item and for scale were calculated (Appendix C).

Participants. For the purpose of content validity 3 expert couple therapists with a minimum of 2 years' experience were recruited through purposive sampling method. The number of experts were chosen of the basis of criteria set by Lynn (1986). Lynn (1986) states that for expert validation there should be a minimum of 3 experts.

Procedure. The procedure of content validity was that a 4-point scale ranging from (4=relevant to 1=Not-relevant) was constructed against each item of the scale. To avoid neutral or uncertain answers a 4-point Likert scale was used (Waltz & Bausell, 1981). The rating scale was established and following that experts were approached. Their consent was taken for their participation in the study validation phase. Operational definition of Interpersonal pattern was provided to each expert and then they were asked to rate each item in the light of operational definition. The expert took around 8-10 minutes to rate each scale. After collecting expert validation form I-CVI was calculated (Appendix). The criteria for calculating the I-CVI was to divide the total number of experts given the rating 3 or 4 with the total number of experts. Considering the criteria set by Lynn (1986) all the items having I-CVI 1.00 were retained. For establishment of psychometric properties 37 items scale were utilized. The scale had a good content validity as S-CVI was 1.00, the criteria set by Lynn (1986) and Waltz et al (2005) set the criteria that S-CVI should be 0.90 or above for a scale to have good content validity. After calculating I-CVI and S-CVI the 37-item interpersonal pattern scale was converted into self-report measure with a 5-point Likert scale (1-5).

Phase III: Pilot Study
The pilot study was conducted to for the purpose of checking the user-friendliness of Interpersonal Pattern Scale (IPS).

Participants. The 37-item scale finalized in content validity phase was utilized for conducting pilot study. 20 individuals participated in pilot study (Females=10, males=10), ages between 28-40 years (*M*=32.5; *SD*=1.10).

Procedure. The scale font size, readability, layout, comprehension level was done with care and attention. Instructions were written for filling the scale, responses option were mentioned to make it easier for the participants to fulfill the scale. After pilot study, the scale was finalized and any item which was reported to be ambiguous or difficult to understand were revised to make their language easy to comprehend.

Phase IV: Psychometric Properties
In this phase, the different factors, the reliability of the scale and validity of the scale were established.

Sampling Strategy. The sample was recruited using purposive sampling method.

Participants. The sample consisted of 450 individuals, responses from individuals which were divorced, separated or had deceased spouses were eliminated. Furthermore, responses having more than 10% of missing values were further eliminated. After the procedure of screening, 300 responses were finalized. The participants had 150 males and 150 females (150 couples). The participants age ranges from 23 years to 45 years (*M*=30.00; *SD*=3.92), 24.7% individuals had love marriage and 75.3% individuals had arranged marriage, 56% individuals had done bachelors, where as 42% individuals had done masters only 1 individual was illiterate where as 1.7% individual had done Ph.D. furthermore 763% individuals belonged to middle class socio-economic status and 22% individuals belonged to upper class socio-economic status. Furthermore, 136 individuals (45.3%) belonged to the nuclear family system whereas 164 individuals (54.7%) belonged to the joint family system.

Measures

Interpersonal Pattern Scale. The Interpersonal pattern scale which was finalized in phase 3 of the research was used. The scale has 37 items and uses 5-point Likert scale (1= strongly disagree to 5= strongly agree). The participants were provided with a set of instructions to fill the scale. The higher the score on particular interpersonal pattern the stronger the interpersonal pattern is.

ENRICH Marital Satisfaction Scale. The ENRICH marital satisfaction scale was developed by Fower & Olson (1993). The Urdu translation of ENRICH Marital satisfaction scale was used in pilot study. The scale was translated by Anjum & Qazi (2023). The scale has 15 items and two subscales: marital satisfaction (10 items) and idealistic distortion (5 items). Item numbers 2, 5, 8, 9, 12 and 14 were reverse coded items. The scale uses 5-point Likert scale (1=strongly disagree to 5=strongly agree). The total score is obtained by adding both the subscales, the higher the score the higher the marital satisfaction. The scale has Cronbach alpha value of .92.

Revised Adult Attachment Scale. Revised Adult Attachment scale was developed by Collins (1996). The scale was translated by Anjum & Batool (2016). The scale has Cronbach alpha value of .88. The scale consists of 18 items, it has 3 subscales: secure attachment style (6 items), dependent attachment style (6 items) and anxious/anxiety attachment style (6 items). The item number 2, 7, 8, 13, 16, 17, and 18 were reverse coded items. The scale uses 5-point Likert scale (1=not at all characteristics of me to 5= very much characteristic of me). The higher score on particular attachment style indicates strong attachment style on particular style.

Procedure. The aim and objectives of the study were briefed to the participants. Participants' rights were also briefed, and confidentiality and anonymity of the participants were also ensured. Participants who participated in the study were provided with the research protocol of Interpersonal pattern scale, ENRICH marital satisfaction scale and Revised Adult Attachment scale. Participants took around 15 minutes to complete the research protocol. Furthermore, after data collection the data was utilized to establish psychometric properties and conduct Exploratory Factor Analysis (EFA).

Results.

Exploratory Factor Analysis of Interpersonal Pattern Scale.
The data of 300 individuals was utilized for conducting exploration factor analysis. The criteria set by Tabachnick and Fidell (2007) states that for scale development there should be 5 participants against each item of the scale; the number of participants were selected on the basis of this criteria. To find out the factors of Interpersonal pattern scale Principal Component Analysis (PCA) with Varimax rotation was conducted. The Cronbach alpha was .85, the Bartlett test of sphericity was also significant ($p<0.01$), furthermore, Myer-Olkin Measure of Sample Adequacy (KMO) was .94. The KMO value, the sphericity test and the Cronbach alpha value show that the data is appropriate for running exploratory factor analysis (Field, 2013). The factors in the Interpersonal pattern scale were determined on the base of Eigenvalue >1 and the factor loading >0.30 on specific factors (Raubenheimer, 2004; Tabachnik & Fidell, 2013).
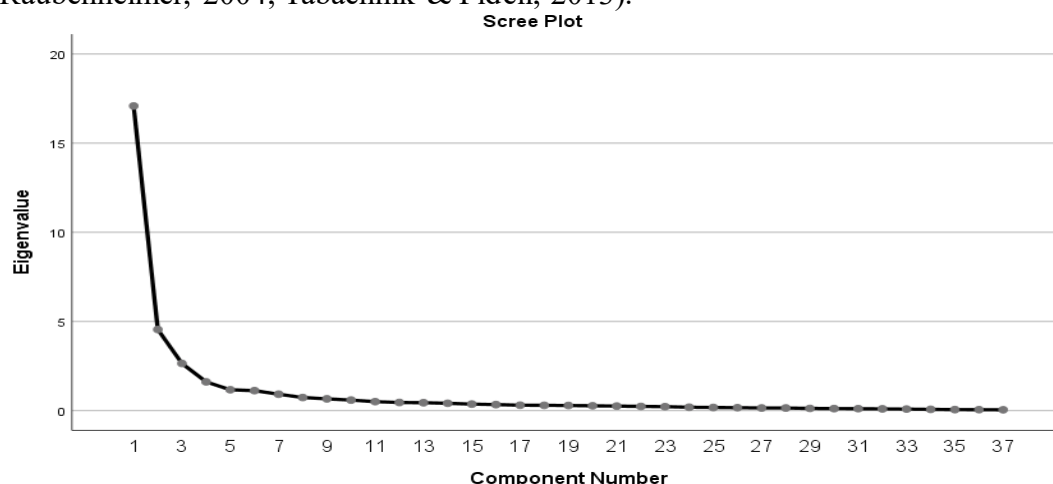

Figure 1. Scree Plot of Interpersonal Pattern Scale

The factor analysis was conducted with six factors, five, four, three and two factors. The two-factor structure was most appropriate with interpretable structure and minimum to no dubious

items. So, considering this two-factor structure was finalized for interpersonal pattern scale. All the items having factors loading less than 0.30 would have excluded but in two factors structure no item was discarded. The factor loading of 37 items is shown in table 1.

Table 1
Varimax Rotation of Factors Underlying Interpersonal Pattern Scale (IPS) (N=300)

Items	F1	F2	Items	F1	F2
1	**.81**	.21	22	**.81**	.04
2	**.89**	.00	23	**.81**	-.03
3	**.54**	-.14	29	**-.35**	.12
4	**.85**	.03	32	**-.32**	.28
5	**.83**	-.14	33	**-.55**	-.18
6	**.89**	.05	34	**-.63**	.25
7	**.88**	.03	35	**-.66**	.08
8	**.84**	-.14	37	**-.34**	.32
9	**.87**	.01	24	.30	**.78**
10	**.84**	-.14	25	.24	**.63**
11	**.88**	.03	26	-.08	**.57**
12	**.83**	-.14	27	.16	**.88**
13	**.89**	-.03	28	.14	**.77**
14	**.88**	-.01	30	.21	**.83**
15	**.81**	.05	31	.20	**.64**
16	**.84**	-.12	36	-.15	**.46**
17	**.86**	.05	Eigen Values	17.08	4.54
18	**-.63**	.17	% Variance	46.17	12.29
19	**-.76**	-.02	Cumulative %	46.17	58.46
20	**-.70**	.13			
21	**.34**	.16			

Note. Boldface items belong to that Factor

Table 1 shows the categorization of 37 items of Interpersonal pattern scale. The items are categorized under two categories: Healing interpersonal pattern, and socio-cultural interpersonal pattern. The names of the factors were decided considering the common theme of particular set of items.

Factor Description. Description of two different interpersonal patterns is mentioned below:

F1: Healing Interpersonal Pattern. The first type of interpersonal pattern, which is healing interpersonal pattern it consists of 29 items; items 17, 18, 19, 20, 29, 32, 34, 35 and 37 are reverse coded items. The items include different aspects of healing interpersonal patterns. The items include talking things out, allowing them to take decisions, complete their responsibilities, mutual trying, providing emotional support in difficult times etc.

F2: Socio-cultural Interpersonal Pattern. The third type of interpersonal pattern is sociocultural interpersonal pattern. It consists of 8 items which discuss different aspects of sociocultural interpersonal pattern such as disturbance in relationship arises due to third person, due to in-laws, due to religious reasons etc.

Inter-Factor Correlation and Internal consistency of Interpersonal Pattern Scale (IPS). Pearson Product Moment correlation analysis was carried out for inter-factor correlation, Cronbach alpha value of all the two different interpersonal patterns were also calculated which is shown in Table 2.

Table 2
Summary of Means, SD and Inter-Factor Correlation (N = 300)

Factors	F1	F2
F1. Healing Interpersonal Pattern	-	.11*
F2. Sociocultural Interpersonal Pattern		-
M	102.83	28.60
SD	26.94	6.58
A	.97	.89

Note. **p < .001

Table 2 shows the inter-factor, Table 2 reveals that healing interpersonal pattern has very weak relationship with sociocultural interpersonal pattern. Weak inter-factor relationship acceptable in Varimax rotation. Furthermore, Table 2 also depicts good internal consistency of subscales.

Validity and Reliability of Interpersonal Pattern Scale. This section of the chapter deals with establishment of validity and reliability of interpersonal pattern scale.

Concurrent Validity of Interpersonal Pattern Scale. To establish the concurrent validity of the scale Revised Adult Attachment Style (Anjum & Batool, 2016) and ENRICH marital satisfaction scale (Razi & Anjum, 2023) were used. The result showed that healing interpersonal pattern had a significant positive relationship with close attachment style (r=.21, p<0.01), furthermore it has significant positive relationship with idealized distortion (r=.78, p<0.01) and with marital satisfaction (r=.69, p<0.01). whereas sociocultural interpersonal style had a significant positive relationship with anxious attachment style (r=.34, p<0.01). considering that it can be stated that interpersonal pattern scale has a good concurrent validity.

Split-Half Reliability of Interpersonal Pattern Scale. The split half reliability was determined through splitting the items in half. As the scale doesn't have a total score split-half reliability of each factor was determined separately. For sociocultural interpersonal pattern the correlation coefficient was significant (r=.80, p<0.01). The Cronbach Alpha value of form A is .79 and for form B was .72. Furthermore, the Spearman-Brown Co-efficient of both the form is .82 and Guttmann's Split Half Coefficient is .82. For healing interpersonal pattern, the correlation coefficient was significant (r=.85, p<0.01). The Cronbach Alpha value for form A is .97 and for form B was .90. Furthermore, the Spearman-Brown Co-efficient of both the form is .91 and Guttmann's Split Half Coefficient is .89. Therefore, it can be concluded that the scale had satisfactory split-half reliability. In this research, a valid and reliable tool to measure interpersonal patterns in married couples was developed. The scale has good concurrent validity, content validity, split-half reliability, and internal consistency. The exploratory factor analysis of the scale result in two factors; healing interpersonal pattern and socio-cultural interpersonal pattern.

Discussion

It is a significant advance in marital research within collectivist cultural contexts because it constitutes the development and validation of the Interpersonal Patterns Scale (IPS) for married couples. Identifying this gap the scale would provide a culturally sensitive tool to assess interpersonal patterns (IPs) specific to culturally determined socio-cultural dynamics such as arranged marriages, extended family participation and traditional gender roles. The combination of the study's mixed method design of rigorous quantitative validation with qualitative exploration produced a robust and comprehensive approach to scale development. By revealing adaptive and contextual context dynamics, these two factor structure, namely Healing Interpersonal Pattern and Sociocultural Interpersonal Pattern explains the important dynamics of marital interactions. Second, global research on adaptive IPs (Eastwick et al. (2019); Gómez López et al. (2019)) identifies healing interpersonal patterns – behaviors such as mutual support, emotional validation, and collaborative problem solving, –as having the potential to increment global health and wellbeing. Such patterns of schematization promote marital intimacy and satisfaction, a

prerequisite for relationship stability. Significant correlations with marital satisfaction (r = .69, p < .01) and close attachment style (r = .21, p < .01) as well as high internal consistency (α = .97) are indications of reliability and concurrent validity of the scale. The implications from these findings are that the IPS effectively measures positive relational dynamics, which forms a starting place for therapeutic work aimed at enhancing marital bonds. The Sociocultural Interpersonal Pattern factor found in this scale is unique in that it addresses the influence that interfamily, in family, and cultural norms have on the marital dynamics. Thus, the emergence of this factor provides evidence for the limitations of the Western developed scale such as the Dyadic adjustment scale (Spanier, 1976) which typically fails to reflect on the collectivist nature of highly invested relationships. There is a significant correlation found with anxious attachment style (r = .34, p < .01), which suggests that sociocultural stressors, like in-law interference, are associated with relational anxiety, stemming from previous research (Saqib Lodhi et al., 2019). It is the scale's ability to measure these dynamics that makes it apply appropriate where systems of joint families are evident and where indirect communication occurs. Explanation of the two factor structure of the Scale through validation through an Exploratory Factor Analysis resulted in a clear distinction between healing and sociocultural pattern, with weak inter factor correlation (r = .11, p < .05). This orthogonality, along with the Varimax rotation, indicates that these patterns function separately so that clinicians can work on specific relational aspects. The psychometric robustness of the scale is further demonstrated by the split half reliability (r = .80-.85) and content validity (S-CVI = 1.00) which further support its reliability for both research and clinical practice. For couples counseling, the IPS is very important. Therapists can treat stressors like in laws interference by identifying maladaptive sociocultural patterns and treating them by answering them by communication training and emotional support strategies (Brigance et al., 2024). This scale has relevance to arranged marriages in which initial emotional unfamiliarity is common, and it is supportive of their use in premarital and early marital interventions to promote adaptive IPs (Akhtar et al., 2017). The IPS should be examined to determine future research potential for longitudinal applications of the IPS to determine its ability to predict social, developmental and psychological outcomes among married couples. Further, it may be more applicable for other collectivist societies through cross-cultural validations.

Conclusion
The Interpersonal Patterns Scale (IPS) presents a useful contribution to the literature on marital research in the realm of collectivist societies as the Interpersonal Patterns Scale (IPS) was developed for Pakistani married couples. The IPS version address the cultural nuances of Pakistan's marital dynamics, especially; the arranged marriages, family importance, and traditional gender roles, and it is a significant gap of Western scales. Healing and Sociocultural Interpersonal Patterns, their robust two factor structure, capture both adaptive relational patterns and context specific stressors and has strong psychometric properties as indicated by high reliability, content validity, and concurrent validity. By being able to differentiate between positive or culturally influenced patterns, the scale gives clinicians a useful tool to use to refer for a range of possible intervention, such as communication skills training or in-law intervention, in order to enhance marital satisfaction and stability. The IPS provides researchers with the opportunity to conduct longitudinal and cross-cultural studies of interpersonal patterns in non-Western contexts that will help to further our understanding of interpersonal patterns in these contexts. Ultimately, the IPS not only advances culturally sensitive marital assessment but also paves the way for stronger, more resilient relationships in Pakistan and potentially other collectivist societies.

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