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The experience of occupational psychosocial stress among librarians in three African countries

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Abstract

Purpose – The purpose of this paper is to focus on describing the experience of occupational psychosocial stress among librarians in Ghana, Nigeria and South Africa. It further seeks to identify the various psychosocial stress components and how they interact to determine the stress level of librarians.

Design/methodology/approach – Using the Effort-Reward Imbalance scale, this descriptive study employed a web-based data collection tool (Google Form) to design and solicit data from respondents. Convenient sampling technique was used to employ 153 librarians from Ghana, Nigeria and South Africa with at least a diploma in any library-related programme, who work in either academic, public or special libraries.

Findings – This study established the prevalence of occupational psychosocial stress among librarians from Ghana, Nigeria and South Africa. It was realised that gender, country of residence of respondents, age, work experience, workers with children under 13 years of age and work roles were the main factors that influenced the occupational stress among the respondents.

Research limitations/implications – The response rate for this study was low. As a result, undertaking any inferential statistics to explain relationships was not possible.

Originality/value – The value of this study lies in the depth of narrative data collected and the insight it affords with regards to contemporary work within libraries in Africa and beyond. The results presented may provide both a starting point for further discussion and may also promote an increased openness about issues of employee safety in the library environment.

Keywords Nigeria, Librarianship, Ghana, South Africa, Effort-Reward Imbalance scale,
Occupational psychosocial stress

Paper type Research paper

Introduction

Job or occupational stress has become a major concern of many workers and human resource management, and has in recent times become the focus of many research studies (Chinyere and Ezinwanyi, 2016). Also, Lee Larson (2004) mentioned job stress as a major headache in the management of occupational safety as well as in organisational well-being. Ogunlana *et al.* (2013) averred that stress is usually expressed as either the external stimulus from the environment or the response in the individual, subjective in nature, and can occur in anyone who feels he or she is under pressure. Thus, it involves processes in which environmental events or forces seem to threaten the well-being of an individual in the society (Chinyere and Ezinwanyi, 2016). Stress, if not well managed can be harmful, destructive and detrimental to the well-being of staff and productivity (Ekienabor, 2016). With regards to the individual, stress can lead workers to become

detached from their work, resulting in increased negative behaviours like poor performance, increased absenteeism and poor health status (Johnson and Indvik, 1996; van Woerkom *et al*., 2016). On the other hand, stress can be costly to both the organisations and countries as whole, as Johnson and Indvik (1996) have confirmed that work-related stress caused the USA's economy to lose as high as $150bn a year, with about 100m working days lost each year because of stress.

Social and technological revolutions in the work environment have been identified as major causes of stress (Vijayakumar and Remy, 2013). Somvir and Kaushik (2012) described stress as the changes which the human body experiences, as one adjusts to the continually changing environment. Moreover, Gandi *et al*. (2011) submitted that stress involves cognitive appraisals, physiological reactions and behavioural tendencies that occur in response to a perceived disparity between situational demands and the resources needed to cope with them. According to Somvir and Kaushik (2013), individuals need a moderate amount of stress to be alert and capable of functioning effectively in an organisation. However, Nekoranec and Kmosena (2015) asserted that whereas the realisation of harmful effects of stress on employees in the workplace has been known, the effects and consequences of stress on employees have not been respected.

Akakandelwa and Jain (2013) observed a swift growth of higher education in emerging economies, with usual features of increasing student memberships, the introduction of different learning modes (including e-learning, distance learning and evening classes), and expansion of academic programmes. However, findings from the works of Gudo *et al*. (2011 and Mukhanji *et al*. (2016) indicated that these developments often do not commensurate with requisite resources like funding, staffing levels or increased infrastructure, such as science laboratories, computer laboratories and library resources, necessary for enhanced productivity in this sector. Akakandelwa and Jain (2013) supported this by averring that most units in institutes of higher learning, including libraries, have experienced and continue to experience a decline in funding, recruitment of qualified human resources and lack of expansion of infrastructure.

The presence of severe and improper working conditions in libraries, improper leadership style practices in libraries, information explosion, reduced funding, and lack of professional and supporting staff are some reasons deduced for the various degrees of stress among librarians (Vijayakumar and Remy, 2013; Ogunlana *et al*., 2013). Ranjna (2015) also identified technology as a major cause of stress in the library. Techno-stress manifests its effects in the form of increased role overload, role conflict, exhaustion, and burnout and decreased job satisfaction (Tarafdar *et al*., 2014). Technology can also contribute to staff stress if workers are not ready in terms of technical know-how in using the new technology. Each of these factors can affect the lives of librarians and other library staff. The advent of information technologies has, over the years, changed library practices from the traditional library to computerised library, then to automated library and more recently digital library (Ranjna, 2015). These transformations also denote that library professionals experience stress as they have to readjust their lives to meet the ever-changing library environment, job rotation, job promotion, etc.

Many studies have been conducted on stress among librarians all over the world. For instance, Ajala (2011), Ikonne (2015) and Chinyere and Ezinwanyi (2016) did extensive work on library-related stress in Nigeria. Furthermore, Akakandelwa and Jain (2013), Gudo *et al*. (2011), Farler *et al*. (2012) and Gill (2017) researched on stress in the library in Botswana, Kenya, the UK and India respectively. However, none of these studies compared stress among librarians across different countries. This study, therefore, described the experience of occupational psychosocial stress among librarians in Ghana, Nigeria and South Africa. It further sought to identify the various psychosocial stress components and how they interact to determine the stress level of librarians.

Effort-Reward Imbalance (ERI) Scale

Stress-measuring scales exist to enable researchers to do theory-based assessments and occupational interventions to prevent the adverse effects of stress (Loerbroks *et al.*, 2015). Among the frequently used scales include the Effort-Reward Imbalance (ERI) model (Siegrist, 1996) which conceptualises stressful working conditions as Efforts exceeding Rewards; the Job-Demand-Control model (Karasek and Theorell, 1990), which defines work-stress as high job demands paired with low job control; and Organisational Justice model (Cropanzano *et al.*, 2001), which refers to unfair organisational characteristics in terms of procedures, social interactions and distribution of rewards.

The ERI scale is a blueprint used to evaluate the relationships between perceived occupational psychosocial stress and health through ascertaining the discrepancy between job demands (Efforts) and benefits (Rewards) in a work environment (Siegrist, 2002). The ERI scale categorises the psychosocial work environment into three main components to include efforts, rewards (these two represent the situational/structural factors) and over-commitment, which represent personal factors (Siegrist, 1996). Efforts at work represent the demands and obligations that are imposed on an employee while occupational rewards connote job resources and benefits provided to the employee which may include money, esteem and career opportunities (Van Vegchel *et al.*, 2005). Efforts and rewards may each predict poor health and well-being, however, the imbalance between high effort and low reward (ER-ratio > 1) has a stronger predictive effect on poor health and well-being over and above the effects of each single component (Siegrist, 2002). Categorically, there are two main subscales which include the effort and the over-commitment subscales. Siegrist (1996) has clarified over-commitment as a personal trait that defines an individual coping pattern with high efforts and low rewards condition at work. People who depict high work-related over-commitment incline to have a strong craving for control, esteem, and approval at work (Siegrist *et al.*, 2004). This makes high related over-committed people underestimate the demands at work and overestimate their own potentials and in the long run, they are likely to experience reward frustration and exhaustion (Niedhammer *et al.*, 2004). This study sought to use the ERI scale because it is situated well in the research objective of evaluating the perceived discrepancy between job demands (efforts) and benefits (rewards) in the Africa library environments (Siegrist, 2002).

Methods and materials

This descriptive study used a web-based data collection tool (Google Form) to design and solicit for data from respondents. The survey was made up of two parts. Part one contained questions on respondents' demographic characteristics with part two containing a previously validated self-administered questionnaire which sought information on prevalence and pattern of associated job psychosocial stress (ERI scale) (Siegrist *et al.*, 2009). The ERI scale was used to measure the self-perceived work-related stress of respondents in this study. The scale included three parts with 22 items of which effort is made of 6 items, reward contained 10 items and over-commitment had 6 items. Respondents were asked to indicate on a four-point Likert scale how frequently they experienced such stressful situations at work. The scores were from 1 (strongly disagree) to 4 (strongly agree).

Convenient sampling technique was used to employ 153 librarians. Inclusion criteria included librarians from Ghana, Nigeria and South Africa with at least a diploma in any library-related programme, who work in either academic, public or special libraries. The researchers applied for the mailing lists of the respective Library Associations. The address (URL) to the survey was sent to all members on the list. The survey was conducted within a two-month period after which it was closed to respondents.

Data analysis

The various ERI ratios and sub-ratios were calculated. These included the fourERI ratios (ERI, Effort-Esteem Imbalance, Effort-Job Security Imbalance and Effort-Job Promotion Imbalance) and four Over-Commitment Reward Imbalance ratios (Over-Commitment Reward Imbalance, Over-Commitment-Esteem Imbalance, Over-Commitment-Job Security Imbalance and Over-Commitment-Job Promotion Imbalance) (Tsutsumi and Kawakami, 2004). All total scores and sub-scores were converted into percentages for standardisation. Effort/over-commitment/reward ratios, as well as component sub-ratios of esteem, job security and job promotion, were calculated by dividing the percentage effort/over-commitment score by the corresponding reward percentage score. Ratios greater than 1 were considered "stressed".

Results

This study had 153 respondents that were relatively distributed among both male (77 (50.33 per cent)) and female (76 (49.67 per cent)) and in all the three countries. It was realised that majority of the respondents (90 (64.75 per cent)) were between 30 and 45 years of age with a significant number of them being married (88 (57.52 per cent)) with at least a child under 13 years (90 (58.82 per cent)). Moreover, the study revealed that most of the respondents (75 (49.02 per cent)) possessed a second degree (University Degree). Table I shows respondents' sociodemographic and work characteristics.

The study discovered a high level of occupational psychosocial imbalance among the study population as denoted by the high rate of Effort-Reward disproportion. This imbalance was more prevalent among the male population (44 (57.14 per cent)) with Effort-Promotion Imbalance of 87 (56.86 per cent) being recorded as the highest component stress, which was predominately experienced by the male respondents. However, Over-Commitment-Effort Imbalance (48 (31.37 per cent)) recorded the lowest level of stress which was manifested

Categories	Parameter	Frequency (153)	Percentage (100)
Gender	Male	77	50.33
	Female	76	49.67
Age	< 30 years	34	24.46
	⩾30 years, < 45 years	90	64.75
	⩾45 years	15	10.79
Marital status	Single	65	42.48
	Married	88	57.52
Respondents with children under 13 years	None	63	41.18
	One or more	90	58.82
Level of education	Diploma	10	6.54
	First Degree	65	42.48
	Second Degree	75	49.02
	Doctorate	3	1.96
Country	Ghana	53	34.64
	Nigeria	51	33.33
	South Africa	49	32.03
Current position	Librarian	46	30.07
	Assistant Librarian	48	31.37
	Library Assistant	59	38.56
Current designation	Acquisitions	50	32.68
	Electronic Services	46	30.07
	Reference Services	57	37.25

Table I.
Sociodemographic and work characteristics of respondents

Note: Data are presented as figure and percentage

among the female population. Table II gives a detailed information on the prevalence of job stress among male and female respondents.

The study further sought to find out the level of stress among respondents in relation to their respective countries. It was revealed that stress was relatively high among respondents from South Africa (29 (59.18 per cent)) and Nigeria (30 (58.82 per cent)), whereas Effort-Promotion Imbalance was the leading stress component among respondents from South Africa 33 (67.35 per cent) and Nigeria (31 (60.78 per cent)), the study recorded low stress components of Over-Commitment-Security Imbalance (18 (35.29 per cent)) among the respondents from Nigeria and both Over-Commitment-Reward Imbalance (16 (32.65 per cent)) and Over-Commitment-Esteem Imbalance (16 (32.65 per cent)) among the South African respondents. Table III displays the rate of job stress among the respondents as grouped according to countries.

This study further sought to establish the rate of stress among the respondents based on some selected demographic characteristics. It was discovered that most of the respondents with higher ERI were 45 years or more (9 (60.00 per cent)), and respondents with 10 or more years (76 (55.47 per cent)) of work experience have high ERI. Again, it was reported that respondents having children who were less than 13 years (53 (58.89 per cent)) had a higher

Parameters	Total (153 (100))	Males (77 (50.33))	Females (76 (49.67))
E-RI	83 (54.25)	44 (57.14)	39 (51.32)
Reward sub-components			
E-EI	62 (40.52)	33 (42.86)	29 (38.16)
E-PI	87 (56.86)	46 (59.74)	41 (53.95)
E-SI	73 (47.71)	41 (53.25)	32 (42.11)
Over-commitment sub-components			
Oc-RI	50 (32.68)	30 (38.96)	20 (26.32)
Oc-EI	48 (31.37)	28 (36.36)	20 (26.32)
Oc-PI	63 (41.18)	38 (49.35)	25 (32.89)
Oc-SI	52 (33.99)	31 (40.26)	21 (27.63)

Notes: E-RI, Effort-Reward Imbalance; E-EI, Effort-Esteem Imbalance; E-PI, Effort-Promotion Imbalance; E-SI, Effort-Job Security Imbalance; Oc-RI, Over-Commitment-Reward Imbalance; Oc-EI, Over-Commitment-Esteem Imbalance; Oc-PI, Over-Commitment-Promotion Imbalance; Oc-SI, Over-Commitment-Job Security Imbalance. Data are presented as figures with corresponding percentage in parenthesis

Table II.
Prevalence of job stress among male and female respondents

Parameters	Ghana (53 (34.64))	Nigeria (51 (33.33))	South Africa (49 (32.03))
E-RI	24 (45.28)	30 (58.82)	29 (59.18)
E-EI	14 (26.42)	26 (50.98)	22 (44.90)
E-PI	23 (43.40)	31 (60.78)	33 (67.35)
E-SI	26 (49.06)	26 (50.98)	21 (42.86)
Oc-RI	15 (28.30)	19 (37.25)	16 (32.65)
Oc-EI	11 (20.75)	21 (41.18)	16 (32.65)
Oc-PI	19 (35.85)	21 (41.18)	23 (46.94)
Oc-SI	17 (32.08)	18 (35.29)	17 (34.69)

Notes: E-RI, Effort-Reward Imbalance; E-EI, Effort-Esteem Imbalance; E-PI, Effort-Promotion Imbalance; E-SI, Effort-Job Security Imbalance; Oc-RI, Over-Commitment-Reward Imbalance; Oc-EI, Over-Commitment-Esteem Imbalance; Oc-PI, Over-Commitment-Promotion Imbalance; Oc-SI, Over-Commitment-Job Security Imbalance. Data are presented as figure with corresponding percentage in parenthesis. Data are presented as figures with the corresponding percentage in parenthesis

Table III.
Prevalence of job stress among respondents categorised according to countries

rate of ERI. Regarding the current designation and the job description of the respondents, it was revealed that those working in the acquisitions and cataloguing sections (29 (58.00 per cent)) and those who considered their jobs as "Administrative" 27(58.70 per cent) experienced work-related stress, respectively. Table IV displays respondents' sociodemographic stratified ERI.

Discussion

The aim of this study was to explore issues of work-related stress amongst library professionals and establish the extent to which they perceived themselves to be stressed in undertaking their roles as librarians, and also compare the stress prevalence among librarians from different countries. The library has traditionally been seen as the "heart of the university" serving the academic community of its parent institution (Bhatt, 2010). Combining the role of mangers, teachers, researchers, information technology experts, information generation and dissemination, user education among others puts a lot of responsibilities on the present day academic librarian. According to Gill (2017), library professionals in a digital library environment do not only play their roles inside their libraries, but also exceed the library's capacity to support other units of their institutions. These responsibilities make their library staff potentially susceptible to stress (Kusi *et al.*, 2014; Owusu and Tawiah, 2014).

The current study revealed a high level of occupational psychosocial stress of 83 (54.25 per cent) among librarians. This finding is similar to the results of Ogunlana *et al.* (2013) in their studies on job stress and job satisfaction among academic librarians in South West Nigerian universities, where higher levels of stress were reported. However, the finding of

Parameter	Total	E-RI
Ages		
Less than 30 years	34 (24.46)	16 (47.06)
B/n 30 and 44 years	90 (64.75)	50 (55.56)
45 years or more	15 (10.79)	9 (60.00)
Number of years on current position		
Less than 5 years	11 (7.19)	6 (54.55)
B/n 4 and 9 years	5 (3.27)	1 (20.00)
10 years or more	137 (89.54)	76 (55.47)
Number of children under 13 years of age		
No child	63 (41.18)	30 (47.62)
One or more child	90 (58.82)	53 (58.89)
Current designation		
Acquisitions and cataloguing	50 (32.68)	29 (58.00)
Electronic and institutional repository	46 (30.07)	21 (45.65)
Reference services	57 (37.25)	33 (57.89)
Job description		
Administrative	46 (30.06)	27 (58.70)
Tutorial	7 (4.58)	2 (28.57)
Both	100 (65.36)	54 (54.00)
Marital status		
Single	63 (41.18)	35 (55.56)
Married	88 (57.52)	46 (52.27)
Divorce	2 (1.30)	2 (100)

Table IV.
Effort-Reward Imbalance as presented by selected demographic characteristics

Notes: E-RI, Effort-Reward Imbalance. Data are presented as figures and percentage

this study is different from that of Wijetunge (2012) whose research on work-related stress among university librarians in Sri Lanka reported moderate level of stress among the respondents. The differences in stress levels recorded in these studies may be as a result of the different systems and cultures that exist in these countries that might have given different perception to the work-related stressors (Stoner and Perrewe, 2006). More so, the use of the ERI scale might have accounted for the variation in stress levels. Previous studies on stress among librarians did not make use of this scale. This finding will be extremely important to library managers who want to get the best out of their staff. The result will serve as a guide in planning well so that staff's efforts are matched with the requisite rewards. This is because when efforts and rewards are balanced, all parties (staff, managers and the library as a whole) benefit.

A descriptive examination of stress among the respondents indicated that the male population (44 (57.14 per cent)) had a high ERI. This concurred with the findings of Ogunlana *et al.* (2013) and Omoniyi and Ogunsanmi (2012) that discovered a high stress prevalence among male populations. This finding, however, is not in tandem with the findings of other earlier studies ((Kristensen *et al.*, 2005; Sackey *et al.*, 2011; Ilo, 2016) and does not also agree with the hypothesis of differential vulnerabilities which expects women to be more responsive to work stressors than men (Jeon *et al.*, 2017). The reason for the current finding stems from the challenging economic environments in these countries, especially where most men are the breadwinners of the family, and have to work extra hours in order to be economically stable to fend for their families.

The higher level of stress among respondents from South Africa (29 (59.18 per cent)) corroborated with the findings of Akakandelwa and Jain (2013) that established that salary-related issues and workload related issues were some reasons for the high prevalence of stress among librarians in southern Africa. Again, the relatively high stress prevalence rate among Nigerians (30 (58.82 per cent)) is in tandem with the findings of Ogunlana *et al.* (2013), which established that that there exists a high prevalence of stress among librarians in Nigeria which could be as a result of role ambiguity, role conflict and unconducive physical work environment and psychological well-being of the people.

The study again revealed that the age of respondents was a contributing factor to their stress levels. Contrary to the observations of Ajala (2011), which concluded that many younger librarians showed higher levels of work-related stress, this study established that the older population (45 years or more) (9 (60.00 per cent)) experienced more stress. However, the findings of (Fonseka, 2012) agree with the findings of this study and conclude that stress tends to increase with age particularly at 40 years and above. This may be attributed to the fact that older staff usually have more responsibilities both at work and home than younger staff (Akakandelwa and Jain, 2013).

The present findings suggest that age may be one of the potential moderators of occupational psychosocial stress. Consistent with the findings of Tsutsumi *et al.* (2002) and Wireko-Gyebi and Ametepeh (2016), this study reported a high level of ERI among the respondents who were less experienced (less than five years on the job (6 (54.55 per cent))) and those who were more experienced on the job (ten years or more (76 (55.47 per cent))) (see Table IV). For young employees, Mosadeghrad (2013) identified conflicting work demands, insufficient training, lack of job security, role ambiguity and too much responsibilities as some factors that mostly contribute to occupational stress. The findings on "experienced employees" as established by this study, however, contradict many findings. Previous studies have reported significant negative work experience with stress (Al-Omar, 2003).

This study also revealed that having children of ages 13 years or less could contribute to workers' experience of stress. Thus, it was found out that, librarians with children under 13 years of age experienced a higher degree of stress 53 (58.89 per cent). Qualitative studies by Fox (2009) and Williams (2010) indicated two major sources of parenting stress for

working-class parents to include "the inability to provide financial support and the lack of family-friendly accommodations at work." To financially support their families, working-class parents undertake a variety of strategies, and according to Williams (2010), some parents work long hours, sometimes by taking multiple jobs at a time and others, as asserted by Woldoff and Cina (2007), make extra money through under-the-table jobs. These additional responsibilities and the efforts of undertaking the caregiver role in their homes are major stressors for this category of workers.

Apart from a record of high Effort-Promotion Imbalance of 87(56.86 per cent), this study recorded low levels of stress under the various component stressors (see Table II). This means that most of the stress experienced by the respondents was as a result of the librarians putting in more efforts in their job than they get in the form of promotions at their work places. This is a possible indication of restricted space for vertical mobility (Madu and Mamomane, 2003; Makie, 2006). The demanding requirement for promotion for most librarians may be some reasons that could be assigned for this high record of Effort-Promotion Imbalance in this study (Ismail and Noor, 2016).

Professionally, the findings of this study provide enough evidence for the management of libraries. Stress is a menace that needs to be well managed in order to get the best out of the library human resource. Management of stress in libraries is not only advantageous to the library staff, but also the institution as a whole. This is because a stress-free environment and stress-free staff may impact positively on productivity and profits. This makes a study like this that sought to understand the prevalence of occupational stress in the library environment an important one for library managers. As indicated in the study, understanding of stress in the library requires library managers to appreciate the dynamics of their staff, the expectations required from them and the corresponding rewards that should go with these expectations. Also, the findings of this study can guide human resource policy formulations in the. Library staff from the onset should be made aware of what is expected from them through a formal and detailed job description. Moreover, rewards in terms of remunerations, promotions and resources to function effectively should be made known and readily available to the staff. These will go long way to help staff stay in balance with regards to their efforts and rewards.

Conclusions

Using the ERI scale to access the occupational psychosocial stress of library staff in Africa, this study has established the existence of high record of occupational psychosocial stress among librarians from Ghana, Nigeria and South Africa. It was revealed that gender, country of respondents, age, work experience, workers with children under 13 years of age, work roles among others were the main factors that determined the occupational stress among librarians in this study. The creation of an enabling working environment with clearly defined expectations and rewards will help library staff to appreciate whatever return they receive for their outputs.

In terms of limitations to this study, it was conducted with the use of an online data collection instrument (Google Form[(R)]). This did not help in increasing the response rate as most targeted respondents did not respond to the survey. Further research can be conducted to show the representativeness of findings across different settings aside the library environments. Second, future research also needs to consider longitudinal studies that measure work-stress over a period of time. This will not only help to get a higher response rate, it will also help to appreciate a better representation of work-stress among a set of workers. However, the value of the findings of this study lies in the depth of narrative data collected and the insight it affords with regards to contemporary work within libraries in Africa and beyond. The results presented may provide both a starting point for further discussion and may also promote an increased openness about issues of employee safety in the work place.

References

Ajala, E.B. (2011), "Work-related stress among librarians and information professionals in a Nigerian University", *Library Philosophy and Practice*, Vol. 450, pp. 1-11.

Akakandelwa, A. and Jain, P. (2013), "A comparative study of perceived work related stress among library staff in two academic libraries in Southern Africa", *Library Management*, Vol. 34 Nos 8/9, pp. 569-584, available at: http://dx.doi.org/10.1108/LM-03-2013-0018

Al-Omar, B.A. (2003), "Sources of work-stress among hospital-staff at the Saudi MOH", *Economics and Administration*, Vol. 17 No. 1, pp. 3-16.

Bhatt, R.K. (2010), "University libraries in India: issues and challenges", *Journal of Library and Information Science*, Vol. 35 No. 1, p. 51.

Chinyere, N.I. and Ezinwanyi, M. (2016), "An investigation of the relationship between job satisfaction, job stress and organizational citizenship behavior: a research on librarians in Nigerian university libraries", *International Journal of Science and Research (IJSR)*, Vol. 5 No. 8, pp. 480-484, doi: 10.21275/ART2016535.

Cropanzano, R., Byrne, Z.S., Bobocel, D.R. and Rupp, D.E. (2001), "Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice", *Journal of Vocational Behavior*, Vol. 58 No. 2, pp. 164-209.

Ekienabor, E.E. (2016), "Impact of job stress on employees' productivity and commitment", *International Journal for Research in Business*, Vol. 2 No. 5, pp. 124-134.

Farler, L., Gar, C.S. and Broady-preston, J. (2012), "Workplace stress in libraries: a case study", *Aslib Proceedings: New Information Perspectives*, Vol. 64 No. 3, pp. 225-240, doi: 10.1108/00012531211244509.

Fonseka, L. (2012), "Biographical factors affecting the labour productivity", *Daily News*, available at: www.dailynews.lk/2012/12/11/fea25.asp (accessed September 15, 2017).

Fox, B. (2009), *When Couples Become Parents: The Creation of Gender in the Transition to Parenting*, University of Toronto Press, Toronto.

Gandi, J.C., Wai, P.S., Karick, H. and Dagona, Z.K. (2011), "The role of stress and level of burnout in job performance among nurses", *Mental Health in Family Medicine*, Vol. 8 No. 3, pp. 181-194.

Gill, R.K. (2017), "Burnout related to occupational stress among Library and Information Professionals (LIS)", *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, Vol. 22 No. 4, pp. 60-65, doi: 10.9790/0837-2204036065.

Gudo, C.O., Olel, M.A. and Oanda, I.O. (2011), "University expansion in Kenya and issues of quality education: challenges and opportunities", *International Journal of Business and Social Science*, Vol. 2 No. 20, pp. 203-214.

Ikonne, C.N. (2015), "Job stress and psychological well-being among library employees: a survey of library staff in selected university libraries in South-West Nigeria", *Open Access Library Journal*, Vol. 2 No. e1632, pp. 1-12, doi: 10.4236/oalib.1101632.

Ilo, P. (2016), "Managing stress among librarians in selected university libraries in Ogun State Nigeria", *Library Philosophy and Practice (e-Journal)*, Vol. 1343, pp. 1-20.

Ismail, N.H. and Noor, A. (2016), "Occupational stress and its associated factors among academician in a research university, Malaysia", *Malaysian Journal of Public Health Medicine*, Vol. 16 No. 1, pp. 81-91.

Jeon, G.-S., Choi, K. and Cho, S. (2017), "Gender differences in exposure and vulnerability to psychosocial and behavioral factors of suicide attempt among Korean adolescents", *Asia-Pacific Psychiatry*, pp. 1-9, doi: 10.1111/appy.12272.

Johnson, P.R. and Indvik, J. (1996), "Stress and workplace violence: it takes two to tango", *Journal of Managerial Psychology*, Vol. 11 No. 6, pp. 18-27, doi: 10.1108/02683949610129721.

Karasek, R. and Theorell, T. (1990), *Healthy Work: Stress Productivity and the Reconstruction of Working Life*, Basic Books, London.

Kristensen, T.S., Hannerz, H., Hogh, A. and Borg, V. (2005), "The Copenhagen psychosocial questionnaire: a tool for the assessment and improvement of the psychosocial work environment", *Scandinavian Journal of Work, Environment and Health*, Vol. 6 No. 31, pp. 438-449.

Kusi, H., Mensah, D.K.D. and Gyaki, E. (2014), "Work-related stress among the academic staff of the University of Education, Winneba Campus, Ghana", *Journal of Education and Practice*, Vol. 5 No. 13, pp. 15-23.

Lee Larson, L. (2004), "Internal auditors and job stress", *Managerial Auditing Journal*, Vol. 19 No. 9, pp. 1119-1130.

Loerbroks, A., Shang, L., Angerer, P. and Li, J. (2015), "Effort-Reward Imbalance at work increases the risk of the metabolic syndrome: a prospective study in Chinese university staff", *International Journal of Cardiology*, Vol. 182, pp. 390-391, doi: 10.1016/j.ijcard.2015.01.030.

Madu, S. and Mamomane, J. (2003), "Stress among nurses in rural hospitals in South Africa", *Journal of Social Sciences*, Vol. 7 No. 3, pp. 209-213.

Makie, V.V. (2006), *Stress and Coping Strategies Amongst Registered Nurses Working in a South African Tertiary Hospital*, University of the Western Cape, Western Cape.

Mosadeghrad, A.M. (2013), "Occupational stress and turnover intention: implications for nursing management", *International Journal of Health Policy and Management*, Vol. 1 No. 2, pp. 169-176, doi: 10.15171/ijhpm.2013.30.

Mukhanji, J.M., Ndiku, J.M. and Obaki, S. (2016), "Effect of increased student enrolment on teaching and learning resources in Maseno University, Kenya", *The International Journal of Social Sciences and Humanities Invention*, Vol. 3 No. 3, pp. 1938-1947, doi: 10.18535/ijsshi/v3i3.5.

Nekoranec, J. and Kmosena, M. (2015), "Stress in the workplace: sources, effects and coping strategies", *Review of the Air Force Academy*, Vol. 1 No. 28, pp. 163-170.

Niedhammer, I., Tek, M.L., Starke, D. and Siegrist, J. (2004), "Effort-Reward Imbalance model and self-reported health: cross-sectional and prospective findings from the GAZEL cohort", *Social Science & Medicine*, Vol. 58 No. 8, pp. 1531-1541.

Ogunlana, E.K. *et al.* (2013), "Indices of job stress and job satisfaction among academic librarians in selected federal universities in South West Nigeria", *Annals of Library and Information Studies*, Vol. 60 No. 3, pp. 212-218.

Omoniyi, M.B.I. and Ogunsanmi, J.O. (2012), "Stress among academic staff in South West Nigeria", *The African Symposium: An Online Journal of the African Educational Research Network*, Vol. 12 No. 1, pp. 126-132.

Owusu, G.A. and Tawiah, M.A. (2014), "Stress management among senior staff female administrators in the University of Cape Coast", *International Journal of Academic Research in Progressive Education and Development*, Vol. 3 No. 4, pp. 78-100, doi: 10.6007/IJARPED/v3-i4/1143.

Ranjna (2015), "Techno-stress among library professionals at the workplace in ICT era: an overview", *International Journal of Multidisciplinary Research and Development*, Vol. 2 No. 4, pp. 532-536.

Sackey, J., Boahemaa, P. and Sanda, M.A. (2011), "Relational impact of job stress on gender based managerial effectiveness in Ghanaian organizations", *World Academy of Science, Engineering and Technology*, Vol. 5 No. 12, pp. 1918-1927.

Siegrist, J. (1996), "Adverse health effects of high-effort/low-reward conditions", *Journal of Occupational Health Psychology*, Vol. 1 No. 1, pp. 27-41.

Siegrist, J. (2002), *Effort-reward Imbalance at Work and Health*, Emerald Group Publishing Limited, Bingley.

Siegrist, J., Wege, N., Pühlhofer, F. and Wahrendorf, M. (2009), "A short generic measure of work stress in the era of globalization: effort-reward imbalance", *International Archives of Occupational and Environmental Health*, Vol. 82 No. 8, pp. 1005-1013.

Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I. and Peter, R. (2004), "The measurement of effort–reward imbalance at work: European comparisons", *Social Science & Medicine*, Vol. 58 No. 8, pp. 1483-1499.

Somvir and Kaushik, S. (2012), "Occupational stress & library professional in digital", *World Academy of Informatics and Management Sciences*, Vol. 1 No. 2, pp. 5-15.

Somvir and Kaushik, S. (2013), "Occupational stress among library professionals in Haryana", *International Journal of Knowledge Management & Practices*, Vol. 1 No. 1, pp. 19-24.

Stoner, J. and Perrewe, P. (2006), "Consequences of depressed mood at work: the importance of supportive superiors", in Rossi, A.M., Perrewe, P.L. and Sauter, S.L. (Eds), *Stress and Quality of Working Life: Current Perspectives in Occupational Health*, Information Age Publishing, Greenwich, CT, pp. 87-100.

Tarafdar, M., Pullins, E.B. and Ragu-Nathan, T.S. (2014), "Technostress: negative effect on performance and possible mitigations", *Info Systems Journal*, Vol. 25 No. 2, pp. 103-132, doi: 10.1111/isj.12042.

Tsutsumi, A. and Kawakami, K. (2004), "A review of empirical studies on the model of Effort-Reward Imbalance at work: reducing occupational stress by implementing a new theory", *Social Science & Medicine*, Vol. 59 No. 11, pp. 2335-2359.

Tsutsumi, A., Kayaba, K., Nagami, M., Miki, A., Kawano, Y., Ohya, Y., Odagiri, Y. and Shimomitsu, T. (2002), "The Effort-Reward Imbalance model: experience in Japanese working population", *Journal of Occupational Health*, Vol. 44 No. 6, pp. 398-407.

Van Vegchel, N., De Jonge, J., Bosma, H. and Schaufeli, W. (2005), "Reviewing the effort-reward imbalance model: drawing up the balance of 45 empirical studies", *Social Science & Medicine*, Vol. 60 No. 5, pp. 1117-1131.

van Woerkom, M., Bakker, A.B. and Nishii, L.H. (2016), "Accumulative job demands and support for strength use: fine-tuning the job demands-resources model using conservation of resources theory", *Journal of Applied Psychology*, Vol. 100 No. 1, pp. 141-150, doi: 10.1037/apl0000033.

Vijayakumar, A. and Remy, S. (2013), "Burnout syndrome in library professionals", *Asian Journal of Science and Technology*, Vol. 4 No. 11, pp. 234-235.

Wijetunge, P. (2012), "Work-related stress among the university librarians of Sri Lanka", *Journal of the University Librarians Association, Sri Lanka*, Vol. 16 No. 2, pp. 125-137.

Williams, J.C. (2010), *Reshaping the Work-family Debate: Why Men and Class Matter*, Harvard University Press, Cambridge, MA.

Wireko-Gyebi, S. and Ametepeh, R.S. (2016), "Influence of socio-demographic characteristics and occupational attributes on work-related stress among frontline hotel employees in the Kumasi metropolis", *African Journal of Hospitality, Tourism and Leisure*, Vol. 5 No. 2, pp. 1-16.

Woldoff, R.A. and Cina, M.G. (2007), "Regular work, underground jobs, and hustling: an examination of paternal work and father involvement", *Fathering: A Journal of Theory, Research, and Practice about Men as Fathers*, Vol. 5 No. 3, pp. 153-173.

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