

Couple Satisfaction Index-16: Translation And Validation In Pakistan

Rahat Bakhteyar¹, Dr. Sadaf Ahsan², Dr. Sameena Humayun Khan³,
Dr. Andleeb Akhtar⁴

¹Ph.D. Scholar, Department of Psychology, Foundation University Islamabad, Pakistan Corresponding author's E-mail: rahat.psy@fui.edu.pk

²Associate Professor, Department of Psychology, Foundation University Islamabad, Pakistan E-mail: sdfmuneer@yahoo.com

³Lecturer, Department of Psychology, The University of Haripur, Haripur, Pakistan E-mail: sameenahumayun@yahoo.com

⁴Lecturer, Department of Psychology, The University of Haripur, Haripur, Pakistan E-mail: andleebmalik81@yahoo.com

Abstract

The Couple Satisfaction Index-16 (CSI-16) is being translated into Urdu in Pakistan. WHO guidelines were used. Data was collected from 150 married couples from Rawalpindi/Islamabad. Confirmatory factor analysis of the data revealed factor loadings of all the items ranging from .40 to .88. High reliability (.95) was found in Urdu CSI-16.

Keywords: Couple Satisfaction Index, confirmatory factor analysis, WHO guidelines, translation, reliability and validity.

Introduction

The Couple Satisfaction Index-16 (CSI-16) was selected to measure marital satisfaction because it is a precise and practically useful instrument for the measurement of marital satisfaction in the literature. The CSI-16 has not been translated into Urdu yet. Hence, in order to fill this gap, this study was focused on translation and validation of CSI-16 in Pakistan. Literature supporting the construct validity of marital satisfaction has never attempted to be precise and never undergone item analysis (Bradbury, Fincham & Beach, 2000) before the development of Couple Satisfaction Indices. Sabbourin, Vaois and Lussier (2005) have developed Dyadic Adjustment Scale-7 (DAS-7) and Karney and Bradbury (1997) have developed Semantic Differential for assessing satisfaction in relationships (Karney & Bradbury, 1997). Funk and Rogge (2007) studied marital satisfaction using Item Response Theory (IRT).

In the development of original CSI scales, 180 satisfaction statements were used with 5,315 respondents. The sample included 23.6% married individuals who were modestly happy. They were at least 18 years old. Recruitment was done online. Both partners of a couple did not participate in the original study. The instrument took 25 to 30 minutes to be completed. Principal component analysis was done. Finally, 32 items of the Couple Satisfaction index (CSI-32) were obtained. CSI-16 and CSI-4 were obtained by selecting the best items from CSI-32. It was shown through analysis that CSI-32 and CSI-16 were better in precision and power than Dyadic Adjustment Scale (DAS) and Marital Adjustment Test (MAT). CSI scales showed high internal consistency and convergent validity. However, the precision and efficiency of CSI scales dropped when the satisfaction in the sample increases.

In the field of marital satisfaction, there

is a prevalent confusion related to the term used for this concept as relationship satisfaction, marital satisfaction, marital quality, marital adjustment, or marital happiness. This article focuses on the concept of marital satisfaction as a partner's evaluation of his/her romantic relationship. The researcher preferred the term marital satisfaction as it refers to a situation where husband and wife are happy and satisfied with their marriage and being with each other. Nowadays marital satisfaction is being measured with questionnaires filled by the subjects themselves. Although western literature supports the CSI scales as valid measures for the investigation of marital satisfaction, no support for the structural validity of these scales comes from Pakistani research. Hence, it seems necessary to critically evaluate the effectiveness of these scales in Pakistan. Funk and Rogge believed that the scales measuring quality of relationships were compromising power of measurement and thereby affecting the quality of scales of marital satisfaction. The concept of marital satisfaction was not measured accurately or there was a large error variance. Hence, Funk and Rogge (2007) developed Couple Satisfaction Indices based on item response theory. The accurate measurement of relationship satisfaction was unavoidable as the concept was important for marital therapy. Hence, three versions of CSI were produced having 32, 16 and 4 items version. 32 items version is very detailed and required more time from the participants to be filled in. Hence, we selected 16 items scale which had almost equivalent capacity to measure marital satisfaction but required less time and lowered the cognitive load of participants. Resultantly, CSI-16 was validated in Pakistan and in this paper, psychometric characteristics of Urdu CSI-16 are discussed with reference to the factor analysis done on the sample. Marital satisfaction is considered a uni-dimensional construct that ranges from high to low (Mattson et al.,

2013). Low marital satisfaction has been related to divorce/separation (Coontz 2007; Previti & Amato, 2004), adverse effects on health and wellness of those involved in the relationship (Amato & Kane, 2011; Carr & Springer, 2010) and negative relational, educational, and financial outcomes of the next three generations after the termination of relationship (Amato, 2000; Amato & Cheadle, 2005). On the other hand, satisfied relationships are associated with higher levels of well being, social and personal growth of couples and increased physical and mental development of their children (Bryant & Conger 2002; Bachand & Caron 2001; Heene et al., 2007; Hughes & Waite., 2009; Williams & Umberson., 2004; Lewis et al., 2012; Barrett & Turner., 2005; Carr & Springer., 2010; Sweeney., 2007). The failure to establish those relationships has been associated with lack of adequate scales available for measurement. The scales developed are mostly developed in Western countries (Urbano-Contreras et al., 2017) and these scales are not readily translated and available in different languages.

Sample and Instrument. The sample of the current study included married individuals living in Rawalpindi/Islamabad. The participants were 150 couples i.e., 150 husbands and 150 wives living in Rawalpindi/Islamabad, Pakistan. Participant's ages ranged from 18 to 74 years. They were selected based on availability and convenience. Majority of the participants were educated and belonged to different socioeconomic groups of middle class in Pakistan. Their demographics have been summarized in Table 1. Eligibility criteria included married respondents having at least 18 years of age. Ethical Committee of the concerned University in Islamabad approved the study. Completion of questionnaires was not time bound and was done manually. The married adults were requested to fill the questionnaires in isolation so that their responses did not get affected by the presence

of the spouse. Couple Satisfaction Index –16 (CSI-16) was used to measure the quality of relationships (Funk & Rogge, 2007). It includes 16 items. The highest score reflects the higher levels of global marital satisfaction. Total scores ranged from 0 to 81. The Urdu version of CSI-16 was developed based on back translation procedures suggested by World Health Organization. The evaluation of psychometric properties of CSI-16 for normal couples was not yet investigated in Pakistan. Current study examined the factor structure of CSI- 16 by applying it to normal couples.

Method. The Urdu version of CSI-16 in Pakistan was prepared from the original CSI-16, freely available on web for research purposes. The scale was translated from English to Urdu by four independent translators. Two of them were psychologists, third one was a bilingual and bicultural language expert, and the fourth one was a university student having a high level of command on both the languages.

Validation, Translation and Adaptation Procedure. Validity of CSI-16 was evaluated using translated version of CSI-16. Construct validity was determined by confirmatory factor analysis (CFA) and the reliability was established by Cronbach alpha using SPSS 23. The translation was done according to the guideline provided by WHO (Borsa, 2012). The steps followed are discussed in sequence.

Step One: Forward Translation. CSI was chosen for translation for its good psychometric characteristics (Atkins & Baucom., 2016; Funk & Rogge., 2007). The translators were competent enough to translate a scale of social research (Hambleton et al., 2005). Forward translation included four independent bilingual experts who translated the instrument. Two of them were M-Phil in Psychology and were serving as Lecturers in a local University. One

translator was MA Arabic and had high proficiency in Urdu and English, basically a Pakistani, living in North Carolina, USA. The fourth one was a BS student of National University of Science and Technology (NUST), Islamabad having high proficiency in both English and Urdu languages. They all were already familiar with the terminologies of the area covered by the instrument. Their mother tongue was Urdu i.e., the primary language of the target culture. Instructions of the instrument were also translated in Urdu emphasizing the conceptual equivalence. General guidelines used during the process included actual equivalence of both the versions in simple, clear, and concise fashion. The translation was targeted toward typical respondents i.e., Pakistani couples and use of jargon was avoided. Age and gender of the respondents to be addressed were also considered during translation.

Step Two: Committee Approach. Expert panel included four bilingual psychologists being faculty members of a local University. The primary researcher, along with the expert panel, prepared the four translations into a single form which was later tested on the target population (Borsa et al., 2012). The panel of psychologists selected the best translation out of four translations provided by the translators.

Step Three: Pretesting and Cognitive interviewing. Pretest respondents were adults. They were not eligible for the main study. Adult married husbands and wives (15 couples) were selected for cognitive interviewing from different middle-class backgrounds. Pretest instrument was systematically given to the respondents, asking respondents about their perception of the question, repetition of the question by the respondents in their own words and what they understood as the meaning of a particular term or phrase. Those questions were repeated for all respondents. They were asked about the words they could not comprehend, or any unacceptable or

offensive word used in the statement. The researcher interviewed all the respondents. No major changes were suggested. The finalized Urdu version of CSI-16 was then back translated into English. The items were weighed in terms of delivery of the sense prevailing in the original item. Through consensus, the final Urdu version was finalized.

Step Four: Back translation. Back translation was also done by two bilingual and bicultural translators who had not seen the original scale and were living in America and Denmark. Primary researcher selected the translators involved in the process. These experts had a thorough understanding of both the American and the Pakistani cultures, had complete understanding of the constructs involved in translation, and possessed the capacity to write scholarly items (Hambleton, 1993).

Step Five: Final English version. Final English version was prepared after consensus of experts.

Step Six: Expert panel (Comparison with Original Scale). The final English back translated version of CSI-16 (Urdu) was then compared for excellence by three competent bilingual experts, Faculty of a local University, with the original CSI-16. The best translation was selected by two Ph.D. Assistant Professors of Psychology and one Assistant Professor from the Department of Management Sciences. These judges and translators were all equally fluent in English and Urdu. Conceptual, content, semantic and technical equivalence of the two scales was judged by these independent experts using the three-point scale of Flaherty (Flaherty et al., 1988). These steps were used during the translation process to produce the final Urdu version of the Couple Satisfaction Index-16.

Step Seven: Final Urdu Version: Final version of Couple Satisfaction Index-16 (Urdu) was prepared. The final version of the translation in Urdu language was the result of all the activities described above.

Results. The reliability of the CSI-16 was found to be .95 for normal adult married population of Pakistan indicating that CSI-16 is a highly reliable index of marital satisfaction in Pakistan (Nunnally Bernstein, 1994).

Frequency distributions, percentage, means, and standard deviations have been reported in above

Table 1

Demographic Characteristics of the Sample for Validation Study (N = 300)

Sample Characteristics	Categories	F	%	M	SD
Gender	Male	150	50		
	Female	150	50		
Age (Years)	>25		5.3	44.3	1.98
	25-50		63.7		
	<50		31		
Education	Matric		17.1	5.4	1.7
	Intermediate		12.6		
	Graduation		33.3		
	Masters and above		30.3		
Marital Duration (Years)	>5		20.7	19.3	11.7
	5-15		16		
	15-25		32		
	<25		31.3		

Note: F = Frequency, % = Percentage, M = Mean, SD = Standard Deviation

table. Mean age of participants was 44.3 years, having a special focus on middle-aged couples. Mean marital duration was 19.3 years. As Pakistan is a Muslim state, almost 99% sample was that of Muslims. Average number of family members was 6 and the average number of kids per family was 3 in

number. 97.3% of the sample was educated, with 35% of the sample representing housewives. 56% of couples belonged to nuclear families. The remaining belonged to joint families. Average income of the middle-class households was around PKR. 92,000 per month.

Table 2: Item Total Correlations Couple Satisfaction Index-16 (N=300)

Item no	r	Item no	r
1	.705**	9	.829**
2	.460**	10	.823**

3	.803**	11	.735**
4	.855**	12	.774**
5	.854**	13	.718**
6	.778**	14	.702**
7	.856**	15	.743**
8	.788	16	.746

**p=.000

Reliability was also calculated by using item-total correlations. Item total correlation estimates were all high and statistically significant. The internal consistency of Urdu version of CSI-16 was also high.

Confirmatory Factor Analysis of CSI-16 (Urdu). Confirmatory Factor Analysis

(CFA) of the scale was conducted using AMOS23 and other calculations were done on IBM SPSS 23. CFA using maximum likelihood estimation (MLA) method and chi-square method showed a significant number of items having good factor loadings (Table 2).

Table 3

Chi-Square, Degree of Freedom, and Model Fit Indices of CFA for Urdu Couple Satisfaction Index-16 (N = 300)

Indexes	χ^2	df	CFI	NFI	RMSEA
CSI-16 (16 items)	561.2	102	0.88	0.90	0.09

Note: χ^2 = Chi-Square, df=degrees of freedom, CFI=Comparative Fit index, NFI=Normed Fit Index, RMSEA=Root Mean Square Error of Approximation.

The models depicted by CFA was well within the acceptable range. Hence, we can say that the CFA supported the construct validity of CSI-16 (Kline, 2015). To test the uni-

dimensionality of CSI-16, CFA indicated that the factor structure of CSI-16 loaded for one latentfactor i.e., couple satisfaction.

Figure 1. Path diagram of the Urdu translated Couple Satisfaction Index -16 (Urdu;16 items) model with item loadings

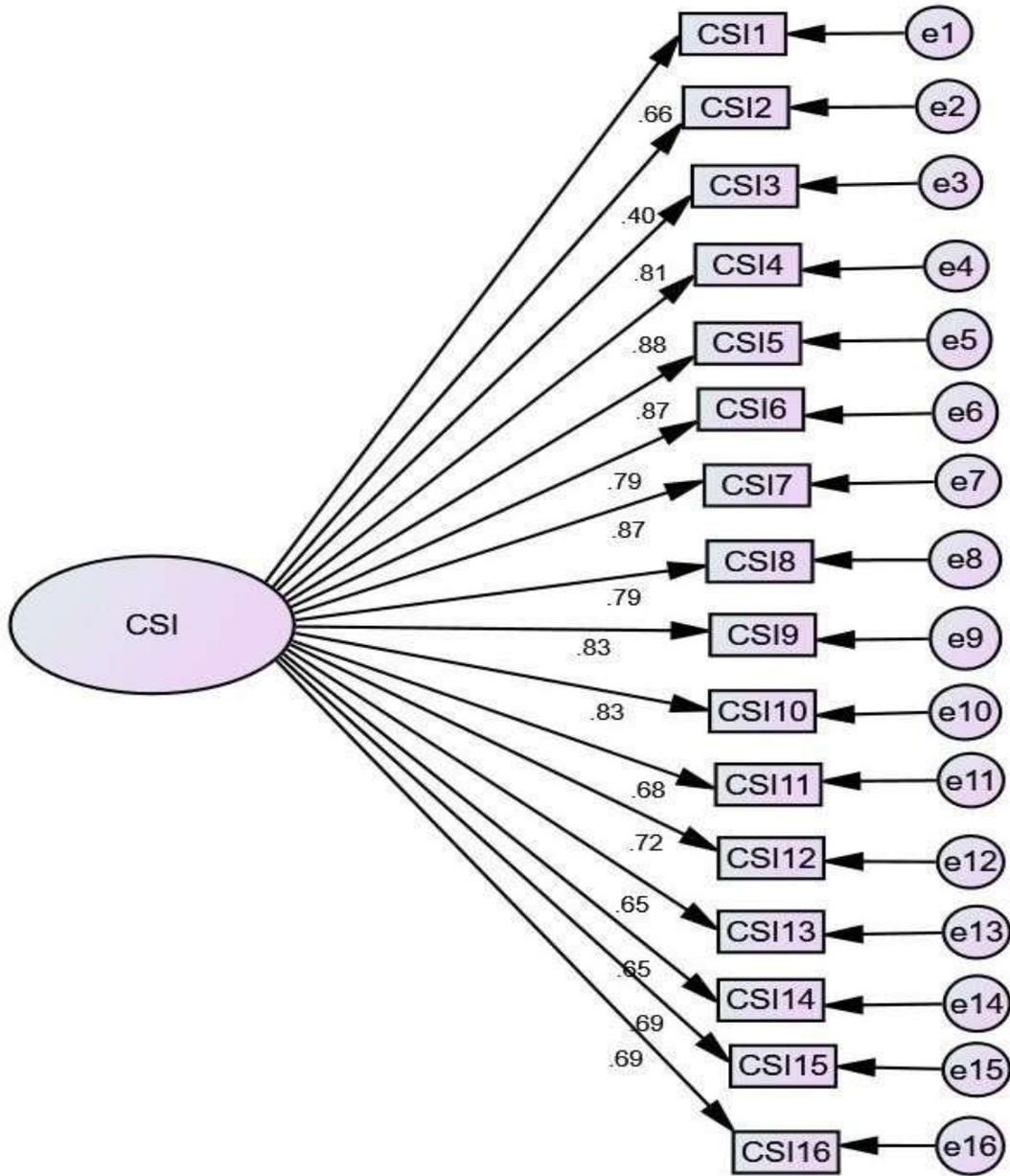


Table 4 Factor Loadings for Confirmatory Factor Analysis of Couple Satisfaction Index-16 (N = 300)

λ	Items	Sr. No.
.66	برائے سمہرائی اپنے ازدواجی تعلق کی خوشگوارى کا اظہار سب چیزوں کو ٹوٹا رکھتے ہوئے۔ کریں۔	.1
.40	عمماً آپ کتنی بدیہ سوچے / سوچتی ہیں کہ آپ اور آپ کے ساتھی کے درمیان سب چیزیں ٹھیک چل رہی ہیں۔	.2
.81	ہمارا ازدواجی تعلق منطوب ہے۔	.3
.88	اپنے ساتھی کے ساتھ میرا تعلق میرے لیے خوشی کا باعث ہے۔	.4
.87	اپنے ساتھی کے ساتھ میرا تعلق بہت خوشگوار اور پرسکون ہے۔	.5
.80	میں اپنے ساتھی کے ساتھ اپنے آپ کو ایک ٹیم کا حصہ تصور کرتا / کرتی ہوں۔	.6
.88	اپنے ساتھی کے ساتھ آپ کا تعلق کس حد تک منطوب ہے۔	.7
.79	آپ کا ساتھی کتنے اچھے سے آپ کی ضرورت پوری کرتا / کرتی ہے۔	.8
.84	آپ کا ازدواجی تعلق کس حد تک آپ کی حقیقی امیدوں پر پورا اترتا رہا ہے۔	.9
.84	مجموعی طور پر آپ اپنے تعلق سے کس حد تک مطمئن ہیں۔	.10
.68	دلچسپ / غیر دلچسپ	.11
.72	برا / اچھا	.12
.65	کھل / اٹھل	.13
.65	جانمید / پرانمید	.14
.69	منطوب / کمزور	.15
.69	تکلیف دہ / پرلطف	.16

Note: Factor Loading > 0.30, λ = Factor Loadings

Table 4 shows the factor loading of all the items of CSI-16. CFA of CSI-16 (Urdu) revealed a single latent factor of couple satisfaction. The factor model confirmed a good fit to the data, showing that all the items of the scale had a factor loading greater than .30. Factor loadings ranged from .40 to .88. Research validating CSI-16 also reported the uni-dimensionality of all factor loadings. As all factor loadings were higher than .30, uni-dimensionality was confirmed.

Discussion. The main aim of this study was to get the instrument adapted from English to Urdu and to establish its linguistic reliability and psychometric equivalence with the original English version of CSI-16. The results of CFA of the CSI-16 (Urdu) showed certain commonalities between the English and Urdu versions of CSI-16. Results showed that the scale fulfills the psychometric requirements for measurement of marital satisfaction in Pakistan. As in the original

version of CSI-16, all items of the questionnaire loaded to one latent factor i.e., marital satisfaction. Hence, we can conclude that this study has introduced a precise instrument for measuring marital satisfaction in Pakistan. The sequence of items was the same as the original CSI-16. Item 2 has the lowest factor loading (given as .40 in the table), usually showing a neutral response to this question. Items 3-10 showed high factor loadings ranging from .79 to .88. Item 4 has the highest factor loading (given as .88 in the table), showing a sense of relational happiness associated with this relationship in Pakistan. This is in line with another research already done in Pakistan. CSI-4 has been translated for use in marital research in Pakistan by Qadir, et al., in which researchers found a significant correlation between the two items showing degree of happiness, warmth and comfortable relationship between partners. It indicated that happiness is more relational and is a

product of warmth and comfort in relationships in Asian countries specially Pakistan. Individuals seek more happiness when the self is perceived as part of the whole relationship. Items 11-16 have a different format which was either difficult for Pakistani people to understand because most of them left these questions in the first attempt or they responded to them in an extreme way (giving 5 as response in most of the cases). These items were perceived differently by the respondents as they could not grade their relationship easily on this format. They left the questions unanswered in the first attempt and when asked to fill them completely, they responded by giving extreme positive responses. Hence, we can say that these items had low discriminatory power as compared to other items in other formats.

In an Iranian study, four different factors including “marital happiness” and “warmth of relationship”, “being together” and “right choice” have been highlighted through exploratory factor analysis of CSI-32 (Forouzesh et al., 2017). According to this research, “marital happiness” which refers to happiness, positivity and comfort in couple relationships, “warmth of relationship” refers to belongingness and friendliness with spouse, “being together” indicates the amount of time being spent together, and “right choice” indicates confidence in selecting the spouse and no feelings of sadness or repentance in the marriage. These factors explained respectively about 30%, 20%, 11% and 7% of variance of marital satisfaction in Iranian sample. The factor structure of CSI-32 was confirmed in Iran whereas our results also confirm the factor structure of CSI-16 in Pakistan. The results indicated that CSI-16 is a highly reliable instrument for Pakistani population. The Cronbach alpha coefficient value showed a high internal consistency (.95) between items, consistent with the studies done in Iran, Turkey, and other South

Asian studies. Hence, we may conclude that CSI-16 showed good psychometric characteristics in Pakistani sample and can be used to measure marital satisfaction as it has been proved to be an efficient measure for marital satisfaction in other Asian nations. The results showed that we prepared an Urdu translation of CSI-16 having good semantic value.

The translation procedure resulted into a psychometrically strong measure. Hence, we can assume that the unidimensional phenomena under study i.e., couple satisfaction when assessed from measures of different cultures or in different languages provided almost similar results. The high reliability of the instrument in Pakistan showed that despite the large cultural, social, economic and linguistic differences, the instrument can be used in Pakistan as a reliable and valid instrument for measurement of marital satisfaction. Finally, we can conclude that universality of marital satisfaction across languages and cultures can be established. The current study provided linguistically and psychometrically strong CSI-16 (Urdu) as a contemporary instrument for education, research, and therapeutic investigation of marital satisfaction in Pakistan.

Pakistani culture presents a complicated concept of marital satisfaction as the concept of marriage is highly related with the cultural and religious norms of the society. In Pakistan, marriage is considered a strictly religious obligation and is perceived as a union of two families rather than two individuals. More focus in research is required in Pakistan on the positive factors underlying marital satisfaction like love, mindfulness, relationship self-regulation etc. Flourishing in relationships should include contentment and happiness according to Eudemonic Theory. By producing highly accurate measures of marital satisfaction, researchers have decreased the error variance in measurement while simultaneously increasing the power of measurement

without increasing the length of the questionnaire. Funk and Rogge claimed that by using CSI scales, researchers will differentiate among groups and these differences will be meaningful with reference to the relationships under consideration. Since CSI-16 is a complete measure of marital satisfaction, it can be used in relationship enhancement studies proving itself as an accurate measure of relationship satisfaction.

Conclusion and Implications. The results of this study indicated that Urdu CSI-16 has appropriate psychometric properties. This instrument can be confidently used in the field of marital research in Pakistan. However, further evaluations of psychometric properties of the scale are required. This study measured the factor structure of Urdu CSI-16 and established its construct validity for Pakistani married couples. This translation may offer mental health providers a starting point for facilitating a dialogue about marital satisfaction in Pakistani clients.

The clear one-dimensional structure indicates that mental health providers can calculate total score to assess overall marital satisfaction in the general population for counseling purposes.

The use of Urdu CSI-16 might give meaningful results with respect to improvement in couple relations, indicating a parallel improvement in mental health correlates. It is, therefore, important for scholars to provide further empirical evidence for the translated instrument. It is important that clinicians and scholars use this translation for various clinical, counseling and research purposes.

Strengths and Limitations. This translation was the first attempt to translate CSI-16 into Urdu. The main limitation of original CSI scales was that the original study was conducted entirely online. This limitation was covered in the current study by taking

manual test with the married couples. Although this study provides the factor structure of CSI-16 in Pakistan, replication and further evaluation of the dimension of couple satisfaction or marital satisfaction is required in Pakistan with diverse and larger samples. In addition, this instrument can also be used in longitudinal studies which will enhance the credibility and reliability of the instrument. Future studies require longitudinal studies of couples, spread over a longer span of time. Previous studies included only one member of the couple whereas current study fills the gap by getting couple data to fully examine the dependency of the data. All the variability in the total score of CSI-16 can be attributed to the couple satisfaction factor. The scores on CSI-16 seem to be primarily driven by the respondent's overall degree of marital satisfaction. This study is one of the first to examine the underlying latent variables in CSI-16. The strengths of this study included implications for counseling practice and mental health professionals, utilizing CSI-16 for the measurement of couple satisfaction or marital satisfaction. They would be facilitated by this translation as various studies in Pakistan have been done in English format which hinders understanding of general population while using the instrument. A real research gap has been filled by the current study. However, due to time constraints and Covid-19 conditions, this study had focus on the middle-aged groups as 60 percent of our sample was middle aged couples. The sample containing newlywed couples is low. Moreover, the total score on CSI-16 can be associated with mental health correlates in literature. Researchers may consider adding further items in CSI-16 to measure couple satisfaction from a specific cultural standpoint. Researchers are encouraged to conduct additional psychometric evaluation of the scale to optimize score reliability, validity and generalizability of CSI-16.

Compliance with Ethical Guidelines.

Informed consent was obtained from all adult participants included in the study. They assured of confidentiality and anonymity of the information provided by them. In addition, the Ethical Committee of Foundation University Islamabad approved the research design to ensure that the ethical requirements of the study were fulfilled completely.

Disclosure Statement. Authors have no conflict of interest.

Acknowledgements. The authors would like to thank all the participants who have contributed to translation and evaluation of the instrument used in the study.

References

1. Amato, P. R. (2000). The consequences of divorce for adults and children. *Journal of Marriage and Family*, 62(4), 1269-1287.
2. Amato, P. R., & Cheadle, J. (2005). The long reach of divorce: Divorce and child well-being across three generations. *Journal of Marriage and Family*, 67(1), 191-206.
3. Amato, P. R., & Kane, J. B. (2011). Life-course pathways and the psychosocial adjustment of young adult women. *Journal of Marriage and Family*, 73(1), 279-295.
4. Atkins, D. C., & Baucom, B. R. (2016). Emerging Methodological and Statistical Techniques in Couple Research. *The Oxford Handbook of Relationship Science and Couple Interventions*, 148.
5. Bachand, L. L., & Caron, S. L. (2001). Ties that bind: A qualitative study of happy long-term marriages. *Contemporary Family Therapy*, 23(1), 105-121.
6. Barrett, A. E., & Turner, R. J. (2005). Family structure and mental health: The mediating effects of socioeconomic status, family process, and social stress. *Journal of Health and Social Behavior*, 46(2), 156-169.
7. Borsa, J. C., Damasio, B. F., & Bandeira, D. R. (2012). Cross-cultural adaptation and validation of psychological instruments: Some considerations. *Paidéia (Ribeirão Preto): cadernos de psicologia e educação*. Vol. 22, n. 53, (set. /dez. 2012), p. 423-432.
8. Bradbury, T. N., Fincham, F. D., & Beach, S. R. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and Family*, 62(4), 964-980.
9. Bryant, C. M., & Conger, R. D. (2002). An Intergenerational Model of Romantic Stability and Change in Relationships, 57.
10. Carr, D., & Springer, K. W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, 72(3), 743-761.
11. Coontz, S. (2007). The origins of modern divorce. *Family process*, 46(1), 7-16.
12. Dagger, T. S., Sweeney, J. C., & Johnson, L. W. (2007). A hierarchical model of health service quality: scale development and investigation of an integrated model. *Journal of Service Research*, 10(2), 123-142.
13. Flaherty, J. A., Gaviria, F. M., Pathak, D., Mitchell, T., Wintrob, R., Richman, J. A., & Birz, S. (1988). Developing instruments for cross-cultural psychiatric research. *Journal of Nervous and Mental Disease*.
14. Forouzesh Yekta, F., Yaghubi, H., Mootabi, F., Roshan, R., Gholami Fesharaki, M., & Omidi, A. (2017). Psychometric Characteristics and Factor Analysis of the Persian Version of Couples Satisfaction Index. *Avicenna Journal of Neuro Psycho Physiology*, 4(2), 49-56.

15. Funk, J. L., & Rogge, R. D. (2007). Testing the ruler with item response theory: increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology, 21*(4), 572.
16. Hambleton, R. K. (2005). Issues, designs, and technical guidelines for adapting tests into multiple languages and cultures. *Adapting Educational and Psychological Tests for Cross-Cultural Assessment, 1*, 3-38.
17. Hambleton, R. K., & Jones, R. W. (1993). Comparison of classical test theory and item response theory and their applications to test development. *Educational Measurement: Issues and Practice, 12*(3), 38-47.
18. Heene, E., Buysse, A., & Van Oost, P. (2007). An interpersonal perspective on depression: The role of marital adjustment, conflict communication, attributions, and attachment within a clinical sample. *Family Process, 46*(4), 499-514.
19. Hughes, M. E., & Waite, L. J. (2009). Marital biography and health at mid-life. *Journal of Health and Social Behavior, 50*(3), 344-358.
20. Karney, B. R., & Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. *Journal of Personality and Social Psychology, 72*(5), 1075.
21. Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.
22. Lewis, M., Lamson, A., & Leseuer, B. (2012). Health dynamics of military and veteran couples: A biopsychosocial overview. *Contemporary Family Therapy, 34*(2), 259-276.
23. Mattson, R. E., Rogge, R. D., Johnson, M. D., Davidson, E. K., & Fincham, F. D. (2013). The positive and negative semantic dimensions of relationship satisfaction. *Personal Relationships, 20*(2), 328-355.
24. Nunnally, J., & Bernstein, I. (1994). *Psychometric Theory 3rd edition* (McGraw-Hill, New York).
25. Previti, D., & Amato, P. R. (2004). Is infidelity a cause or a consequence of poor marital quality? *Journal of Social and Personal Relationships, 21*(2), 217-230.
26. Qadir, F., de Silva, P., Prince, M., & Khan, M. (2005). Marital satisfaction in Pakistan: A pilot investigation. *Sexual and Relationship Therapy, 20*(2), 195-209.
27. Sabourin, S., Valois, P., & Lussier, Y. (2005). Development and validation of a brief version of the dyadic adjustment scale with a nonparametric item analysis model. *Psychological Assessment, 17*(1), 15.
28. Urbano-Contreras, A., Iglesias-García, MT, & Martínez-González, RA (2017). Development and validation of the Satisfaction in couple relationship scale (SCR). *Contemporary Family Therapy, 39* (1), 54-61.
29. Williams, K., & Umberson, D. (2004). Marital status, marital transitions, and health: A gendered life course perspective. *Journal of Health and Social behavior, 45*(1), 81- 98.

Couples Satisfaction Index (CSI-16)

For each of the following items select the answer that best describes your relationship. Your answer should be based on your first impression and immediate feeling about the item.

ایات۔ درج ذیل سوالات کے لیے اس جواب کا انتخاب کریں جو آپ کے خیال میں آپ کے تعلق کی صحیح ترجمانی کرتا ہے۔ آپ کا جواب اس سوال کے بارے میں آپ کے پہلے تاثر پر فوری احساسات کی بنیاد پر ہونا چاہیے:-

ORIGINAL SCALE CSI-16	FINAL URDU TRANSLATION	FINAL BACK TRANSLATION			
1. Please indicate the degree of happiness, all things considered, of your relationship.	برائے میری اپنے ازدواجی تعلق کی خوشگوار اور ناخوشگوار سب چیزوں کو ملحوظ رکھتے ہوئے کریں۔	1. Keeping all factors in mind, how pleasant do you think your relationship is with your partner on the following scale			
2. In general, how often do you think that things between you and your partner are going well?	معموماً آپ کتنی بار یہ سوچتے سوچتی ہیں کہ آپ اور آپ کے ساتھی کے درمیان سب چیزیں ٹھیک چل رہی ہیں۔	2. How often do you think that things are going well between you and your partner?			
3. Our relationship is strong	ہمارا ازدواجی تعلق مضبوط ہے۔	3. Our relationship is strong			
4. My relationship with my partner makes me happy	اپنے ساتھی کے ساتھ میرا تعلق میرے لیے خوشی کا باعث ہے۔	4. My relationship with my partner is a source of happiness for me			
5. I have a warm and comfortable relationship with my partner	اپنے ساتھی کے ساتھ میرا تعلق بہت خوشگوار اور پرسکون ہے۔	5. My relationship with my partner is pleasant and peaceful			
6. I really feel like part of a team with my partner	میں اپنے ساتھی کے ساتھ اپنے آپ کو ایک ٹیم کا حصہ تصور کرتا/کرتی ہوں	6. I perceive myself and my partner to be part of a team			
7. How rewarding is your relationship with your partner?	اپنے ساتھی کے ساتھ آپ کا تعلق کس حد تک مفید ہے۔	7. To what extent is your relationship with your partner beneficial?			
8. How well does your partner meet your needs?	آپ کا ساتھی کتنے اچھے سے آپ کی ضروریات کو پورا کرتا ہے / کتنی ہے؟	8. How well does your partner satisfy your needs?			
9. To what extent has your relationship met your original expectations?	آپ کا ازدواجی تعلق کس حد تک آپ کی حقیقی امیدوں کو پورا کرتا ہے۔	9. To what extent does your relationship fulfill your original expectations?			
10. In general, how satisfied are you with your relationship?	مجموعی طور پر آپ اپنے تعلق سے کس حد تک مطمئن ہیں۔	10. How satisfied would you say you are with your relationship?			
11. Boring	نیر دلچسپ	11. Boring	11. Interesting	دلچسپ	Interesting.
12. Good	اچھا	12. Good	12. Bad	برا	Bad
13. Empty	خالی	13. Empty	13. Completely	مکمل	Full
14. Hopeful	پرامید	14. Hopeful	14. Hopeless	ناامید	Discouraging
15. Fragile	کمزور	15. Weak	15. Strong	مضبوط	Sturdy
16. Enjoyable	پُرلطف	16. Pleasant	16. Painful	تکلیف دہ	Miserable

Categories CSI-16

	0	1	2	3	4	5
Original English	Not at all	A little	Somewhat	Mostly	Almost completely	Completely
Urdu Translation	ہاں نہیں	تھوڑا	کسی حد تک	اکثر	تقریباً عمل	عمل
Back Translation	Not at all	A little	To some extent	Often	Almost completely	Completely
	0	1	2	3	4	5
Original English	Not at all true	A little True	Somewhat true	Mostly true	Almost completely true	Completely true
Urdu Translation	ہاں ہی نہیں	تھوڑی	کسی حد تک	اکثر	تقریباً عمل	عمل
Back Translation	Not at all true	A little true	To some extent true	Often true	Almost completely true	Completely true

	0	1	2	3	4	5
Original English	Never	Rarely	Occasionally	More often than not	Most of the time	All the time
Urdu Translation	کبھی نہیں	بہت کم	کبھی کبھار	اکثر اوقات	بہت اوقات	ہر وقت
Back Translation	Never	Less often	Sometimes	Often, at times	Most of the time	All the time