

**CORRELATIONAL ANALYSIS OF WORK-FAMILY CONFLICT  
BIDIRECTIONALITY**

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## Abstract

*This study investigated the correlation between the bidirectional aspects (work interference with family and family interference with work) of work-family conflict among mothers in the human service profession. Participants comprised 304 female teachers between the ages of 26 to 54 years ( $M=40.37$ ,  $SD = 4.09$ ) drawn from 24 state government secondary schools in Enugu metropolis using criterion sampling method. Okonkwo (2011) 32-item Work-Family Conflict Scale with two subscales measuring work interference with family and family interference with work was administered. Correlational design was used. Correlational analysis using Pearson Product Moment Correlation Coefficient revealed that work interference with family related slightly positively with family interference with work,  $r(302) = 0.37$ ,  $p < .05$ . The result was discussed in the light of Spillover Theory. Considering the result, it was concluded that if work interference with family correlated positively with family interference with work then these bidirectional dimensions of work-family conflict should be considered both distinct and related constructs.*

**Keywords:** Correlational, Bidirectionality, Work-family Conflict, Work Interference with Family, Family Interference with Work.

## Introduction

Work and family responsibilities are among the most important aspects of life especially among working mothers. In a bid to balance these work and family responsibilities, women are caught between the cross role demands of family responsibilities and work behaviour expectations. The cross role demands many a time precipitate work interference with family and family interference with work. The interferences between work and family have always resulted in work-family conflict (Okonkwo, 2011). These two aspects of life are related and the relationship has emerged in form of conflict (Esson, 2004). The conflict occurs when the employees especially working mothers extend their efforts to satisfy their work demands at the expense of their family demands or vice versa (Cole, 2004). Work-family conflict is a form of

inter-role conflict in which role pressures from work and family domains are mutually incompatible in some respect (Flippo, 2005). Work-family conflict occurs when demands from work role affect one's ability to meet the demands associated with family role and vice versa Greenhaus and Beutell (1985). In line with this, many researchers suggested that work affect family and family affect work, which implies a bidirectional relationship (Allen, Herst, Bruck & Sutton, 2000, Frone, Russell & Cooper, 1992). Work-family conflict has generally been recognized as bidirectional, that is, work can interfere with family and family can interfere with work (Grandey, Cordeiro & Crouter, 2005). Work interference with family and family interference with work are related but distinct constructs (Ajiboye, 2008). Work-family conflict is a distinct but related form of inter-role conflict whereby work interferes with family and family interferes with work (Frone, Russell & Cooper, 1992, Netemeyer, Boles & McMurian, 1996). Work interference with family is reported more frequently than family interference with work (Frone, 2003)

Work interference with family occurs when participation in work responsibilities makes it difficult for an employee to carry out family responsibilities (e.g. cooking, washing, child care e.t.c.). It has been observed that job-related variables have strong bearing on work interference with family. Work interference with family is primarily determined by excessive work demands and predicts negative family outcomes (Adebola, 2005).

For instance, career salience, that is, the psychological identification with work role may lead to a higher level of work-family conflict (Greenhaus & Beutell, 1985). According to Cooke and Roussoau (1994) conflict is greater from the domain that is more salient to the person's identity. This shows that when a woman's career identity grows, she will become more ego involved in that work role and exhibits higher levels of motivation. This, in turn, may increase

time commitment to that work role and produce strain that may interfere with her family role. As a result, role pressures and inter-role conflict emerge. Work involvement (the degree to which a person actively participates in his/ her work role) is another job-related factor which determines work interference with family. It has been found that high work involvement is associated with higher levels of work-family conflict (Wiley, 1987). Also, time commitment to work was found to be positively related to work-family conflict (Voyandoff, 1988). For working women, the time spent on work activities was strongly associated with work interference with family (Frone, 1992). Job flexibility which reflects the autonomy and control one has regarding time schedule and work location is another job-related factor which has bearing on work-family conflict. High flexibility at work facilitates job-family compatibility and thus reduces work-family conflict (Ngo, 1992). For example, a highly flexible job (such as working at home) may allow women to shift between their domestic and work roles easily and hence better manage their time.

Family interference with work occurs when participation in family responsibilities makes it difficult for one to meet work responsibilities. Family-related variables have significant impact on work-family conflict. As noted by Adebola (2005), family interference with work is primarily determined by family demands and predicts negative work outcomes. The foremost family-related variable that interferes with work behaviour expectations is number of children at home (Pleck, 1980). Given that child care responsibilities normally rest on women, working wives with more children are likely to experience greater family interference with work (Voyandoff, 1988). Also, having young children at home is consistently related to role strain and time shortage for women (Voyandoff & Kelly, 1984). Family orientation is another factor that may lead to work-family conflict (Parasuraman, 1996). It has been observed that working women who have stronger identity with familial roles are more likely to feel the incompatibility between work and family life (Bielby & Bielby, 1988). Owing to the traditional sex-role ideology, women are

socialized to have a stronger orientation to and greater involvement in the family than men. Thus, for working mothers, role strain and time conflict may occur more frequently as a result of dual commitments to employment and to the family.

Interestingly, married working women in Nigeria, like their counterparts in other parts of the world, find it challenging to balance work role and family role. And participation in the two roles precipitates role strain which often results in a variety of negative consequences in both the workplace and the family (Frone, Russel & Cooper, 1992). Also the responsibilities orchestrated by these roles make these individuals (working mothers) particularly vulnerable to stress (Seaward, 1999). Conflict between work role and family role has dramatic effects on individuals (Fu & Shaffer, 2001, Burke & Greenglass, 2001). For instance, higher levels of work-family conflict are related to lower levels of job satisfaction, organizational commitment, job performance, higher levels of turnover and burnout (Allen, Herst, Bruck & Sutton, 2000). Among married working women, work and family responsibilities interact closely that separating the two nearly becomes impossible. Antecedent conditions in work and family domains may not be highly stressful, when considered alone, but their joint occurrence is apt to produce stress and consequently burnout (Bedeian, Burke & Moffet, 1988), suggesting an additive effect (Frone, Russell & Cooper, 1992).

Considering these consequences of work interference with family and family interference with family, therefore, this study focused on working mothers especially teachers whose work (teaching responsibilities) and family responsibilities interact ceaselessly that it is difficult to create a boundary between the two. For female teachers, teaching responsibilities (preparing lesson notes, marking examination scripts, reading and researching to update knowledge) which often spill over into family might interfere with their domestic responsibilities. At home, deep

participation in family responsibilities (e.g. child care, cooking, washing clothes e.t.c.) as demanded by gender-role socialization in Africa especially in South-eastern part of Nigeria might interfere with the work (teaching) responsibilities. Against this background, a ceaseless flux would likely exist between work and family responsibilities, hence this study on the correlation between the bi-directions of work-family conflict (work interference with family and family interference with work) among this segment of working mothers (female teachers).

In view of the fact that although work interference with family and family interference with work are related yet distinct constructs, it was hypothesized that there will be no correlation between the two.

## Theoretical Background

### Spillover Theory

This theory focuses on the satisfaction and effect of one domain on the other domain. According to this theory, positive spillover (work-family enhancement) refers to situations in which the satisfaction, energy and sense of accomplishment derived from one domain transfers to another (Frone, 1992).

On the contrary, negative spillover (work-family conflict) is derived from problems being carried over from one domain to another. For example, increased dissatisfaction in the work domain leads to increased dissatisfaction in other life domains (e.g. family domain) (Zedeck & Mosier, 1990).

This theory is of the view that work and family domains can either benefit or hamper each other. Following this explanation, interferences between work and family responsibilities might

be either beneficial or detrimental to each. Considering working mothers especially teachers in relation to this theory, the ceaseless flux (interaction) between their work (teaching) and family responsibilities appears inevitable and results in either positive or negative spillover (interference).

The spillover (negative or positive) they experience depends on the degree of balance (incompatibility or compatibility) between work and family responsibilities. Thus, if there is compatibility between these two domains, benefit will result leading to work-family enhancement. On the other hand, if there is incompatibility, role strain results leading to work-family conflict. This theory has suggested that although the work-family conflict bi-directions are distinct construct yet their ceaseless interactions could have either positive or negative correlation.

### Related Empirical Studies

Frone, Russell and Cooper (1992) testing a sample of both white and blue collar workers, found a strong relationship between work interference with family and family interference with work. The study revealed that job stressors predicted work interference with family which predicted job distress, while family involvement and family stressors predicted family interference which in turn predicted job distress and depression. Subsequently, other researchers observed that the direction of the conflict (work interference with family and family interference with work) is directly related to strengths of the relationships found between each of these facets and its antecedents and consequences (Casper, Martin, Buffardi & Erdwins, 2002, Grzywacz & Marks, 2000). The findings of these studies suggest that work-family conflict is a bidirectional construct which is the result of a pair facets, work-family conflict and family-work conflict

(Frone, 2003, Grzywacz & Marks, 2000). Similarly, a meta-analysis by Mesmer-Magnus and Viswesvaran (2005), has shown these two concepts to be interrelated ( $r = 0.38$ ). For instance, negative mood state has been found to spill over from work to family and from family to work (Williams & Alliger, 1994).

Considering these related empirical studies which focused on Western cultures without any on Africa as reviewed, hence the need for this present study to fill in part the gap created by dearth of empirical studies in this area in Africa especially Nigeria.

## Methods

### Participants

The participants comprised 304 female secondary school teachers drawn from 24 state government secondary schools within Enugu, the capital city of Enugu State in the South-eastern part of Nigeria. All the participants were qualified with 24 percent holding a National Certificate of Education, 53 percent had Bachelor's degree in Education, and 10 percent had Post-graduate diploma in Education and 13 percent with a Master's degree in Education.

Criterion sampling, which involves selecting cases (participants) that meet some predetermined criteria of importance (Patton, 1990), was used to select the participants. Following the criteria set for the sample selection, the female teachers selected for the study were aged between 26 and 54 years ( $M = 40.37$ ,  $SD = 4.09$ ), had spent at least a year as teachers in the schools, were married and living with their husbands, had at least one child, and were living with at least one of their children. Widows and divorcees were not included. The principals of the selected schools facilitated the sample selection by examining the files of their teachers in order to identify those who met the set criteria



A total of 177 (58.2 percent) of the participants had children aged between 1 and 11 years, 87 (28.7) had children aged 12 to 17 years, and 40 (13.2 percent) had children aged 18 years and above. In addition, 198 (65.1 percent) of the participants had at least one person assisting them with domestic chores while the remaining 106 (34.9 percent) had nobody assisting with domestic chores.

### Instrument

Data collection was through a self-administered questionnaire that had two components. The first was designed to specifically collect the teachers' demographic information such as their age, educational qualification, rank, years of experience as a teacher, marital status, as well as the number and ages of their children.

The second component comprising Okonkwo (2011) 32-item Work-Family Conflict Scale with two subscales measuring work interference with family and family interference with work was administered. The Okonkwo (2011) 32-item Work-Family Conflict Scale when administered simultaneously with Carlson, Kacmer and Williams (2000) 18-item Work-Family Scale in a pilot study yielded convergent validity of 0.55. The item loadings of the 18-item subscale of Okonkwo (2011) 32-item Work-Family Conflict Scale measuring work interference with family ranged from 0.53 to 0.85 and were considered acceptable for validation of the instrument since Mitchel and Jolley (2004) noted that item loading of 0.30 is good and 0.70 very high. These 18 items yielded split-half reliability of 0.89 and was accepted as a good index of internal consistency since Mitchel and Jolley (2004) noted that an index of 0.70 (and preferably above 0.80) is needed to say that a measure is internally consistent. The item loadings of the 14-item subscale of Okonkwo (2011) 32-item Work-Family Conflict Scale measuring family interference with work ranged from 0.55 to 0.76 and yielded split- half reliability of 0.88.

The Okonkwo (2011) 32-item Work-Family Conflict Scale comprising the two subscales was in Likert form and had direct scoring for all the items. Therefore, a response of strongly agree = 5, agree = 4, undecided = 3, disagree = 2 and strongly disagree = 1.

## Procedure

Stage one, a letter was written officially to the Ministry of Education, Enugu State, Nigeria requesting for the number of state Government Secondary Schools within Enugu, the capital city of Enugu state and permission to use a sample of the female teachers in the schools as participants for the study. The requested information and permission were granted within two weeks of the application.

Stage two, equipped with the requested information (e.g. 24 state secondary schools and their locations) and permission, a visit was made to the principals of the schools in their schools respectively. The principals serving as research assistants facilitated the examination of files of these teachers in order to identify those teachers who met certain criteria which included spending at least one year in the schools, married with children (at least a child of one year per teacher), living with their husbands, living with their children (at least one child per teacher). However, divorces and widows were not included.

Stage three, considering the number (N= 356) of the identified female teachers who possessed these criteria and volunteered to participate, all (N =356) were selected for the study. Therefore, 356 copies of the questionnaire (measuring number of children, age of children and strain-based family interference with work) were given to the principals (research assistants) who administered them to the identified female teachers in their respective schools. The participants

were instructed to take the copies of questionnaire home, study them carefully, complete and return them to the principals within one week. This was the procedure in each of the 24 schools.

Stage four, copies of the completed and returned questionnaire were retrieved from the principals. Of the 356 copies of the questionnaire administered, 304 (85.39%) copies were properly completed and returned while 43 were returned but not properly completed and 9 were not returned. Therefore, the 304 copies properly completed and returned were used for analyses and testing of the hypothesis.

#### Design/Statistics

Correlational design was used. This enabled the researcher to administer simultaneously the measures of work interference with family and family interference with work.

Pearson Product Moment Correlation Coefficient was used as statistical test for data analysis and subsequently testing the hypothesis. This enabled the researcher to study simultaneously the degree and direction of the relationship between work interference with family and family interference with work.

Table 1

Pearson Product Moment Correlation Coefficient on the relationship between work interference with family and family interference with work

Variations	Mean	SD	DF	r	p
Work Interference with Family	33.64	11.07			
Family Interference with Work	27.53	9.81	302	0.37	<.05

Results as shown in table 1 indicated a positive relationship between work interference with family and family interference with work,  $r(302) = 0.37, p < .05$ . In other words, higher scores on work interference with family were related to higher scores on family interference with work and

vice versa. Thus, the hypothesis which stated that work interference with family will not be related to family interference with work was disconfirmed and rejected.

## Discussion

The overall findings of this study revealed that the tested hypothesis which stated that work interference with family will not be related to family interference with work was disconfirmed and rejected.

Work interference with family as revealed by the findings correlated slightly positively with family interference with work. This positive association indicated that as the scores of these participants (female teachers) used for the study increased on work responsibilities interfering with family responsibilities, their scores on family responsibilities interfering with work responsibilities increased as well. Conversely, as their scores on work responsibilities interfering with family responsibilities decreased, their scores on family responsibilities interfering with work responsibilities decreased.

This correlation analysis has shown that although these bidirectional aspects of work-family conflict are distinct, yet they are somewhat related. This has shown that experiencing work responsibilities interfering with family responsibilities especially by a segment of working mothers (female teachers) whose job (teaching) responsibilities often spill over into family responsibilities could be linked to experience of family responsibilities (domestic demands such as child care) interfering with work responsibilities. This positive correlation could be an indication of roles without boundary played by working mothers because of the ceaseless flux of the interaction between their work and family demands.

This positive correlation is in congruence with Frone, Russell and Cooper (1992) who in a study testing a sample of both white and blue collar workers, found a strong relationship between work interference with family and family interference with work. Similarly, a meta-analysis by Mesmer-Magnus and Viswesvaran (2005), has shown these two concepts to be interrelated ( $r=0.38$ ). For instance, negative mood state has been found to spill over from work to family and from family to work (Williams & Alliger, 1994)

The congruity between this present correlational analysis and previous findings could be attributed to the nature of teaching job especially among mothers. Teaching job often extends beyond the work setting (e.g. marking exam scripts at home, preparing lesson note, reading and researching to update one's knowledge as a teacher). This extension of work responsibilities to home and vice versa requires them to divide between work and family responsibilities the time which would have been strictly reserved for the family responsibilities. Consequently, sharing this limited time between work and family responsibilities at home could in part account for the interferences which led to the positive correlation.

Traditional gender-role socialization in Africa especially in the South-eastern part of Nigeria which saddles women with greater percentage of domestic responsibilities irrespective of their engagement in paid employment in part explains this congruity. This is in line with Ngo and Lau (1998) observation that strong commitment of time to career and job makes it more difficult for women to perform their domestic role as prescribed by the traditional sex-role ideology, thus the interference of paid employment with domestic sphere becomes more severe for them.

The positive correlation as observed in this present study has given credence to the tenet of spillover theory which holds that experiences in either roles (work and family) spill over into

each other either positively or negatively resulting in either work-family enhancement or work-family conflict.

### Implications of the findings

The findings of this study have revealed both theoretical and practical implications of work-family conflict for combining work and family responsibilities especially among working mothers.

Theoretically, the positive correlation as shown is an indication that the bidirectional aspects (work interference with family and family interference with work) of work-family conflict although distinct but related. This revelation, therefore, adds to literature which will guide subsequent studies on work-family conflict.

Practically, employers, Industrial/Organizational Psychologists, Human Resources Managers, Nigerian Union of Teachers, Ministry of Labour and Productivity, and of course the Nigerian Government will learn from the findings of these study the need for adequate labour policies such as family-friendly organizations in order to help employees especially working mothers to balance work life and family life. This without doubt, will reduce job stress, work-family conflict and thus enhance labour productivity, employees' well-being and family welfare.

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