



RESEARCH PAPER

Couple's Satisfaction of Married Adults from Pakistan: A Cross-Cultural Validation of Couple Satisfaction Index-4

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ABSTRACT

The research aimed at the translation of Couple Satisfaction Index-4 for the cultural adaptation and use in context of Pakistani married individuals. It focused on Current translation and development of psychometric properties for the four-item version. Numerous researches have been conducted to investigate the marital satisfaction of romantic partners. In this context, couple satisfaction index is the widely used instrument based on availability of its different versions containing 32, 16, and 4 items. Couple Satisfaction Index-4 was first translated in Urdu language by obtaining two versions of Urdu through help of bilingual experts. Second, subject matter experts and five couples reviewed the final Urdu version for face validity and clarification of any ambiguities. Based on the feedback, corrections were made, and final Urdu version was obtained. Back translation was obtained with bilingual experts that was verified and approved by original author. After fulfilling all these criteria Urdu version was ready for the validation. For validation, 100 couples were recruited from five provincial capitals of Pakistan. They were provided with informed consent, demographic sheet, Urdu translated instrument and Satisfaction Level subscale of Urdu translated Investment Model Scale. The obtained data was first checked for normality assumption. After obtaining acceptable values of skewness and kurtosis, confirmatory factor analysis and Pearson correlation was performed for construct validation. The findings suggested that CSI-4 Urdu translated version has sound psychometric properties for assessing couple and individual marital satisfaction among adults of Pakistan.

KEYWORDS Confirmatory Factor Analysis, Construct Validity, Convergent Validity, Couple Satisfaction, Discriminant Validity, Married Individuals

Introduction

In past few decades, ample research has been conducted on the success and failure of the marriage institute. Researchers have been intrigued about the large number of long-lasting marriages in collectivist society where the vow 'till death do us part' can be seen effective. Globally, in both individualist and collectivist societies, the divorce rate has drastically increased since 1970 (Ortiz-Ospina & Roser, 2020). According to the global data, the number of divorced and separated individuals have doubled in the recent years following the fall and plateau in some years (Ortiz-Ospina & Roser, 2020). In Pakistan, even though divorce rate has increased in past years (GallupPak, 2019), however; it has not crossed the one percent, which is far below than the other parts of the world.

Scientists and researchers have been captivated by the relationship determinants to bind people including love, affection, emotional and social support, satisfaction, and overall appraisal (Rusbult et al., 1998). Many factors bring changes in the overall

satisfaction of such relationships, such as mental health (Whitton et al., 2010), sexual gratification (Bilal & Rasool, 2020; Roels et al., 2020), partner's educational and financial contribution (Ayub & Iqbal, 2012), emotional availability, and most importantly the culture (Frenn et al., 2022).

Nothing can be researched appropriately in context of social and psychological phenomenon if that starts with not culturally relevant and representative measures. Nowadays, researchers believe in the validation of every theoretical concept from a diverse population across the globe. The trend has shifted to understanding people from their cultural standpoint and in their native language (Gjersing et al., 2010; Shultz & Englert, 2021). Therefore, the need for the most psychometrically sound tool from cultural understating of romantic relationships has also been raised.

Literature Review

In Pakistani culture, the success and failure of any relationship reside on women, especially in the context of marital relationships and associated relations irrespective of other features that are more connected with this phenomenon (Hayee & Kamal, 2022; Khurshid, 2016; Qadir et al., 2013). This intrigued the notion of how both partners rate their overall relationship satisfaction, where women are considered more responsible for relationship building culturally.

As relationship studies have expanded globally for supporting evidence, it is inevitable to contribute in context of Asian culture. Notably, Pakistan is different from other Asian societies, still developing and dealing with many crisis such as economic instability due to COVID-19 (Baranov et al., 2022), political upsurge (Pakistan Ministry of Finance, 2022), highest need for survival (World Value Survey, 2016), more than 95 percent Muslims and official religion of country to be Islam (Hackett et al., 2012), and the cultural cohesiveness irrespective of religious values (Gelfand et al., 2011). Pakistan as patriarchal society where differential gender roles are practiced (Knox & Schacht, 2000), and women considered to be more responsible for outcome of the success and failure of marital relationship (Bilal & Rasool, 2020). According to Gefland and colleagues (2011), it is culturally prohibited to show affection publicly, having low tolerance for disregarding cultural norms, and divorcing is one of them. Western and many Asian societies are culturally dynamic and therefore are not comparable with Pakistan (Iqbal, 2019; Qadir, 2013; Bilal & Rasool, 2020; Ayub, 2022). Therefore, cross cultural validation of tools was required before their use for global and cross-cultural evaluation of behaviors (VanderDrift et al., 2013).

Globally many tools were devised for assessment of couple satisfaction based on emotional, financial, as well as the sexual satisfaction. With the cultural transitions and psychometric advancements, it was found that psychological tools lack the validation support for its ongoing and across group use (Flake et al., 2017). Whereas, Couple Satisfaction Index was found to be the most cited and validated tool for couple satisfaction (Quinn-Nilas, 2022). Originally starting with 180 items that were analyzed with factor analysis and item response theory for obtaining the final version of 36 items in the end. Its 36 and 16 items were found to be more informative than any other relationship satisfaction scales. According to Funk and Rogge (2007), four item version yields the same reliable and valid results in comparison to its lengthy versions. Researchers have empirically supported this claim with cross-validated and translated four item version (Forouzesh Yekta et al., 2017; Frenn et al., 2022).

Materials and Method

Cultural Adaptation and Translation in Urdu

For translation and adaptation of four items of Couple Satisfaction Index-4 that was originally designed by Funk and Rogge (2007) with two other version available of 16 and 32 items. The reason of selecting 4 item version of CSI was to understand the overall evaluation of couple relationship by more concise, valid, and reliable tool. As researchers has reported that despite of many hardships it is the overall perception that a person holds for life (Bilal & Rasool, 2020), and in this case it's the perception about marital life. Authors have established the psychometric properties of all three versions. Along with that these versions have been translated and validated in various cultures and found to be psychometrically sound (Bruner et al., 2015; Frenn et al., 2022; Funk & Rogge, 2007; Hoagland & Levant, 2015; Kim et al., 2022; Lamela, 2020; Witherow et al., 2016). Just like its other versions, respondents rate their relationship against four items on Likert Type response category ranging from 0 to 5 that are 'not at all true' to 'completely true' for three items, and 0 to 6 ranging from 'extremely unhappy' to 'perfect' respectively for item one.

Firstly, the selected version was evaluated by subject matter experts. After careful evaluation, experts suggested the replacement of term 'Partner' with 'Spouse', keeping in consideration cultural acceptance of marital relationship and disapproval of cohabiting relationships. After initial changes and approval of experts it was translated into Urdu by following Borsa et al. (2012) approach. Three Urdu translated versions of Couple Satisfaction Index-4 were obtained through three bilingual experts of the field. After this all versions were evaluated were experts and the first final version of Urdu was obtained. For understanding the comprehension of instrument by target population 5 couples were engaged in the process. The purpose was to evaluate the understanding and clarity of the items without administering any statistical analysis. The respondents were allowed to read the translated items and were provided with explanations in case of ambiguous item. Further, discussions were generated on conceptual clarity of items to eradicate any possible changes and achieving the best suitable version.

After this back translation in English was done by three bilingual experts to follow the application of semantic and idiomatic adjustments (Sireci et al, 2006). These experts were not involved in any of the process before (Gudmundsson, 2009). They were briefed to evaluate the conceptual equivalence of the translated instrument approach. A committee of five subject matter experts were formed for evaluation of back translation. After approval of Back translation from original author, pilot testing was done as final step before proceeding for validation of Urdu version. The Urdu translated version was administered on Urdu speaking couples to assess the face validity. Further inclusion was based on minimum one year of marriage. Both married men and women from varied socio-economic status were approached. Feedback of these participants were noted down for further clarity of translated Urdu version. Responses of these participants were not included in the later analysis of study. It was found that the participants approved the language adequacy of the Urdu translated version and found it to be appropriately conveying desired meanings. When no further changes were required, the final version was proceeded to next step that was validation.

Participants for Validation of Translated Version

Data for current validation study was collected from five provincial capitals of Pakistan including Karachi, Islamabad, Lahore, Peshawar, and Gilgit. For recruitment of participants, married individuals were approached in their work settings, academic institutes, shopping malls, restaurants, as well as homes. Participants were briefed about the nature of study, importance of their contribution along with right to refusal and

withdraw. They were further briefed that their provided information is anonymous, confidential and will be used only in research and education. No financial benefit was provided for participation. It took 5 to 7 minutes on average to response the translated questionnaire along with demographic sheet. Participants were thanked in the end for participation and valuable feedback. Email contact of researcher was provided for further correspondence if needed.

Participants and Sample Size

Adult married participants above the age 18 years ($N=200$) participated in current study. Any participant having marital years with current partner below 1-year were excluded from participation. Further, people with prior psychiatric illness history, severe chronic medical illness, and inability to understand the language of Urdu version were excluded. According to the approach of Lai et al. (2013), against each item at least 10 responses should be present for suitable analysis. Couple Satisfaction Index -4 has 4 items, so proposed sample size was 40. However, 100 couples participated in current study to get the better understanding and opinion of both partners in term of their marital satisfaction.

Statistical Analysis

For analysis, IBM SPSS version 20 was used. For normality analysis Skewness and Kurtosis test was performed. Data indicated that the value of Skewness and Kurtosis are -1.27 and 1.37 respectively. Both values are within the acceptable range of ± 3 , and therefore data considered as normally distributed (Brown, 2006). Further, parametric tests were performed on the data for validation of translated version. Exploratory factor analysis was performed on data of 100 couples, and further tested on husband and wives separately. Eigenvalues above 0.7 was considered as good fit (Field, 2009) were retained as the contributor to the respective factor. Internal consistency of test scores was determined through Cronbach alpha. Alpha values above 0.7 considered as acceptable, 0.8 and 0.9 as good and excellent respectively (George, 2003).

Results and Discussion

100 couples participated in the current study. Response from both partners were obtained. Those responses were not included in the analysis where only one partner responded. The mean age of the male and female participants was 37.38 and 34.22 respectively. The sample comprised of participants from varied socio-economic status, professions, and educational background. Where education level of participants and spouse ranged from Intermediate/A-levels to PhD, even including doctor and engineers. As per Funk and Rogge (2007), people scoring below 13.5 were considered as dissatisfied in relationship. From the results of both husband ($M = 17$; $Mdn = 16.33$) and wives ($M = 17$; $Mdn = 15.93$) it has been concluded that all couples were satisfied in their marital relationship. Cronbach alpha was analyzed for the four items of Urdu version and results ($\alpha = 0.92$) indicated high reliability.

Validity Analysis

Face validity of Urdu version was achieved through subject matter experts' evaluation and pilot study. Factorial structure was determined by performing confirmatory factor analysis through AMOS software. For determining the convergent validity satisfaction level subscale of Investment Model Scale translated and validated by Hayee and Kamal (2023) was used.

Pearson's Product Moment Correlational analysis was performed to see the results of two scales.

Construct Validity Analysis

Confirmatory Factor Analysis was performed to validate the factorial structure of Couple Satisfaction Index-4 Urdu translated version. Goodness of Fit for model was evaluated based on chi-square value (χ^2), comparative fit index (CFI), p of close fit (PCLOSE), normed fit index (NFI), Tucker-Lewis Index (TLI), and root-mean-square error of approximation (RMSEA).

Table 1
Confirmatory Factor Analysis Showing Indices of Model Fit for Couple Satisfaction Index-4 Urdu

Model	χ^2	df	p	CMIN/df	Fit Indices			
					CFI	NFI	TLI	RMSEA
Second Order CFA (4 Items-Without Error Covariances for both Partners)								
	2.29	2	.317	1.15	.99	.99	.99	.03
Second Order CFA-Men/Husbands ($n = 100$)								
	1.42	2	.701	0.47	1.00	.99	1.02	.00
Second Order CFA-Women/Wives ($n = 100$)								
	5.49	2	.064	2.74	.98	.97	.96	.07

Note. CFI = Comparative Fit Index, NFI = Non-Normed Fit Index, TLI = Tucker Lewis Index, RMSEA = Root Mean Square Error of Approximation

The results indicated that model came out as good fit (Table 2). The RMSEA value for both partners, husbands and wives separate, found to be good as less than 0.05 (Kim, 2016) and between 0.05 to 0.08 as acceptable (Hooper et al., 2008). Factor loadings of all items for both partners (Figure 1), husbands (Figure 2), and wives (Figure 3) are above .70 indicating the good representation of construct being measured (Awang, 2014).

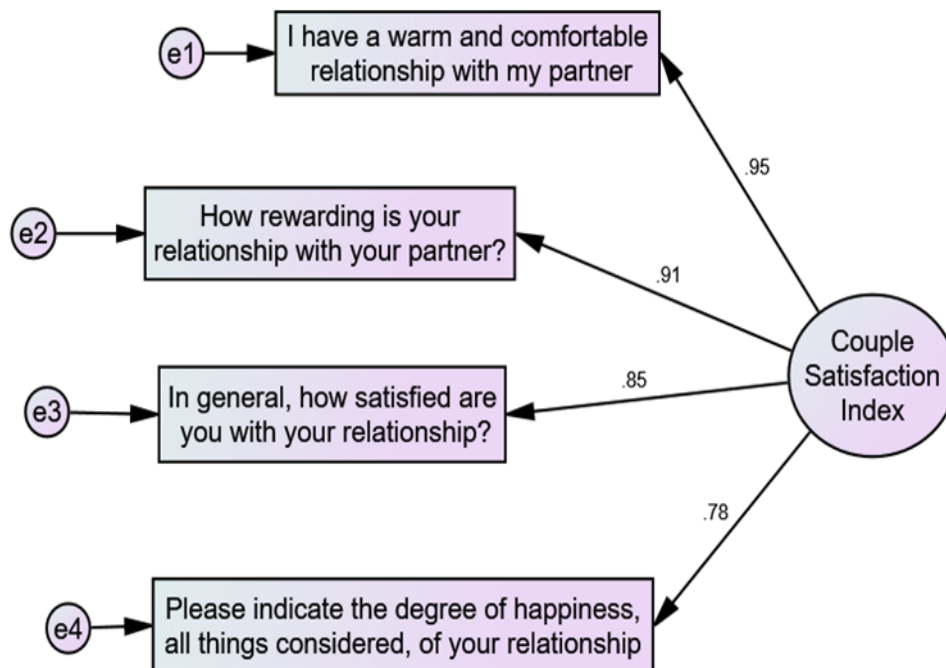


Figure 1. Factor Loadings of all 4 Items for both Genders

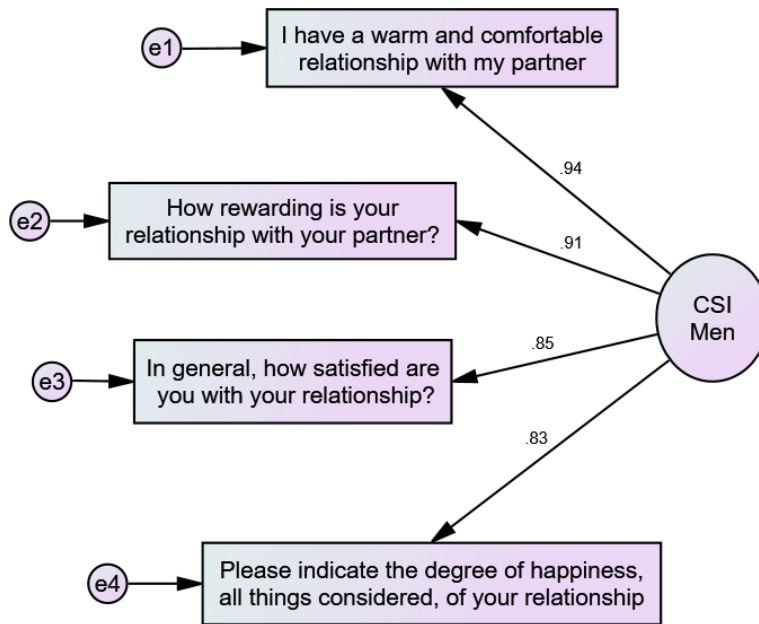


Figure 2. Factor Loadings of all 4 Items for Men/Husbands

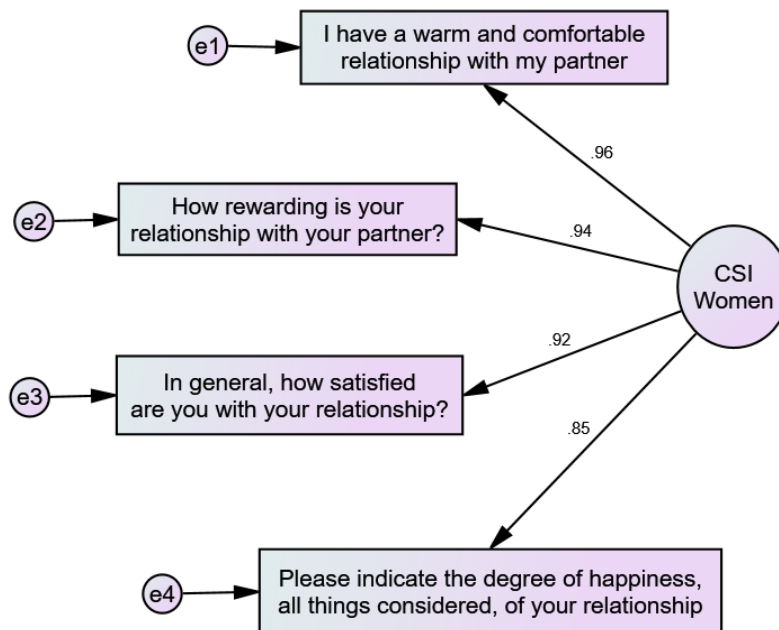


Figure 3. Factor Loadings of all 4 Items for Women/Wives

Convergent Validity Analysis

For determining the convergent validity, Couple Satisfaction Index-4 Urdu translated version and satisfaction level subscale of Investment Model Scale translated and validated by Hayee and Kamal (2023) was filled by the sample. Pearson’s Product Moment Correlational analysis was performed to see relationship between two scales. Correlation value ($r = 0.83, p = 0.001$) indicated higher correlation between both scales indicating the similarity of both constructs. Therefore, considering as a valid tool for measuring marital satisfaction.

Table 2
Comparison of Urdu translated Couple Satisfaction Index-4 for Husband and Wives

Variable	Mean \pm SD		<i>p</i>
	Men/Husbands	Women/Wives	
CSI-4	16.33 \pm 4.94	15.93 \pm 5.39	.704
Item-1 (Degree of Happiness)	4.33 \pm 1.66	4.41 \pm 1.54	.804
Item-2 (Warmth and Comfort)	3.88 \pm 1.25	3.67 \pm 1.48	.461
Item-3 (Rewarding Relationship)	3.98 \pm 1.33	3.84 \pm 1.45	.645
Item-4 (Satisfaction)	4.14 \pm 1.16	4.00 \pm 1.28	.569

Note. CSI-4 = Couple Satisfaction Index total score,

For comparison of husband and wives on the index of satisfaction, mean differences were calculated for overall score of couple satisfaction and each items separately. Results indicated that men score higher on overall satisfaction and all other items of CSI-4 except the item-1 that indicates happiness of couple. Women scored higher on happiness item. All these differences are non-significant gender differences. As per cut off score of CSI-4 all the couples are satisfied in their relationship.

Discussion

The current study translated and adapted the CSI-4 in Urdu to be used with the Pakistani population. The researcher followed the cross-cultural validation criteria of Borsa et al. (2012) for establishing an equivalent version that caters to all cultural, idiomatic, linguistic, as well as contextual aspects related to the translation. During the subject matter expert evaluation, it was suggested to replace the term 'partner' with 'spouse' keeping in mind that Pakistani is a patriarchal society with strong religious ties, where it is strictly prohibited and disapproved by society to have a cohabiting relationship (Hayee & Kamal, 2022; Qadir et al, 2013). Moreover, couples have more sense of responsibility and need for the success and survival of relationships than Western society (Halford et al., 2018). In accordance with the previously translated versions of the CSI-4 in native languages (Frenn et al., 2022; Kim et al., 2022; Lamela, 2020; Witherow et al., 2016), the Urdu version has shown high reliability of test scores. (Ursachi et al, 2015).

Current study results have added to the dearth of knowledge by validating the shortest version of the couple satisfaction index based on four items. It was found that in a patriarchal society where marriage institute is the most sacred, the notion of romantic relationships other than a spouse is greatly condemned (Hayee & Kamal, 2022; Khurshid, 2016). Therefore, the term partner was specifically replaced with 'spouse' when understanding and evaluating the overall quality and satisfaction level of the relationship.

Previous literature has reported either minor or no minor gender differences in the marital satisfaction of couples (Ayub & Iqbal, 2012). The current study also indicated that although there are slight differences in the mean test scores, both partners reported their relationship as fulfilling. To further this, gender differences of each item were estimated separately for husband and wife. The findings revealed that no gender differences were found for items depicting the couple's happiness level, warmth and comfort, the nature of the relationship to be rewarding, and general relationship satisfaction, although men/husbands scored slightly higher on the degree of happiness than women/wives, these are non-significant differences. Whereas women scored higher than men on other items, but again those differences are non-statistically meaningful.

These findings are in line with the study of Ayub et al. (2022) as they concluded that men are more satisfied in a relationship than their female counterparts but when it comes to bonding and emotional connection with partners, women scored slightly better than their spouses. This supports the cultural notion that irrespective of whatever people are facing in a relationship they will ultimately report it to be satisfying as the social disapproval of ending such a relationship is higher (Bilal & Rasool, 2020; Qadir et al., 2013).

Despite having economic crises and hardships of life, and the lack of facilities available to families and partners in Western societies, families and partners still have feelings of connectedness and contentment in their relationship.

Conclusion

The Urdu version of Couple Satisfaction Index-4 was found to be valid and reliable measure for assessing the couple satisfaction. Further, results revealed that factorial structure of Urdu version is unidimensional supporting the same as its original English version. Therefore, it supports the use of Couple Satisfaction Index-4 Urdu to investigate the couple satisfaction.

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