Relational Impact of Job Stress on Gender Based Managerial Effectiveness in Ghanaian Organizations

Jocelyn Sackey, Priscilla Boahemaa, and Mohammed A. Sanda

Abstract—This study explored the relationship between occupational stress and the perceived effectiveness of men and women managers in Ghanaian organizations. The exploration is underpinned by an attempt to understand the degree to which male and female managers in Ghanaian organizations experience occupational stress at the workplace. The purpose is to examine the sources and extents of occupational stress experienced by male and female managers in Ghana. Data was collected using questionnaires and analyzed using both descriptive statistics and correlation analysis. The results showed that female managers in Ghana are more likely to report of more stress experiences in the workplace than their male counterparts. The female managers are more likely to perceive role conflict and alienation as job stressors while the male managers perceived blocked career as a major source of workplace stress. It is concluded that despite the female managers experiencing enormous level of occupational stress, there was no significant differences between their managerial effectiveness and that of the male.

Keywords—Gender, job stress, managerial effectiveness, organizational environment

I. INTRODUCTION

The importance of managerial performance and effectiveness has long been recognized by major writers such as [1] who, propounded that managers are dynamic, invigorating element being integral aspect of management activities creating some production remain resources and never become product. By the nature of their activities in the organization, managers have informal authority over the unit/department they manage. By implication, managers occupy special positions of status in organization that are characterized by many decisive roles that are interpersonal, informational and decisional [2]. These roles being integral aspect of management activities create some level of stress for the managers who work under highly stressful circumstances in the quest for organizational excellence. For instance the decisional roles require the manager to make strategic organizational decisions to put their entrepreneurial role to bear, through initiating and planning, controlled change by

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exploiting opportunities or solving problems and taking actions to improve existing situation. Therefore, managerial work is intrinsically very stressful, due to the high levels of role overloads, role conflict, role ambiguity and the heightened desire for career progression.

In the Ghanaian industrial establishment, it is in all competitive business environments, the ability of an organization to survive a competitive business environment and be successful, in part, relies on the quality, effectiveness and performance of its managers. In Ghana, as in many developing economies, female potentials are now being developed and others are also striving for managerial and professional careers in addition to their normal duties as wives, mothers or single parents [3]. More women are entering the workforce, and are occupying managerial positions that have been traditionally held by men [4]. The multiple role commitment of these women is not excluding them from the impact of stress [4]. Though women are being given the same platform as men to exhibit their potentials and capabilities, they tend to encounter gender based discrimination against women when it comes to promotion and role assignments with higher remuneration. Such discrimination is related to the macho perspective of organizational design which views men as possessing adequate capabilities and strength to handle certain positions better than women, and hence, can control the stress levels accompanying such positions better than women who have to contend with their double role commitment as full-time workers and mothers or wives.

A number of factors make it difficult for Ghanaian women to achieve harmonious balance between work and family life. These factors include abrupt changes in work schedules, time-pressured work, unsympathetic treatment by management and co-workers, and lack of control over the content and organization of work and family responsibilities [5], [6]. Shift work and irregular working hours are particularly difficult to reconcile with family routines and events. Though men are likely to be affected by occupational stress, working women tend to experience occupational stress more and on daily basis [7] due to their additional sociocultural roles as wives and mothers [3]. Though a certain amount of stress may arguably not necessarily be seen as bad experience and may even help promote a higher level of performance, the conflict, confusion, frustrations and anxiety generated by multi-tasking and balancing priorities, and meeting contradictory demands can be detrimental to the individual on the job and the organization as a whole. The threatening nature of occupational stress to work [8] makes it necessary to identify and study the variables that impact negatively on the effectiveness of managers since managerial effectiveness is the only effectual advantage an organization in a competitive economy can have. This study therefore, examined the sources
and impacts of job stresses experienced by male and female managers in Ghana. It also explored the relationship between job stress and the perceived managerial effectiveness of male and female managers in Ghanaian organizations by attempting to answer two research questions and also test their accompanying hypotheses.

A. First Research Question

The first question that this research attempted to explore is as follows: To what degree do male and female managers in Ghanaian organizations differ in their perceptions of job stresses at the workplace?

In answering this question, the following five hypotheses were tested.

1) H 1: Female managers in Ghanaian organizations experience more job stresses resulting from role conflicts than male managers.

2) H 2: Female managers in Ghanaian organizations experience more job stresses resulting from blocked careers than male managers.

3) H 3: Female managers in Ghanaian organizations experience more job stresses resulting from alienation than male managers.

4) H 4: Female managers in Ghanaian organizations experience more job stresses resulting from work overloads than male managers.

5) H 5: Female managers in Ghanaian organizations experience more job stresses resulting from unfavorable work environments than male managers.

B. Second Research Question

The second question that this research attempted to explore is as follows: To what extent is the managerial effectiveness of male and female managers in Ghanaian organizations affected when they work under stressful conditions?

In answering this question, the following four hypotheses were also tested.

1) H 6: When working under stressful job conditions, female managers’ interpersonal relations will be less effective than their male colleagues.

2) H 7: When working under stressful job conditions, female managers’ management and leadership capabilities will be less effective than their male colleagues.

3) H 8: When working under stressful job conditions, female managers’ knowledge and initiatives will be less effective than their male colleagues.

4) H 9: When working under stressful job conditions, female managers’ success orientations will be less effective than their male colleagues.

This study therefore, is underlined by the observation that the changing nature of opportunities, challenges, risks and limitations from the external environment coupled with the prevailing atmosphere surrounding the organization generate pressures and tensions on the manager in his/her bid to make effective and resourceful decisions. These challenges in the work environments, characterized by heightened competition, lack of time, more uncontrollable factors, lack of space, continuous technological development, conflicting demands from organizational stakeholders [9], increased use of participatory management and computerization [10], greater uncertainty, and others have resulted in higher stress at work mostly referred to as job or occupational stress. Occupational stress is thus, a global issue that has a consequential effect on the productive performances of all categories of workers, both blue and white-collar workers in organizations.

II. Literature Review

A key determinant of the work of the manager is the nature of the environment comprising both internal and external in which the manager operates [11]. The internal environment relates to the culture and climate of the organization, thus, the prevailing atmosphere surrounding the organization. The external environment refers to the organization as an open system, where managers must respond to the changing opportunities and challenges, and risks and limitations facing the organization [11]. The manager’s work then becomes more meaningful when described in terms of the various ‘roles’ associated with the position. Roles has been characterized by [2] into three forms as follows; interpersonal roles, informational roles and decisional roles. These roles, as they are described by [2], results from the formal authority managers have over the unit they control. These roles that managers engage in, coupled with the unpredictable nature of the environment especially the external environmental factors which are largely outside the control of management, can lead to uncomfortable experiences of pressures and strains, thereby, serving as sources of stress for managers at work.

Sources of managerial stress have been well documented since the late 1970s by researchers, such as in [12] and [13]. Four categories of stressors have been identified by [12] as follows; physical environment, individual level (a mixture of role and career development variables), group level (primarily relationship-based), and organizational level (a mixture of climate, structure, job design and task characteristics). Seven categories of work stressors have also been identified by [13] as follows; job qualities, relationships, organizational structure, physical qualities, career development, change and role in the organization. Based on this categorization, other researchers have indicated that managerial work is intrinsically more stressful than other types of occupations. This has been attributed to the high levels of role overloads, role conflict, role ambiguity and heightened desire for career progression [14], [3].

A. Managerial Role, Stress and Gender

In recent times, women have had a lot of balancing to do regarding the home and the workplace, including balancing between social and personal requirements. The issues of maternity, menopause, parenthood, gender roles, and conditions at home and workplace often harm women’s lives in the long run [15]. Therefore, the relationship existing among gender, work and stress is multifaceted; several factors contribute to the varying relationship. Earlier studies conducted in the past indicate that traditional roles and family responsibilities assigned to men and women contribute to this variability.
Women make up a sizeable and growing part of the contemporary workforce and many today are in demanding managerial positions [3]. Despite this vast involvement of women in work activities the division of labour at home remained unchanged. This assertion is confirmed by [15] who also established that the total workload of women in full-time employment is much higher than that of men employed full-time, and also the total workload for part time working women is as much as that of men in full time employment. Aside family responsibilities other factors were identified to have fortified the correlation of workload between the men and women [15]. One of such factors is the lower levels of control in the jobs of women. Because most women tend to occupy less senior jobs than men, circumstances at work are always beyond them and responsibilities are likely to be huge especially where her boss is very demanding. Furthermore, the very few women who struggle to occupy more senior positions tend to suffer from discrimination and prejudice both from their colleagues and organizational policy [16] [15]. Other factors which add up to make women more vulnerable to work-related stress include: the proliferation of women in high-stress occupations, such as nursing, teaching and work with visual display units, and the higher proportion of women who work in precarious forms of employment [15]. A study by [17] on occupational stress among managers in Hong Kong and Taiwan found that there were significantly more male managers in the top and senior rank than female managers. Majority of female managers were in the middle or junior posts in both Hong Kong and Taiwan. These findings support the works of other researchers who have always stressed the fact that women are not equally represented in management decisions [15], [16].

A study on whether there are differences in sources and levels of stress between male and female professionals in the construction industry was conducted by [18]. The results indicated that in general, men experienced slightly higher levels of stress than women. Although [18] identified common sources of stress for both men and women, some differences were also noticed. Stress in relation to risk taking, disciplinary matters, implication of mistakes, redundancy, and career progression were found to be common with women. In contrast, women appear to suffer more stress in relation to opportunities for personal development, rates of pay, keeping up with new ideas, business travel, and the cumulative effect of minor tasks. These differences are attributed to women’s traditional and continued suppression in the construction industry. In another study on stress, it is found by [19], that managing, supervising and disciplining people are variables that impact significantly on male managers. The female managers are also affected by pressures from lack of influence [20], as well as lack of involvement and participation [21].

Society perceive executive role as an essential role for men and there is no possibility for a woman manager to adequately fit those positions or meet the role requirements. In a study of occupational stress on female and male graduate managers by [22], the female graduate managers were found to have significantly higher scores on all seven sources of stress subscales, including the added gender factor of discrimination and prejudice. It is also reported by [22] that; while females are more likely than males to adopt positive coping strategies, they have lower overall job satisfaction scores and were more at risk of mental and physical ill-health (particularly those in junior and middle management positions). By implication, women have higher stress levels than men [23].

**B. Dynamics of the Work Environment**

The environment in which an individual works can be a very stressful situation. Environmental factors such as temperature variations, strenuous activities, noise vibrations and lighting may significantly affect individual stress. Most definitions of stress, as in [24] and [25], imply that something uncharacteristic happening in the environment can give rise to a stress response. Stress is thus, caused by natural environmental factors or man made environment. While some individuals accept it with open arms, others get depressed and frustrated. This is because there are people who regard stress as a learning experience. A problem or an event need not cause stress but if one is not able to solve that problem then it becomes stressful [24]. Physical demands associated with extreme work environment, strenuous activities, unpleasant organizational climate, lack of privacy, a lot of hassle in conducting work and distractions have been proven to have resulted in higher stress [26] [27].

In this study, the Person-Environment Fit model, as in [28], [29] and [30]) is used as the study framework for understanding managerial stress sources. The Person-Environment Fit theory explains that stress occurs when role expectations are conflicting, or when the person’s skills and abilities do not meet the demands of the social role or environment. This theory best describes the very challenging demands managers encounter as they execute their daily responsibilities and tasks. For instance, the work of a manager is characterized by interpersonal, informational and decisional roles which require the manager to put his or her entrepreneurial skills to bear, by exploiting opportunities and solving problems [2]. But the changing nature of the external environment coupled with the internal atmosphere of the organization could collide with the expectations, skills and abilities of the manager.

The sources of workplace stress have been identified by [30] as task or job demands, role demands, interpersonal demands and physical demands. Task demand which is characterized by lack of control and career progress, work overload or under-load, inadequate resource support, no provision for meaningful participation in decision-making, and insecurity contribute to the stress experiences at work. In their study, [31] also found a positive relationship between barriers to career advancement or progress and job stress. When employees perceive a lack of career opportunities to enhance their development, they are likely to feel tentative about their future in the organization, which in turn, induce stress. According to [32], severe workload lowers an individual’s psychological health resulting in job stress. In support to this, both quantitative and qualitative research has empirically linked work overload to series of physiological, psychological, and behavioral strain symptoms [33], [34], [26]. According to [35], managers are especially vulnerable to the demands of work overload.

Another potential source of managerial work stress is role demand arising from variables, such as role incongruence and
role conflict [36]. Role demands are external to the tasks associated with a job. This particular type of stress typically develops as a result of flawed organizational structures, ineffective organizational development, the inability of an individual to successfully pursue achievement goals within an organization, or some combination of all three. The concept of role conflict focuses attention on aspects of behaviour existing independently of an individual’s personality. Role conflict arises from inadequate or inappropriate role definition, and results in a person behaving in a way which may not be consistent with their expected pattern of behaviour [11]. Role conflict can also result from conflicting demands between two different roles (inter-role) or within a single role (intra-role). As it is found by [34], a positive relationship exists between role conflict and job stress.

According to [34], when individuals are required to play two or more role requirements that work against each other, they are likely to experience job stress. Role conflict thus, arises from insufficient and inappropriate role definition and needs to be distinguished from personality clashes [34]. In other instances, roles may be clearly defined and fully understood but the incompatibility between two or more people as individuals may give rise to role conflict [34]. A reason to this is the fact that role conflicts create expectations that may be hard to reconcile [37].

C. Measurement of Occupational Stress

The Occupational Stress Inventory (OSI) as in [38], was used to measure occupational stress. The OSI was founded on the view that stressors influence people in different ways. Therefore, individual differences may be linked to occupational stress and direct predictors of stress-related outcomes [39]. The OSI questions provided a concise measure of three important dimensions of occupational adjustment: (i) occupational stress, (ii) psychological strain and (iii) coping resources. For each of these dimensions, clear-cut scales measure specific attributes of the environment or individual that represents important characteristics of occupational adjustment. In this study, only the occupational stress scale was used. The predator variables in this study were represented by five organizational variables namely; (i) role conflict, (ii) blocked career, (iii) alienation, (iv) work overload, and (v) unfavorable work environment.

D. Measurement of Managerial Effectiveness

The Criterion Effectiveness Measures model for measuring managerial effectiveness [40] was adopted in this study. The model measures the following five dimensions of managerial effectiveness: (i) ability to manage and lead, which represents the traditional leadership behaviours of setting, directing, inspiring and motivating, coaching and managing conflict; (ii) interpersonal relationship or relationship with peers and senior managers inside the organization; (iii) success orientation, which is an orientation towards goal achievement and attainment of required organizational outcomes, and the potential and desire to reach the most senior jobs in the company; (iv) knowledge and initiative, which reflects the combination of the characteristics of broad knowledge and professional competence with the personal attributes of confidence, independence and initiative; and (v) contextual adeptness, which is the ability to manage external relationships with the organization. These five dimensions or scales are based on the conceptual model of Predicators of Managerial Effectiveness in a Global Context [40].

The Criterion Effectiveness Measures model is chosen because it identifies such dimensions as, ability to manage and lead, interpersonal relationship, success orientation, and knowledge and initiative, reflecting the observable behaviours of managers, and also represents a suitable criterion by which the concept of perceived managerial effectiveness can be measured to yield reliable results. Also it integrates a number of theories of leadership and managerial effectiveness as they relate to management in the global role as well as the use of quantitative methodology to draw the conclusions. In addition, the work of [40] investigated a large number of variables that have demonstrated links to managerial effectiveness including role behaviour [41], coping with pressure and diversity, integrity [42], knowledge of the job [43], and personality and intelligence [44] [45]. This study adopted these criteria as proposed by [40].

III. METHODOLOGY

The survey research design was employed. Data on occupational stress reports and perceived managerial effectiveness were gathered by means of carefully designed questionnaires.

A. Study Participants

The study participants were men and women occupying managerial positions in both private and public organisations in Ghana. The functions of these managers in their organisations cut across Human Resources, Accounting and Finance, Sales and Marketing, Operations, Research and Development, Production, and Information Technology.

B. Data Collection

Data was collected using questionnaires. The questionnaire was divided into three sections. The first section consisted of demographic variables. The second section consisted of occupational stress measures, and the third section contained variables that measured respondents’ perceived managerial effectiveness.

In the first section, data on the following eight demographic variables of the study participants was collected; (i) organization type, (ii) age, (iii) gender, (iv) highest educational level attained, (v) marital status, (vi) number of children, (vii) school age of children, and (viii) tenure in managerial position.

In the second section, data from 25 predictor measures adopted from the Occupational Stress Inventory was collected. The response option in this section was based on a seven point Likert scale. The responses ranged from one (very definitely it is not a source of stress) to seven (very definitely it is a source of stress).

In the third section, data from 22 measures of occupational stress developed from the Criterion Effectiveness Measures were collected. The response option in this section was based on the five point Likert scale. The responses ranged from zero (does not apply to me at all), indicating low managerial
effectiveness to four (applies to me all the time), which indicates high managerial effectiveness.

There is considerable supportive evidence for the reliability of the scales employed in this study, for example, [46] has proposed that the minimum acceptable reliability coefficients levels of the variables should be (0.80 to 0.96). The present study reports reliability coefficients in the measure of occupational stress as; role conflict ($\alpha = 0.87$), blocked career ($\alpha = 0.86$), alienation ($\alpha = 0.89$), work overload ($\alpha = 0.85$), and unfavorable work environment ($\alpha = 0.80$). In the measure of perceived managerial stress; managing and leading ($\alpha = 0.87$), interpersonal relation ($\alpha = 0.80$), knowledge and initiative ($\alpha = 0.78$), and success orientation ($\alpha = 0.68$).

In the data collection procedure, permission was first sought from the appropriate authorities concerned to engage managers in their organisations in the study. After approval had been given, the questionnaires were randomly administered to a sample of 150 managers at all levels in their respective organisations. Each participant was given a time period of two weeks to answer and return the questionnaire.

A total of 135 questionnaires, out of the 150 distributed, were returned, representing a response rate of 90 percent. A total of 72 returned questionnaires were from the male respondents, and 63 were received from the females. A total of six of the returned questionnaires, four from the male respondents and two from the female respondents, were found unusable, since all the sections in the questionnaire were not fully scored, and thus, were rejected. Therefore, 68 returned questionnaires from the male respondents, and 61 returned questionnaires from the female respondents were usable with all sections fully scored.

In order to ensure a fair and accurate representation of both genders in the comparative analysis, a stratified random sampling method was used to divide the usable returned questionnaires into gender strata. A total of 60 out of the 68 usable questionnaires were selected randomly from the male stratum. Similarly, a total of 60 out of the 61 usable questionnaires were selected randomly from the female stratum. This ensured a fair representation of 60 females and 60 males in the analysis.

IV. RESULT ANALYSIS OF RELATIONAL EFFECT OF ORGANIZATIONAL FACTORS ON JOB STRESS

A. Appraisal of Respondents’ Demography

The demographic characteristics of the respondents’ are summarized in table 1 below. The distribution shows that 76 (63.33%) respondents are from private organizations while 44 (36.67 %) respondents are from public organizations. In terms of age, 69 (57.50 %) of the respondents are 45 years old and above, while 51 (42.50 %) respondents are 44 years or below. A total of 68 (56.67%) of the respondents are married, 27 (22.50 %) are single, 10 (8.33 %) are divorced, 7 (5.83 %) are separated, and 8 (6.67 %) are widowed.

Regarding number of children that each respondent has, 19 (15.83 %) respondents indicated one child, 35 (29.16 %) respondents indicated two children, and 36 (30 %) respondents indicated three children, while 16 (13.33 %) respondents indicated more than four children. However, 14 (11.67 %) respondents indicated that they have no children.

B. Appraisal of Relational effect of Organizational Factors on Job Stress

The results from the correlation analysis of respondents’ scores on the relationship between organizational variables and job stress report are summarized in table 2 below. The results indicate that the respondents consider each organizational variable as a source of stress. Role conflict ($\alpha = 0.58, p \leq 0.01$); Blocked career ($\alpha = 0.17, p \leq 0.01$); Alienation ($\alpha = 0.59, p \leq 0.01$); Work overload ($\alpha = 0.19, p \leq 0.01$) and unfavorable work environment ($\alpha = 0.11, p \leq 0.01$). Although the respondents’ consider each organizational variable as a source of stress, role conflict and alienation had higher scores in contributing to higher job stress. Thus a statistically significant positive relationship exist between gender based managerial role conflict and job stress ($\alpha = 0.58, p \leq 0.01$), as well as gender alienation and job stress ($\alpha = 0.59, p \leq 0.01$). This indicates that role conflict and alienation have stronger positive relationship with job stress.

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Categories</th>
<th>N</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>male</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Age</td>
<td>24 to 44 years</td>
<td>51</td>
<td>42.50</td>
</tr>
<tr>
<td></td>
<td>45 years and above</td>
<td>69</td>
<td>57.50</td>
</tr>
<tr>
<td>Marital status</td>
<td>married</td>
<td>68</td>
<td>56.67</td>
</tr>
<tr>
<td></td>
<td>single</td>
<td>27</td>
<td>22.50</td>
</tr>
<tr>
<td></td>
<td>divorced</td>
<td>10</td>
<td>8.33</td>
</tr>
<tr>
<td></td>
<td>separated</td>
<td>7</td>
<td>5.83</td>
</tr>
<tr>
<td>Number of children</td>
<td>none</td>
<td>14</td>
<td>11.67</td>
</tr>
<tr>
<td></td>
<td>one</td>
<td>19</td>
<td>15.83</td>
</tr>
<tr>
<td></td>
<td>two</td>
<td>35</td>
<td>29.16</td>
</tr>
<tr>
<td></td>
<td>three</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>four and above</td>
<td>16</td>
<td>13.33</td>
</tr>
<tr>
<td>School age of children</td>
<td>all pre-school</td>
<td>15</td>
<td>12.50</td>
</tr>
<tr>
<td></td>
<td>pre-school/school age</td>
<td>19</td>
<td>15.83</td>
</tr>
<tr>
<td></td>
<td>all school age</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>school/post school age</td>
<td>29</td>
<td>24.17</td>
</tr>
<tr>
<td></td>
<td>all post school age</td>
<td>33</td>
<td>27.50</td>
</tr>
<tr>
<td>Type of organization</td>
<td>private</td>
<td>76</td>
<td>63.33</td>
</tr>
<tr>
<td></td>
<td>public</td>
<td>44</td>
<td>36.67</td>
</tr>
</tbody>
</table>
However, a statistically significant, but weaker positive relationship exist between blocked career and job stress (α = 0.17, p ≤ 0.05); work overload and job stress (α = 0.19, p ≤ 0.05).

### TABLE II

**CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN ORGANIZATIONAL FACTORS AND JOB STRESS**

<table>
<thead>
<tr>
<th>Organizational Factors</th>
<th>Correlation Coefficients for Relationship between Organizational Factors and Job Stress (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role conflict</td>
<td>0.58**</td>
</tr>
<tr>
<td>Blocked career</td>
<td>0.17*</td>
</tr>
<tr>
<td>Alienation</td>
<td>0.59**</td>
</tr>
<tr>
<td>Work overload</td>
<td>0.19*</td>
</tr>
<tr>
<td>Unfavorable work environment</td>
<td>0.11*</td>
</tr>
</tbody>
</table>

*correlation is significant at the 0.05 level (2-tailed)
**correlation is significant at the 0.01 level (2-tailed)

0.05); and unfavorable work environment and job stress (α = 0.11, p ≤ 0.05). These variables were also perceived as stressful by the respondents but their relationships with job stress were not as strong as the relationship existing between either role conflict or alienation and job stress.

### V. ANALYSIS OF THE GENDER BASED IMPACT OF STRESS-INDUCING ORGANIZATIONAL FACTORS

The male and female respondents’ mean (M) scores, standard deviations (SD) and Z-values for the organizational factors inducing occupational stress are shown in table 3 below.

In this analysis, which is directed towards answering the first research question, the five hypotheses (H1 - H5) on female managers in Ghanaian organizations experiencing more job stresses resulting from role conflict, blocked career, alienation, work overload and unfavorable work environment than male managers were tested.

### TABLE III

**RESPONDENTS’ MEAN SCORES, STANDARD DEVIATIONS, AND Z-SCORE ESTIMATES FOR JOB STRESS-INDUCING ORGANIZATIONAL FACTORS**

<table>
<thead>
<tr>
<th>Organization Factors</th>
<th>Females’ Mean Scores</th>
<th>Males’ Mean Scores</th>
<th>Critical Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Role conflict</td>
<td>22.55</td>
<td>3.73</td>
<td>17.93</td>
</tr>
<tr>
<td>Blocked career</td>
<td>17.68</td>
<td>3.11</td>
<td>18.82</td>
</tr>
<tr>
<td>Alienation</td>
<td>18.1</td>
<td>3.87</td>
<td>14.82</td>
</tr>
<tr>
<td>Work overload</td>
<td>11.3</td>
<td>2.35</td>
<td>11.48</td>
</tr>
<tr>
<td>Unfavorable work</td>
<td>12.53</td>
<td>1.24</td>
<td>12.9</td>
</tr>
<tr>
<td>environment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*correlation is significant at the 0.05 level (2-tailed)
**correlation is significant at the 0.01 level (2-tailed)

### A. Test of the hypothesis (H1) that; female managers in Ghanaian organizations experience more job stress resulting from role conflicts than male managers.

The results in table 3 above show that the female managers reported higher scores (M = 22.50, SD = 3.73) for stress induced by role conflict than their male colleagues (M = 17.93, SD = 3.67). This is indicative of the fact that Ghanaian female managers experience higher levels of stress in relation to role conflict in comparison to their male colleagues (Z = 6.79, p ≤ 0.01). Therefore, the null hypothesis (H1) that female managers in Ghanaian organizations experience more job stresses resulting from role conflicts than their male colleagues is supported.

### B. Test of the hypothesis (H2) that; female managers in Ghanaian organizations experience more job stress resulting from blocked careers than male managers.

Regarding blocked career, the male managers were found to experience significantly more stress (M = 18.82, SD = 4.65) than the female managers (M = 17.68, SD = 3.11). This shows that the male managers become more stressed as a result of blocked careers than their female colleagues (Z = 5.77, p ≤ 0.01). Therefore, the hypothesis (H2) that female managers in Ghanaian organizations experience more job stresses resulting from blocked careers than their male colleagues is not supported. Rather, the male managers are more stressed by blocked careers than their female colleagues.

### C. Test of the hypothesis (H3) that; female managers in Ghanaian organizations experience more job stress resulting from alienation than male managers.

The female managers reported higher stress due to alienation (M = 18.10, SD = 3.87) compared with the male managers (M = 14.82, SD = 3.31). This shows that the female managers are significantly stressed when they feel alienated in the organization than their male colleagues (Z = 4.97, p ≤ 0.01). Therefore, the hypothesis (H3) that female managers in Ghanaian organizations experience more job stresses resulting from alienation than their male colleagues is supported.

### D. Test of the hypothesis (H4) that; female managers in Ghanaian organizations experience more job stress resulting from work overloads than male managers.

The difference in the level of stress induced by work overload on the male managers and female managers is statistically insignificant (Z = 0.49, p ≥ 0.05), even though the mean score for the female managers (M = 11.48, SD = 1.63) was higher than that of the male managers (M = 11.30 SD = 2.35). Therefore, the hypothesis (H4) that female managers in Ghanaian organizations experience more job stresses resulting from work overloads than their male colleagues is not supported. Rather, both the female and male managers appeared to be equally affected by the work overload stresses.

### E. Test of the hypothesis (H5) that; female managers in Ghanaian organizations experience more job stress resulting from unfavorable work environments than male managers.

The difference in the level of stress induced by unfavorable work environment on the male managers and female managers is statistically insignificant (Z = 1.48, p ≥ 0.05), even though...
the mean score for the female managers (M = 12.90, SD = 1.49) is higher than that of the male managers (M = 12.53; SD = 1.24). Therefore, the hypothesis (H5) that female managers in Ghanaian organizations experience more job stresses resulting from unfavorable work environments than their male colleagues is not supported. Rather, both the female and male managers appeared to be equally affected by stresses that emanate from unfavorable work environments.

VI. RELATIONAL ANALYSIS OF GENDER, JOB STRESS AND MANAGERIAL EFFECTIVENESS

The relationship between job stress and determining factors for managerial effectiveness were also analyzed. The mean (M) scores, standard deviations (SD) and Z-scores are shown in table 4 below. In this analysis, the four hypotheses (H6 – H9) which indicated that when working under stressful job conditions, female managers’ management and leadership capabilities, interpersonal relations, knowledge and initiatives, as well as their success orientations will be less effective than their male colleagues were tested.

A. Test of the hypothesis (H 6) that; when working under stressful job conditions, female managers’ interpersonal relations will be less effective than their male colleagues.

B. Test of the hypothesis (H 7) that; when working under stressful job conditions, female managers’ management and leadership capabilities will be less effective than their male colleagues.

As we have shown in table 4 above, the male managers reported higher mean scores (M = 14.27; SD = 4.38) than their female colleagues (M = 13.95; SD = 4.32) in relation to effectiveness of their management and leadership capabilities when working under stressful job conditions in the organization, but the difference in the mean scores is statistically insignificant (Z = 0.41, p ≥ 0.05). Therefore, the hypothesis (H7) that the management and leadership capabilities of female managers in Ghanaian organizations will be less effective than that of their male colleagues when working under stressful job conditions is not supported. On the contrary, the effectiveness of both the female and male managers’ management and leadership capabilities are equally affected by job stress.

C. Test of the hypothesis (H 8) that; when working under stressful job conditions, female managers’ knowledge and initiatives will be less effective than their male colleagues.

As we have shown in table 4 above, the female managers scored higher (M = 12.50; SD = 4.94) than the male managers (M = 11.90; SD = 2.94) in relation to the effectiveness of their knowledge and initiatives when working under stressful job conditions in the organization, but the difference in the mean scores is also statistically insignificant (Z = 0.81, p ≥ 0.05). Therefore, the hypothesis (H8) that the knowledge and initiatives of female managers in Ghanaian organizations will be less effective than that of their male colleagues when working under stressful job conditions is not supported. On the contrary, the effectiveness of both the female and male managers’ knowledge and initiatives are equally affected by job stress.

D. Test of the hypothesis (H 9) that; when working under stressful job conditions, female managers’ success orientations will be less effective than their male colleagues.

As we have shown in table 4 above, the female managers scored higher (M = 12.77; SD = 3.84) than the male managers (M = 11.75; SD = 3.53) in relation to the effectiveness of their success orientations when working under stressful job conditions in the organization, but the difference in the mean scores is statistically insignificant (Z = 1.52, p ≥ 0.05). Therefore, the hypothesis (H9) that the success orientations of female managers in Ghanaian organizations will be less effective than that of their male colleagues when working under stressful job conditions is not supported. On the contrary, the effectiveness of both the female and male managers’ success orientations is equally affected by job stress.

VII. DISCUSSION

Our study examined the extent to which organizational factors, such as role conflict, blocked career, alienation, work overload and unfavorable work environment, related to the job stresses and managerial effectiveness of both male and female managers in Ghanaian organizations. The results shows that...
all the organizational factors measured have positive relationships with job stress. The implication drawn from the five tested hypotheses (H1–H5) shows that female managers in Ghanaian organizations experience more job stresses resulting from role conflicts and alienation than male managers, but not from blocked careers, which tend to affect the male managers much more. Even though the female and male managers, statistically appeared to encounter the same levels of stress induced by work overload, and also stress due to unfavorable work environment, the differences in their mean scores have realistic interpretational value in the Ghanaian socio-cultural environment. By implication, it can be said that female managers are more affected than their male colleagues by stresses from these two organizational factors, irrespective of the smallness of differences in their mean scores. These findings indicate that the respondents view each organizational variable (role conflict, blocked career, alienation, work overload and unfavorable work environment) as sources of job stress.

Building on other research findings, such as in [5], [34] and [37]), our study has provided further evidence that self-reported stressors such as work overload and role conflict are significantly related to job stress among people who occupy managerial positions in their organizations. The implication of this finding is that when managers, irrespective of their gender-orientation, encounter conflicting role requirements, there is the tendency for them to experience job stress. Several researchers have stated that managerial work is intrinsically more stressful than other types of occupations because of high levels or role overload, role conflict and role ambiguity. This is because the expectations associated with the role may be too difficult to satisfy or probably find themselves in situations where they are required to manage the implementation of institutional policies or other organizational activities that they may find contradicts their personal values or principles. These managers may also encounter similar stresses induced from role conflicts in the organization when they are faced with situations marked by possible task ambiguities, and also conflicts between work life and social life. Many studies have pointed out specific stress factors which have been identified for managers and professionals, both males and females in general. These include factors intrinsic to the job, role-based stress relationships, career development factors, organizational structure and climate, and work-family interface [14]. In this study, these five organizational factors are identified as key sources of job stress to managers, irrespective of their gender orientation. This finding is also consistent with those of [14].

Our finding of a positive relationship between blocked career and the managers’ job stresses points to the possibility of the managers perceiving as unavailable, opportunities for career enhancement or development, or the prevalence of issues considered as self-threatening in the organization. Consistent with the findings of this study is the observations by [33], [47] and [39]) that individuals who constantly have to struggle to move up their organizational ladder within the organizational hierarchy will always perceive blocked career as a stressor. Such managers are also likely to perceive inadequate feedback about performance, under-promotion, and denied promotions as stressors. Our results also showed positive relationship between alienation and job stress. Thus the managers reported alienation as a source of job stress. The managerial role creates a sense of independence in role performance, and ones own ability to stand alone in decision-making. Therefore this situation might have created among the managers a sense of isolation. This finding is also consistent with those of [48] and [49].

Our study further examined occupational stress and its relationship to gender. Stress inducing organizational factors such as role conflict, blocked career; alienation, work overload and unfavorable work environment were examined to determine the gender differences in reported stress in relation to these organizational variables. Our findings indicate that the female managers reported significant levels of stress in relation to role conflict in comparison to their male counterparts. The differences observed in their reports are significant, indicating that the female managers experience more stress relating to role conflict in comparison to their male counterparts. The female managers are more exposed to job stress that emanate from role conflict and alienation in the organization. This finding tends to support those found by [3] in which they indicate that female managers experience high conflict between the two roles they occupy (work-home life), implying that female managers in Ghana tend to experience ambiguities in their managerial responsibilities due to conflict between their work and home lives. Similarly, [50] found that women scored significantly higher on sources of stress from factors intrinsic to the job, managerial role, career achievement, organizational structure and climate and relation with others. In relation to blocked career, our findings further indicate that the male managers report this organizational variable as a significant source of stress in relation to the female managers. This implies that when male managers perceive that their chances of advancing within their careers are blocked, they are more likely to experience job stress.

Our study further examined job stress and its relationship to perceived managerial effectiveness. This sought to show whether when managers reported higher job stress levels their level of perceived managerial effectiveness in relation to performing their managerial roles such as managing and leading; interpersonal relations; knowledge and initiative and success orientation were affected in any way.

The implication from the four tested hypotheses (H6–H9) shows that the effectiveness of female managers’ interpersonal relations in Ghanaian organizations is less affected by job stress than that of male managers. Even though, the impact of job stresses on the effectiveness of the female and male managers’ knowledge and initiatives, success orientations, and management and leadership capabilities appeared not to differ statistically, but the differences in their mean scores have realistic interpretational value in the Ghanaian sociocultural environment. In this regard, the impact of job stress on the effectiveness of the male managers’ knowledge and initiative capacities as well as their management and leadership capabilities can be said to be lesser than those for the female managers. Conversely, the impact of job stress on the effectiveness of the female managers’ success orientations can be said to be lesser than those for the male managers. These findings indicate that some degree of stress contribute to the effectiveness of both the male and female managers. This is because the pressures and demands of managerial job cause
stressors that are sometimes positive in their effects. Personal performance may improve with pressure up to a certain point, but continuous pressure leads to a fall in performance as the person is no longer able to cope [29][30]. Our results also shows that both the male and female managers do not differ in the quantum of their knowledge capacities, initiatives and success orientations, as well as their management and leadership abilities. This finding shows that female managers in Ghanaian organizations, despite their exposure to greater job stressors, are as effective and productive as their male colleagues, in the performance of their managerial jobs. However, in terms of interpersonal relations, the female managers obtained significantly higher scores than their male counterparts. The difference observed is very significant indicating that the female managers are more effective in developing interpersonal relations within the organizations than their male colleagues in stress conditions.

VIII. CONCLUSION

The ever-quickening pace of change and the demands to push the levels of productivity and accuracy higher can be very stressful. Personal problems and emotional frustrations can also add up to the stress experiences. But many organisations do not see any relationship between job stress and performance outcomes and therefore little or no attention has been given to it. The findings of our study have shown that female managers are more likely to perceive role conflict and alienation as job stressors. On the other hand, the male managers perceive blocked career as a major source of workplace stress. Our study has also shown that female managers in Ghana are more likely to give reports of more stress experiences in the workplace than their male counterparts. Though many studies have indicated negative relationship between stress and performance outcomes, this study has shown that little amount of stress will induce effectiveness among managers. We therefore, concluded that, despite the enormous stress experienced by female managers, their managerial performance is at par with that of male managers.

The findings from our study suggest several implications. Organizations need to attend to the organizational factors that are likely to act as job stressors. In order to minimize job stress among managers, organizations should clearly outline and communicate its expectations, give enough opportunity for managers to develop their career and move to higher positions in the organization, and embark on a structure that will enhance effective and productive relationships among colleagues. Our study has shown that female managers are likely to report stress experiences when they perceive ambiguity about their responsibilities, conflict between work and home life, covert discrimination and favoritism, and when they are left out in decision making processes. On the other hand, male managers are also likely to report stress experiences when they are denied opportunities to develop their careers or achieve their ambitions. For this reason, we propose that particular attention be paid to gender differences as organisations attempt to provide support and design programmes to reduce workplace stress. Given the applicability of stress to managerial effectiveness, organizations need to ensure that the little pressure needed to enable performance is available and sustained. Such pressures could include deadlines, objective performance standards, target setting, continuous and effective evaluation of outcomes and performance appraisals. But there is also the need to ensure that the pressures do not extend beyond individual threshold of stress. Above the threshold of stress, continuous pressure would lead to a fall in performance as the individual may no longer be able to cope.

REFERENCES


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