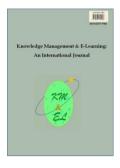
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# The impact of work-life connectivity on professional women: A case study of telecom industry

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# The impact of work-life connectivity on professional women: A case study of telecom industry

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Abstract: The purpose of this research was to test work life border theory against job/life satisfaction. The impact of work-life connectivity on professional women working in telecom industry was checked. This quantitative research was conducted by collecting secondary data gathered through world recognized questionnaires. A sample size of 285 respondents was collected through Qualtrics and self-administered questionnaires. This sample was adequate as using Power and Precision software a minimum sample of 175 was computed. Cluster sampling technique in combination with stratified sampling was used to collect data from women in Telecom Industry from major cities of Pakistan. Data collected was analyzed in SPSS and SEM was run on AMOS. Pearson r correlation and regression tests were run to study the effect of the understudy variables. The study found that both types of connectivity, work- to- family and family- to-work directly influence job and family satisfaction of women. The results suggest that family-friendly policies and organizational support can bring substantial benefits to women workers and the organization as a whole.

**Keywords:** Work-life connectivity; Border permeability; Flexibility; Spillover; Job/life satisfaction

**Biographical notes**: Zahida Latif is a doctoral candidate of Faculty of Engineering Management, CASE. Her research interests include work-family conflict, work and home connectivity and family/job satisfaction. She has completed all of the requirements for the doctoral degree.

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#### 1. Introduction

During the past few decades, boundary management issues between work and family to achieve job/family satisfaction and work/family balance (WFB) of the employees both in public and private sector have received intensive research (Greenhaus & Allen 2011; Edwards & Rothbard, 2000; Greenhaus & Beutell, 1985; Butts, Becker, & Boswell, 2015). Clark (2000) deliberated upon the balance between work and life borders and gave work/family border theory explaining its two major dimensions, permeability and flexibility. The work and home boundaries are no more clearly defined due the agile and flex timings. It is possible to connect to work from anywhere any time (Orlikowski, 2007). It has been reported that managers in Canada, US and UK work longer hours and have experienced a sense of working high speed all the time. This aspect is emerging as a widely spreading concept all over the world both for the developing and developed countries (Osman, Talib, Sanusi, Tan, & Alwi, 2012; Aker & Mbiti, 2010; Dén-Nagy, 2014; Pitichat, 2013). In developed countries several policies and procedures have been finalized to avoid the burden of work after the work hours but in developing countries non-existence of rules and procedures have aggravated the situation for the professionals. Despite clear demarcation of the terms by Clark (2002a) there is still a great deal of work required, especially in developing countries to investigate and propose solution to these problems. Work/family balance or work-life balance (WLB) is a subtle ideal situation to achieve. Interruption in work and home caused by using technology such as cell phones either at work or remotely reduces the work-life balance (Hislop, 2008; Rennecker & Godwin, 2005; Azad, Salamoun, Greenhill, & Wood-Harper, 2016), but Middleton (2008) found an increase productivity at work using information and communication (ICT) devices. The concept of work linked to technology as "anytime and anywhere" has caused work/life effectiveness (WLE) by alternative and flexible work schedules, a positive feeling for total life management increase productivity at work (Facer & Wadsworth, 2008). Various types of relationships have been reported between work and home boundaries and internet and ICTs and their impact on the executive level employees (Chesley, 2010; Derks, van Duin, Tims, & Bakker, 2015; Derks, Bakker, Peters, & van Wingerden, 2016; Tennakoon, 2007). Literature found mostly on the impact of connectivity behaviours using ordinary mobile phones, email, laptops and smartphones show that their persistent usage causes the disturbance in work and life patterns (Chesley, 2005; Schweitzer & Duxbury, 2006).

Telecom Sector in Pakistan have grown manifolds. In the last decade, the fundamental transformations in industry from highly rigorous-labor to high-technology have made this industry highly competitive. Increased participation of women workforce chains up with changes in the family structures. Work-life balance is a means to create and maintain supportive work environments to retain the employees for achieving

productivity and loyalty in organizations (Lowe, 2005; Ďuranová & Ohly, 2016a; 2016b). The growing number of educated women in Pakistan has led to increased participation of female work force in urban industrial sector in all segments. As compared to females working in other parts of the world, women in Pakistan face many difficulties both at work and at home (Malik, Saleem, & Ahmad, 2010). In Pakistan women managers are more affected by work-family conflict with impacts on job and family satisfaction and career advancements than men due to unequal distribution of domestic responsibilities (Maqsood, Bushra, Zia, & Cheema, 2005). As women plan to enhance their career in addition to their traditional role of homemaker, they face inter-role conflict and pressure to balance personal and professional lives. However, a sense of empowerment from work is also reflected in women at executive level in Pakistan as industry has shown growth from the last decade and a large female work force has joined it.

The research was conducted with intent to find the problems and challenges faced by women working at executive levels in the telecom industry of Pakistan in achieving work and family satisfaction and struggling to balance their work and families in demanding careers where connectivity to work is mandatory.

#### 2. Back ground

Since the last three decades, most developed and developing countries have experienced changes in demographics and family dynamics due to societal and financial conditions. These prevailing conditions have changed the family dynamics by increasing dual earning families with a large number of females entering the workforce, which eventually resulted in defining two roles for women, one at home and other at work place. Managing the both requires time and energy and often results in stress and work/family conflict (Joplin, Francesco, Shaffer, & Lau, 2003; Frizzell, 2015; Jin, Ford, & Chen, 2013; Kanji & Cahusac, 2015; Kossek, Hammer, Kelly, & Moen, 2014). Different impacts of dual roles regarding women impact in a different manner according to the culture both in developed and developing countries. The "double duty" faced by women often result in an imbalance between work and family of women. The demanding professional careers makes it mandatory for employees to work long hours which in turn have negative impacts on work and family lives (Chesley, 2005; Parasuraman & Simmers, 2001). Bailyn, Drago, and Kochran (2001) strongly supported that organizations must take measures to allow the working families to integrate the domains of work and home. The phenomena of blurred borders between work and home by constant accessibility due to ICTs has also been recognized as a result of too much integration of the two spheres (Chesley, Moen, & Shore, 2003; Galinsky & Kim, 2000). Clark (2000) and Ashforth, Kreiner, and Fugate (2000), gave work border theory and boundary theory which also address the nature, the way and possible consequences of border/boundary formation, crossing of these borders and conservation of these borders. Those borders which are associated with separate roles tend to be more precise and clear whereas when roles across these boundaries tend to be similar or same then it becomes difficult to transit from one role to another causing the blurring. Boundary blurring between work and family is the "experience of confusion or difficulty in distinguishing one's work from his/her family roles in a given setting in which these roles are seen as highly integrated, such as doing paid work at home" (Desrochers, Hilton, & Larwood, 2002).

Problems are being faced throughout the world both in developed and developing countries to balance work and family (McManus, Korabik, Rosin, & Kelloway, 2002). Change in roles for both men and women rises serious concerns for child and older age

care setup especially in countries like Pakistan where role for maintaining home and social relationships with family are primary duty of almost every woman whether from any economic background or class. Women who are employed feel more difficulties in managing their time and work/family balance than their respective male counter parts (Gutek, Searle, & Klepa, 1991). According to Hochschild (1997), the "second-shift" errands of women are a major source of stress and conflict for working women.

It is generally perceived by women that in Pakistan men expects a woman to be a good wife and a good mother, reflecting a typical stereotypical culture and expectations. The current global job sector trends demand individuals to work longer hours, being in touch with work place all the time less control over schedules give rise to job stress and conflict (Burke, 2001), these trends are also followed in Pakistan with cultural constraints thus adding to further burden for women. In Western countries people generally keep work and family relationships separate but in Asia and in Pakistan specifically people merge the two domains. These factors impact on the professional career advancement for female in managerial and technical forms. Moreover the high representation of men as compared to women on these job levels and less training opportunities for women reflect the situation faced by women. In a survey undertaken by PASHA in 2012, women generally feel more strained by work, inadequate benefits and discernment in promotion. The general perception about women to be more involved in family commitments adds to unequal promotion chances for them (Tzeng, 2006).

#### 2.1. Work-border theory

Clark (2000) called both flexibility and permeability as blending while Ashforth, Kreiner, and Fugate (2000), called as integrated and Nippert-Eng (1996) proposed this blurring between work and family to be greater in integration of domains. Contrary to this argument, segmentation of boundaries makes them "thicker", which means separate behaviours, roles schedules and behaviours in both domains and hence crossing over between borders/boundaries becomes difficult (Nippert-Eng, 1996). Desrochers, Hilton, and Larwood (2002) and Nippert-Eng (1996) argued that working at the same place as working at home in different forms of work such as telecommuting can lead to the blurring of boundaries between work and family and lead to the reduction of work family conflict in time perspective but equally give a chance to create work family conflict in other aspects.

#### 2.2. Theoretical framework

Based on the literature review conducted and the gap identified in the BOK, theoretical framework of this research was finalized. As elaborated with the help of schematic diagram as shown in Fig. 1, independent variables of this research work include work and home connectivity. It was hypothesized that work and home connectivity impact work and home border strengths (Flexibility & Permeability). The framework opts to understand why some individuals perceive work and home as two separate worlds, while others see the two domains as more fluid, overlapping realities. It does so by focusing on the boundaries that divide the two domains, the ease and frequency of crossing boundaries (Ashforth, Kreiner, & Fugate, 2000), and the meanings individuals assign to work and home (Nippert-Eng, 1996; Pitichat, 2013; Stock, Bauer, & Bieling, 2014). Central to Boundary Theory is the argument that the 'strength' of the boundaries between work and home is an indicator for the extent of integration of the two domains, and the ease of crossing over. The theory distinguishes two boundary characteristics that generate the strength of the boundaries: flexibility and permeability.

Detailed definitions of the terminologies used and their relationships are given below in the paragraphs with headings of the variable names. Work connectivity and home connectivity were independent variables in this study and their impact was tested on flexibility and permeability, where depended variables in the beginning. Then moderating impact of boundary preferences was tested between work and home connectivity and flexibility and permeability. Than flexibility and permeability were taken as independent variables and their impact was tested in job/life satisfaction, which were dependent variable. Than impact of positive spillovers was tested as moderation between flexibility/permeability and job/life satisfaction.

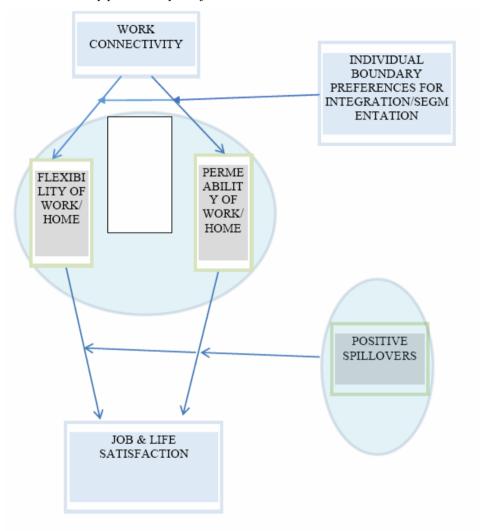


Fig. 1. Schematic diagram of theoretical framework

#### 2.3. Flexibility

"Flexibility is the degree to which spatial and temporal boundaries are pliant to the needs of the domains" (Hall & Richter, 1988; Ashforth, Kreiner, & Fugate, 2000). Employees who have the opportunity of flexitime are often given a time range in which they can start and end their workday. For many individuals flexitime is a highly valued work characteristic (Clark, 2002b), and previous studies have pointed out several benefits of flexitime. For instance, earlier research found that flexitime has a positive influence on the ability to fulfil both work and home responsibilities (Ralston, 1989), and on time spent with family members (Winnett, Neale, & Williams, 1982). In a study by Grzywacz, Carlson, and Shulkin (2008) on different companies ranging from manufacturing to a university revealed more job satisfaction and less burnout on employees who used flexible work arrangements. Schedule flexibility has positive affect on lower work/family conflict for women enabling them to play a better role both at work and at home (Carlson, Grzywacz, & Kacmar, 2010). Employees who use flexible work schedules achieve work/life balance than their colleagues who work in traditional fixed hour jobs (Hayman, 2010). The perceived usability and availability of these work schedules appears to be a key element in achieving work/life balance for many office-based employees (Hayman, 2010).

#### 2.4. Permeability

"Permeability is the degree to which a person physically located in one domain (i.e. the home domain) allows psychological and behavioural elements from another domain (i.e. the work domain) to enter" (Hall & Richter, 1988; Ashforth, Kreiner, & Fugate, 2000). Permeability and permeable boundaries may be desired by some, and undesired by others. Kossek and Ozeki (1999) propose that those without extended family or child minding facilities, such as single parents, single children and dual households, will more likely prefer integration of work and home. Desrochers and Sargent (2004) found that those persons with integrated boundaries tend to make their home and work boundaries segmented. Cell phone technology to stay connected has made employees to remain available all the times (Mulvaney, O'Neill, Cleveland, & Crouter, 2007). In a study on the connectivity causing permeability, it was found that permeability is a potential predictor of negative spillovers of work to home (Mustafa & Gold, 2013).

#### 2.5. Boundary preferences

Work has many forms and types depending upon the nature of organization, its policies and its technological advancement. Work to family facilitation is found higher in jobs with autonomy and resources (Grzywacz & Butler, 2005). Since the present study focuses on the connectivity during work and non- work hours in relation to work/life boundaries and impacts on job/ life satisfaction, therefore, the preferences for integration or segmentation of these boundaries would be considered in accordance with the work characteristics that represent constant connectivity throughout the working and non-working hours. Integration and segmentation are two faces of the work life balancing strategy that are usually used interchangeably by the individuals. People may opt for integration in one setup and segmentation in another, for example, those individuals who do not have family responsibilities such as child bearing or spouse or elder care would prefer to have integrated setup for home and work (Kossek & Ozeki, 1999), Those individuals who opt for an integrated setup of both work and home domains allow the distractions from both work and home to interrupt in their work or family life (Kossek &

Ozeki, 1999). The permeability and flexibility in integrated approach is influenced by the preference for integration or segmentation.

#### 2.6. Job/Family preferences

"Job/family satisfaction is the extent to which employees are satisfied or dissatisfied with their jobs/family lives" (Spector, 1986). According to Lawler and Hall (1970) "Satisfaction proved to be related to such job characteristics as the amount of control the job allowed the holder and the degree to which it is seen to be relevant to the holder's valued abilities. Satisfaction was not related to either self-rated effort or performance". The correlations between high flexibility, low permeability, and low work–family conflict depend upon people choosing the balancing mechanisms between work and life (Rau & Hyland, 2002; Köffer, Anlauf, Ortbach, & Niehaves, 2015; McBride & Bergen, 2015; Methot & LePine, 2016; Ninaus, Diehl, Terlutter, Chan, & Huang, 2015).

# 2.7. Positive spillovers

Quality of life has positive relation to positive spillovers (Grzywacz, Almeida, & McDonald, 2002). Moreover, spillover effects of work to home tend to greater in male whereas spillover effects of home to work tend to be greater in females (Pleck, 1977). Positive spillovers from work was the only used facet scale and has three dimensions; effective positive spillovers, behavioural based instrumental positive spillovers, value based instrumental positive spillovers. The hypotheses of the study are given as under.

#### 2.8. Hypotheses

**Hypothesis 1a**: Work connectivity is positively related with flexibility.

**Hypothesis 1b**: Work connectivity is positively related with permeability.

**Hypothesis 2a**: Home connectivity is positively related with flexibility.

**Hypothesis 2b**: Home connectivity is positively related with permeability.

**Hypothesis 3**: Work connectivity is negatively related with work/family border strength.

**Hypothesis 4**: Home connectivity is negatively related with work/family border strength.

**Hypothesis 5a**: Boundary preferences moderate relationship b/w work connectivity and flexibility.

**Hypothesis 5b**: Boundary preferences moderate relationship b/w work connectivity and permeability.

**Hypothesis 6a**: Boundary preferences moderate relationship b/w home connectivity and flexibility.

**Hypothesis 6b**: Boundary preferences moderate relationship b/w home connectivity and permeability.

**Hypothesis 7**: Strong work/family boundary is positively related with job and life satisfaction.

**Hypothesis 8**: Weak work/family boundary is negatively related with job and life satisfaction.

#### 3. Research methodology

In this research quantitative research methodology was used. Close ended questions were asked on 5 point Likert scale for all the understudy variables. Questionnaires used to measure the variables are extracted from published work as described in detail in the literature review section. This explanatory study was conducted to understand and explain the extent of relationship between work-family border strengths and job/life satisfaction. This study also explored the relationship of work connectivity on work/family border strength. The influence of boundary preference for segmentation or integration were also studied on work-family border strengths.

#### 3.1. Respondents

The population selected for conducting this research was working women of Pakistan in telecom industry, so there were no male respondents in this research. Sample was selected out of this population for research analysis. All of the working women selected in the sample were on executive levels, so this research was concentrated on white collar female workers only. Women in this industry generally have a minimum of Bachelor's level education so all are well conversant with English language. Considering this aspect the questionnaires used were not translated and were used in English language. Most clusters of the sample of these working women are in the age bracket of 20 to 40 years.

#### 3.2. Sample size

Sample size has been determined using Power and Precision software. Borenstein, Rothstein, and Cohen (2001) introduced one-sample correlation procedure, which has been used. In this software 5% statistical level of significance was set for computation. The value of correlation coefficient was taken from previous studies (Borenstein, Rothstein, & Cohen, 2001). The value of correlation ranges from 0.12 and 0.17 (Leung, 2011), hence, the value of 0.15 has been selected. Sample size of 175 was determined with a precision of 95% level of confidence. Power and Precision report is attached in annexure. Total of 350 questionnaires were administered and 280 were received making it a response rate of 80.2%. High response rate can be attributed to use of latest technology for data collection.. Out of these only 217 were found usable.

#### 3.3. Sampling technique and data collection procedure

Cluster sampling in combination with stratified random sampling was used. The combination provided full randomization and biasing in the sample was avoided. Combination of techniques were used for data collection. One of the major method of data collection was through Qualtrics, a web based data collection software. Apart from using web based technique of data collection, methodology of self-administered questionnaires was also used.

#### 3.4. Measures used

Work connectivity for Smart phones, laptops and latest gadgetries was measured by items adopted from Richardson and Benbunan-Fich (2011). Five point Likert scale was used to measure the responses for all the measure. The items are given in the questionnaire in the appendices. Individual boundary preferences for integration or segmentation were measured using 4-Item measure adopted from Kreiner (2001). Permeability of both the domains was measured separately, with six items from Clark (2002b). Both the domains of work and home were measured separately for flexibility using four items from Clark (2002b). Positive spillovers from work to family and from family to work were measured using a 22- item scale which measures positive spillovers from both work and home developed by Hanson, Hammer, and Colton (2006). Job and family satisfaction was measured using five item measures adopted from Smilkstein, Ashworth, and Montano (1982).

#### 3.5. Data analysis

For data analysis IBM SPSS (ver. 22) and AMOS (ver. 20) was used. After constructing the variable view firstly it was checked if the data is valid and no wrong entry has been made as per the predefined loaded rules. Then all variables were computed using mean command. After that Psychometric properties of the data were computed. Firstly, Cronbach's alpha was computed. After confirming the reliability of the data factor loadings were tested in SPSS. Firstly, Exploratory Factor Analysis was conducted and then Confirmatory Factory Analysis was conducted in AMOS. Principle Component Analysis (PCA) with Varimax rotation was also done in SPSS. Confirmatory Factor Analysis (CFA) was done to ensure that no dual loadings are resulting in the data analysis. Structural equation Modeling was run on AMOS to check the model fit. To conduct the bivariate analysis Pearson's r correlation were run to measure the magnitude of the relationship between the variables, as all our variables will become continuous after computing and as per Bryman and Bell (2011), Pearson's r correlation was run between continuous variables. Statistically significant results proved the existence of relationship between the understudy variables. As per the results obtained regression tests were run to reject or accept the research hypotheses. Firstly, simple linear regression tests were run between the IV's and DV's. Multiple regressions were also be run as we have four IV's impacting the work/life boundary strengths. Similarly, multiple regressions were run between flexibility and permeability and job/life satisfaction for both work and home domains.

After determining the regression impacts, moderation effect of demographics and spillover between work/family border strengths and job/life satisfaction were tested. Baron and Kenny (1986) model of moderation and mediation were used for testing moderation effects.

#### 4. Results

#### 4.1. Psychometric properties

This research proposed Work Connectivity Model. Complete model was checked and tested. Firstly the psychometric properties of the variables were tested. In order to check reliability and validity of the data collected in this study, tests were run in SPSS for

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reliability and exploratory factor analysis for the proposed model. Than CFA was conducted in AMOS. For reliability of the data the Cronbach alpha values of all items of individual factors should be greater than 0.7 (Cronbach, 1951) and Composite reliabilities of all items of individual constructs should be greater than 0.8 (Kline, 2011). Results are shown in Table 2 for work connectivity model. To check the validity of the collected data this study followed four step approach of Fornell and Larcker (1981), in which validity of the data is confirmed after assessing four type of validity which include face validity, convergent validity, discriminant validity and nomological validity. Factor loadings are shown in Table 1. Convergent validity means whether all items are explaining variance to their relevant factor, to check the convergent validity of the collected data, the values of Composite Reliabilities (CR) should be greater than 0.8, Average Variance Extracted (AVE) should be greater than 0.5 and factor loadings of the relevant factor's construct should be greater than 0.7 (Fornell & Larcker, 1981). As well discriminant validity means all indicators are representing with their relevant concept, have no engagement with other concepts. To check discriminant validity of the collected data, the square root of AVE of the factors should be greater than correlations of the selected factor with all other variables.

**Table 1**Work connectivity model - Factor loadings

Variables	No. of Items	Factor Loadings
Positive Spillovers – Home (PSH)	11	0.797, 0.769, 0.659, 0.691, 0.706, 0.712, 0.682, 0.719, 0.648, 0.68, 0.723
Home Connectivity (HC)	7	0.753, 0.791, 0.764, 0.725, 0.678, 0.678, 0.616
Permeability – Work (PW)	6	0.752, 0.789, 0.615, 0.695, 0.794, 0.784
Family Home Satisfaction (FHS)	4	0.904, 0.753, 0.729, 0.663
Job Satisfaction (JS)	4	0.794, 0.704, 0.830, 0.782
Flexibility – Work (FW)	4	0.835, 0.761, 0.678, 0.606
Boundary Preference – Work (BPW)	4	0.832, 0.822, 0.721, 0.689

**Table 2**Work connectivity model - Psychometric properties

	CR	AVE	FW	PSH	НС	PW	FHS	JS	BPW
FW	0.814	0.526	0.725						
PSH	0.917	0.503	0.295**	0.709					
HC	0.881	0.514	0.361**	0.138*	0.717				
PW	0.851	0.536	0.237**	0.239**	0.361**	0.732			
FHS	0.850	0.589	-0.304**	-0.302**	-0.072	-0.245**	0.767		
JS	0.860	0.607	-0.327**	-0.262**	-0.334**	-0.304**	0.482**	0.779	
BPW	0.851	0.591	0.028	0.198**	0.111	0.045	-0.162**	-0.225*	0.769

Note: a) \*\*. Correlation is significant at the 0.01 level (1-tailed);

b) \*. Correlation is significant at the 0.05 level (1-tailed).

#### 4.2. Structural equational modeling (SEM) and path analysis

Structural Equation Modeling (SEM) technique was used by this study to analyze the hypothesized relationships. With reference to Kline (2011), in SEM researchers can test more than one dependent variables in the presence of different mediating and moderating variables. Several past studies recommended the researchers they should use SEM to test relationships in the behaviour sciences field (Bilal, Hashmi, & Fiaz, 2015; Gefen, Straub, & Boudreau, 2000). To perform SEM, this study used IBM Amos 22 to analyze the proposed relationships. This study also used IBM SPSS 22 to perform univariate and bivariate analysis to check out descriptive statistics for analyzing the collected data normality and reliability issues. This study followed two step Anderson and Gerbing's (1988) approach to perform SEM. In this approach in first step Confirmatory Factor Analysis (CFA) was performed to check the constructs convergent validity and discriminant validity by measuring model in Amos, in which all constructs were allowed to covariate with each other openly. Firstly CFA was performed on the items of Work Connectivity Model in Amos by drawing all the unobserved variables with their relevant indicators which were having errors terms as per rule (Kline, 2011). Then all unobserved variables co-varied for the assessment of model's items reliability and validity. As values were good so error terms were not deleted. After successfully computing results, firstly model fit indices was checked to check the model fit. Kline (2011) proposed on the base of previous research standards for fitness of model values that are, Normed Chi-square should be less than 3, Adjusted goodness of fit index (AGFI) > .80, Goodness of Fit Index (GFI) > 0.80, Tucker Lewis Index (TLI) > 0.90, Comparative fit Index (CFI) > .90, Root Mean Square Error of Approximation (RMSEA) < .05 and PCLOSE > .05. Study found that model fit indices of Work Connectivity Model was meeting the minimum fit criteria like Chi-square = 955.358, DF = 669, Normed Chi-square = 1.428, SRMR = .059, GFI = 0.829, AGFI = .800, TLI = 0.926, CFI = 0.933, RMSEA = 0.045 and value of PCLOSE = .925. Model fit indices were found to be in acceptable ranges as shown in Fig. 2. Than path analysis was conducted and all values were found in range as shown in Fig. 3. Table 1 shows the number of items and factors loadings of the collected data and Table 2 shows the psychometric properties of the collected data which includes CR, AVE, square root of AVE and correlation among all the factors which were proposed in the Work Connectivity Model. These table values confirmed that there was no reliability and validity issues and these calculated results meet the minimum aforementioned criteria of convergent, discriminant and nomological validity.

### 4.3. Regression tests and moderation check for work connectivity model

After analyzing the convergent and discriminant validity, hierarchical regression model technique has been used for multiple path analysis (Kline, 2011). Moderation can be checked through hierarchical regression model by generating interaction terms, so structural equation modelling (SEM) could not be used in this study where interaction terms would unable to be generated. To analyze the moderating impact of different variables, the approach of Baron and Kenny (1986) was followed. According to them, independent variable would be known as predictor, dependent variable would be labelled as outcome variable and the term moderator means "qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable" (Baron & Kenny, 1986). Hierarchical regression model is comprised of three step, so it is also known as "three-step hierarchical regression analyses". In the first step the relationship among predictor and outcome variables was tested, and that relationship should be significant. In next step,

the relationship among predictor and outcome variables was evaluated in the presence of moderators. In the last step of hierarchical regression model, interaction terms were generated by multiplication of predictors and moderators so that relationship among interaction terms and outcome variables would be examined to detect the impact of moderation, and this relationship should be significant (Baron & Kenny, 1986). This study elucidate the moderating impact of work connectivity and home connectivity on relationship among predictors and outcome variables. At first the moderation of Work Connectivity Model was analyzed to know how it impacts relationship among predictors and outcome variables as shown in Table 3.

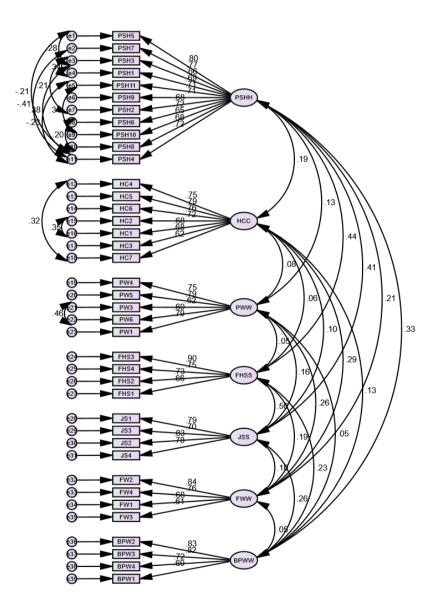


Fig. 2. Structural equational modeling work connectivity model

**Table 3** Regression weights – Work connectivity

Relationships	Unstandardized β	Standardized β	S.E.	C.R.	P
Model 1					
$HC \rightarrow PW$	.290	.361	.051	5.681	***
$HC \rightarrow FW$	.302	.317	.064	4.699	***
$PW \to JS$	196	184	.070	-2.786	**
$\text{FW} \to \text{JS}$	193	215	.059	-3.252	**
$PW \rightarrow FHS$	140	134	.066	-2.128	*
$FW \rightarrow FHS$	175	198	.056	-3.130	**
Model 2					
$HC \rightarrow PW$	.271	.337	.051	5.351	***
$\mathrm{BPW} \to \mathrm{PW}$	036	031	.073	493	ns
$HC \rightarrow FW$	.294	.309	.062	4.706	***
$\mathrm{BPW} \to \mathrm{FW}$	080	059	.084	945	ns
$PW \rightarrow JS$	173	163	.069	-2.488	*
$\mathrm{FW} \to \mathrm{JS}$	170	189	.060	-2.851	**
$PSH \rightarrow JS$	122	110	.072	-1.697	t
$PW \rightarrow FHS$	116	112	.066	-1.775	+
$FW \rightarrow FHS$	146	166	.056	-2.597	**
$PSH \rightarrow FHS$	155	142	.066	-2.331	*
Model 3					
$HC \rightarrow PW$	.190	.236	.063	2.997	**
$BPW \rightarrow PW$	.110	.096	.050	2.182	*
$HC_x_BPW \rightarrow PW$	046	258	.017	-2.738	**
$HC \rightarrow FW$	.103	.108	.080	1.283	ns
$BPW \rightarrow FW$	.071	.053	.064	1.110	ns
$HC_x_BPW \to FW$	031	146	.021	-1.448	ns
$PW \rightarrow JS$	-1.143	-1.073	.311	-3.673	***
$FW \rightarrow JS$	182	202	.247	735	ns
$PSH \rightarrow JS$	953	854	.331	-2.879	**
$PSH_x_PW \rightarrow JS$	.260	1.326	.081	3.197	**
$PSH_x_FW \rightarrow JS$	001	004	.066	011	ns
$PW \rightarrow FHS$	357	343	.303	-1.181	ns
$FW \rightarrow FHS$	239	271	.235	-1.016	ns
$PSH \to FHS$	435	397	.320	-1.358	ns
$PSH_x_PW \rightarrow FHS$	.064	.332	.079	.812	ns
$PSH_x_FW \rightarrow FHS$	.024	.138	.063	.384	ns

Note: \*=p<0.05, \*\*=p<0.01, \*\*\*=p<0.001, =p<0.1, ns=p>0.1

As discussed above, the relationships among predictors and outcome variables were analyzed in first step. Model 1 indicated significant relationship among all predictors and outcome variables which fulfills the standard of (Baron & Kenny, 1986). It showed that relationship of HC with both PW and FW had positive association at 99.99% significance level. The relationships of PW, FW with JS were negatively significant at 99%. On the other hand the relationship of PW with FHS had negative association at 95% significance level. At last the relationship between FW and FHS was negatively significant at 99%.

In the next step, the relationship among predictors and outcome variables were examined in the presence of moderating variables i.e. BPW and PSH, shown in Model 2. Now the relationships were again analyzed in existence of moderators, to identify the extent of change in relationship among predictors and outcome variables. It revealed that relationship between predictors and outcome variables remained significant in model 2 but presence of moderators (BPW and PSH) slightly weakened their relationship, when values of unstandardized and standardized β were analyzed in Model 1 and Model 2. At last in final step of moderation analysis, interaction terms were developed by multiplication of predictors and moderators. This study established the interaction terms by multiplying HC with BPW and PW, FW with PSH as shown in Model 3. After generating interaction terms, their relationship had been analyzed with outcome variables (PW, FW and FHS). Model 3 assisted to identify that either the relationship of predictors and outcome variables is moderated by moderating variables or not. Moderation exist if the relationship among interactions terms and outcome variables showed significant association (Baron & Kenny, 1986). When the results of Model 3 were analyzed, it indicated the moderating impact of BPW on relationship between HC and PW as association of interaction terms and PW was significant at 99% (unstandardized  $\beta$ = -0.046, standardized  $\beta$ = -0.258 and p<0.01). This moderator negatively weakened the relationship among HC and PW contrary to values in Model 1. Then the moderating impact of BPW on relationship among HC and FW was considered which indicated no moderating impact of BPW, as Model 3 reveal that association of interaction terms and FW was non-significant (unstandardized  $\beta$ = -0.031, standardized  $\beta$ = -0.146 and p>0.1). It also showed that without moderator the direct relationship among predictor and outcome variable was also insignificant in Model 3. Furthermore it indicated moderating impact of PSH on relationship among PW and JS because it exposed significant relationship among interaction term and JS (unstandardized  $\beta$ = 0.260, standardized  $\beta$ = 1.326 and p<0.01). When these values were compared with Model 1, it showed that presence of moderator positively strengthen the relationship among PW and JS. Without moderating variable, the relationship between predictor and outcome variable was negative, but presence of PSH altered their relationship into positive as shown in Model 3. Model 1 indicated no moderating impact of PSH on relationship among FW and JS as the relationship among interaction term of FW and JS was insignificant (unstandardized  $\beta$ = -0.001, standardized  $\beta$ = -0.004 and p>0.1). In Model 1 the relationship among FW and JS was significant but existence of moderating variable made this relationship insignificant. Finally the moderating impact of PSH was analyzed on relationship of PW and FW with FHS. Model 3 indicated no moderating impact of PSH on relationship among PW and FHS as the relationship among interaction term of PW and FHS was insignificant (unstandardized  $\beta$ = 0.064, standardized  $\beta$ = -0.332 and p>0.1). The relationship among predictor and outcome variable was negatively significant in Model 1 but presence of PSH made this relationship insignificant as shown in Model 3. Model 3 also indicated no moderating impact of PSH on relationship among FW and FHS as the relationship among interaction term of FW and FHS was insignificant (unstandardized  $\beta$ = 0.024, standardized  $\beta$ = -0.138 and p>0.1). The relationship among FW and FHS was negatively

significant in Model 1 but presence of PSH made this relationship absolutely insignificant as shown in Model 3. To sum up the moderation of work connectivity, it can be said that only two moderations were found in work connectivity. First is the moderating impact of BPW on relationship among HC and PW. Second is the moderating impact of PSH on relationship among PW and JS. The path analysis is depicted in Fig. 3.

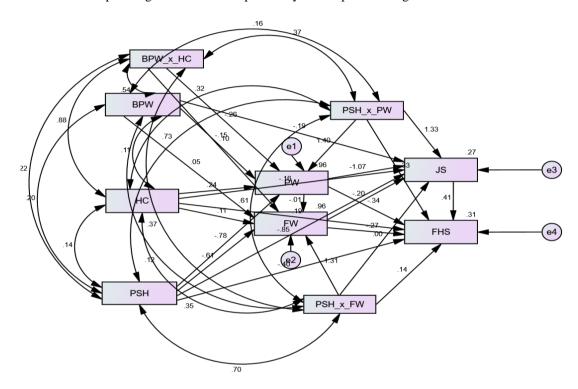


Fig. 3. Path analysis of work connectivity model

#### 4.4. Moderation test

It also showed that without moderator the direct relationship among predictor and outcome variable was also insignificant in Model 3. Furthermore it indicated no moderating impact of PSW on relationship among PH and JS because it exposed insignificant relationship among interaction term and JS (unstandardized  $\beta$ = 0.013, standardized  $\beta$ = 0.072 and p>0.1). Without moderating variable, the relationship between predictor and outcome variable was also insignificant as shown in Model 3. Table 2 indicated no moderating impact of PSW on relationship among PH and FHS as the relationship among interaction term of PH and FHS was insignificant (unstandardized β= 0.093, standardized  $\beta$ = 0.432 and p>0.1). In Model 1 the relationship among FW and JS was significant but existence of moderating variable made this relationship insignificant. Finally the moderating impact of PSW was analyzed on relationship of FH with JS and FHS. It indicated moderating impact of PSW on relationship among FH and JS because it exposed significant relationship among interaction term and JS (unstandardized  $\beta$ = 0.194, standardized  $\beta$ = 1.127 and p<0.01). When these values were compared with Model 1, it showed that presence of moderator positively impact the relationship among FH and JS. Without moderating variable, the relationship between predictor and outcome variable was negative, but presence of PSW altered their relationship into positive as shown in Model 3. Model 3 also indicated no moderating impact of PSW on relationship among FH and FHS as the relationship among interaction term of FH and FHS was insignificant (unstandardized  $\beta$ = -0.127, standardized  $\beta$ = -0.612 and p>0.1). The relationship among FH and FHS was negatively significant in Model 1 but presence of PSH made this relationship absolutely insignificant as shown in Model 3. To sum up the moderation of home connectivity, it can be said that only two moderations were also found in home connectivity. First is the moderating impact of BPH on relationship among WC and PH. Second is the moderating impact of PSW on relationship among FH and JS. Rest of the relationships among predictors and outcome variables were not moderated by moderators.

#### 5. Discussion and conclusion

The main purpose of the study was to inspect the impact of work-family connectivity on job and family satisfaction of women working in Telecom industry of Pakistan. The study subsidizes the literature by testing theories and research findings derivative from economically developed Western countries in a dissimilar economic and cultural environment. This research considers the concept of connectivity between work and home domains within a specific cultural context of Pakistan and hence targets to fill in some gaps in knowledge about work family research in Non-Western cultural context. Problems are being faced throughout the world both in developed and developing countries to balance work and family. Change in roles for both men and women rises serious concerns for child and older age care setup especially in countries like Pakistan where role for maintaining home and social relationships with family are primary duty of almost every woman whether from any economic background or class. Women who are employed feel more difficulties in managing their time and work/family balance than their respective male counter parts. According to Hochschild (1997), the "second-shift" errands of women are a major source of stress and conflict for working women.

It is generally perceived by women that Pakistan is a male-dominated society where men expects a woman to be a good wife and a good mother, reflecting a typical stereotypical culture and expectations. The current global job sector trends demand individuals to work longer hours, being in touch with work place all the time less control over schedules give rise to job stress and conflict (Burke, 2001), these trends are also followed in Pakistan with cultural constraints thus adding to further burden for women. In Western countries people generally keep work and family relationships separate but in Asia and in Pakistan specifically people merge the two domains. These factors impact on the professional career advancement for female in managerial and technical forms. Moreover the high representation of men as compared to women on these job levels and less training opportunities for women reflect the situation faced by women. In a survey undertaken by PASHA in 2012, women generally feel more strained by work, inadequate benefits and discernment in promotion. The general perception about women to be more involved in family commitments adds to unequal promotion chances for them.

The results of present study has proved that due several cultural and organizational circumstances the working women of Pakistan Telecom sector cannot keep the work and home boundaries strong. These boundary blurring result in negative impact on job satisfaction and family satisfaction of these professional women. The results has provided a strong stimulus for Telecom industry in Pakistan to work with family friendly policies to be more reassuring. This study accentuates the claim that connectivity impacts positively on permeability and flexibility and operative organizational support can affect the positive spillovers which are critical to job and

family satisfaction of the working women. As prophesied, the outcomes are quiet steady with previous western research and cover it, endorsing the importance of connectivity and then overall organizational environment and work conditions that are professed by the professional women to be compassionate to manage job and family satisfaction and improve work and life balance. The study results revealed that positive relationship between connectivity of work and home and from home to work on permeability and flexibility of the two domains and a positive impact of both strong borders as well as weak borders on women' job and family satisfaction. These results provide confirmation for the view that negative impact of both form of connectivity on both individual outcomes may not be cultural specific. The results directed that connectivity has significant positive effects on the border strength by increasing permeability and flexibility. Connectivity is an important factor that helps to improve the work and life balance the job and family satisfaction.

Western research findings of the impacts of connectivity on increasing the work/life balance were also established in the context of Pakistan. Although most of the judgments of the research on the impacts of connectivity are comparable to western research results, a variance exists between western and Pakistan populations. An important repercussion of this study is that the theoretical frameworks and research fallouts in western context are beneficial but not completely appropriate to the societies with cultural differences. One of the main difference being the fact that in Pakistani society it is general believed that women are basically responsible for taking care of home and family weather they are working or not. These cultural aspects put strong pressure on working women in Pakistan resulting in high levels of stress.

Limitations of study can be grouped into three categories as causality inference study design of cross -sectional survey, sample characteristics and methodology used for measurements. Although the research process was adopted in a manner to reduce and minimize the limitation, the study done in a cross sectional design might have hindered the causality among and say data reported nature of the data also add to the limitations of the study. Another limitation of the research is that working women in more age brackets did not responded well to the questionnaires. Most of these senior ladies either refused to give the answers or gave incomplete answers.

The context of the research with respect to culture might have prejudiced the research findings in a manner that permeability of home domain did not show significant positive relationship with family/home satisfaction. Positive spillovers from work to home and form home to work did not show significant effects of increasing job and family satisfaction of both the domains. Furthermore boundary preferences for home and work domains also did not show significant decrease in permeability and flexibility due to connectivity in both the domains. In a broader context, the research findings show that theoretical frameworks in western cultural context are partially applicable in the cultural context of Pakistan. Most of the professional women in Telecom Industry try to compromise and avoid work-family by simply compromising the preferences enjoying the good working conditions and benefits if available while simply carrying on with negativities at organizational environments and work characteristics and conditions. These results show a noticeable difference between the Western and Pakistan culture. The organizations in Pakistan Telecom Industry might therefore need to progress strategies in undertaking these compromises to avoid work/family conflicts done by our professional women and take into justification the economic situations, social and family values and structures and culture. The Telecom Industry related research implications and recommendations are given in the following section.

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