BIO-SOCIAL CHARACTERISTICS AND COPING ABILITY PREDICTING PERCEIVED JOB DEMAND AMONG EMPLOYEES OF TELECOMMUNICATION COMPANIES

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ABSTRACT

This study thus considered bio-social characteristics and coping ability as factors predicting perceived job demand among employees of telecommunication companies. An ex-post facto research design was used with 246 employees (male=118; female=128) that were selected using purposeful random sampling techniques. The participants age ranged between 23 and 65 (Mean=37.78; SD=10.27) and they responded to validated instrument measuring coping ability (α=.93) and perceived job demand (α=.72). Hierarchical regression analysis was used to test the formulated hypotheses. The results went contrary to the hypotheses such that perceived job demand increases with increase in coping ability (β=.29, p <.01). Among the bio-social characteristics, only educational qualification influenced perceived job demand such that higher qualification implies higher perceived job demand (β=.69, p <.01). This implies that employees with higher skills, potentials and ability to cope with the job are those that are likely to experience more responsibilities via promotions, increased task commitment and entrusted with managerial roles such that triggers their job demands. Thus it was recommended that employees with these itemized qualities should be motivated in their job functioning with necessary resources to continually function effectively.

Key words: Bio-social characteristics, coping ability, job demand

INTRODUCTION

Job demand are those aspects of the job (like timeliness, client persistent and aggressive response, supervisory autonomous control, e.t.c.) that require sustained physical and/or psychological (i.e., cognitive or emotional) effort on the part of the employee (Bakker, Hakanen, Demerouti & Xanthopoulou, 2007). Job demands represent characteristics of a job that make employees more vulnerable to strain because of job requirements that exceed the employee’s adaptive capability (Crawford, LePine & Rich, 2010). Although job demands are not necessarily negative and it does not necessarily have to end up in strain (Crawford, LePine & Rich, 2010), but they may turn into job stressors when employees are faced with demands that require high effort and in cases where the employee does not adequately recover (Meijman & Mulder, 1998; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007).

Demands within a job setting could be regarded as either challenge induced or viewed as a form of hindrance (Olusa, 2015; Crawford, LePine & Rich, 2010). When a demand is challenging, it is assumed to increase or serve as a motivational force for the employee, while the demands felt as hindrance tend to be viewed negatively and it is assumed that employees avoided hindrance demand. The negativity created by job demand is such that the results and targeted goals of the organization could fall short of expectations if such demands are not adequately managed (Garcia-Izquierdo& Rios-Risquez, 2012). Researches (Heppner & Lee, 2002; Shimmazu, de Jonge, & Irimajiri, 2008; Laisne, Lecomte, & Corbiere, 2012) had ascertained that the demanding nature of a job could lead to strain, burnout, turnover intentions and even health related dysfunctioning among employees.
One of the leading sectors in the business world at large is the telecommunication organizations (Mansoor, Fida, Nasir & Ahmad 2011). The continuum in technological advancement (Carbone, 2006) on daily bases has made the task for continuous upgrading and development a constant phenomenon in the telecommunication sectors. Therefore, for any telecommunication company to improve efficiency in communication, attract more customers and improve its task performance due to the exigency of global networking, the scope of work and job functioning will experience regularly increase. Modern organizations involved in such services are faced with both pressure to meet the increasing demands in their services and the challenges to upgrade with recent evolution in the communication world (Vetter, 2005).

These pressures are basically on the human factors working within such organizations. The present of stress on employees will overtime reduce the capacity to function, increase in their chances of withdrawer from such jobs (turnover) and even mental and physiological health implications (Boundless, 2016).

In a challenging, competing and fast growing business world, it is expected that employees engaged within a striving company will perceive increases in their job demands. This is coupled with limited access to the necessary resources to function effectively, therefore they have to adapt to the fast changing world of work. This is due to the point that employees that could adapt easily to situations, evaluate events positively and get themselves going on the job will perceive the job as less demanding compared to those that do not possess the skills to do so.

The ability of an employee to manage himself or herself with the demanding nature of the job becomes the dream of every employee that want to remain in such organizations. Also, their present social status, age experience and gender differences could explain the extent at which such employees are able to withstand and cope with stressful situations at work.

Few indigenous studies had considered the relationship between coping ability and perceived job demands with respect to bio-social factors in Nigeria. Based on these, the influence of coping ability and bio social factors on the demanding nature of the job will be investigated among telecommunication employees.

Considering the bio-social characteristics of employees, individual differences would also tend to determine employees’ perceptions of job demands as stressful situations. Fernet, Guay, and Senecal (2004) opined that it could be assumed that some people would be more effective than others at managing job control and adapting with work roles because according to Parckes’s dairy (as cited in Fernet, Guay, and Senecal, 2004), a good fit between personal characteristics and work-environment characteristics results in favourable psychological consequences while a lack of fit leads to negative consequences. The ability to cope in situations and personal characteristics of individuals differs, thus it is important to examine the implication of these factors in the face of challenging and demanding jobs especially among employees of telecommunication companies.

Coping ability is expressed as the efforts used to manage the internal or external demands that are appraised as potentially harmful and stressful to the individual (Lazarus & Folkman’s dairy as cited in Lian and Tam, 2014). Individuals differ in their responds to stressful or demanding events, and this depends on how they can cope. Demanding jobs would be termed stressful based on the perception or appraisal of the events involved, rather than the events itself (Trautmann, Voelcker-Rehage & Godde, 2011; Volkholz, 2006).

Coping are those thoughts and actions that are used to deal with stressful situations (Chapin, 2009), thus the capacity to utilize these thoughts and actions are referred to as coping ability. Coping has been associated with stress, disability, psychological distress, including
depression, anxiety, hopelessness, anger and interpersonal distress (Heppner & Lee, 2002), such that its absence increases the likely-hood of stressful experience at the expense of wellbeing (Shimmazu, de Jonge, & Irimajiri, 2008; Laisne, Lecomte, & Corbiere, 2012; Van Rhenen, Schaufeli, Van Dijk, & Blonk, 2008). Burgess, Irvine, and Wallymahmed (2010), Van Rhenen et al. (2008), and Claudi (2013) reported that the presence of coping ability results in less absence and fewer critical incidents and error at work place. Thus, an active coping style seems to be an effective way to reduce or control for demands in the present economic state and work organizations. It has been suggested that the efficacy of coping strategies is derived from one’s acquisition and judicious use of physical and mental resources such as of time-management, rational energy-disbursement and emotional coping styles spread across both domains (Akanji, 2012; Greenhaus & Powell 2006; Rotondo, & Kincaid, 2008).

Since the perception of the demanding nature of a job is subjected to individual differences (Fernet, Guay, & Senecal, 2004), the present research also considered the bio-social factors that could influence these perceptions of demand. Researchers had observed cases of misfit between individual skills and job demands due to increasing job-related demands (Volkholz, 2006). This gives reasons to consider employees education qualification as a possible determinant of their adapting capacity in stressful situations. On a contrary view, Van Jaarsveld, Walker and Skarlicki (2010) observed that education qualification of employees positive relates to their job demand. This was such that perceived job demand increases with educational qualification.

Aside the consideration of skills and potentials of an employee on a task-specific level, the increase complexity in modern work context shows the need in considering the cognitive and mental level of employees. The age of an employee will determine their capacity to possess certain knowledge and experiences. Also, the capacity for training in new work fields, especially as regard technology, learning new tasks and the use of already learned skills in changing work contexts depends on the understanding and active aged individuals. Classen and Cohen, (2003) opines that abilities are not only individually very diverse, but also often decreases with age in different work areas. Findings had shown that learning abilities and task flexibility are less expected from older employees compared to younger ones (Gold et al., 2010; Madden et al., 2010; INQA, 2005). Although recent works indicated that there in a steady increase in the learning abilities of older employees (Simon et al., 2010), their adaptation would definitely not exceed that of their younger colleagues (Gold et al., 2010).

Some other identified personal characteristics that could influence the perception of job demands are marital status, job tenure and gender. Van Jaarsveld et al., (2010) findings with customer service representatives indicated that age and gender do not relate with job demands, but job tenure had a strong correlation with job demand and it was such that employees with longer duration of tenure experienced higher demands compared to short serving employees. A study carried out among bank employees by Balogun (2013) revealed that age, gender and tenure do not significantly correlate with employees’ job demands.

Adebayo and Olowodunoye (2015) findings on private and public organisations employees was in line with Demerouti, Bakker, & Schaufeli (2005); Mathews, Del-Priore, Acitelli, and Barnes-Farrell (2006); Neff and Karney (2007), which revealed that women reported more conflict compared to men and this could increase their job demand.

The results of the findings from the divers literatures considered seem different and the divergence could be based on the difference in the work settings and participants used for the study. Few studies have been carried out among telecommunication employees specifically within South West Nigeria. With these considerations, the present study will be evaluating specifically,
the identified variables among telecommunication employees in South West Nigeria with the following hypotheses.

1. Bio-social characteristics will significantly predict perceived job demands
2. Coping ability will significantly predict perceived job demands such that perceived job demand will decrease with increase in employees’ coping ability.
3. Bio-social characteristics and coping ability will jointly significantly predict perceived job demands

METHOD

Research design

Adopting an ex post facto research design, employees’ coping abilities and bio-social factors were assessed in order to examine how these factors affect their demands within the job.

Setting

Four major telecommunication companies were purposely utilized because of their wide coverage and the employees were randomly selected across the various sections within the companies. These companies were; MTN Nigeria, located in Lagos Nigeria, Airtel Nigeria mobile telecommunication, located in Ibadan, Nigeria, Globacom telecommunications company, located within Lagos, Nigeria and Etisalat telecommunications company located in Ogun, Nigeria.

Participants

Two hundred and forty six (246) employees were purposefully and randomly selected within the South-West Nigeria. They were purposefully selected based on the wide coverage of the organizations and depicting a highly populated client service telecommunication organization. The randomization was used by selecting employees in their work setting such that the available employees within the offices had equal chances of been selected for the study. The sampled employees comprises of 118 males and 128 females with age ranging between 23 and 65 years (M=37.78; SD=10.27). The marital status distribution indicated 79 singles, 130 married, 22 divorced and 15 widowed workers, while the educational qualification shows that 17 had o’ level certificates, 61 had either of ND or NCE. Those with first degree or HND were 114 and 54 had a postgraduate certificate. Based on their job status, it was noted that 94 were in junior level, 96 were in senior level while 56 were at the management level. Their tenure in the job revealed that 69 were below 6 years of service, and between 6 and 9 years each, while 108 were already working for 10 years and above. Initially, 250 employees were administered the research instrument, but 246 were retrieved and found valid for the research purpose.

Instrument

Responding to instrument containing three sections, self-rated scales were utilized to gather research data. Section 1 elicited responses on bio-social characteristics of respondents, while section 2 and 3 were on coping ability and perceived job demands respectively.

Coping ability was tested using 26-item coping self-efficacy scale by Chesney, Neilands, Chambers, Taylor, and Folkman (2006). The scale was rated on 11-point scale from 0- ‘Cannot do at all’, 5- ‘Moderately can do as the midpoint’, to 9- ‘Certain can do’. Sample items are; “Leave options open when things get stressful”, and “Look for something good in a negative situation”. Cronbach Alpha of .95 was indicated by Chesney, et al. (2006), while the present study obtained a Cronbach Alpha of .93. In the present study, possible measures from the scale range between
0 and 234, with a mean score of 153.67. Scores below the mean implies low level of coping ability and high score from the mean above implies high ability to cope.

**Perceived Job Demand** was measured with a 5-item measure from Boyar, Carr, Mosley and Carson (2007) perceived work demand scale. The scale was rated on a 5-point Likert format from 1-strongly disagree to 5-strongly agree. Sample items are, "My job requires all of my attention" and "I am given a lot of work to do". Boyar et al (2007) found an alpha of .89 for the 5-item scale and correlating it with work role overload (.68), work role conflict (.29) and work role ambiguity (.08) to obtain validity. Present study found a Cronbach alpha coefficient of .72. The obtainable score within the scale range between 5 and 25, while the mean was 16.66. The scale was explained, such that scores higher than the mean score implies high perceived job demand while scores lower than the mean indicate low perceived job demand.

**Procedure**
The administrative heads of the organizations utilized were formally approached with the purpose of the study. Permission was granted and the researcher distributed the questionnaires to the employees in their various offices after establishing adequate rapport and assuring them of confidentiality. The questionnaires were not retrieved immediately since most of the employees that agreed to participate still indicated a very busy schedule in the present moment, but promised to respond to it when less busy. The questionnaires were retrieved within a frame of three weeks before proceeding with analysis.

**Data analysis**

Pearson Product Moment Correlation was used to test the relationship among study variables that could be tested using the bivariate statistics. Hierarchical regression was used to test the formulated hypotheses, while further test on educational status grouping was carried out using Post-hoc analysis.

**RESULTS**

**Table 1: Correlation Matrix Showing the Relationship among Study Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>37.78</td>
<td>10.27</td>
<td>1</td>
<td>-.21**</td>
<td>.71**</td>
<td>.14*</td>
<td>.01</td>
</tr>
<tr>
<td>2. Gender</td>
<td></td>
<td></td>
<td>1</td>
<td>-.19*</td>
<td>-.09</td>
<td>-.05</td>
<td></td>
</tr>
<tr>
<td>3. Job Tenure</td>
<td>2.16</td>
<td>.84</td>
<td>1</td>
<td>.16*</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Coping Ability</td>
<td>153.67</td>
<td>39.65</td>
<td>1</td>
<td>.30**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Perceived Job Demand</td>
<td>16.66</td>
<td>4.26</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ** p < 0.01, * p < 0.05, N= 246. Gender was coded, Male 1, Female 0;

The test on relationship indicated that from the bio-social characteristics that could be analyzed via bivariate correlation, age [r(244)= .01, p > .05], gender [r(244)= -.05, p > .05], and job tenure [r(244)= -.08, p > .05] do not significantly relate with employees’ perceived job demand. Coping ability had a significant positive relationship with perceived job demand [r(244)= .30, p < .01] such that when coping ability increases, perceived job demand also increases.

**Table 2: Hierarchical Regression Showing Bio-social Characteristics and Coping Ability predicting Perceived Job Demand**

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Using hierarchical regression analysis to confirm the observed relationship in Table 1 and more, the first step indicated that perceived job demand was not significantly predicted by age (β = .05, p > .05), gender (β = .00, p > .05), marital status (β = .04, p > .05), job status (β = -.21, p > .05) and job tenure (β = -.12, p > .05). Only educational qualification significantly predicted perceived job demand (β = .69, p < .01) such that perceived job demand increases with increase in the level of educational qualification. Collectively, the bio-social characteristics accounted for 43% of the variance in perceived job demand (R² = .07) and this could only be attributed to educational qualification. With this, hypothesis 1 partially supported. In step 2, bio-social characteristics bio-social characteristics and coping ability accounted for 45% of the variance noted in perceived job demand [R² = .45; F(7, 238)= 28.07, p < .01]. However, only educational qualification (β = .65, p < .01) and coping ability (β = .29, p < .01) emerged as positive significant predictors, of perceived job demands such that perceived job demand increases with increases in both educational qualification and coping ability. Based on the results, hypothesis 2 was negated, while partially confirming hypothesis 3.

For further clarifications on which of the categories of educational qualification brought about the significant difference in the influence of perceived job demand by educational qualification, post hoc analysis was conducted to test and compare the mean differences. The result is presented below.

**Table 3: Sheffe Post-hoc Summary of Levels of Educational Qualification on Perceived Job Demand**
<table>
<thead>
<tr>
<th>Educational Qualification</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. O’ level</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>10.82</td>
<td>4.30</td>
</tr>
<tr>
<td>2. ND/NCE</td>
<td>4.38*</td>
<td>-</td>
<td></td>
<td></td>
<td>90</td>
<td>15.20</td>
<td>3.30</td>
</tr>
<tr>
<td>3. HND/ First Degree</td>
<td>8.05*</td>
<td>3.67*</td>
<td>-</td>
<td></td>
<td>84</td>
<td>18.87</td>
<td>3.14</td>
</tr>
<tr>
<td>4. Postgraduate</td>
<td>8.32*</td>
<td>3.94*</td>
<td>.27</td>
<td>-</td>
<td>44</td>
<td>19.14</td>
<td>2.83</td>
</tr>
</tbody>
</table>

Note: * mean difference < .05, N= 246. Educational Qualification was coded, O’level 1, OND/NCE 2, HND/ First Degree 3, Postgraduate 4

The result indicated that employees with postgraduate qualifications had the highest mean score on measure of perceived job demand ($M=19.14; SD=2.83$). This implies that they experience higher perceived job demands compared to other categories of educational qualification. This was followed by employees with higher national diploma (HND) or first degree with a mean score of 18.87 ($SD=3.14$). Employees with secondary school leaving certificates (O’Level) had the least on measure of perceived job demand, while this was followed by those with national diploma (ND) or Nigeria college of Education certificate (NCE).

The mean difference indicated that there was a significant mean difference between employees with O’level and ND/NCE ($md=4.38$, $p < .05$), O’ level and HND/ First degree ($md=8.05$, $p < .05$), and O’level and Postgraduate ($md=8.32$, $p < .05$). The mean difference between ND/ NCE and HND/ First degree was significant ($md=3.67$, $p < .05$). ND/NCE had a significant mean difference with postgraduate ($md=3.94$, $p < .05$). That of HND, First degree and postgraduate was not significant ($md=.27$, $p > .05$). This implies that the difference in the perceived job demand of employees with HND/ First degree qualifications and those with postgraduate qualifications was not significant.

**DISCUSSION**

The prediction of perceived job demand by bio-social characteristics and coping ability was investigated and the results indicated that age did not significantly predict perceived job demand among employees of telecommunication companies. The findings contradict earlier results which say age significantly affects job demands such that older employees experienced higher demands (Classen & Cohen, 2003; Gold et al., 2010; Madden et al., 2010; INQA, 2005). Supporting this present research is the work of Simon et al. (2010) that noted that there is steady increase in the learning abilities of older employees, therefore there is possibilities of their perceived job demand decreasing and rendering the difference among age non-significant like the result of Balogun (2013). Also the bio-social factors as gender, marital status, job status and job tenure were not significant predictors of perceived job demand. The findings on gender concur with Van Jaarsveldetal. (2010) and Balogun (2013) that identified gender having no effect on job demands, although working with some other specified set of employees, Adebayo and Olowodunoye (2015), Mathews, Del-Priore, Acitelli and Barnes-Farrell (2006) reported women experiencing higher demands compared to men. The findings on job tenure negates the result of Van Jaarsveld et al. (2010) that said job tenure had strong correlation with job demands among customer service representatives. The present research did not only consider employees that relates with customers alone, but also other sections within the telecommunication companies and most of them were computer and technological expertise. Newly employed staffs that have the recent experience and qualifications in the technology world are likely to perceive tasks easier compared to those already in the system with little knowledge of recent development. Therefore, employees; tenure in service might not be a determinant of how demanding their work roles would be. In line with literature reviewed (Volkholz, 2006), education qualification significantly predicted...
perceived job demands, but contrary to expected results, perceived job demands increases with increase in education qualification. It could be explained that employees that has high education qualification are those saddled with greater responsibilities at work. They are given challenges and tasking decision making jobs, therefore they are likely as noted in Van Jaarveld et al. (2010) work to experience higher demands.

In a similar trend, coping ability significantly predicted perceived job demands such that perceived demands increase with increases in coping ability. Just as explained this could be linked with the point that organizations tend to match individuals with specific job roles and those that possess the ability to cope are given the challenging role within the job and made to supervise and manage sections and team based works. Even those not identified to possess such qualities at earlier section processes would be assign such role via promotions. All these tend to make them perceive the job more demanding compared to those with less coping ability. The findings contracts with earlier researches on coping ability which had identified coping ability as a negative correlates with perceived job demands (Garcia-Izquierdo & Rios-Risquez, 2012; Fernet et al, 2004; Claudi, 2013). There is every tendency that the specific aspect of perceived job demands related to coping was that which leads to hindrance and strain. LePine and Rich (2010) had identified that there are challenges and hindrance demand; therefore the challenging demand would probably be related to increase in coping ability, while the hindrance would be related to decreased coping ability.

Conclusion

It was concluded that bio-social characteristic like education qualification and coping ability were strong determinants of telecommunication companies’ employees. This was such that their perceived job demands increases with higher qualifications and increased level of coping ability. This summation does not necessarily implies that coping ability do not control the level of stress that could be experienced in the job, but rather it emphasizes on the resulting out comes of employees that possess high coping skills coupled with high education qualifications. They will definitely be more utilized by the organizations compared to others.

It is therefore recommended that management of telecommunication companies should put into consideration those factors that could limit the strength of employees who possess high education and coping ability so that the load of task and challenges to not result to strain by giving them challenges that are attainable and realistic rather than un achievable targets. The necessary resources and control needed to accomplish such task should also be put in place to avoid burnout and reduction in the level of their effectiveness.

Limiting this research work is the geographical location where the sample was selected. Using employees from South-West Nigeria reduces the chances of generalizing the research work across other geographical and socio-cultural settings. Therefore, further studies should make use of a cross cultural study that will represent a larger scope and race of employees and improve on the findings with the bio-social characteristics along with individual differences in coping abilities.

REFERENCES


