

ASSESSMENT OF PERCEIVED PSYCHO-SOCIAL HEALTH IN EMIGRANTS' WIVES: PRELIMINARY FINDINGS

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ABSTRACT

This study is an attempt to identify and develop a scale that would assess Perceived Psycho-social issues in the wives of emigrants. For this purpose, 20 wives of emigrants were interviewed to extract a list of items related to their psycho-social health issues in the absence of husbands. A list of (23 items) was administered to 150 emigrants' wives. Principal Component Factor Analysis revealed three factors named Somatic, Low Mood and Social Isolation. The scale revealed adequate psychometric properties and suggested that wives living without husbands are prone to these three psycho-social health problems in our culture. The use of Perceived Psychosocial Health in the wives of emigrants (PPHWE) to identify and assess mental health of left- behind wives due to emigration of husband is proposed

Keywords: *Psycho-social, Emigrants wives, Assessment*

INTRODUCTION

Migration is a global phenomenon, deeply affecting the lives of 200 million migrants around the globe but also the lives of those connected to them, in particular those left behind in the countries of origin (International Organization of Migration, 2009). Pakistan is among the largest labor sending countries of Asia (Graham & Jordan, 2011). According to the figures released by the Ministry of Overseas Pakistanis and Human Resource Development a total of 2,765,789 citizens, have proceeded abroad for employment opportunities over the last five years. The earlier report stated that 5,873,539 Pakistanis have emigrated from 1981 to 2012, out of which a staggering 41,498 professional and technical workers left in 2012 alone (Siddiqi, 2013). It can be assumed that in coming years Pakistan is likely to experience a larger number of left-behind families due to the increasing number of cross-border migration/migrants. In collectivistic cultures, family is not considered to be complete without a male head (Carteret, 2011). In the absence of husbands, wives has to play dual role to maintain the equilibrium in the family which is emotionally draining and physically tiring (Morales, 2015), it may aggravates psycho-social health issues in the wives of emigrants.

In South Asia many researches has been done on the households of emigrants in Pakistan, India and Bangladesh but their scope is not primarily psychological in nature. These

researches are mainly done by social workers, sociologists and economists but not by psychologists (Ali, 2007; Asis, 2003; Brown, 2006; Cohen, 2011; Chan, Mercer, Wong, & Griffiths, 2009; Datta & Mishra, 2011; Ganguly, 2010; Moraes, 2015; Singh, Cabraal & Robertson, 2010; Wu & Ye, 2016). Sociologists and social workers have different framework to analyze the phenomena of emigration and its impact on the wives empowerment, mobility, autonomy and decision making. Psychological cost and consequences of husband emigration on left-behind wives is not the area of their interest. In Pakistan, Mansuri (2006) in rural Punjab examined the impact of parent migration on children's health and education. Mansuri pointed that the 'issue of migration' needs more research. In this research survey psychological consequence of migration on the left-behind family has also not been studied.

LITERATURE REVIEW

A very few authentic research has been found on the psychological cost migration bring about on the wives of emigrated husbands (Graham, Jordan & Yeoh, 2015; Lu, 2013; Wilkerson, Yamawaki & Downs, 2009; Yu, Qirong, Shengwei, Xiadong, Ling & Fen, 2016). These studies used the data collected five to six years back in China, India and Srilanka for some other researches with different objectives. The objectives of these studies were not the measurement of the specific psychosocial health problems of the stay behind wives of emigrants. Researchers used Self Report Questionnaires, Patient Health Questionnaire, Strength and Difficulty Questionnaire, General Health Questionnaire (GHQ-12,) Differential Loneliness Scale and Beck Depression Inventory to assess mental health of the wives of emigrants. Neither of the mentioned scale is specific for the psychosocial health in wives of emigrants nor have researchers established psychometric properties in different languages. Numerous developed a psychological symptom checklist for the wives of emigrants but did not mention the procedure of development and psychometric properties of the check list.

Many researchers (Graham, Jordan & Yeoh, 2015; Mansuri, 2009; Wilkerson, Yamawaki & Downs, 2009) suggested a need to explore the psychological cost of migration in the stay-behind wives of emigrants. The literature also implies a need of accurate estimate of the extent of the problems related to emigration and its impact on the wives living in Pakistan (Sahar & Gillani, 2014; Ahmad & Zainulaabdin, 1991). Early and timely identification of the problems enable researcher to take remedial steps. The cultural values and social background of an individual plays a vital role in shaping and developing human behavior. These values and social norms vary considerably from culture to culture (Ellis, & Carlson, 2009). So, the use of measures which are not culturally sensitive may provide a false picture about the problem but also mislead the preventative and intervention

measures (Stewart et al., 1999). Therefore, in order to have an accurate account of psychological consequences of migration, the scales should have cultural sensitivity.

Most of the researches on the issue of emigration and left-behind wives had employed qualitative methods like semi-structured and in-depth interviews (Datta & Mishra, 2011; Ganguly, 2010; Moraes, 2015). These researches have an intrinsic flaw that none of them clearly mentioned that which qualitative analysis has been done. Beside, researchers have not developed any measure/ scale on the basis of qualitative data. Given the high rate of emigration and the review of the literature revealed there is a dearth of research on psychological cost of migration on left behind families so, pioneering efforts deemed important. Therefore, the aim of the present study is to explore the experience and manifestation of perceived psycho-social health in the wives of emigrants. This study also aimed to develop perceived psycho-social health measure for assessing impact of husband emigration on wives' psycho-social health. This study was carried out in the following three phases.

MATERIAL AND METHOD

Phase I: Exploration of Phenomenology of Psycho-social Problems

Sample and Sampling. In order to explore the psycho-social problems associated with absence of husband, in- depth interviews were conducted. Snow ball sampling technique was used to approach wives of emigrants. Snow ball sampling is used when the probability of selecting a particular person in a population group is not known. It is also used when it is difficult to sample an entire population group (Gravetter & Forzano, 2003; Maree & Pietersen, 2007). A sample of 25 wives whose husbands were living abroad for minimum at least one year had been interviewed. The age range of the participants was from 22-55 years and educations ranged from illiterate to masters. 22 wives have children, one was on family way and two were issueless. 10 wives were living in peripheries of Gujrat and 15 were living in Lahore, Pakistan. Wives were living in joint family system in the peripheries of Gujrat. 6 wives were living in nuclear family system in Lahore and 9 were living in a joint family system. All the husbands were living in Arab countries for earning purposes. Marital duration ranged from 1 year to 36 years.

Procedure: In-depth interviews were taken and audiotaped. All the participants were briefed on the aims and objectives of the current research. They were asked for informed consent. They were assured of the confidentiality and anonymity. It was being told that the information taken from them will be only used for research purposes. All the participants were given the right to withdraw any time during the interview if they feel insecure and

uncomfortable. The main inquiry question in the phase I (exploration of phenomenology) was “What changes come into your life after your husband has been emigrated?” researcher did not intervene while wives were expressing and manifesting their psychosocial health problems. All the interviews were conducted in Urdu or Punjabi depending on the language of the interviewee. The researcher asked supplementary questions when need to probe or clarify some information so that enough information would be extracted. All interviews were recorded and transcribed. The interviews took about 60- 75 minutes, followed by debriefing session and concluded by *thanks* at the end. Through these in-depth interviews, 43 items were initially extracted. A number of reading passes had been given to the initial list. All the items that were ambiguous, dubious, vague or overlapping to researcher and supervisor were merged or modified keeping close to their original connotations, context and inquiry question. In this way, a list of 31 items was collated.

Phase II: Empirical Validation

A list of 31 items was given to 4 clinical psychologists who have got experience to deal with psycho-social health of women living alone and to the four researchers (PhD’s who involved in postgraduate teaching and research). The experts were being instructed that following are some psycho-social issues observed in the wives of emigrants. Kindly examine each item carefully in the light of your experience and rate each item for their frequency of occurrence in the wives whose husbands are living abroad. They were asked to rate on a 4 point rating scale ranging from 0 = “not at all” to 4 = “very often”. Only those items that were rated 4 by the experts were retained, others were discarded leaving a total of 23 items for further psychometric manipulation.

Pilot Study: Participants and procedure: This list of 23 items was transformed into 4 point self-report rating scale. A Likert scale of 0 to 3 was used for the purpose of rating and scoring. 0 is being “*not at all*” and 3 being “*very much*”. A pilot study was carried out on 25 wives of emigrants to analyze item difficulty and comprehension of the items. Snow ball sampling technique was used to collect data from participants. No ambiguity was found in understanding instructions and items. Therefore, the list was retained with all 23 items and was named as perceived psycho-social problems in the wives of emigrants (PPHWE).

Phase III: Main Study

Participants: Main study was carried out to determine the factor structure and psychometric properties of PPHWE. In this phase, a purposive sample of 150 wives of emigrants from Lahore, Gujrat and peripheries of Gujrat was taken by using Snow ball sampling technique. Snow ball sampling technique is the most suitable when locating

people of a specific population (MacBurney, 2001), e.g., emigrants wives. There were no lists or other obvious sources for locating wives of emigrants'. Researcher is a lecturer in a university of Gujrat (UOG). UOG is located among the peripheries of Gujrat, 14 kilometer away from the Gujrat City. Gujrat is the area where the emigration rate is very high. To collect data from the wives living in rural area, researcher talked to student of MPhil in psychology about the current research project and asks them to help her in identifying the wives of emigrants. Three volunteer students agreed to introduce me to the wives whose husbands were living abroad. Only those wives were interviewed whose husbands were living abroad from at least one year.

To obtain maximum data, researcher used snow ball sampling with wives to whom students introduced. In the end of each data collection session, researcher asked wife to refer another wife whose husband is emigrated from at least one year. In this way 75 (48%) wives were approached. For the wives living in urban area, Lahore is selected because researcher's native city is Lahore. Researcher approached two wives in family and three in neighborhood to initiate the data collection. The same procedure of snow ball sampling was repeated. 77 (51%) wives completed the data collection. The age of wives ranged from 20-55 years. 126 (83%) wives have children and 24(16%) were issueless. 59 (39%) wives lived in nuclear family system, 79 (52%) with in-laws and 11 (7%) with parents.

Measures

Demographic questionnaire: A detailed demographic questionnaire of 30 questions was developed in the light of literature and observations made in exploration phase. All questions were in the form of categories. Respondent had to tick the most relevant and true to her.

Perceived Psycho-social health in the wives of emigrants scale. The 22 item PPWE scale developed in phase I was used to collect data from emigrants' wives. It is a self-report measure with four point Likert scale ranging from 0(Not at all) – 3 (Very often). Depression Anxiety and Stress Scale (DASS, Urdu translated and adapted Aslam, 2007). DASS was used to establish concurrent validity for Perceived Psychosocial Problems in the Wives of Emigrants. It is a self -report scale comprised of 21 items on 4 point Likert scale ranging from 1 (Not at all) - 4 (very often). It has three sub-scales, each sub-scale contains 14 items. The alpha values for the scale were .72, .74 and .76for Depression, Anxiety and Stress, respectively (Aslam, 2007).

Procedure: Initially five wives on the basis of personal reference were contacted and at the end of the testing session they were requested to refer some other wives whose husbands are living abroad. Appointment per phone used to be made before going to fill the questionnaires. They were assured that all the information were collected for research

purpose and will be kept confidential. They were given the right to withdraw from testing at any time. All the participants were given research protocol comprised on demographic questionnaire, PPHWE scale and DASS. The average testing time was 30 minutes. At the end of each testing session, debriefing was done. After data collection, SPSS 20 was used for the analysis of data.

Statistics: A principal component analysis was done to establish the factorial structure of PPHWE in Statistical package for social sciences-version 20 (SPSS 20). A correlation analyses were used to analyze the interrelationships between three factors of PPHWE and total scores of PPHWE and DASS.

RESULTS OF THE STUDY

Factor Analysis

In order to identify the underlying factor structure of PPWE, principal component factor analysis with Varimax rotation was performed. Kaiser-Guttman's retention criterion of Eigen values (Kaiser, 1974) revealed six factors to be extracted whose Eigen value is greater than 1. Researcher carried out 6 factor solutions to find the best fit model. Factor loading criterion $> .30$ was employed but so many dubious items were found in the solution. So, in order to have least dubious and minimal cross loading items factor loading criterion $> .40$ was determined (Tabachnik & Fidell, 2001). The Kaiser-Meyer-Olkin (KMO) value was found to be .86 and Bartlett's test was significant ($p = .00$). Initial Cronbach alpha was .90. Kaiser criterion often suggested too many factors to be extracted. It is also important to look at scree plot provided by SPSS.

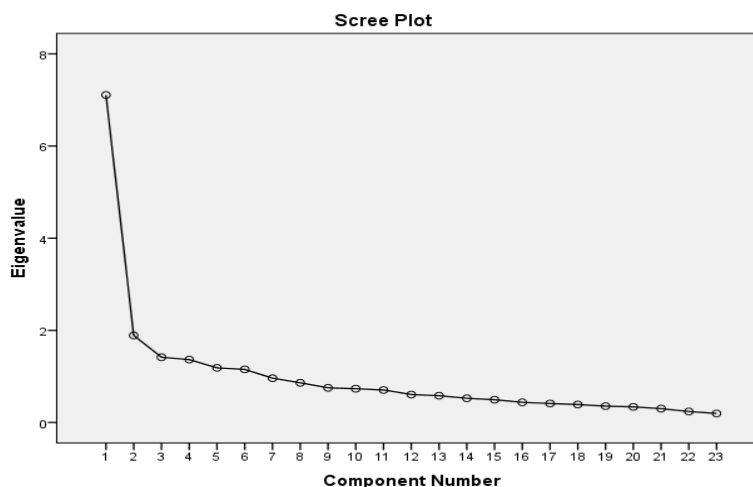


Figure 1. Scree plot showing extraction of factors of Perceived Psychosocial Problems in the Wives of Emigrants Scale.

The scree plot is showing Eigen values and number of factors that could be retained. The scree plot helped in determining the number of factors. Kaiser-Guttman's retention criterion of Eigen values (Kaiser, 1974) revealed six factors but as it is revealed in scree plot that there is a clear break between second and third factor. Factor 1, 2 and 3 explained much more of the variance than the remaining factors. Depending on the research context (Tabachnik & Fidell, 2001) three factors solution found to be the best fit model. By increasing the factor loading criterion to $> .40$ 'clean' result was found. Each of the items loaded strongly on only one factor, and each factor was represented by a number of strongly loading items. Three factors solution found to be the most optimal solution. Item 20 did not load on any of the three factors so eliminated from the list.

Table 1: The Factor Structure of PPWE with Varimax Rotation (N =150)

S.NO.	ITEM NO.	Somatic	Low mood	Social Isolation
1.	12	.76	-	-
2.	6	.69	-	-
3.	8	.67	-	-
4.	16	.61	-	-
5.	14	.60	-	-
6.	11	.52	-	-
7.	19	.52	-	-
8.	15	.48	-	.46
9.	20	-	-	-
10.	10	-	.73	-
11.	9	-	.73	-
12.	1	-	.71	-
13.	18	-	.50	-
14.	3	-	.49	-
15.	2	-	.48	-
16.	13	-	.47	-
17.	7	-	.46	-
18.	17	-	-	.78
19.	21	-	-	.72
20.	22	-	-	.64
21.	4	-	-	.47
22.	23	-	-	.46
23.	5	-	.41	.43
Eigen values		7.38	1.85	1.44
% of variance		32.10	8.06	6.27
Cumulative %		32.10	40.17	46.45

Note. The factor loadings $>.40$ have been bold faced

Seven items loaded on factor 1, eight items on factor 2 and six items on factor 3. Item 15 loaded on factor 1 and 3 both but it is related to factor 3 so retained there. Likewise, item

5 is loaded in both factor 2 and 3 but is retained in factor 2 because of its similarity with other items of factor 2. The descriptive labels assigned to each factor on the basis of commonality of theme emerged in respective factor. Factor 1 is Somatic, Factor 2 is Low mood and Factor 3 is Social isolation.

Factors Description

Researcher has assigned a label on the basis of commonality of themes after close examination of the items corresponding to each factor and the theme.

Factor 1: Somatic

The first factor of PPWE that emerged as a result of factor analysis is Somatic. This factor is comprised of 7 items and denotes to physical symptoms. Some of the items are feeling fatigue; having blood-pressure; headaches ; muscular weakness; loss of sexual desire; and so on.

Factor 2: Low mood

The second factor of PPWE is Low mood. It comprised of 9 items denotes to depressive symptomology. It does not seem to be clinical depression rather reactive in nature that is why it is named low mood. A few items of this factor are feeling irritable; feeling low; like to cry; feelings of sadness; feelings of incompleteness; mental stress; dependency on others and so on.

Factor 3: Social Isolation

The third factor of PPWE is Social isolation. This factor is comprised of 6 items denoted to social stress. Some of the items are fearfulness; feeling of insecurity; feeling of being widower; feelings of loneliness.

Table 2 Summary of Means, SD, Inter-Factor correl and Internal Consistency (N=150)

Factors	1	2	3	4	5
1.Somatic	-	-	-	-	-
2.Low Mood	.95***	-	-	-	-
3.Social Isolation	.60***	.60***	-	-	-
4.PPWET	.83***	.83***	.84***	-	-
5.DASST	.68***	.66***	.70***	.80***	-
M	21.85	21.85	13.63	56.54	42.52
SD	5.11	5.11	4.34	13.56	11.08
α	.81	.81	.75	.89	.89

Note. DF=149, *** $p < 0.01$. PPWET= Perceived Psycho-social Problems in Wives of Emigrants. DASST= Depression Anxiety and Stress Scale

Table 3 indicates that Somatic Factor has significant positive relationship with Low mood ($p < 0.01$) and Social isolation ($p < 0.01$). Similarly, Low mood factor has significant positive relationship with Social isolation ($p < 0.01$). It also showed strong internal consistency in factors established in the PPWE scale. It also showed significant positive relationship between PPWET and DASST.

Psychometric Properties of PPWE

In order to determine psychometric properties of PPWE construct validity, concurrent validity, test-retest validity and split-half reliability were computed.

Construct validity: Findings of Table 2 suggested that Total PPWE has highly significant positive correlation with all three factors of PPWE. The values of Cronbach's Alpha ranged from .75 - .89. It indicated that PPWE has high internal consistency.

Concurrent validity: Depression, anxiety and stress scale (DASS) was used to calculate the concurrent validity of PPWE. A significant positive correlation was found between PPWE and DASS $r = .80$ ($p < 0.01$).

DISCUSSION

The aim of the current study was to develop an indigenous measure to assess psycho-social problems in the wives of emigrants. Pakistan is among the largest labor sending countries and in the last one decade a huge amount of semi- skilled people has left Pakistan, mainly for earning purposes (IOM, 2009; Graham & Jordan, 2011; Siddiqi, 2013). In this context, there is a dearth to develop indigenous tools that can measure the psychological consequences of cross border migration on left-behind families. This is not a very well researched out area yet. Males from developing countries are more prone to leave the native land and work abroad to have good salaries and status. In Asia, Pakistan, India and Bangladesh are the largest labor sending countries. There is another face of the issue and that is in Collectivistic cultures like Pakistan male is considered to be the head of the family. In the absence of head, a wife has to play double role, it would be psychologically draining and physically laborious (Datta & Mishra, 2011; Ganguly, 2010; Moraes, 2015).

Managing household, taking care of children and in-laws with activities outside the house is not less than juggling. Analysis of the in-depth interviews revealed that wives living alone are on 24/7 duty with least appreciation from the in-laws and husbands rather they are blamed for children's rearing and education if it would not be on to the expectation of their husbands. It is also observed that wives of emigrants' have symptoms of depression which is consistent with (Graham et al., 2015) which suggested that stay- behind mothers are almost twice as likely to suffer from common mental disorders compared to non-migrant households. The Bio/physical-psycho-social model states that health and illnesses are determined by a dynamic interaction between biological, social and psychological factors (Engel, 1977). The first factor is Somatic that includes physical problems like headaches, having blood pressure, muscular pain, loss of sexual desires. The second factor is Low- mood; it is comprised of symptoms of anxiousness and depression like feeling blue, mental stress, irritability, worthlessness, crying etc. Social isolation is the third factor which contains items like feeling like widower, feeling of insecurity, fearfulness etc.

These three factors are mainly physical, psychological and social in nature. It is assumed that sense of loss, sense of grief, loss of intimate support with additional sense of responsibility transforms to somatic stress in emigrants' wives. It seemed to be a somatization of their psychological problems. It is also revealed that emigrants' wives have depressive symptomology. These findings are also in line with (Ali, 2007; Asis, 2003; Brown, 2006; Cohen, 2011; Chan et al., 2009; Datta & Mishra, 2011;; Ganguly, 2010; Moraes, 2015; Rahman, 2011; Singh, Cabraal & Robertson, 2010). Depression in wives are more reactive rather clinical in nature. It was also observed during the interviews that wives were not clinically depressed but absence of husband made them vulnerable to experience specific kind of mental stress. That is why it is called Low-mood. Absence of husband also leads wives to feel socially insecure, dependent and fearful and that may also aggravates stress in them (Datta & Mishra, 2011; Ganguly, 2010; Moraes, 2015).

CONCLUSION

The current research is a trailblazing work to address a largely neglected area (Graham, Jordan & Yeoh, 2015; Mansuri, 2009; Wilkerson, Yamawaki & Downs, 2009) of research by focusing on mental health of wives who stay behind in Pakistan to care for the children and family of overseas migrant husbands. It is concluded that bio-psycho-social and religious model is a holistic and comprehensive approach to cognize the impact of husband emigration on wives physical, psychological, social and religious aspects of life. PPHWE scale will help in identifying the psychosocial problems in emigrants' wives. Early and timely identification will also help in estimating the need for intervention and establishing the mental health services in community. Besides, PPHWE scale is a culturally sensitive measure that would be used in future research on psychological impact of emigration in Pakistan.

References

- Ahmed, S. H. & Zainulabdin, F. (1991). Dubai syndrome in Karachi. *Journal of Pakistan Medical Association*. 101 (41), 10-12.
- Ali, S. (2007). Go West Young Man': The Culture of Migration among Muslims in Hyderabad, India. *Journal of Ethnic and Migration Studies*, 33 (1), 37-58.
- Asis, M. B. (2003). When men and women migrate: Comparing gendered migration in Asia.
- Aslam, N. (2007). Psychological disorders and resilience in earthquake effected individuals. Unpublished MPhil dissertation, National Institute of Psychology, Quaid-e-Azam University, Islamabad, Pakistan
- Bernier, J. C., & Siegel, D. H. (1994). Attention deficit hyperactivity disorder: An ecological and family systems perspective. *Families in Society*, 75 (3), 142-151.

- Billler, H. B. (1970). Father absence and the personality development of the male child. *Developmental Psychology*, 2 (2), 181-201.
- Brown, S. S. (2006). Can remittances spur development? A critical survey. *International Studies Review*, 8 (1), 55-75.
- Carteret, M. (2011). Dimensions of culture: cross cultural communications of health care professionals.
- Chan, E.Y., Mercer, S.W., Yue, C., Wong, S., & Griffiths, S. M. (2009). Mental health of migrant children. *International journal of Mental Health*, 38 (3), 44-52.
- Cohen, J. H. (2011). Migration, remittances and household strategies. *The annual Review of Anthropology*, 40, 103- 114.
- Datta, A., & Mishra, S. (2011). Glimpses of women's lives in rural Bihar: *Impact Of Male Migration*. 54 (3), 457-477.
- Desai, S., & Banerji, S. (2008). Negotiated identities: Male migration and left-behind wives in *Journal of Population Research (Canberra)*. 25 (3), 337-355.
- Ellis, C. M., & Carlson, J. (2009). Cross cultural awareness and social justice in counseling. New York, NY: Routledge.
- Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, 196, 129-136.
- Ganguly, S. (2010). Does household structure matters in the lives of left behind women due to male out-migration in rural India: *Evidence from NHFS-3*.
- Gravetter, F. J., & Forzano, L. B. (2003). Research methods for behavioral sciences. Belmont, CA: Wadsworth/Thomson.
- Graham, E., & Jordan, L. P. (2011). Migrant parents and the psychological well-being of the left- behind children in Southeast Asia. *Journal of Marriage and Family*, 73(4), 763-787.
- Graham, E., Jordan, L.P., & Yeoh, B.A. (2015). Parental migration and the mental health of those who stay behind to care for children in South-East Asia. *Social Science & Medicine*, 132, 225-235.
- International Organization for Migration. (2009). Gender and labor migration in Asia.
- Jordan, L., & Graham, E. (2012). Resilience and well-being among children of migrant parents in South-East Asia. *Child Development*, 83 (5), 1672-1688.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36.
- Lu, Y. (2013). Household migration, social support, and psychosocial health: the perspective from migrant-sending area. *Social Science Medication*. 74 (2), 135-142.
- Maree, J. Pitsers, J. (2007b). Sampling. In K. Maree (Ed.), *first steps in research*. (pp.144-153). Pretoria, South Africa: Van Schaik.

- Mansuri, G. (2006). Migration, sex bias, and child growth in rural Pakistan: *Policy Research Working Paper Series 3946*.
- McBurney, D. H. (2001). *Research Methods*. (5thE.d).USA:Wadsworth/Thomas Learning.
- Moraes, S, S. (2015). Negotiating male migration: The Experiences of women in Goa. *The International Journal of Humanities and Social Studies*. 3 (1), 103-108.
- Rahman, M, M. (2011). Bangladeshi migrant workers in UAE: Gender- differentiated patterns of migrant experiences. *Middle Eastern Studies*, 47 (2), 395-411.
- Sahar, N., & Gillani, I, N. (2014). Loneliness and depression among wives of Pakistani expatriate husbands. *Journal of Identity and Migration Studies*.8 (2), 25-36.
- Siddiqi, K. (2013). Brain drain: *2.7m Pakistanis have exited country in last 5 years*.
- Singh, S., Cabraal, A., & Robertson, S. (2010). Remittances as a currency of care: A focus on 'twice migrants' among the Indian diaspora in Australia. *Journal of Comparative Family Studies*, (2), 245-263.
- Siriwardhana, C., Wickramage, K., Siribaddana, S., Jayasekara, B., Weerawarna, S., Pannala, G., Adikari, A., & Sumathipala, A. (2015). Common mental disorders among adult members of 'left -behind' international migrant worker families in Srilanka. *BMC Public Health*. 1-9.
- Stewart, S, M., Bond, M. H., Zaman, R. M., McBride-Chang, C., Rao, N., Ho, M. L., & Fielding, R. (1999). Functional parenting in Pakistan. *Internal Journal of Behavioral Development*, 23 (3), 747-770.
- Tabachnik, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. (4th Ed). New York: Harper Collins.
- Thomas, B., & Adhikarey, S. (2012). Male migration: Dynamics, issues and difficulties of left-behind families. *Asia pacific journal of social sciences*. 4(1), 109-130.
- Vogel, A., & Korinek, K. (2012). Passing by the girls? Remittance allocation for educational expenditures and social inequality in Nepals' households 2003-2004. *International Migration Review*, 46(1), 61-100.
- Wu, H, & Ye, J. (2016). Hollow lives: women left-behind in China. *Journal Of Agrarian Change*. 16(1), 50-69.
- Yu, J., Qirong, Q., Shengwei, Z., Xiadong, Y., Liang, L., & Fen, H. (2016). Depressive symptoms were prevalent among left-behind women in Man'anshan China. *Journal of Nervous mental Disorders*. 204 (3), 226-232.
- Zhao, X., Chen, J., Chen, M. C., Lv, X. L., Jiang, Y. H., & Sun, Y. H. (2014). Left-behind children in rural China experience higher levels of anxiety and poorer living conditions. *Acta Paediatrica*, 103 (6), 665-670.