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Job Control in Nurses' Burnout under Job Demands

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ABSTRACT

This study investigated the moderating role of job control in job demands and burnout relations among nurses. Two hundred and Ninety Two (292) participants comprising one hundred and seventy two (172) females and one hundred and twenty (120) males between the ages of 26 and 58 years (M = 46.7, SD = 4.9) were drawn from three hospitals within Enugu metropolis using stratified and purposive sampling techniques. The study was a cross-sectional survey in which 16-item Job Control Scale, 16-item Job Demands Scale and 22-item Burnout Inventory were administered for data collection. Moderated hierarchical regression analysis was used for data analysis. The results indicated that Also, conflict demand positively predicted feeling of reduced personal accomplishment dimension of burnout (β= .38, t=3.21, p=.001). Qualitative (β=.37, t = 2.96, p=.003) and employee (β=.25, t=2.19, p=.009)) dimensions of job control positively predicted emotional exhaustion dimension of burnout respectively while qualitative (β=.35, t = 2.86, p=.005) and workload (β=.36, t=3.58, p=.001)) dimensions of job control positively predicted feeling of reduced personal accomplishment dimension of burnout respectively. Workload dimension of job control only, moderated the relationship between workload demand and depersonalization (b= -0.64, t = -2.18, p = .030). The results of this study were discussed; the implications of the study highlighted and suggestions were made for further study. Finally, it has been recommended that policy makers in the health care sector should make policies that will create conditions for nurses to enjoy more job control, especially workload control.

Keywords: Job Control, Job Demand, Burnout

Introduction

Effective health care delivery is absolutely hinged on the involvement of health care providers, especially nurses (Olatunji, 2014). Nurses occupy important positions in all health care organizations that seek to reduce mortality and morbidity rate, therefore, high premium is placed on job demand of its entire workforce (Olatunji, 2014), else they slide into burnout.

Nurses as health care givers are the most valuable assets that endure various problems and issues (Maher, 2016) and are particularly susceptible to job burnout due to their job demands and direct contact with patients who are in pain, suffering and may eventually die (Maher, 2016). It is common to find burnout syndrome in health professionals, especially in the field of nursing (Alexander, Rollins, Walker & Yogo, 2015). In the health area, nursing stands out as one of the most exhausting professions owing to different circumstances in professional practice causing physical and emotional exhaustion (Orly, Rivka, Rivka & Dorit, 2012), hence the interest of this study is burnout of nurses.

Burnout is defined as a persistent, negative, work-related state of mind in otherwise normal individuals, characterized by emotional exhaustion, cynicism and feeling of reduced personal accomplishment (Maslach, Schaufeli & Leiter, 2001). Burnout has been understood to be a syndrome characterized by emotional exhaustion, depersonalization and feeling of reduced personal accomplishment. And burnout frequently occurs among individuals who work in close contact with other people (Maslach & Jackson, 2003). The symptoms (burnout) may also lead to increased turnover, absenteeism and presenteeism, a condition in which the person is present at work, but their productivity is as low as if they were absent (Trigo, Teng, & Hallack, 2007).

Emotional exhaustion" is defined as a lack of energy and enthusiasm and the feeling of resource exhaustion (Carlotto & Camara, 2004), which may manifest itself in various symptoms such as headaches, nausea, muscular tension, low back or cervical pain, sleep disturbance, impatience, irritability (Trigo, Teng & Hallack, 2007). Emotional exhaustion and cynicism are referred to as the core components of burnout (Green, Walkey & Taylor 2001). Emotional exhaustion is particularly associated with high job demands, such as workload and time pressure, while cynicism is more strongly related to poor job resources, like lack of control and feedback (Demerouti, Bakker Machreiner & Schaufeli, 2001) and can be viewed as poor strategy to deal with exhaustion (Bakker, Schaufeli, Sixma, Bosveld, & Dierendock, 2000).

Depersonalization refers to the impersonality with which a professional treats the people around them such as dealing with patients and colleagues as if they were objects, and developing emotional insensitivity (Carlotto & Camara, 2004). In occupations that do not involve patients or customer service, this dimension can be characterized by the development of a distance attitude and an indifference towards the work, rather than with the people with whom one is working (Maslach & Schaufeli, 2003). Pereira (2007) divided "depersonalization" dimension into two, "dehumanization and emotional distancing"

Feeling of reduced personal accomplishment (low professional achievement) is a worker's tendency to self evaluate negatively and to feel unhappy and dissatisfied with his or her professional development (Carlotto & Camara 2004). Among burnout characteristics, feeling of reduced personal accomplishment is considered a more independent state and less important (Maslach, Schaufeli & Leiter, 2001) because of its relatively low correlations with exhaustion and cynicism.

Many factors have been found to relate to burnout such as job demand (Schaufeli & Bakker, 2004). Studies have proven job demands as part of the de-energizing process to be the strongest predictors of burnout (Schaufeli & Bakker, 2004; Xanthropolou, Bakker, Hackanen & Demerouti, 2007). Demerouti, Bakker, Nachreiner, and Schaufeli (2001) proposed two processes for the development of burnout.

First, long –term excessive job demands from which employees do not adequately recover may lead to sustained activation, the energetic component of burnout.

Secondly, a lack of resources precludes that job demands are met and that work goals are reached which leads to withdrawal or reduced motivation that is, the motivational component of burnout acts as a self protective strategy to prevent further energy depletion (Demerouti, 2001).

Demerouti, Bakker, Nachreiner and Schaufeli (2001) defined job demands as those physical, social or organizational aspects of the job that requires sustained physical or mental effort and are therefore associated with certain physical and psychological costs.

Contact with people is demanding and exhausting, and is one of the root causes of burnout (Schaufeli, Maslach & Marek, 2003). Xanthopoulou et al (2007) opined that job demands can increase employees' (nurses) strain which eventually causes stress and burnout and may result in many forms of employee workplace deviant behaviour (Schaufeli & Bakker, 2004, Xanthopoulou et al, 2007). Job demand requires substantial energy and skill, involves physical and psychological cost that creates exhaustion and burnout: those demand generated through higher workload can be challenging (Li, Jiang, Yao, 2013; Broeck Ruysseveldt, Belle & Witte 2013, Tadic, Bakker & Oerlemans, 2015).

Several studies have shown that high job demand such as workload and poor job resources (such as low job control) strongly relate to burnout (Schaufeli & Bakker, 2004; Xanthopoulou et al, 2007). There are compelling evidence that motivation, professional outcomes and positive development are positively determined by available resources such as job control (Bakker & Demerouti, 2014).

Demerouti, Bakker Nacreiner & Schaufeli (2001) defined job control as those physical, psychological, social or organizational aspect of the job that may do any of the following:

a. Are functional in achieving work related goal
b. Reduce job demands and the associated physiological and psychological costs.
c. Stimulate personal growth, learning and development.

Psychological research in job control has focused on its interactions with job demand as a means to describe psychological processes that explain the development of job-related strain and motivation that are related to desirable organizational outcomes and well-being of workers (nurses) (Broeck, Ruysseveldt, Belle & Witte, 2013).

Job control and "challenge demands" have been found to influence professional outcomes and personal development (among nurses) mostly through their positive input on motivational factors and "hindrance demands" have been found to negatively affect professional outcomes of (nurses) because they increase stress above optimal levels and the probability of burnout (Bakker & Demerouti, 2014). Burnout occurs as a result of the mismatch that exists between work demands and job control being thus described by way of two processes (Demerouti, Bakker, Nachreiner & Schaufeli, 2001).

In the first, the authors argue that typical work demands especially excess work, can lead to overload and as a consequence to emotional exhaustion (burnout).

The second refers to the lack of resources (job control), which can aggravate the effects of demands and lead to distancing and cynical behavior by employees (nurses) that in turn generate into burnout and total disengagement.

Control moderates the impact of job demands in strain (burnout) and can help employees (nurses) to engage in challenging tasks and learn new skills. Studies have shown that job control reduces the negative effects of high demands on employees (Demerouti, Bakker, Machreiner & Schaufeli, 2001). Skill discretion and decision latitude (components of job control) are commonly dichotomized into high/low, high strain (high demand –low control), active (high demand –high control), passive (low demand-low control) and low strain (low demand – high control).

Among the combined job control categories, high strain (burnout) is construed as the job condition most related to employees' (nurses) health hazards (Karasek, et al., 2001).

When work situation of employees (nurses) is demanding but also involves high level of freedom, learning and growth (job control), it is thought to buffer the effects of workload (Bakker, Demerouti & Euwema, 2005).

The presence of job control can moderate the relationship between demand and burnout among employees (nurses), hence this study on the moderating role of job control in job demand and burnout relation among nurses.

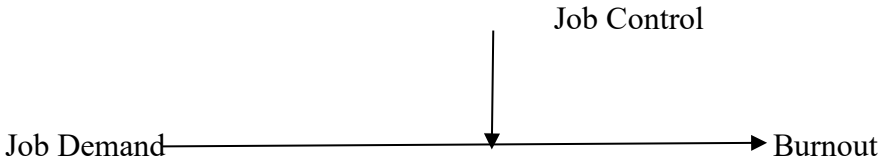

Fig. 1

Hypotheses
The following hypotheses were tested:

1. Job demand (qualitative demands, employees demands, workload demands and conflicts demands) will significantly predict burnout (emotional exhaustion, depersonalization and low professional achievement).
   Job control (qualitative control, employees control, workload control and conflicts control) will significantly predict burnout (emotional exhaustion, depersonalization and low professional achievement).
2. Job control (qualitative control, employees control, workload control and conflicts control) will significantly predict job demand (qualitative demands, employees demands, workload demands and conflicts demands).
3. Job control (qualitative control, employees control, workload control and conflicts control) will significantly moderate the prediction of burnout by job demand.

Method

Participants

A total of two hundred and ninety two (292) nurses comprising one hundred and seventy two (172) females and one hundred and twenty (120) males between the ages of 26 and 58 years (M = 46.7, SD = 4.9) drawn from three hospitals within Enugu metropolis using stratified and purposive sampling techniques participated in the study. Yamane sample size formula (1967) was used to derive the sample size of 292. The participants were all registered nurses.

Instrument

Three scales were used for this study, and they included:

Job Control Scale

Job control was measured using 16-item Job Control Scale (Ganster, 1989) characterized by four subscales measuring qualitative control, employees control, workload control, and conflicts control. Sample items include: "Employee's level of creativity and motivation", "the extent to which my job required learning new things" etc. Ratings were made using 5-point scale ranging from 1 = have virtually no control to 5 = have complete control. Gangster (1989) reported internal reliability coefficient of .85 and weighted reliability of .95. Scores on the items were averaged to provide an aggregate index of the amount of control employees have over their job, a high score indicates greater control. The researchers in a pilot study obtained a Cronbach's alpha of .71.

Maslach Burnout Inventory

Burnout was measured using 22-item Maslach Burnout Inventory (Maslach &Jackson, 1981) designed to measure the extent to which an employee experiences chronic work related stress. This Maslach Burnout Inventory has three subscales measuring emotional exhaustion, feeling of reduced personal accomplishment and depersonalization. Sample items include: "I feel like I am at the end of my rope", "I worry that this job is hardening me emotionally." Ratings were made using a 7-point scale ranging from 0 (never), to 6 (everyday).

Maslach and Jackson (1981) reported the following internal consistency reliability estimates (Cronbach alpha) for emotional exhaustion (.89), feeling of reduced personal accomplishment (.74) and depersonalization (.72) while test-retest Cronbach's alpha coefficients were 0.82 for emotional exhaustion, 0.80 for reduced feeling of personal accomplishment and 0.64 for depersonalization.

Using an Asian sample Wickramasinghe et al. (2018) obtained internal consistency alpha reliability coefficients of .83 for emotional exhaustion, .86 for personal accomplishment and.88 for depersonalization. Coker (1999) using a Nigerian sample revalidated the scale and obtained a Cronbach's alpha of .86 and split half reliability of .57. By correlating the Maslach and Jackson's (981) Burnout Inventory with Psycho-physiological Patterns of Anxiety Scale Omuluabi (1996) obtained concurrent validity coefficient in the range of .01 to .36 while the reliability Cronbach's alpha coefficient of .86 and Split-half of .57 was obtained. Okonkwo (2011) obtained split-half reliability coefficient of 0.63 for emotional exhaustion subscale, 1.00 for depersonalization subscale and 0.75 for feeling of reduced personal accomplishment subscale. Okonkwo (2013) reported a Cronbach alpha of .81. Olebara and Okonkwo (2019) reported a reliability Cronbach alpha of .72 for the overall Maslach Burnout Inventory. The present researchers in a pilot study reported Cronbach's alpha reliability coefficient of .71.

Job Demand Scale

Job demands were measured using i6-item Job Demands Scale (Karasek, 1985) designed to measure job demands characterized by four subscales measuring qualitative demands, employees demands, workload demands and conflict demands. Sample items include "my capacity and potential are not utilized", "different work than required in job description" etc. Ratings were made on a 5-point scale ranging from 1= completely false to 5 = completely true. Karasek (1985) reported internal reliability coefficient of .81. The present researchers in a pilot study reported Cronbach's alpha reliability coefficient of .70.

Procedure

The researcher first obtained approval from the Head of the Department of Psychology, Enugu State University of Science and Technology, Agbani. Thereafter, the researcher obtained ethical clearance for the research from the three hospitals. Two-stage sampling technique was adopted for the selection of the participants. Stage one; the hospitals were grouped into three strata. Stage two, purposive sampling technique was used to draw the nurses that met the criteria for the research. The inclusion criteria included experience that is nurses that had worked not less than three years (those whose appointments had been confirmed) in the clinical areas. The nurses that were on leave during the data collection period, student nurses and National Youth Service Corps members available at the period of data collection in the various hospitals were exempted.

The participants (nurses) were given the questionnaire during break period to avoid interference with work.

A total of three hundred and two (302) copies of questionnaire were distributed, two hundred and ninety two (292) were properly completed and returned, six were not returned while four were discarded due to incomplete data and errors in completion. The two hundred and ninety two properly completed and returned questionnaire were used for analysis.

Design and Statistics

The research was a cross-sectional survey study as data were collected to make inferences about the population of interest at one point in time. Moderated hierarchical regression using SPSS version 25 was used for data analysis.

Results

TABLE 1: RESULTS DESCRIPTIVE STATISTICS AND ZERO ORDER CORRELATION

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
Age	46.65	4.90	1	.01	-.10	.00	.05	.10	.00	.01	.04	.04	.02	-.03	-.05
Gender				1	-.11	.01	.02	-.00	.07	-.02	-.03	-.06	-.05	.13*	-.03
QC	13.24	2.27			1	.14*	.11	.27**	.23**	.15**	.24**	.15**	.24**	.14*	.24**
EC	13.23	2.41				1	.19*	.04	.19**	.16**	.13*	.07	.18**	.13*	.14*
WC	13.43	2.33					1	.14*	.10	.08	.06	.02	.15**	.11	.23**
CC	13.74	2.49						1	.17**	.18**	.08	.18**	.17**	.08	.18**
QD	13.77	2.41							1	.22**	.26**	.26**	.24**	.15**	.15**
ED	13.97	2.40								1	.18**	.20**	.09	.15**	.14*
WD	13.76	2.38									1	.19**	.13*	.09	.17**
CD	13.96	2.30										1	.24**	.17**	.25**
Emotional Exhaustion	34.65	4.65											1	.33**	.33**
Depersonalization	15.23	2.70												1	.23**
Reduced Accomplishment	31.65	4.65													1

Note **p<.01; *p<.05; Gender (0 = Male, 1 = Female); QC= Qualitative Control; EC= Employees Control; WC=Workload Control; CC=Conflicts Control; QD=Qualitative Demands; ED=Employees Demands; WD=Workload Demands; CD=Conflicts Demands

The correlations in Table 1 showed that gender (more with the female participants), correlated positively with depersonalization dimension of burnout, indicating that females were more likely to experience depersonalization dimension of burnout (r = .13, p<.05).

Qualitative component of job control was positively related to job demand (qualitative demands, employees demands, workload demands and conflicts demands dimensions of job demands) (r = .23, p<.01; r =.15, p< .01; r=.24, p<.01; r = 15, p <.01) respectively. This means that the higher the qualitative control dimension of job control, the more the job demands (qualitative, employees, workload, and conflicts demands dimensions of job demands).

Qualitative component of job control was positively related to burnout (emotional exhaustion, depersonalization and feeing of reduced personal accomplishment dimensions of burnout) *(*r = .24, p <.01; r =.14, p< .05; r=.24, p<.01) respectively. This means that the higher the qualitative control dimension of job control, the more the burnout (emotional exhaustion, depersonalization and feeing of reduced personal accomplishment).

Employees component of job control was positively related to job demands (qualitative demands, employees demands, and workload demands dimensions of job demands) (r = .19, p<.01; r =.16, p< .01; r=.13, p<.01) respectively. This means that the higher the qualitative control dimension of job control, the more the job demands (qualitative, employees, and workload demands dimensions of job demands).

Employees component of job control was positively related to burnout (emotional exhaustion, depersonalization and feeing of reduced personal accomplishment dimensions of burnout) (r = .18, p<.01; r =.13, p< .05; r=.14, p<.05) respectively. This means that the higher the employees dimension of job control, the more the burnout (emotional exhaustion, depersonalization and feeling of reduced personal accomplishment dimensions of burnout).

Workload component of job control was not related to job demands (qualitative demands, employees demands, and workload demands dimensions of job demands).

Workload component of job control was positively related to burnout (emotional exhaustion and feeling of reduced personal accomplishment dimensions of burnout) (r = .15, p <.01; r=.23, p<.01) respectively. This means that the higher the workload dimension of job control, the more the burnout (emotional exhaustion and feeing of reduced personal accomplishment dimensions of burnout). Moreover, workload component of job control was not related to depersonalization.

Conflicts component of job control was positively related to job demands (qualitative demands, and workload demands) (r = .17, p<.01; r =.18, p< .01; r=.18, p<.01) respectively. This means that the higher the conflicts dimension of job control, the more the job demands (qualitative and workload demands).

Conflicts component of job control was positively related to burnout (emotional exhaustion and feeing of reduced personal accomplishment) (r = .17, p<.01; r=.18, p<.01) respectively. This means that the higher the conflicts dimension of job control, the more the burnout (emotional exhaustion and feeling of reduced personal accomplishment). However, conflicts component of job control was not related to depersonalization.

Table 2: Hierarchical Regression Coefficient table

Variables	Emotional Exhaustion			Depersonalization			Reduced Accomplishment		
	STEP1	STEP 2	STEP 3	STEP1	STEP 2	STEP 3	STEP1	STEP 2	STEP 3
Age	.368			-.609			-.733		
Gender	-.822			2.249*			-.345		
Qualitative control		2.961*			1.887			2.862*	
Employee control		2.191*			1.541			1.077	
Workload control		1.610			1.189			3.289**	
Conflict control		1.710			.649			1.882	
Qualitative demand			2.158*			.642			.047
Employee demand			-.581			1.553			.602
Workload demand			.299			.136			1.242
Conflict demand			2.640*			2.181*			3.214**
F	.276	7.451	3.884	1.989	2.934	2.654	.741	8.982	3.901
R	.054	.314	.383	.143	.244	.306	.088	.346	.408
R^2	.003	.099	.147	.020	.059	.094	.008	.119	.166
ΔR^2	.003	.096	.048	.020	.039	.034	.008	.112	.047

Note $^{**}p$<.01; $^{*}p$<.05; Gender (0 = Male, 1 = Female); QC= Qualitative Control; EC= Employees Control; WC=Workload Control; CC=Conflicts Control; QD=Qualitative Demands; ED=Employees Demands; WD=Workload Demands; CD=Conflicts Demands

According to table 2, the results of the hierarchical multiple regression indicate that age and gender were not significant predictors of emotional exhaustion component of burnout. While in the second step, qualitative component of job control positively predicted emotional exhaustion dimension of burnout (β = .37, t = 2.96, p = .003). Employees component of job control positively predicted emotional exhaustion dimension of burnout (β = .25, t = 2.19, p = .029). Workload control and conflict control components of job control were not significant predictors of emotional exhaustion dimension of burnout. Job control accounted for 9.6% (ΔR^2=.096) variance in emotional exhaustion component of burnout. In the third step, job demands (qualitative, employee, workload and conflict demand) was added. Qualitative component of job demands was significant positive predictor of emotional exhaustion dimension of burnout (β = .26, t = 2.16, p = .032). This means that the higher the qualitative dimension of job demands, the more the emotional exhaustion dimension of burnout. Conflict component of job demands was significant predictor of emotional exhaustion dimension of burnout (β = .32, t = 2.64, p = .009). This means that the higher the conflicts component of job demands, the more the emotional exhaustion dimension of burnout. Employee and workload dimensions of job demands were not significant predictors of emotional exhaustion dimension of burnout. Job demands accounted for 4.8% (ΔR^2=.048) variance in emotional exhaustion dimension of burnout.

Under depersonalization dimension of burnout, of all the demographic variables only gender (β =.74, t = 2.25, p = .025), was a significant predictor of depersonalization dimension of burnout. The contribution of the demographics in explaining the variance in depersonalization dimension of burnout was 2.0% (ΔR^2 = .020). In the second step, job control (qualitative, employee, workload and conflict control dimensions of job control) was not a significant predictor of depersonalization dimension of burnout. Job control accounted for 3.9% (ΔR^2=.039) variance in emotional exhaustion dimension of burnout. In the third step, job demands (qualitative,

employee, workload and conflict demand dimensions of job demands) was added. Conflict component of job demands was a significant positive predictor of depersonalization dimension of burnout (β = .16, t = 2.18, p = .030). This implies that the higher the conflicts dimension of job demands, the more the depersonalization dimension of burnout. Qualitative, employee, and workload demand dimensions of job demands were not significant predictors of depersonalization dimension of burnout. Job demand accounted for 3.4% (ΔR^2=.034) variance in depersonalization dimension of burnout.

Under the feeling of reduced personal accomplishment dimension of burnout, none of the demographic variables significantly predicted feeling of reduced personal accomplishment dimension of burnout. The contribution of the demographics in explaining the variance in feeling of reduced personal accomplishment dimension of burnout was 0.8% (ΔR^2 = .008). In the second step, qualitative component of job control was a significant predictor of feeling of reduced personal accomplishment dimension of burnout (β = .35, t = 2.86, p = .005). This means that the higher the qualitative component of job control, the higher the feeling of reduced personal accomplishment dimension of burnout. Workload component of job control was a significant positive predictor of feeling of reduced personal accomplishment dimension of burnout (β = .38, t = 3.58, p = .001). This implies that the higher the workload control dimension of job control, the more the feeling of reduced personal accomplishment dimension of burnout. Employee and conflict control dimensions of job control were not significant. Job control accounted for 11.2% (ΔR^2=.112) variance in feeling of reduced personal accomplishment dimension of burnout. In the third step, job demands (qualitative, employee, workload and conflict demand dimensions of job demands) was added. Conflict component of job demands was a significant positive predictor of feeling of reduced personal accomplishment dimension of burnout (β = .38, t = 3.21, p = .001). Qualitative, employee and workload demand dimensions of job demands were not significant predictors of feeling of reduced personal accomplishment dimension of burnout. Job demands accounted for 4.7% (ΔR^2=.047) variance in feeling of reduced personal accomplishment dimension of burnout.

Table 3: Moderation Coefficient table

Variables	Emotional Exhaustion		Depersonalization		Reduced accomplishment	
	COEFF	ΔR^2	COEFF	ΔR^2	COEFF	ΔR^2
QD*QC	.019	.000	-.005	.000	-.025	.001
ED*QC	-.010	.000	-.026	.003	.011	.000
WD*QC	-.066	.006	-.018	.001	-.062	.005
CD*QC	-.040	.002	-.006	.000	.047	.003
QD*EC	.026	.001	.000	.000	-.038	.002
ED*EC	-.034	.002	-.050	.010	-.023	.001
WD*EC	.077	.008	-.012	.001	-.045	.003
CD*EC	-.002	.000	-.033	.006	.031	.002
QD*WC	.027	.001	-.005	.000	.053	.004
ED*WC	-.026	.001	-.001	.000	.004	.000
WD*WC	-.021	.001	-.064*(.030)	.016	.006	.000
CD*CC	.022	.001	-.036	.005	.018	.000
QD*CC	.037	.002	-.016	.001	-.031	.001
ED*CC	-.043	.003	-.007	.000	.014	.000
WD*CC	.048	.003	.012	.001	-.049	.004
CD*CC	-.027	.001	-.033	.004	.056	.004

Note $^{**}p$<.01; $^{*}p$<.05; QC= Qualitative Control; EC= Employees Control; WC= Workload Control; CC= Conflicts Control; QD= Qualitative Demands; ED= Employees Demands; WD= Workload Demands; CD= Conflicts Demands

Table 3 shows the moderating role of the job control (qualitative, employee, workload and conflict control dimensions of job control) in job demands (qualitative, employee, workload and conflict demand dimensions of job demands) and burnout (emotional exhaustion, depersonalization and feeling of reduced personal accomplishment dimensions of burnout). Only workload demand and workload control showed to have significant negative moderating effect on depersonalization dimension of burnout (b= -064, t = -2.18, p = .030).

Table 4: Conditional effects of the workload demand predictor at values of the workload control

Workload control	Effect	Se	T	P	CI 95%	
					LLCI	ULCI
LOW	.260	.099	2.640	.009	.066	.455
MEAN	.131	.067	1.953	.052	-.001	.264
HIGH	-.062	.099	-.626	.532	-.257	.133

CI= confidence interval

Table 4 showed that low workload control significantly moderated workload demand to predict depersonalization dimension of burnout (see figure 1).

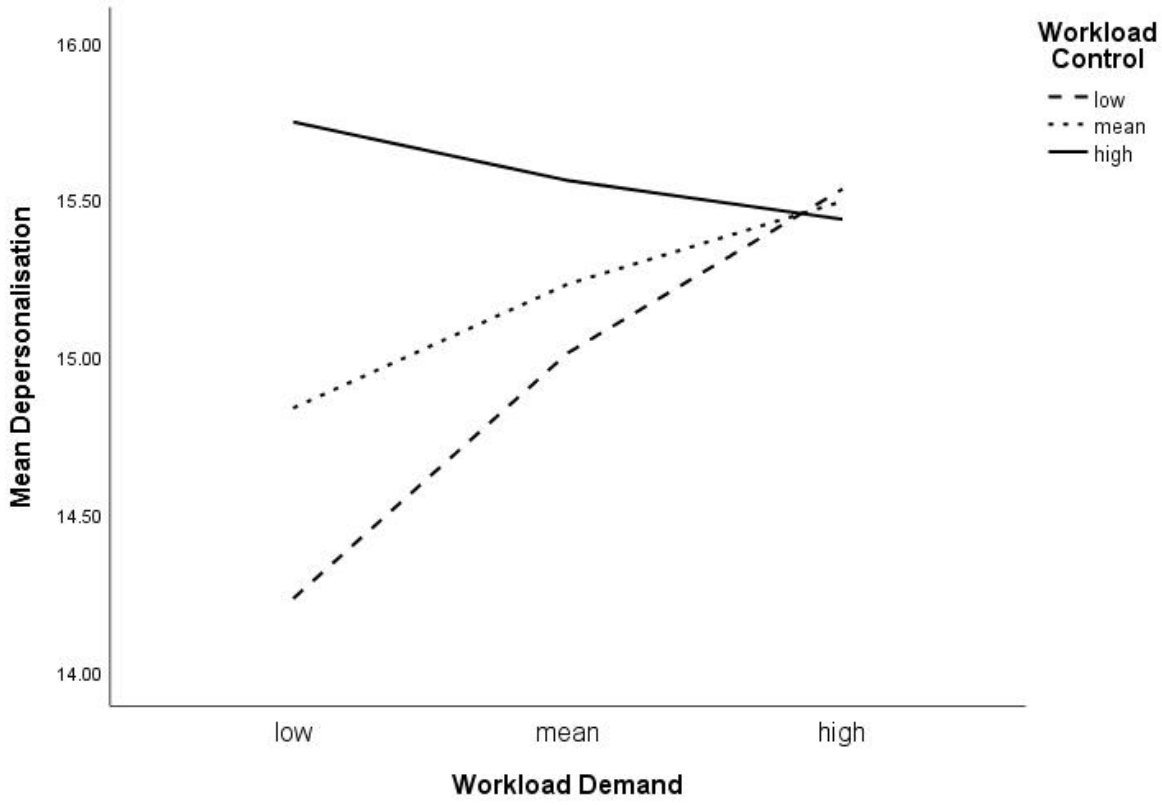

Figure 1: moderation graph of workload control and workload demand on depersonalization dimension of burnout.

Discussion

Considering the results, the first hypothesis which stated that job demands (qualitative, employee, workload, and conflict demands) will significantly predict burnout (emotional exhaustion, depersonalization and feeling of

reduced personal accomplishment dimensions of burnout) was confirmed. This is because qualitative and conflict demand components of job demands positively and significantly predicted emotional exhaustion dimension of burnout while others did not. This implies that the higher the level of qualitative and conflict demand dimensions of job demands on nurses, the more likely they (nurses) are to experience emotional exhaustion (resource exhaustion, lack of energy, lack of enthusiasm, and energy depletion at work) dimension of burnout. This means that qualitative and conflict demand dimensions of job demands contributed significantly to nurses feeling of emotional exhaustion which is characterized by resource exhaustion, depletion of energy and lack of enthusiasm. This is in congruence with Bakker, Boyd, Dollard and Gillespie (2010) findings which reported a significant positive association between two dimensions of job demands (qualitative and conflict demands) and emotional exhaustion dimensions of burnout. This may be as a result of the nature of their job which involves direct contact with patients who are in pain and suffering and the high premium placed on job demands of its entire workforce (Olatunji, 2014). Mehrad (2019) stressed that the higher the demands (qualitative and conflict demand dimensions of job demands), the higher the emotional exhaustion (resource exhaustion) dimension of burnout.

The other two dimensions of job demands (employee and workload demands) were not significant predictors of emotional exhaustion component of burnout. The reason for this is not clear. The researcher suspects that it may be as a result of nurses normal involvement and sacrifice to their service delivery irrespective of the stress involved and this is in agreement with the findings of Heijden Mahoney and Xu (2019) which found no significant correlation between job demands and emotional exhaustion dimension of burnout.

Furthermore, conflict component of job demands was a significant positive predictor of depersonalization dimension of burnout. This implies that the higher the conflict demands, the more the cynical attitude (distance attitude, and insensitivity towards patients) by nurses. This is in line with Zwetsloot and Pot (2015) findings, which reported a significant positive correlation between conflict demand and cynicism using 311 bank employees in Canada.

Following the result and in congruence with the findings of Bakker and Vries (2020), where they investigated the association between three dimensions of job demands (qualitative, employee, and workload demand dimensions of job demands), and a dimension of burnout (depersonalization) and reported no significant prediction, job demands (qualitative, employee, and workload demand dimensions of job demands) were not significant predictors of burnout (depersonalization dimension of burnout) in the researcher's finding (result). This may be as a result of workers (nurses) level of involvement in their service delivery as health care givers and their tendency to endure various problems (demands) and not self-evaluate negatively or feel unhappy and dissatisfied with their professional development (Maher, 2016, Carlotto, & Camara, 2014). The researcher guesses here that nurses try not to self-evaluate negatively and rather be neutral irrespective of demands and knowing the nature of their job and the expected level of involvement (service delivery). That is, considering the nature of the job that nurses do, and the level of expectation, they will try to keep to their routine unconditionally and be satisfied, knowing that they must do what they ought to do.
Meanwhile, the result of the findings did not support the first hypothesis which stated that job demands (employee and workload demand dimensions of job demands) will significantly predict burnout (emotional exhaustion dimension of burnout). This implies that when nurses experience employee and workload demand dimensions of job demands, they may not necessarily suffer resource exhaustion. This is in agreement with Rothmann and Joubert (2017) findings, where they explored the relationship between job demands (employee and workload demand dimensions of job demands) and burnout (emotional exhaustion dimension of burnout) using 310 managers at Platinum mine in Japan and reported no significant association.

In the case of feeling of reduced personal accomplishment dimension of burnout, job demands (conflict demand dimension of job demands) positively predicted feeling of reduced personal accomplishment dimension of burnout. This implies that as nurses experience conflicting demands at their workplace, their tendency to experience unhappy, dissatisfied, and self-evaluate negatively will equally increase. This finding supports the

first hypothesis which stated that job demands (qualitative, employee, conflict and workload demand dimensions of job demands) will significantly predict burnout. This implies that when nurses experienced high levels of job demands (conflict demand dimension of job demands), they felt unhappy, dissatisfied, and self evaluated negatively (feeling of reduced personal accomplishment dimension of burnout).

Under feeling of reduced personal accomplishment, conflict demand component of job demands positively predicted feeling of reduced personal accomplishment dimension of burnout. This implies that as nurses experience conflicting demands, that the tendency that they (nurses) will feel dissatisfied, unhappy, and negatively evaluate themselves will definitely increase. This finding supports the first hypothesis which stated that job demands (qualitative, employee, conflict, and workload demand dimensions of job demands) will significantly predict burnout (feeling of reduced personal accomplishment dimension of burnout). This means that when the nurses experienced high levels of job demands (e.g. conflict demand dimension of job demands), they felt dissatisfied, unhappy or evaluated themselves negatively. This finding is not in congruence with Wang and You (2016), which found no association between job demands (conflict demand dimension of job demands) and nurses dissatisfaction.

The second hypothesis which stated that job control (qualitative, employee, workload, and conflict control dimensions of job control), will significantly predict burnout (emotional exhaustion, depersonalization, and feeling of reduced personal accomplishment dimensions of burnout) was confirmed. This is because qualitative component of job control positively predicted burnout (emotional exhaustion dimensions of burnout). This implies that the higher the qualitative dimension of job control, the more the burnout (emotional exhaustion dimension of burnout). Employee component of job control positively predicted burnout (emotional exhaustion dimension of burnout). This implies that when nurses experience high level of employees control, they will likely experience resource exhaustion, energy depletion, emotional insensitivity, and dissatisfaction at work place. This is in agreement with Scanlan and Still (2019) where they examined the relationship among qualitative and employee dimensions of job demands and burnout and found positive association among them. The researchers equally suspect increase in demands as a result of too much concentration on control (qualitative and employee control) to be a contributing factor to positive association between qualitative/employee job control, and burnout (emotional exhaustion dimensions of burnout). Workload component of job control positively predicted emotional exhaustion and feeling of reduced personal accomplishment dimensions of burnout. This means that the higher the nurses workload control, the higher the tendency that they experienced resource exhaustion, energy depletion, and dissatisfaction. Conflict component of job control positively predicted emotional exhaustion and feeling of reduced personal accomplishment dimensions of burnout. This means that the more nurses experienced conflict control, the more they felt resource exhaustion, energy depletion, and evaluated themselves negatively. This equally means that the higher the job control (workload and conflict control dimensions of job control), the higher the burnout (emotional exhaustion and feeling of reduced personal accomplishment dimensions of burnout). This complies with Adewa and Agboola (2020) findings. They explored the correlation between workload and conflict control dimensions of job control and burnout (emotional exhaustion and feeling of reduced personal accomplishment dimensions of burnout) using 400 Nigerian nurses and obtained positive association between them.
The result showed no significant relationship between job control (conflicts and workload control dimensions of job control) and depersonalization dimension of burnout.

The third hypothesis which stated that job control (qualitative, employee, workload, and conflict control dimensions of job control) will significantly moderate the prediction of burnout by job demands (qualitative, employee, workload, and conflict demands) was confirmed. This is because workload control dimension of job control negatively moderated the prediction of burnout (depersonalization dimension of burnout) by workload demand dimension of job demands. This implies that out of the four dimensions of job demands (qualitative, employee, workload, and conflict demand dimensions of job demands) and burnout (emotional exhaustion, depersonalization, and feeling of reduced personal accomplishment dimensions of burnout), only workload

demand dimension of job demands and workload control dimension of job control had a significant negative moderating role on depersonalization dimension of burnout.

The first result obtained from the fourth hypothesis showed that job control failed to moderate workload relationships with dimensions of burnout (emotional exhaustion, depersonalization, and feeling of reduced personal accomplishment dimensions of burnout) among nurses. This implies that job control did not moderate the negative impact of workload on burnout (emotional exhaustion, depersonalization, and feeling of reduced personal accomplishment dimensions of burnout). The result is not consistent with Carlo, Girardi, Alessandra, Corso and Sipio (2019) findings which argued that job control moderates workload and conflict demands and burnout relationship in general, suggesting that higher level of job control is related to lower level of workload.

The result obtained from the fourth hypothesis and in table 4 showed the moderating effect of job control (qualitative, employee, workload, and conflict control) and job demand (qualitative, employee, workload, and conflict demand) on burnout (emotional exhaustion, depersonalization, and feeling of reduced personal accomplishment). Only workload demand dimension of job demands and workload control dimensions of job control proved to have significant negative moderating effect on depersonalization dimension of burnout. This implies that high level of workload demand with high level of workload control buffers the negative impact of demands (workload dimension of job demands) on burnout (depersonalization dimension of burnout).

This finding is in agreement with Odetunde (2021) who found negative influence of job control on job demands and burnout relationship using 420 contract bank employees across four banks in Lagos.
This gives credence to the job demand-control theory and the theoretical framework of this study (Karasek, 1979) which assumes that job control militates against the impact of job demands on burnout and when nurses feel they have enough control, it will cushion off the effect of demands on burnout (depersonalization dimension of burnout). Whereas burnout occurs when nurses feel that they lack resources (control).

Implications of the findings of the study

The findings of this study have theoretical, empirical, and practical implications. Theoretically, the findings of this study have given credence to the theoretical framework of the study, Job Demand- Control Theory (Karasek, 1979) which postulates that control (job control) moderates the negative influence of job demands on burnout. For example, the findings revealed that when nurses felt they had enough job control in form of workload control, it buffered the impact of workload demands on depersonalization component of burnout. Empirically, the findings of this study align with earlier findings (e.g. Olley, 2003; Bakker, Boyd, Dollard, & Gillespiek, 2010) which found a significant positive relationship between job demands and burnout. Practically, policy makers in the health care sector should make policies that will create conditions for nurses to enjoy more job control, especially workload control. This will help to cushion off high job demands which result in burnout, especially depersonalization dimension of burnout. This policy if properly implemented will enhance the productivity of nurses.

Limitations of the study and suggestions for further studies

There are some limitations in this study. First, the study involving cross-sectional survey did not support causal inferences. To this end, it is suggested that experimental and longitudinal approaches should be considered in future studies. Again, self-report measure was used in obtaining data from the participants at one point in time and this might have causal social desirability responses, hence the need for mixed design in subsequent studies.
Also, generalization of the findings of this study should be done with caution because only nurses from Federal tertiary hospitals within Enugu metropolis and in Eastern part of the country (Nigeria) serving as participants, somehow affected the external validity of the study. The researcher suggests that subsequent studies should broaden the scope of this study by considering nurses in other States of Nigeria. Moreover, future studies should not consider only nurses in tertiary hospitals. This consideration will help to cross-validate and enhance the external validity of the present study.

Conclusion

The results and discussions showed that both qualitative and conflict dimensions of job demands positively predicted burnout, especially emotional exhaustion component of burnout. Conflict component of job demands positively predicted depersonalization dimension of burnout.

Also, the results and discussions of the findings showed that workload component of job control moderated the relationship between workload dimension of job demands and burnout, especially depersonalization dimension of burnout. The findings therefore, imply that if healthcare institutions (hospitals) provide their healthcare givers (employees/nurses) with enough control, especially workload control dimension of job control, then we will have improved healthcare delivery system. In conclusion, this study provided a new perspective in the link between job demands and burnout by exploring the moderating role of job control.

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