

Development and Validation of Pre-Marital Anxiety Scale

Nadia Afzal

*Department of Applied Psychology
Lahore College for Women, University, Lahore, Pakistan*

Amina Muazzam

*Department of Applied Psychology
Lahore College for Women, University, Lahore, Pakistan*

Subha Malik

*Department of Applied Psychology
Lahore College for Women, University, Lahore, Pakistan*

Abstract

Present study intends to develop an indigenous tool to measure Pre-Marital Anxiety in adults of Pakistan and to assess psychometric properties of Pre-Marital Anxiety Scale (PMAS). Phenomenon of Pre-Marital Anxiety was explored by identifying the themes related to Pre-Marital Anxiety in youth. After wards by conducting the interviews and focus groups with adults (both men & women) and Match Maker, list of 81 items was drawn. Face and content validity was evaluated with relevance to clarity and construct on three-point rating. Items that bear above 20% on "NO" on relevance to construct were excluded. Pilot study was conducted to remove any ambiguity in items. Construct validity of PMAS with final 47 items was evaluated through Principal Component Analysis that came into results with six factor solution named as Anxiety to maintain relationship, Anxiety about proposal, Anxiety about Spouse, In-laws Concerns, Future concerns and financial concerns. Alpha reliability was $\alpha=.94$. Whereas PMAS was evaluated for Test-Retest Reliability which was ($r=.87$). Convergent and Divergent validity were also evaluated which was ($r=.55$) and ($r=-.60$) respectively. It was concluded that PMAS is a valid and reliable tool to measure Pre-Marital Anxiety in youth.

Keywords: Development; Validation; Pre-Marital Anxiety Scale

Introduction

Marriage is a holy bond between two people. It is an ancient and sacred event in all societies since the human development (Giddens and Philip, 2013). Marriage is a basic unit of any society on which the overall structure and functioning of whole society depends. It is a very initial and closest bond between two individuals or families but very few individual are really prepared for this basic and important event of their lives where they have to live together in such manner the needs and dreams of both individuals be fulfilled according to their desires and expectations (Nganga and Wasanga, 2010). So the marriage is equally important in all religions, races and societies as the world is created. But it is fact that the prospect relationship come up with different anxieties among various people such as future apprehension, doubts about spouse and responsibilities burden. Anxiety is universal phenomenon within the human nature. Every person feels anxiety or become anxious at different time of life.

Due to burden of dowries, Gifts, jewelry, heavy clothes, hefty budgets of engagement and wedding functions, unemployment and a lot of other social and economic problems lead to youth delayed in marriage and they developed the fear about marriage (Eskandari 2008, 650). Existence of pre-marital anxieties can be traced back in earlier research that concluded that the event of marriage evoke the apprehensions and anxieties about future uncertainty, doubts of success and contentment among adults (Zimmer 1986, 149). Very few researches are conducted to explore the existence of premarital anxiety because the sex before marriage and companionship without marriage is common in individualistic/western culture. They are less anxious about the marriage relationships as the interaction between men and women is very common. They are free to take their decisions. In

European/individualistic culture marriage is bond of just two persons (Diener and Diener, 2009, 71). But in Asian culture which is collectivistic culture marriage is a major and drastic change in life of adults. As they have to come in bond not only with a person with whom never met before but also their whole family. Limited interaction of male and female make more anxious the couple specially girls about marriage (Chan et al. 2009). So in western culture , many scales were developed to assess premarital sexual behavior, anxieties about sex such as Premarital Sexual Behavior Assessment Scale for Young Women (Rahmani et al. 2014), Reiss Premarital Sexual Permissiveness Scale (Reiss 1964, 188). Sexual Anxiety Scale (Kumar 1992, 5499). No specific scale for measuring pre-marital anxiety was developed. Pre –marital anxiety was assessed by simple Anxiety scales i.e. Taylor Manifest Anxiety Scale (Taylor 1953, 285). Whereas in some earlier studies self-developed questionnaire was used to assess pre-marital anxiety (Bakhshandeh, Sedrposhan and Zarei 2015).

There is no tool to assess specifically pre-marital anxiety appropriate for our Pakistani culture. So the present study aims to develop and validate a tool that is appropriate to assess the anxieties that adult face before marriage regarding their prospect marriage in Pakistan. So that such kind of anxieties can be dealt at appropriate time by psychotherapy and counseling to reduce the anxiousness about marriage and to enable a couple to enjoy their marriage and to lead happy married life.

Objectives of the Study

1. To develop an indigenous tool to assess pre-marital anxiety that is appropriate for Pakistani culture regarding pre-marital anxieties.
2. To assess psychometric properties of Pre-Marital Anxiety Scale

Method

Phase I: Exploration of phenomenon of pre-marital Anxiety

As there was no previous literature exist regarding pre-marital anxiety. In limited studies simple anxiety scales were used to assess pre-marriage anxiety. So the phenomenon of pre-marital anxiety was explored regarding to Pakistani culture.

Identification of Domain

In order to explore the phenomena of pre-marital anxiety in Pakistani culture, Experts were consulted to identify the domain regarding marriage anxieties in Pakistani culture. It includes six psychologists from a well renowned university of Lahore from the department of Gender Studies and Applied Psychology. They were identified four domains i.e. anxieties about proposal process future, about spouse, about in-laws and to maintain sexual relationship.

Focus Group

After the identification of four domains regarding pre-marital anxiety, in the light of those domain initial open-ended questions were prepared such as , how you feel when you thinking about your prospect marriage, tell about your worries associated with marriage. For this purpose, 4 focus groups were conducted. Participants of first focus group were engaged female age ranges between 22-28 years. Their marriage was expected after four or six months. Second focus group was conducted with unmarried male, participants age ranges between 25-30 years. Third focus group was consisted of unmarried women even not engaged their age ranges from 20 to 30 years. Students and job holders both were included. Some verbatim were i.e. One participant said “ *Mujhy shadi kay baray main soch ker bojh sa mehsoos hota hay*”(I feel burden when thinkingabout marriage) another participant reported, “*shadi zumaydarion ka dosra name hay or insan kiazadi khtm ho jati hay*” (marriage is name of responsibilities that ends freedom of man).

Interviews.

Further to expand the pool of items three match-maker two males and one female were interviewed running marriage Bauru in Lahore. Their age range was 35-55 years. Education ranges between B.A

to M.A. They were asked to identify the problems and anxieties that Pakistani youth experience regarding their marriages.

Procedure

First of all, all participants for interviews and focus groups were debriefed about the present study and they were requested to be taking part in study. During focus groups and interviews they were probed about the topic and encouraged to give detailed answers to open ended questions. After conducting the focus group and interviews. All were transcribed and themes were deducted. On the basis of those themes a list of 81 items was generated.

Reviewed by Supervisor

Initial list of 81 items was reviewed by supervisor to detect the wording mistakes, grammatical mistakes and to improve phrase structure. After the supervisor review, mistakes were corrected at sentence, grammatical and phrase level.

Content and face validity by endorsement of experts

List of 81 items were presented to three psychologists working experience of five years in university to assessment of content and face validity. All were females. They are asked to endorse item on the basis of their relevance to construct and with relevance to clarity on 3-point rating (no=0, to some extent=1, and yes=2). One married lady having 2 years of happy married life was consulted to endorse the items in light of their premarital experience. One lady has conflict in her marriage life and one match-maker was also consulted to endorse items in the light of their experience. After the endorsement obtained all data were entered into SPSS to run analysis of frequency and percentages for each item on three point rating. Those items that bear above 20% score on "NO" with regard to the relevance of construct were excluded. Items those bear more than 20% on "NO" regarding to clarity were rephrased carefully to enhance clarity. And the draft of 54 items was prepared.

Piloting

In order to reduce any ambiguity and grammatical mistakes draft of 38 items was presented to small sample of 32 participants. Which include 16 males and 16 female age ranges between 19-35 years. They all were unmarried and recruited from public and government institutes by using purposive sampling. They were instructed to fill whole questionnaire carefully and report any ambiguity. Response format was Likert type ranges from 0-4 (Strongly disagree to strongly agree). Participants report some items ambiguous and specific for one gender and minor grammatical mistakes in the items. They were carefully rephrased and rewrite accurately. All 54 items were retained.

Phase II: Construct Validity through Factor Analysis

Principal component factor analysis was carried out to determine construct validity of pre-Marital Anxiety Scale (PMAS).

Sample

In the present study sample of (N= 400) was recruited in two waves. Two hundred (n=200) participants both men and women were approached to educational institutions of Lahore by using purposive sampling whereas other (n=200) were recruited from different colonies and villages of Lahore by using purposive and snow ball sampling technique. Sample size was adequate to run factor analysis as for the development indigenous scale each item is required five participants to run factor analysis. Present scale consists of 54 items which required 270 participants. So the sample of 400 participants was most appropriate.

Table 1 Demographic Characteristics of Sample for factor Analysis (N=200)

Variables	Frequency	Valid %
Gender		
Men	200	50%
Women	200	50%
Education		
5 th Grade	14	3.5%
10 th Grade	40	10.0%
Ist year	5	1.3%
2 nd year	71	17.8%
3 rd year	73	18.3%
4 th year	93	23.3%
5 th year	58	14.5%
6 th year	44	11.0%
7 th year	2	.5%
Residence		
Urban	250	62.5%
Rural	150	37.5%
Current Status		
Students	196	49.0%
Job Holders	114	28.5%
Unemployed	90	22.5%

Procedure

Draft of PMAS contained 54 items was presented to participants and they were instructed to complete the questionnaire with full devotion and rate all items according to their feelings and perception where they lie on 0-4 point rating strongly disagree to strongly agree. Participants were debriefed properly and informed consent was taken. After collecting whole data, data was entered in SPSS to run analysis.

Results

All data collected from 400 participants was entered in SPSS and principal component factor analysis with varimax rotation was run on the PMAS draft of 54 items. Results of factor analysis showed that scores of participants were distributed well enough as the Bartlett test of sphericity was significant at ($p=0.000$). Kaiser-Meyer-Olkin value was determined to determine the adequacy of sample size. KMO value was .87 which indicated that sample size was adequate to run component factor analysis.

Initially nine factors were resulted in order to criteria of Kaiser-Guttman's retention of Eigen values greater than 1 (Kaiser 1974, 31). But that distribution was too much scattered through the ten factors. So next, factors were specified to 6 factors solution. Six factor solutions with 54 items were carried out. Further, in order to determine the factors for PMAS, scree plot was examined which shows six factors can be retained as they valued greater than 1 of Eigenvalue. Scree plot in figure I also indicated the extraction of factors for PMAS with 54 items.

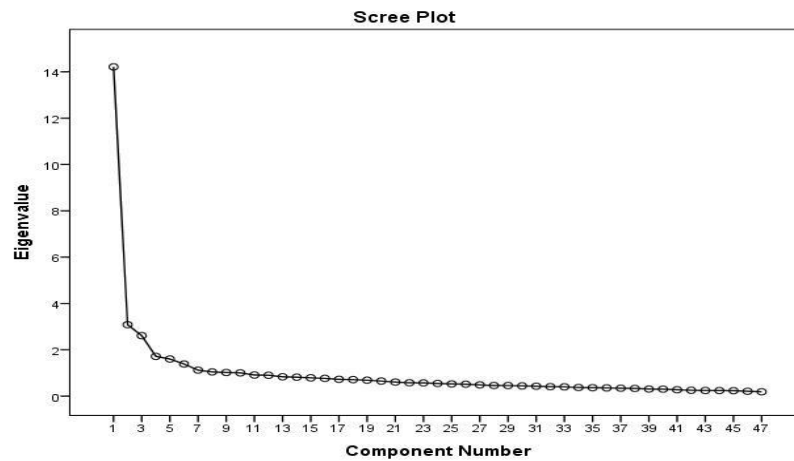


Figure I show extraction of factors within the Eigenvalue for Pre-Marital Anxiety Scale

Component factor analysis was carried out PMAS with six factor solution using varimax rotation. Loadings of items with factors which were $\geq .40$ retained in those factors. Items 7, 11, 21, 22, 33, 47 and 48 were discarded from the PMAS because of their loading were less than .40 in each factor. Draft of PMAS with 47 items was prepared for further process.

Principal Component Analysis was carried out on PMAS with 47 items. Total variance of six factors was 52.36 which showed that each factor had distinct attribute to measure Pre-Marital Anxiety. Detailed Eigenvalues and percentage of variance for six factors is given below in table.

Table 2 Eigenvalue, Percentage of Variance and Cumulative Percentages of 47 items of Pre-Marital Anxiety Scale (PMAS) with six factors solution through Principal Component Analysis

Factors	Eigenvalue	Percentage of Variance	Cumulative Percentages
1	4.87	10.33	10.33
2	4.85	10.32	20.65
3	4.83	10.28	30.94
4	4.62	9.83	40.77
5	3.22	6.86	47.64
6	2.22	4.72	52.36

Six factor solutions of PMAS with 47 items came in accurate factor loadings of items with factors which ranges from .402 to .802. Some items load other than one factor but those items were retained in a factor in which they scored highest. Further, factors were given appropriate names according to their content. Six factors named as Anxiety to maintain relationship, Anxiety about proposal, Anxiety about Spouse, In-laws Concerns, Future concerns and financial concerns. First factor Anxiety to maintain relationship include 7 items, second factor Anxiety about proposal include 9 items, third factor Anxiety about Spouse include 10 items, fourth factor include 12 items, fifth factor include 5 items and sixth factor include 4 items.

Inter- subscales and subscales association with total score was also computed. Result shows that subscales (Anxiety to maintain relationship, Anxiety about proposal, Anxiety about Spouse, In-laws Concerns, Future concerns and financial concerns) are moderately correlated which other as correlation ranges from .40 and .66. But subscales with total of PMAS was highly correlated as ranges from .69 to .87 which shows that all Subscales contribute to the PMAS to measure Pre-Marital

Anxiety. Detailed results of Inter-Correlations among Subscales of Pre-Marital Anxiety Scale (PMAS) and correlation with total scale items are given below in Table 4.

Table 4 Inter-Correlations among Subscales of Pre-Marital Anxiety Scale (PMAS) and correlation with total scale items

Sr. No	Subscales	No. of Items	I	II	III	IV	V	VI	PMAS Total
I	Anxiety to maintain relationship	7	-						.759
II	Anxiety about proposal	9	.480**	-					.728**
III	Anxiety About Spouse	10	.432**	.404**	-				.773**
IV	In-laws Concerns	12	.661**	.502**	.584**	-			.770**
V	Future concerns	5	.492**	.528**	.535**	.609**	-		.875**
VI	Financial concerns	4	.458**	.456**	.457**	.553**	.597**	-	.695**

** Shows correlation is significant at 0.01 level

Phase3: Internal Consistency of Pre-Marital Anxiety Scale (PMAS)

Inter-Item reliability of PMAS with 47 items was assessed which was .94 that is considered appropriate for exploratory measures (Nunnally 1978). It shows that items are correlated each other and assess the same construct of Pre-Marital Anxiety.

Phase 4: Test –Retest Reliability of Pre-Marital Anxiety Scale (PMAS)

Test –Retest reliability was evaluated by determining the association between two scores of PMAS administered to the same group of participants within the lapse of two weeks.

Hypothesis

There will be positive correlation between two scores of Pre-Marital Anxiety Scale (PMAS) administered to the same group of in two settings within the break of two weeks.

Sample

Total 25 participants were recruited to assess test-retest reliability of PMAS. All were females both students and job holders age ranged between 19 -35 years (M=, SD=). They all were selected by using purposive sampling as only unmarried females were selected from university and hostel.

Instruments

Following instrument was used.

Pre-Marital Anxiety Scale

PMAS developed in previous study will be used to assess Pre-Marital Anxiety. PMAS consists of 47 items rate on 5-point scale where 0 indicates strongly disagree and 4 indicates strongly agree. It has six subscales extracted through Principal component factor analysis by using varimax rotation named as (1) Anxiety to maintain relationship, (2) Anxiety about proposal, (3) Anxiety about Spouse, (4) In-laws Concerns, (5) Future concerns and (6) financial concerns. Alpha reliability of PMAS was .94. Alpha reliability for subscales was: Anxiety to maintain relationship: $\alpha=.87$, Anxiety about proposal: $\alpha=.86$, Anxiety about Spouse: $\alpha=.81$, In-laws Concerns: $\alpha=.85$, Future concerns: $\alpha=.7$ and financial concerns. $\alpha=.71$.

Procedure

PMAS was administered individually subject to subject. All participants were instruct to rate each item on the rating which best describe them on 5-point rating where 0 depicted strongly disagree and

4 depicted the strongly agree. Firstly all participants were debriefed and informed consent was taken. After two weeks same draft of PMAS was administered to the same sample and linear correlation was found between the two scores of same scale obtained from the same sample.

Results

Data was entered in the SPSS and bivariate correlation was computed between the scores of the two administrations of PMAS on same sample. Results showed significantly high test-retest reliability which was .87** as $p=.000$ at 0.01 level of alpha. Results are shown in the table 5.

Table 5 Test-Retest Reliability of Pre-Marital Anxiety Scale (PMAS)

PMAS Administrations	M	SD	R
I	67.68	30.47	
II	67.32	29.18	.87**

** Shows correlation is significant at 0.01 levels

Phase 5: Convergent Validity of Pre-Marital Anxiety Scale (PMAS)

Convergent validity was evaluated by correlating scores of Pre-Marital Anxiety Scale with the Taylors Manifest Scale which is the measure of same construct.

Hypothesis

Score on PMAS will positively correlate with the scores of Taylors manifest Anxiety Scale.

Sample

Total 100 participants (Men =50, Women=50) were selected from both private and government institute of Lahore. Age ranges between 17-25 years (M=20.38, SD= 2.18). They all were unmarried.

Instruments

Following instruments were used to find out convergent validity.

Pre-Marital Anxiety Scale

PMAS developed in previous study will be used to assess Pre-Marital Anxiety. PMAS consists of 47 items rate on 5-point scale where 0 indicates strongly disagree and 4 indicates strongly agree. It has six subscales extracted through Principal component factor analysis by using varimax rotation named as (1) Anxiety to maintain relationship, (2) Anxiety about proposal, (3) Anxiety about Spouse, (4) In-laws Concerns, (5) Future concerns and (6) financial concerns. Alpha reliability of PMAS was .94. Alpha reliability for subscales was: Anxiety to maintain relationship: $\alpha=.87$, Anxiety about proposal: $\alpha=.86$, Anxiety about Spouse: $\alpha=.81$, In-laws Concerns: $\alpha=.85$, Future concerns: $\alpha=.7$ and financial concerns. $\alpha=.71$

Taylors Manifest Anxiety Scale

In order to assess convergent validity scale of same construct was selected that was Taylors Manifest Anxiety Scale by Taylor (1953). Previous literature showed that Taylors Manifest Anxiety Scale was used to assess Pre and Post Marital Anxiety (Shibli et al. 2015, 1). It was open access scale. Taylors Manifest Anxiety Scale consisted of 38 items. It was dichotomous in response format (yes, No). It was in English version and translated in Urdu for develop clear and obvious understanding of participants.

Procedure

Participants were selected through purposive sampling. Both Taylors Manifest Anxiety Scale (Urdu version) and Pre-Marital Anxiety scale were administered to the participants at the same time after taking informed consent. Then data was entered in the SPSS for further analysis.

Results

Scores of both scales Taylors Manifest Anxiety Scale (Urdu version) and Pre-Marital Anxiety scale were entered in the SPSS. To find out the correlation between the scales of same construct bivariate correlation was computed. Results showed that there was moderate positive correlation ($r=.55^{**}$) at 0.01 between Taylors Manifest Anxiety Scale (Urdu version) and Pre-Marital Anxiety scale. That showed PMAS had good convergent validity.

Table 6 correlation between Pre-Marital Anxiety Scale & Taylors Manifest Anxiety Scale

Scales	M	SD	R
Pre-Marital Anxiety Scale	69.96	25.74	.55**
Taylors Manifest Anxiety Scale	15.99	7.95	

** Shows correlation is significant at 0.01 levels

Phase 6: Discriminant Validity of Pre-Marital Anxiety Scale (PMAS)

Discriminant validity was assessed through correlating the scores of PMAS with the scores on opposite construct measure.

Hypothesis

Pre-Marital Anxiety Scale will be negatively correlated with BBC Well-Being Scale which is measure of opposite construct.

Sample

Total 100 participants (all females) were selected from both private and government institute of Lahore. Age ranges between 17-25 years ($M=19.74$, $SD= 1.51$). They all were unmarried.

Instruments

Following instruments were used to find out discriminant validity of PMAS.

Pre-Marital Anxiety Scale

PMAS developed in previous study will be used to assess Pre-Marital Anxiety. PMAS consists of 47 items rate on 5-point scale where 0 indicates strongly disagree and 4 indicates strongly agree. It has six subscales extracted through Principal component factor analysis by using varimax rotation named as (1) Anxiety to maintain relationship, (2) Anxiety about proposal, (3) Anxiety about Spouse, (4) In-laws Concerns, (5) Future concerns and (6) financial concerns.

BBC Well-Being Scale

In order to determine discriminant validity, BBC Subjective Well-Being Scale by Kinderman, Schwannauer, Pontin, & Tai (2011). Wellbeing is the opposite construct to Anxiety that is why BBC Well-Being Scale was used to assess discriminant validity. BBC Well-Being Scale consisted of 24 items. Response rate was 5-point rating. Alpha Coefficients for BBC Well-Being Scale was $\alpha= .935$. For convenience of target population, English version of BBC Well-Being Scale was translated in Urdu language.

Procedure

BBC Well-Being Scale was in English version and first of all translated in Urdu for develop clear and obvious understanding of participants by using Backward Translation Method. Then participants were selected through purposive sampling. Both BBC Well-Being Scale (Urdu version) and Pre-Marital Anxiety scale were administered to the participants at the same time after taking informed consent. Then data was entered in the SPSS for further analysis.

Results

Scores of both scales BBC Well-Being Scale (Urdu version) and Pre-Marital Anxiety scale were entered in the SPSS. To find out the correlation between the scales of different construct bivariate correlation was computed. Results showed that there was moderate negative correlation ($r = -.60^{**}$) at 0.01 between BBC Well-Being Scale (Urdu version) and Pre-Marital Anxiety scale. That showed PMAS had good discriminant validity with BBC Well-Being Scale that was of opposite construct.

Table 7 correlation between Pre-Marital Anxiety Scale & BBC Well-Being Scale

Scales	M	SD	r
Pre-Marital Anxiety Scale	79.71	26.82	
BBC Well-Being Scale	88.18	22.88	-.60**

** Shows correlation is significant at 0.01 levels

Discussion

Present study aimed to develop an indigenous tool for the assessment of unique phenomenon of Pre-Marital Anxiety in Pakistani culture. Anxiety is usually characterized by feeling of fear, worry and apprehension of something or event which has imaginary or realistic basis. Several studies have done to find out the prevalence of anxiety disorder, according to the results of those studies prevalence of anxiety disorder ranges from 7% to 50% which is high than other developing countries like Zimbabwe, Uganda and Lesotho (Niaz et al. 2004, 337; Ali et al. 2002, 513; Orley, Wing and Ahmed 1997, 513; Hollifield et al. 1990, 343; Abas and Broadhead, 1997, 59). Literature showed that there was no instrument available to measure pre-Marital Anxiety in Pakistan as well as in foreign culture. For this purpose the phenomenon of Pre-Marital Anxiety was explored in Pakistani culture by accessing the psychologist pointed out the domains of Pre-Marital Anxiety that identify in which areas adults can feel anxious about marriage. Further focus groups and interviews were conducting in order to deduct questions from it. Some verbatim of participants were “*Shadi zimmaydarion ka dosra nam hay*” (Marriage is the name of responsibilities), “*jub rishta daikhnay kayliay anay walay mujh main nuks nikaltay hain to meri zzzte-naffas bht majrooh hoti hay*” (when people come for my proposal and made criticism of my appearance, I feel hurt), “*mujhy shadi kay akhrajat ka soch kr bht bojh mehsoos hota hay*” (I feel burdened whenever thought about marriage expenditures”. Previous literature supported above concerns regarding marriage as it was documented is a study that due to burden of dowries, Gifts, jewelry, heavy clothes, hefty budgets of engagement and wedding functions, unemployment and a lot of other social and economic problems lead to youth delayed in marriage and they developed the fear about marriage (Eskandari 2008, 650).

Draft of PMAS was analyzed through Exploratory Factor Analyses as it is used to explore the factors which influence the target variable and how to make cluster under a domain of construct (DeCoster 1998). A principal component factor analysis was carried out with the 47 items of PMAS which came in result 6 factors solution by using varimax rotation. Items loaded $\geq .40$ on a factor were retained in that factor. Identified six factors were named as: first factor Anxiety to maintain relationship include 7 items, second factor Anxiety about proposal include 9 items, third factor Anxiety about Spouse include 10 items, fourth factor include 12 items, fifth factor include 5 items and sixth factor include 4 items.

Items include in factor I (Anxiety to maintain relationship) indicates the youth anxiety to maintain sexual relationship with their spouse. Some items in the factor I is like, "I feel anxious to confront my spouse in sexual relationship" another is "I feel a great deal of tension when think about to maintain sexual relationship". Factor-II was regarding the proposal process. It showed the youth concerns or anxieties about the procedure of proposal they encountered in their lives. Some items in this factor was like "I feel fear that people come for my proposal will reject me" another is "I get worried to see my parents tensed due to delay in my marriage". Factor III (Anxiety about Spouse) of PMAS includes items which related to the adult's concerns about their prospect spouse regarding his/her behavior, habits, health and nature. Items in Factor III like, "I feel anxious to think that understanding between me and my spouse can be developed or not", another is "Concerns about my spouse sincerity made me worried".

Items include in factor IV (In-Laws Concerns) assess the youth anxieties regarding their In-Laws such as "Thinking about interfering attitude of in-Laws made me anxious". Factor V (Future Concerns) of PMAS includes items which depict the future concerns about marriage such as "I feel afraid that my freedom will end after marriage" another item is "I feel burdened when thinkabout the responsibilities after marriage". Items in factor VI (financial Concerns) related to the expenditure of the marriage such as "I feel anxious to think about the marriage expenditure". Alpha reliability of Pre-Marital Anxiety Scale was of high level which was $\alpha = .94$ whereas the subscales internal consistency was also determined which was factor I=.87, factor II= .86, factor III=.81, factor IV=.85, factor V=.79 and factor VI=.71 respectively which are satisfactory and considerable as Nunnally (1978) suggested that alpha reliability of .70 for an exploratory measure is adequate and indicate that item had strong homogeneity and covariance. Correlation of items with total score of PMAS was analyzed which ranges from .33 to .64 which were significant at $P < .01$.

Test-Retest reliability was assessed of Pre-Marital Anxiety Scale. Test-Retest reliability of Pre-Marital Anxiety Scale was $r = .87$, which shows high correlation between two scores of PMAS. Further convergent validity of PMAS was evaluated by using the Taylors Manifest Anxiety Scale which was the measure of same construct as Pre-Marital Anxiety. Convergent validity of PMAS was $r = .55$ which is of moderate level reason behind this may be the Taylors Manifest Scale' scoring pattern which was of dichotomous style (YES/No). Moreover to strengthen the construct validity of PMAS, divergent validity was evaluated by associating the scores of PMAS with the scores of opposite construct measure which was the BBC well-being Scale. Divergent validity of PMAS was $r = -.60$. Finally, a valid and reliable indigenous tool (Pre-Marital Anxiety Scale) was developed to measure Pre-Marital Anxiety in Adults. Final draft of PMAS was prepared included 47 items a Self-Report measure with 5-Point ratings where 0 indicate strongly disagree and 4 indicates strongly agree. Scores are distributed as high level of Anxiety and low level of anxiety. For scoring purpose PMAS mean ($M = 84.65$) was used as a cut score between high level of Anxiety and low level of anxiety.

Implications

Pre-Marital Anxiety Scale is a valid and reliable scale which can be used by clinician, psychologists and counselors to assess level Pre-Marital anxiety in adults so that they can be helped to deal with their anxieties related to marriage to improve their quality of psychological well-being.

References:

- Ali B., Rahber M., Naeem S., Tareen A., Gul, A., & Samad L. (2002). Prevalence of and factors associated with anxiety and depression among women in alower middle class semi-urban community of Karachi, Pakistan. *Journal of Pakistan Medical Association* 52: 513-517.
- Abas, Melanie. A., & Broadhead, Jeremy C. (1997). Depression and Anxiety among Women in an urban setting in Zimbabwe. *Psychological medicine* 27: 59-71.

- Bakhshandeh, Sedrposhan & Zarei. (2015). Marriage, process and preparedness among Youth:Insight from Youth in India. Paper presented at International Institute for Population Sciences. <http://iussp.org/en/event/17/programme/paper/4108>
- Chan, Melissa., Randall, Ashley K.,Duggi Deepti., Kamble Shanmukh V., & Butler, Emily A. (2009). Examining the cross-cultural differences in attachment styles within marriage types between Asian Indians and Americans. Poster presented at the UA's 14th Annual Graduate College Summer Research Conference, University of Arizona, Tucson, Arizona.
- DeCoster, Jamie (1998). *Overview of factor analysis*. <http://www.stat-help.com/notes.html>
- Diener E., & Diener M. (2009). Cross-Cultural Correlates of Life Satisfaction and Self-Esteem. *Social Indicators Research Series* 38: 71-76. doi: 10.1007/978-90-481-2352-0
- Eskandari & Cherati A. (2008). Social factors influencing delay the age of marriage with emphasis on Golestan province in Iran. *Specialized Journal of Sociology* 4: 650-660.
- Giddens & Philip. (2013). *Sociology*. Italy: Polity Press. <http://www.amazon.com/Sociology-Anthony-Giddens/dp/074565293X>
- Hollified M., Katon W., Spain D., & Pule L. (1990). Anxiety and depression in a village in Lesotho, Africa: a comparison with the United States. *British journal of psychiatry* 156: 343-350.
- Kaisr, Henry F. (1974). An index of factorial Simplicity. *Psychometrika* 39: 31-36
- Kinderman P., Schwannauer, M., Pontin E., & Tai S. (2011). The development and validation of a general measure of wellbeing: the BBC well-being scale. *Quality of Life Research* 20. doi: 10.1007/s11136-010-9841-z
- Kummar. (1992). Sexual Anxiety Scale. In Paul, Arun. 2014. "Pre-Marital Sexual Anxiety among Adolescents." *European Academic Research* 2: 5499-5510. https://www.researchgate.net/publication/286922460_Pre-Marital_Sexual_Anxiety_among_Adolescents
- Nganga, R. & Wasanga, C. (2010). Assessment of the existing premarital counseling programs offered in selected PCEA churches in Kiambu district. Paper presented during the eleventh KAPC counseling conference. http://www.kapc.or.ke/downloads/nganga_pre_marital.pdf
- Niaz U., Hassan S., Hussain H., & Siddiqui, S. (2004). A cross-sectional study of the frequency of psychiatric morbidity in affluent urban population of Karachi. *PakistanJournal of Medical Sciences* 20:337-344.
- Nunnally, Jum C. (1978). *Psychometric theory*. NY: McGraw-Hill.
- Orley, John., & Wing, John K. (1997). Psychiatric disorders in two African villages. *Archives of general psychiatry*367: 513-520
- Rahmani, A., Merghati-Khoei, E., Moghadam-Banaem, L., Hajizadeh, E., Hamdieh, M., & Montazeri, A (2014). Development and psychometric evaluation of the Premarital Sexual Behavior Assessment Scale for Young Women (PSAS-YW): an exploratory mixed method study. *Reproductive Health*. doi: 10.1186/1742-4755-11-43.
- Reiss,Ira L. (1964). The Scaling of Premarital Sexual Permissiveness." *Journal ofMarriage and Family* 26: 188-198.doi:10.2307/349726
- Shibili, N., Gul, A., Aftab, S., Shbbir, S., Nasir, R., Shehzadi, S., Yousaf, S. & Mehmood, I. (2015). Pre and Post Marriage Differences in Anxiety Level among Male/Females Belonging to

- Various Income/Class Groups. *International Journal of Scientific and Research Publications* 5: 1-2. <http://www.ijsrp.org/research-paper-0115.php?rp=P373533>
- Taylor, J. A. (1953). A personality scale of manifest anxiety. *The Journal of Abnormal and Social Psychology* 48: 285-290. <http://dx.doi.org/10.1037/h0056264>
- Zimmer, T. (1986). Premarital Anxieties. *Journal of personal and social relationship* 3:149-159. doi: 10.1177/0265407586032002