

*Full Length Research Paper*

# Impact of work and family involvement on work-family conflict of non professional Igbo Nigerian employees

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This study aimed at examining the impact of work and family involvement in work-family conflict. Two hundred self selected non professional Igbo workers (95 males and 125 females) participated in the study. Carlson, Kacmar and William's 18-item work-family conflict scale was used to assess workers' experience of work-family conflict. In addition, Job involvement and family involvement questionnaires were employed to assess workers' level of work and family involvement. The design of the study was a four group cross-sectional survey design. Two-way analysis of variance (ANOVA) was used to analyze the data. Results revealed that work involvement had no significant influence on workers' experience of work-family conflict. Family involvement was shown to have a significant influence on workers' experience of work-family conflict ( $F(1, 192) = 11.95, P > .001$ ). The results further revealed a significant interaction effect between work involvement and family involvement on work-family conflict ( $F(1, 192) = 8.90, P > .01$ ). The results were discussed in relation to Nigerian work ethics and the Nigerian family culture where more value is placed on caring for members of one's family than being more committed to one's job duties.

**Key words:** Work-family conflict, work involvement and family involvement.

## INTRODUCTION

Over the last three decades, researchers have begun to realize that the various domains of an individual's life interact with one another and must therefore be studied in an integrated manner and within a common framework (Bacharach et al., 1991). Two broad domains that have generated research attention are work and family domains (Hepburn and Barling, 1996).

Profound changes in the world of work in recent decades, such as rising numbers of women in career activities, have stimulated much research on work-family conflict (WFC) (Grzywacz and Marks, 2000). Also, the changing nature and composition of workplace, with participation of working mothers, dual-career couples and single parents (Milliken et al., 1998), has made for a more productive workforce, but a workforce that is also

experiencing greater work-family conflict (Siegel et al., 2005).

The Igbo Nigerian society has also experienced its socio-demographic changes in the workforce. Igbo is one of the three major ethnic groups in Nigeria and located in the eastern part of Nigeria. In general, there is division of labour along gender lines. In the past, while very few were active in the Nigerian workforce, the greater majority of Igbo women were full house wives and concentrated on household roles, subsistent farming and small scale businesses. However, over the last two decades the role of Igbo women in Nigeria has undergone changes. There has been a progressive change in their role as housewife, whose role is bearing children and caring for children and husband, to that of

contributing to the economy of the home and the national economy. These changes brought about by economic down turn and consequently increased number of dual-earners in Nigeria have presented similar situation as found in the Western countries which is thought may influence the experience of work-family conflict of Igbo Nigerian employees in their efforts to juggle work and family roles.

Work-Family Conflict (WFC), is defined as the extent to which inter role conflict occurs between employees' work and family roles such that the demands of their work roles interferes with the fulfillment of their family roles (Greenhaus and Beutell, 1985). Consistent with this definition, Frone (2003), described work-family conflict as a product of incompatible pressure in the work and family domains such that work interferes with family life and/or family interferes with work life. It is evident that working parents are obligated to perform major functions both at home and at work. These dual responsibilities have a tendency of overlapping and leading to work-family conflict. At the organizational level, work-family conflict has been associated with increased absenteeism, increased employee turnover, decreased career involvement and decreased job satisfaction (Greenhaus et al., 2001; Netemeyer et al., 1996). Also at individual level, work-family conflict has been associated with depression, substance abuse, hypertension and overall poor physical and psychological well-being (Amazue and Uzoka, 2009; Frone et al., 1997).

A recent supposition in work-family research literature is the importance of the directionality of the work and family conflict construct (Huffman, 2004). According to Frone et al. (1992) work-family conflict is bidirectional in nature; work interfering with family (WIF) and family interfering with work (FIW). Work interfering with family (WIF) occurs when demands and obligation of work are deleterious to family life. Family interfering with work, on the other hand, arises when family obligations disturbs one's work. In other words, the interface between the two domains can be reciprocal in nature. For example, an employee may work long hours which interferes with his or her responsibilities at home. In turn, the employee's spouse may put unrealistic pressure on the employee to be more involved in tasks at home, and this makes the employee feel stressed and frustrated at home which he or she later acts upon at work.

Work-family conflict, as a phenomenon in the work place, over the last decade has gained more and more attention. Its antecedents, various aspects of the conflict, its consequences as well as gender differences have been examined by various measures and with different samples. As a result of the various investigations, research has suggested that the level of involvement in the two domains can influence the level of work-family conflict (Eby et al., 2005). However, the relative importance of the two domains in influencing the experience of work-family conflict has remained an issue of

controversy. The present study was aimed at providing an answer to the question: Which of the two domains has significant impact in influencing the experience of work-family conflict?

Involvement refers to how immersed in the work or family situation an individual actually is. As individual becomes involved in a role, he/she may become pre-occupied with that role. This preoccupation may interfere with his/her effort to fulfill the demand of a competing role (Frone et al., 1992). Job involvement thus refers to the degree to which a person identifies psychologically with the job, and the importance of the job to the person's self-image and self concept (Higgin et al., 1992).

Findings from previous studies have provided evidence for the positive relationship between job involvement and work-family conflict (Carlson and Frone, 2003). Conflict is higher among those who work greater number of hours or days (Parasuraman and Simmers, 2001). Research has also shown that work role conflict, work role overload and work-role ambiguity are the upshot of work involvement, and that each has the potential to affect work-family conflict (Razak et al., 2011). With respect to work-role conflict, the more conflict among work roles the greater the chances that stress will spill over and cause negative behaviours that interfere with fulfilling family roles (Greenhaus et al., 2003). Role overload is the result of having too many things to do in a given time (Bacharach et al., 1991). As time is constrained by having too many tasks to accomplish, it can lead to work-family conflict (Greenhaus and Beutell, 1985). Work role ambiguity occurs when workers are unsure of what is expected of them in a work role. As uncertainty concerning work-roles increases, employees use more mental energy and attention need for their family roles. Carlson and Kacmar (2000) and Razak et al. (2011) found that role overload and role conflict are components of work-involvement and influence work-family conflict. Razak et al. (2011) further found that job involvement have no significant impact on work-family conflict.

Family involvement on the other hand, entails spending more time on family related work such as child care and household chores (Frone et al., 1997). In addition, to time involvement, psychological involvement with one's family has been shown to lead to work-family conflict (Adams et al., 1996). However, to fully understand the relationship or role family involvement play in work-family conflict, family involvement must be more inclusive allowing for both the number and salience of various constraints to be considered (Boyar et al., 2003). Boyar and colleagues (2003) defined family involvement as the obligation to care for others who are either formally or informally sanctioned family members. This could include for example, a spouse or significant other parents, children, siblings and children of siblings. Higgins et al. (1992) found that family involvement and family expectations were related to family conflict and ultimately work-family conflict. According to Boise and Neal (1996) high levels

of family responsibility may cause increased time requirements and strain placed on the family, which spill over and thereby, interferes with the employee's work role. As children, siblings or elderly family members require care, obligation to meet their needs can influence family roles, which can create inter role conflict and impact family role and this could influence work-family conflict.

The justification for the present study is hinged on the fact that much of the literature in work-family research is based on research carried out in the developed countries of the west and North America (Karatepe and Baddar, 2006). However, there is a growing recognition that larger social cultural and political contexts may affect individuals' perceptions and experiences within the work/family domain (Shafiro and Hammer, 2004; Korabiki et al., 2003; Joplin et al., 2003). It has become necessary to determine whether these findings can be generalized to non-white, non-Western populations (Robinson and Swanson, 2002) Furthermore, a few studies exist that have examined non-Western samples (cf, Adekola, 2010; Aryee and Luk, 1996) and most of these studies conducted in the West and the few studies conducted in non-Western countries have been conducted with middle class workers. Thus, the present study further explores the extent to which the level of involvement in either work and/or family impact on the experience of work-family conflict of non professional Igbo Nigerian employees. Non-professional employees refer to workers who seem to be disadvantaged by virtue of their limited educational exposure, low economic empowerment and are of the lowest job status. This group of employees has been observed to be faced with the incredible challenges of balancing both work and family stress. Whereas, their professional counterparts can delegate functions to their subordinates (as a result of their high job status and better financial standing) the non-professionals tend to carry out almost every function both at work and at home, leaving out little or no time to ease off pressures from these domains. This study specifically addressed the following questions:

- (i) Does the level of work involvement of non-professional Igbo employee influence his/her experience of work-family conflict?
- (ii) Does the level of family involvement of non-professional Igbo employee influence his/her experience of work-family conflict?

It is, thus hypothesized that:

- (1) High work involvement will significantly influence the experience of work-family conflict of non-professional Igbo employees.
- (2) High family involvement will significantly influence the experience of work-family conflict of non-professional Igbo employees.

## METHOD

### Participants

Two hundred non professional Igbo Nigerian working mothers and fathers (95 males and 105 females) participated in the study. The participants were self selected or volunteers who gave their consent to participate in the study. The participants were drawn from University of Nigeria, Nsukka and Nsukka Local Government Secretariat in Enugu state, Nigeria because the two establishments have substantial number of non-professional Igbo Nigerian employees in Nsukka, Enugu state where the study was conducted. The participants constituted Igbo Nigerian employees from the lower socio-economic group. Their grade levels ranged from O1 to O5 and their educational qualifications ranged from first leaving certificate to West African Examination Certificate (WAEC). Out of the 200 participants, 128 participants were drawn from University of Nigeria Nsukka, while 72 were drawn from Nsukka Local Government Secretariat. The participants age ranged between 30 and 57 years with a mean age of 43.5 years and they have worked for between 5 years and 15 years. Only data from married men and women were analyzed in this research, as married people are more likely to experience work-family conflict than those who are single.

### Instruments

Three instruments were used for this study. They include (a) Job involvement questionnaire (b) Family involvement questionnaire and (c) Work-family conflict scale.

#### Job Involvement questionnaire

Job involvement questionnaire contains 20 items that measure respondents' work involvement. This instrument was developed by Lodahl and Kejner (1965). The instrument is a four response scale ranging from Strongly Agree – 1 to Strongly Disagree - 4. It has both direct and reverse scoring pattern. Lodahl and Kejner (1965) reported a Spearman Brown corrected split half reliability coefficient of .80 and .70 for males and females respectively. They further reported a 72 days test retest reliability coefficient of .90. Sample items include: I will stay overtime to finish a job, even if I am not paid for it; the major satisfaction in my life comes from my job and I usually show up for work a little early, to get things ready. However, Mogaji (1997) validated this instrument with a Nigerian sample and obtained a reliability coefficient of .38.

#### Family involvement questionnaire

To assess family involvement, Kanungo's (1987) four item job involvement scale was modified so that all the items referred to family instead of job. This family involvement scale has a reported coefficient alpha of 0.76 (Frone and Rice, 1987). An overall family involvement score was calculated as the average of these four items for each participant.

A pilot study was conducted using fifty (50) participants. At the end, an alpha coefficient of .82 was obtained.

#### Work-Family Conflict Scale

Carlson et al. (2000) 18-item work-family conflict scale was used to assess work-family conflict (WFC) of the participants. The scale consists of six subscales (3 items each in the two directions of WFC, namely; work interfering with family (WIF) and family interfering with work (FIW)). Carlson et al. (2000) scale is

**Table 1.** Mean scores and standard deviations (SD) of the various groups on work-family conflict.

Variables	Levels	Means $\bar{X}$	SD	N
Work involvement	High	64.45	6.44	111
	Low	66.27	7.76	88
Family involvement	High	67.21	6.24	92

designed in a 5-point Likert-type pattern, ranging from strongly disagree (1) to strongly agree (5). Carlson, Kacmar and Williams, reported coefficient alpha of .86. Higher scores on each scale indicate higher levels of WFC. Sample items are "My work keeps me from my family activities more than I would like" and "When I get home from work I am often extremely tired to participate in family activities." This scale was developed using rigorous psychometric procedure (Herst & Brannick, 2004).

For the purpose of the current study, the researcher revalidated the WFC scale through pilot study. This became necessary because previous validations of the instrument was done with western samples and non was done in Nigeria thus the present researcher decided to validate the instrument using Nigerian samples. The responses of the participants for the pilot study were further subjected to item analysis. The result of the item analysis revealed that the items have an internal consistency of alpha .87 and a Spearman corrected split-half reliability index of .56.

### Procedure

The data for the present study was collected between March and April 2012. Three hundred copies each of the three instruments were distributed to volunteered workers in the University of Nigeria, Nsukka and Nsukka local government secretariat. Out of the three hundred copies 200 copies were distributed among University of Nigerian non-professional workers. Out of this number 140 questionnaires were returned representing a return rate of 70%. Out of the returned number 12 copies were discarded for improper completion. Thus, the remaining 128 copies were used for analysis. In addition, hundred copies out of the total copies of the questionnaires used for this study were distributed among the non-professional workers of Nsukka local government secretariat. Out of this number 85 copies were returned representing 85% return rate. Out of this number 13 copies were discarded for improper completion. The remaining 72 copies were used for analysis. Overall, a total of 300 copies of the questionnaires were distributed. Out of this number 225 were returned representing a return rate of 75%. Out of the returned copies 25 copies were discarded for improper completion and the remaining 200 copies were used for analysis.

### Design/statistics

The design was a four group cross sectional survey design. A two-way analysis of variance (ANOVA) was used to analyze the data.

## RESULTS AND DISCUSSION

Table 1 shows that participants who reported high work involvement had lower work-family conflict ( $M = 64.45$ )

than participants with low work involvement ( $M = 66.27$ ). Conversely participants high in family involvement had a higher mean score on work-family conflict ( $M = 67.21$ ) than those low in family involvement ( $M = 63.59$ ).

Table 2 shows that work involvement had no significant main effect on work-family conflict. The result further revealed that family involvement had a significant main effect on work-family conflict,  $F(1,192) = 11.9$ ,  $P < .001$ . Finally, the results showed a significant interaction effect between work involvement and family involvement on work-family conflict,  $F(1,192) = 8.90$ ,  $P < .01$ .

Figure 1 shows that when family involvement was low, participants with low work involvement had less work-family conflict ( $M=57.11$ ) than participants with high work involvement ( $M=64.18$ ), and when family involvement was high participants with a low work involvement had higher work-family conflict ( $M=67.32$ ) than participants with high work involvement ( $M=65$ ).

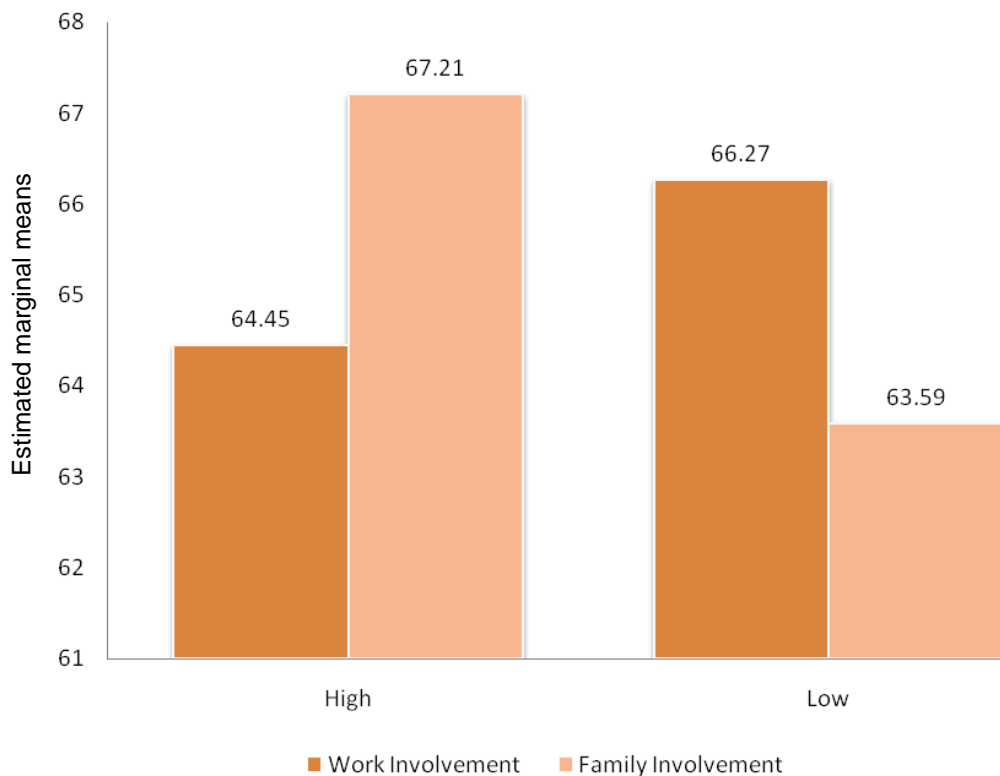
The results as presented in Tables 1 and 2 showed that work involvement did not play a significant role in influencing work-family conflict. The result did not support the first hypothesis. Although the literature on the role of work involvement in work-family conflict has shown that work involvement play a significant role in influencing work-family conflict (Carlson and Perreive, 1999; Carlson and Frone, 2003), the present study did not corroborate that. However, it is consistent with Razak et al. (2011) who found that job involvement had no significant impact on work-family conflict. A possible explanation for the present finding could be hinged on the differences in the work ethics between Western samples and that of Nigerian samples. For instance, the work culture in Europe and America is more intense and with stiffer supervision because high premium is placed on productivity. Workers in Nigeria, especially government workers, are mostly interested in money, fringe benefits and substantial pay raises (Eze, 2004). These extrinsic motivational tendencies lead to sluggish performance, laziness, indifference and low productivity (Eze et al., 1990) This may explain the non significant influence of work involvement on work-family conflict among Igbo Nigerian workers. Nigerian work ethics especially government workers, seem to be one of larzairefare and one of maximizing financial gains from the government. This kind of attitude does not promote commitment and dedication to duties, which are indices of work involvement. Thus, is possible that because of this kind of work attitude, the work roles of this group of workers seem not to present serious challenges that could result in their experience of work-family conflict.

The results further revealed that family involvement significantly influenced work-family conflict. This finding supported the second hypothesis. The result showed that workers high in family involvement had higher mean score on work-family conflict than those low in family involvement. This result provides support for the findings of Higgins et al. (1992) which suggest that family

**Table 2.** ANOVA summary table showing the effects of work involvement and family involvement on work-family conflict.

Source	Sum of square	df	Mean square	F	Sig.
Work involvement (A)	116.51	1	116.51	2.61	Ns
Family involvement (B)	542.83	1	542.83	11.98	***
A x B	404.02	1	404.02	8.90	**
Error	8714.92	192	45.39		
Total	861647.000	200			
Corrected total	10003.995	199			

Keys: Ns = Not significant \*\*\* = P <.001 \*\* = P <.01.



**Figure 1.** Interaction effect on family involvement and work involvement on work-family conflict.

involvement was related to conflict in the family and ultimately work-family conflict. They found that high family responsibility may cause increased time pressure and strain which is likely to spillover and interfere with the employee's work role. Consistent with this finding is the finding of Ford et al. (2007) which posits that the performance of any individual's family role can create a state of conflict and consume time on the work domain thereby leading to work-family conflict.

A possible explanation for this could be linked to the Igbo Nigerian family culture where more value is placed on caring for members of one's family than being committed to one's job. This also reflects the general Nigerian cultural disposition. In Nigeria individuals are

subordinated to the group, namely, the immediate family, extended family and the home town. Thus, Family roles seem to have no pattern. It involves multiple roles that are sometimes not defined. It could, therefore, be argued that employees make better adjustments to their work lives than they do in their family lives. In other words, family roles are more demanding for an Igbo Nigerian employee and is more likely to lead to family conflict and ultimately to work-family conflict. If this is the case, then it could be presumed that the demanding roles in the family domain are more likely to generate greater conflict among the non-professional lower income employees.

This may be so because, while high status employees can delegate some of their family roles to their

subordinates, the lower status worker does it all by him/herself thus increasing the amount of time pressures and strain resulting from performing these unpredictable family multiple roles.

According to Boyar and colleagues (2003) family involvement entails the obligation to care for others who are either formally or informally sanctioned family members. This could include for example, a spouse or significant other parents, children, siblings and children of siblings. High levels of family responsibility may cause increased time requirements and strain placed on the family, which spill over and interferes with the employee's work role. As children, siblings or elderly family members require care, obligation to meet their needs can influence family roles, which can create inter role conflict and impact family role and this could influence work-family conflict (Boise and Neal, 1996).

Finally, the result of this study revealed an interaction effect between work involvement and family involvement on work-family conflict. The interaction effect shows that when family involvement was low, participants with low work involvement had a less work-family conflict than participants with high work involvement. When family involvement was high, participants with a low work involvement had a higher work-family conflict than participants with high work involvement. This finding is consistent with previous studies that suggest that work involvement and family involvement are reciprocally causally related (Carlson and Perreive, 1999).

A number of implications can be drawn from these findings. First the findings of the study suggest that work involvement is not a significant factor in work-family conflict. This implies that Igbo Nigeria non professional workers are less likely to experience work-family conflict as a result of their work roles. This also suggests that this group of workers appear to be less committed to their work which may be as a result of government policies. However, previous research has shown that organizations with family-responsible culture with relevant policies are associated with a healthier, more committed workforce with lower turnover (Epie, 2010). This suggests that Nigerian employers can make their employees more committed to their jobs and at the same time assist them in balancing their work and family demands by establishing family friendly policies. In Nigeria some public policies are available to support work-family integration, but there are inconsistencies in the availability of paid leave and benefits and a significant lack of affordable high quality child care. Thus employees may benefit greatly when organizations offer work-family policies and practices and supervisors are supportive of work-family balance. Recent research indicates that employees' satisfaction with family-friendly workplace policies and a workplace culture that supports balance are major factors that reduce role overload and work interference with family (Duxbury and Higgins, 2005; Epie, 2010).

As a result of this study the researcher is encouraging

Nigerian managers of organizations and employers, especially government parastatals to put in place consistent and relevant work-family policies and work cultures that will assist their employees in their efforts to integrate and balance their work and family responsibilities. This way, the government may have a workforce that will be highly committed to work, with reduced role overload and consequently a workforce with less work-family conflict.

The present findings further indicate that Nigerian workers who are highly committed to their family responsibilities are more likely to experience work-family conflict. This implies that employees who are immersed in their family responsibilities are more likely to experience higher work-family conflict than employees who are moderately involved in family responsibilities. Individual employees are encouraged to endeavour to develop some skills, like time management skills, that will enable them to juggle between the incompatible roles of work and family domains. By so doing they can reduce family interference with work and the consequent work-family conflict.

## Conclusion

The findings of the present study indicate that high family involvement is an important factor in the experience of work-family conflict. Contrary to the findings of majority of the study in the Western countries, the findings of this study failed to provide support for the prediction that high job involvement will influence employees' work-family conflict. This finding appears to be consistent with findings in countries like Malaysia which seem to have similar cultural values (e.g. collectivistic values). On the other hand, the study supported the prediction that high family involvement will significantly influence work-family conflict. The findings further suggested that Igbo Nigerian employees pay more premiums to family roles and hence appear to be more immersed in family roles than work roles. This therefore explains their experience of work-family conflict. However, the findings also suggest that their experience of work-family conflict as a result of their involvement in the family responsibilities is dependent on their different levels of involvement in their work roles. When they are highly involved in the family and work domains they experience lower level of work-family conflict than when they are highly involved in the family roles and are low in their involvement in the work roles. In addition, their experience of work-family conflict was shown to be lowest when their involvement is low in both work and family responsibilities.

## REFERENCES

- Adams GA, King LA, King DW (1996). Relationship of Job and Family Involvement, Family Social Support and Work-Family Conflict with Job and Life Satisfaction. *J. Appl. Psychol.* 81:411-420.

- Adekola B (2010). Interferences between Work and Family among Male and Female Executives in Nigeria. *Afr. J. Bus. Manage.* 4(6):1069-1077.
- Amazue LO, Uzoka JN (2009). Impacts of Work-Family Conflict and Self-esteem on General Well-being of Non-Professional Employees. *Nig. J. Soc. Sci.* pp.135-150.
- Aryee S, Luk V (1996). A Cross-Cultural Test of a Model of the Work-Family Interface. *J. Manage.* 25:491-511.
- Bacharach SB, Bamberger P, Conley S (1991). Work-Home Conflict among Nurses and Engineers; Mediating the Impact of Role Stress and Burnout and Satisfaction at Work. *J. Organ. Behav.* 12:39-53.
- Boise L, Neal MB (1996). Family responsibilities and Absenteeism: Employees Caring for Parents versus Employees Caring for Children. *J. Manag. Issues* 8(2):218-238.
- Boyar SL, Maertz Jr. CP, Pearson AW, Keough S (2003). Work-Family conflict: A model of linkages between work and family domain variables and turnover intentions. *J. Manag. Issues* 15(2):175-190.
- Carlson DS, Kacmar KM, Williams LJ (2000). "Construction and initial validation of a multi-dimension measure of work-family conflict." *J. Vocat. Behav.* 56(2):249-276.
- Carlson DS, Frone MB (2003). Relation of behavioural and psychological involvement to a new four-factor conceptualization work-family interference. *J. Bus. Psychol.* 17(4):515-535.
- Carlson DS, Kacmar KM (2000). Work-Family Conflict in the Organization: Do Life Role Values make a Difference? *J. Manage.* 26:1031-1054.
- Carlson DS, Perreive PL (1999). The Role of Social Support in the Stressor-Strain Relationship: An Examination of Work-Family Conflict. *J. Manage.* 3:573-540.
- Duxbury L, Higgins C (2005). Report 4:Who is at risk? Pridictions of work-life conflict. Ottawa: Public Hesth Agency of Canada.
- Eby LT, Casper WJ, Locwood A, Bordeaux C, Brinley A (2005). Work and family research in IO/OB: Content analysis and review of literature (1980-2002). *J. Vocat. Behav.* 66:124-197.
- Epie CM (2010). Benefits of family-responsible management in the Nigerian environment: A comparison of two breweries. *Gender Behav.* 8:45-56.
- Eze N (2004). Psychology and indigenous Organizational Effectiveness. Lagos: Pumark Publishers Ltd.
- Eze N, Ekpo-Ufot A, Soto GO (1990). Psychology and Industry in Nigeria, Ikeja: Malthouse Press Ltd.
- Ford MT, Heimen BA, Longkamar KL (2007). Work and Family Satisfaction and Conflict: A Meta-Analysis of Cross-Domain Relations. *J. Appl. Psychol.* 92:57-80.
- Frone MR, Rice RW (1987). Work-Family Conflict: The Effect of Job and Family Involvement. *J. Occup. Behav.* 8:45-53.
- Frone MR, Yardley JK, Markel KS (1997). Developing and Testing an Integrative Model of the Work-Family Interface. *J. Vocat. Behav.* 50:145-167.
- Frone MR (2003). "Work-Family Balance". In: Quick JE, Tetrick LE (eds). *Handbook of Occupational Health Psychology*. Washington, DC. Am. Psychol. Assoc. pp.143-162.
- Frone MR, Russell M, Cooper ML (1992). Antecedents and Outcomes of Work-Family Conflict: Testing a Model of the Work-Family Interface. *J. Appl. Psychol.* 77(1):65-78.
- Greenhaus JH, Beutell NZ (1985). Sources of Conflict between Work and Family Roles. *Acad. Manage. Rev.* 10:76-88.
- Greenhaus JH, Colins KM, Shaw JD (2003). The relation between work-family balance and quality of life. *J. Vocat. Behav.* 63:510-531.
- Greenhaus JH, Parasuraman S, Collins KM (2001). Career Involvement and Family Involvement as Moderators between Work-Family Conflict and Withdrawal from a profession. *J. Occup. Health Psychol.* 6:91-100.
- Grzywacz JG, Marks NF (2000). Reconceptualizing the Work-Family Interface: An Ecological Perspectives on the Correlates of Positive and Negative Spillover between work and family. *J. Occup. Health Psychol.* 5:111-126.
- Hepburn CG, Barling J (1996). Eldercare Responsibilities, Inter-Role Conflict and Employee Absence: A Daily Study. *J. Occup. Health Psychol.* 1:311-318.
- Herst D, Brannick MT (2004). Cross Cultural Measurement invariance of work/family conflict scale across English-speaking samples. Paper presented at the 19th annual conference of the society for Industrial and Organizational Psychology.
- Higgins CA, Duxbury LE, Irvin RH (1992). Work-Family Conflict in the Dual-Career Family. *Organ. Behav. Hum. Decis. Proc.* 51: 57-75.
- Kanungo R (1987). "Measurement of job and work involvement". *J. Appl. Psychol.* 67(3):341-349.
- Karatepe OM, Baddar L (2006). An empirical study of selected consequences of frontline employees' work family conflict and family work conflict. *Tourism Manage.* 27:1017-1028.
- Korabiki CK, Lero DS, Ayman R (2003). A Multi-Level Approach to Cross-Cultural Work-Family Research: A Micro and Macro-Perspective. *Int. J. Cross-Cultural Manage.* 3(1):289 -304.
- Joplin JRM, Shaffer MA, Francesso MA, Lau T (2003). The macro-environment and work-family conflict: Development of a cross-cultural comparative framework. *Int. J. Cross Cultural Manage.* 3: 305-328.
- Lodahl TM, Kejiner M (1965). The Definition and Measurement of Job Involvement. *J. Appl. Psychol.* 49(1):24-33.
- Milliken FL, Martins LL, Morgan H (1998). Explaining Organizational Responsiveness to Work-Family Issues: The Role of Human Resources Oucutives as Issue Interpreters. *Acad. Manage. J.* 41:580-590.
- Netemeyer RG, Boles JS, McMurrian R (1996). Development and Validation of Work-Family Conflict Scales. *J. Appl. Psychol.* 81:400-410.
- Parasuraman S, Simmers CA (2001). Type of Employment, Work-Family Conflict and Well-being: A Comparative Study. *J. Organ. Behav.* 22:555-568.
- Razak AZA, Yunus NKY, Nasurdin M (2011). Impact of work overload and job involvement on work-family conflict among Malaysian doctors. *Labuan e-Journal Maumalat Soc.* 5:1-10.
- Robinson JW, Swanson N (2002). Psychological Well-being of Working Women: A Cross-Cultural Perspective, *Curr. Women's Health Rep.* 2:214-218.
- Shafiro MV, Hammer LB (2004). Work and Family: A Cross-Cultural Psychological Perspective. [www.bc.edu/beorgdavplu/network/rft/wppedia/wfpccpent.html](http://www.bc.edu/beorgdavplu/network/rft/wppedia/wfpccpent.html). Viewed 26<sup>th</sup> July 2012.
- Siegel P, Post C, Brockner J, Fishman AY, Garden C (2005). The moderating influence of procedural fairness on the relationship between work-life conflict and organizational commitment. *J. Appl. Psychol.* 19(1):13-24.