

## **Job Demands and Mental Strain Relationship: The Moderating Effect of Perceived Organizational Support on the Mediating Role of Job Decision Latitude among Nigerian Immigration Officers**

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**Abstract.** This paper examined job demands and mental strain relationship: The moderating effect of perceived organizational support on the mediating role of job decision latitude among Nigeria immigration officers. Five hypotheses were developed. The descriptive survey research design was adopted for this study. The population comprised of all immigration officers in South-West, Nigeria. The sample consisted of 1600 respondents from Zone A and Zone F of the Nigerian Immigration Service in Zone A and Zone F, which covers five States in South-West, Nigeria – Ogun, Lagos, Oyo, Osun, and Ekiti Ogun and Lagos States. The sample was selected through the stratified random sampling technique. The instruments used for data collection included the Job Content Questionnaire (JCQ), General Health Questionnaire (GHQ), and Perceived Organizational Support Questionnaire (POSQ). Data were analyzed using regression analysis at the .05 level of significance. Results revealed, among other things, that there is a significant direct effect of job demands on mental strain independent of job decision latitude ( $t = 28.366$ ,  $p < .05$ ) and that there was no significant moderating role of organization support (coeff = .124;  $t = 1.286$ ,  $p > .05$ ) in the mediating role of job decision latitude between (coeff = -.087;  $t = -.908$ ,  $p > .05$ ) job demands and mental strain. It was recommended therefore that the management of paramilitary service in Nigeria should give more attention to organizational support in order to minimize mental strain

among the immigration officers and similar bodies.

**Keywords:** Job demands, mental strain, perceived organizational support, job decision latitude, Officers.

### **1. Background to the Study**

Working in organizations all over the world is characterized by stress and mental strain which could hinder job performance. Scholars like Baker, Olson, and Morisseau (1994) have attributed most cases of accidents in the workplace to mental strain. There is therefore a need to understand mental strain and its antecedents. Mental strain is characterized by feelings of boredom, fatigue or exhaustion which drains a person's mental energy and leads to reduced alertness, workplace accidents and injuries, etc. Mental strain hampers affective, psychomotive, and cognitive functions (Schagen, 2003). It is a complex psychological phenomenon often created by insidious long range continuous pressures, threats, and demands on an individual's mental alertness which are beyond his or her tolerance limits. Mental strain could be caused by personality and organizational factors such as interpersonal relationships, job description, and organizational climate.

Research suggests that officers in military and paramilitary organizations sometimes have

accidental discharge of arms due to strain. For example, Owens (2013) cited the case of a 35-year-old Krystal Barrows a woman in Ross County in US who was shot in the head and died during a raid on US 23. The incident was a form of accidental discharge while the officer was moving the gun. Also McKittrick (2007) reported an incident of how McAnespie, a member of Aghaloo O' Neills Gaelic football club was killed by an accidental gun discharge while travelling for a match after he just walked pass a British Army check point. *Paramilitary job is strenuous* (Govender, 2008; Kayal, 2004; Malach-Pines & Keinan, 2007) *and the Nigerian Immigration Service's job is not an exception*. During holidays, for example, immigration officers are at their duty posts unlike many other categories of workers. Besides, they work 12-hour shifts without compensation for the additional time. There are also the problems of poor organizational support, autocratic leadership, and insufficient operational resources which could all induce mental strain.

The job strain model assumes that strain especially results from the combination of high job demands, low decision latitude and low social support (Warren et al., 2002). JDCS shows how health impairment may be influenced by three dimensions at work: Job demands, job control or resources, and social support. In short, the JDCS Model focuses on three job characteristics: Job demands (stressors), job control (decision latitude) and social support (colleagues + supervisors) at workplace. Psychological dissatisfaction has been associated with low levels of decision latitude and low organizational support (De Jonge & Kompier, 1997).

In his job demand-control (JDC) model, Karasek (1979) postulates that two work characteristics (that is, job demands and job control) determine employees' job strain. While job demands are stressful tasks requiring the exertion of a considerable amount of effort or workload within a relatively short period of time and could be psychologically distressing to employees and are the major cause of mental strain at work (Karasek & Theorell, 1990), job decision latitude gives employees the opportunity to contribute to the decision-making process that

affects the use of their knowledge and skills. In a nutshell, job demands are work-related psychological stressors, while decision latitude refers to employees' control over their tasks and how the tasks are executed. It consists of both skill discretion and decision authority. Skill discretion describes the degree to which the job involves a variety of tasks, low levels of repetitiveness, occasions for creativity and opportunities to learn new things and develop special abilities. Decision authority describes both the employee's ability to make decisions about their own job, and their ability to influence their own work team and more general organization policies. This article therefore seeks to determine empirically the extent to which decision latitude will mediate the relationship between job demands and mental strain on the one hand, and the extent to which perceived organizational support will moderate the relationship between job demand and job decision latitude to influence mental strain of personnel of Nigeria immigration service.

Perceived organizational support is defined as how much the organization values employees' contributions and cares about them (Allen, Armstrong, Reid, & Riemenschneider, 2008). It is considered as a major work characteristic which may have main and moderating effects on job control and mental strain at work. Organizational support protects employees against the adverse effects of strain (Cohen & Wills, 2005). Perceived organizational support could increase positive employee attitudes and behaviour such as organizational commitment and effectiveness (Aselage & Eisenberger, 2003; Rhoades & Eisenberger, 2002). It could therefore reduce work stress and strain (Laschinger et al., 2006; Laschinger et al., 2008).

Organizational support has been found to enhance psychological well-being of employees and organizational outcomes (Billings & Moos, 2004; Holahan & Moos, 2001; Kwok & Wai, 2005). Rhoades & Eisenberger (2002) found that perceived organizational support was related positively to outcomes favourable to the individual and the organization but negatively with mental strain. The present study, however, attempt to investigate the extent to which

organizational support will moderate between job demand and job decision latitude to influence mental strain of personnel of the Nigerian Immigration Service.

## 2. Hypotheses

Based on the established relationship that is said to exist between the independent, mediating and moderating variables of this study and the criterion variable, five hypotheses were set and tested at 0.05 error margin:

- There is no significant total effect of job demand on mental strain.
- There is no significant direct effect of job demand on mental strain independent of job decision latitude.
- There is no significant indirect effect of job demand on mental strain through job decision latitude.
- There is no significant moderating effect of organisational support in the relationship between job decision latitude and mental strain.
- There is no significant interaction effect of job decision latitude and organisational support on mental strain.

## 3. Method

### 3.1 Research Design and Participants

This study adopted a descriptive survey research design. 1600 immigration officers selected through the proportional stratified random sampling technique from Lagos, Ogun, Ekiti, Osun, and Oyo States in the South West Zone of Nigeria. Participants were then chosen from each State through the simple random sampling technique.

### 3.2 Measures

Four standardized instruments were used for data collection which include: Demographic Data Inventory (DDI), Job Content Questionnaire (JCQ), General Health Questionnaire (GHQ), and Perceived Organizational Support Questionnaire (POSQ). These are described below.

**Demographic Data Inventory (DDI):** This was constructed by the researchers and used to gather demographic characteristics of the participants such as gender, age, job status, and work experience.

**Job Content Questionnaire (JCQ):** Job demands and decision latitude were measured using the Job Content Questionnaire developed by Karasek (1985). It is a five-item scale which described psychological stressors such as workload and time pressures. Responses are measured on a 5-point Likert-type scale ranging from 1 (never) to 5 (extremely often). Sample items in the scale are: "To what extent does your job require your working fast?" and "To what extent does your job require a great deal of work to be done?" Coefficient alpha values for job demands range from .79 to .88 (Chay, 1993; Fortunato, Jex, & Heinisch, 1999; Moyle & Parkes, 1999; Parkes, 1990; Westman & Eden, 1997; Xie, 1996; Zohar, 1997). Evidence of criterion validity was obtained from cross-correlations of the scales. Demographic distribution of the scales and intercorrelations were consistent with the English version. Results of the factor analysis were consistent with the two dimensions expected from the theory. Mean scale scores and variations in the prevalence of high psychological demands combined with low decision latitude by age, sex, education, and job category support the discriminant validity of the instrument.

Job decision latitude sub-scale consists of nine items; six relating to an employee's discretion in applying skills to do the job and three describing an employee's authority to make job-related decisions. Responses are measured on a 5-point Likert-type scale ranging from 1 (never) to 5 (extremely often). Sample items in the scale are: "To what extent do you have control over what happens on your job?", "To what extent are you assisted in making your own decisions" etc. Higher scores indicate more perceived discretion in applying skills to do the job and authority to make job-related decisions. Coefficient alpha values for decision latitude ranged from .77 to .85 (Chay, 1993; Fortunato et al., 1999; Moyle & Parkes, 1999; Parkes, 1990; Westman & Eden, 1997; Xie, 1996; Zohar, 1997).

**General Health Questionnaire (GHQ):** This was developed by Goldberg in the 1970s. It was used to measure mental strain. The GHQ assesses the extent to which respondents have experienced a list of somatic and affective symptoms over the past three months. The scale is a 12 item scale measured on 5-point Likert-type. Ranging from 1 = rarely or never true to 5 = most of the time true.” The instrument has been widely used in a large medical and psychiatric literature such as Cardozo et al (2000) and Pevalin and Ermisch (2004), and in health-economics research by, Shields and Wheatley (2005) and Gardner and Oswald (2004). Sample items on the scale are: “I could not concentrate on whatever was occurring around me,” and “I have lost my confidence.” The coefficient alpha of the scale was 0.87. Validity of the instrument was performed using convergent validity. When the correlation between the GHQ-12 and global quality of life scores was investigated, as expected a significant negative correlation emerged ( $r = -0.56, P < 0.0001$ ) indicating that those who were more distressed showed lower levels of global quality of life.

**Perceived Organizational Support Questionnaire (POSQ):** This was developed by Eisenberger et al. (1997) was adopted for this study. The questions were worded to tap the extent to which respondents believed their organisation valued their contribution,

considered their goals and interests, made help available to solve personal problems, and cared about the employee’s well-being. The scale has 8 items and was measured on a 5-point Likert-type. The responses range from 1 = strongly disagree to 5 = strongly agree.

The reliability coefficient (Cronbach’s alpha) for the scale was 0.86. Eisenberger et al. (1986) reported that employees showed a consistent pattern of agreement with statements concerning whether the organization appreciated their contributions and would treat them favorably or unfavorably in differing circumstances. POSQ has been found to be related to, yet distinct from, affective organizational commitment (Eisenberger et al., 1990; Settoon, Bennett, & Liden, 1996; Rhoades, Eisenberger, & Armeli, 2001; Shore & Tetrick, 1991).

**3.3 Data Analysis**

The researchers personally administered the instruments at each of the Zones with the permission and assistance of the Area Commander. A total of eight weeks and three days were used for the administration and collection of the questionnaires. One thousand and six hundred questionnaires were administered but only 1575 were retrieved; out of which 1536 were found adequate for analysis. The response rate of the survey was 95.0%. The data resulting from the scoring of the instrument was subjected to multiple regression and t-test statistical analyses.

**4. Results**

**Test of the Hypotheses**

Ho1: There is no significant total effect of job demand on mental strain.

**Table 1:** Model Summary of the Total Effect of Job Demands on Mental Strain

Model	R	R Square	Adj R Square	Coeff	df 1	df 2	F	t	LLCI	ULCI	p
(Constant)	.587	.345	.341	37.151	1.000	1534.000	807.396	76.593	36.200	38.103	.000
Job demands				.296				28.415	.276	.316	.000

Dependent Variable: Mental Strain  
 Predictors: (Constant), Job Demands

Results in Table 1 revealed that there was a significant total effect of job demand on mental strain. The value of the coefficient of determination ( $R = .587$ ;  $R^2 = .345$ ;  $Adj R^2 = .341$ ;  $coeff = .296$ ;  $t = 28.415$ ;  $F_{(1,1534)} = 807.396$ ;  $p < .001$ ). Table 1 further showed that 34.1% of the variance in mental strain can be explained by job demands ( $Adj R^2 = .341$ ). Thus, the null hypothesis is rejected in favour of alternative hypothesis, leading to the conclusion that there is a significant total effect of job demands on mental strain.

Ho2: There is no significant direct effect of job demand on mental strain independent of job decision latitude.

**Table 2:** Model Summary of Direct Effect of Job Demands on Mental Strain Independent of Job Decision Latitude

Model	R	R Square	Adj R Square	Coeff	df 1	df 2	F	t	LLCI	ULCI	p
(Constant)	.587	.345	.341	36.549	2.000	1533.000	403.463	11.407	30.265	42.834	.000
Job demand				.296				28.366	.276	.317	.000
Job decision				.001				.190	-.100	.122	.849

Dependent Variable: Mental Strain

Table 2 showed a significant result ( $coeff = .296$ ;  $t = 28.366$ ;  $F_{(2,1533)} = 403.463$ ;  $p < .001$ ). The null hypothesis is therefore rejected in favour of the alternate hypothesis. It is thus concluded that there is a significant direct effect of job demands on mental strain independent of job decision latitude. Furthermore, 34.1% of the variance in mental strain is explained by job demands ( $Adj R^2 = .341$ ).

Ho3: There is no significant indirect effect of job demands on mental strain through job decision latitude.

**Table 3:** Indirect Effect of Job Demands on Mental Strain through Job Decision Latitude.  
Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
jobdec	.000	.001	-.002	.001

Model	R	R <sup>2</sup>	Adj R <sup>2</sup>	Coeff	df 1	df 2	F	t	LLCI	ULCI	P
(Constant)	.060	.004	.003	55.994	1.000	1534.000	5.514	11.407	55.564	56.424	.000
Job demand				-.011				-2.348	-.020	-.002	.019

Results in Table 3 revealed that there was no significant indirect effect of job demand on mental strain through job decision latitude. ( $LLCI = -.002$ ;  $ULCI = .001$ ) The result further indicated that there was partial mediating effect of job decision latitude on job demand and mental strain. The value of the coefficient of determination ( $R = .060$ ;  $R^2 = .004$ ;  $coeff = -.011$ ;  $t = -2.348$ ;  $F_{(1,1534)} = 5.514$ ;  $p > .001$ ) implies the non-significant of the indirect effect of job demand on mental strain through job decision latitude, it was further observed that although job demand through job decision latitude accounted for approximately 0.4% of the variance in mental strain ( $R^2 = .004$ ) the effect of job decision latitude is negligible ( $LLCI = -.002$ ;  $ULCI = .001$ ). Therefore the null hypothesis is hereby accepted.

Ho4: There is no significant moderating effect of organisational support in the relationship between job decision latitude and mental strain.

**Table 4:** Moderating Effect of Organizational Support in the Relationship between Job Decision Latitude and Mental Strain

Model	R	R Square	Adj R Square	Coeff	df 1	df 2	F	t	p
(Constant)	.078	.006	.004	50.594	3.000	1532.000	3.110	295.307	.025
Org support				.279				2.350	.019
Decision Latitude				-.305				-2.589	.010
Int_1				-.033				-1.830	.067

Interactions: int\_1 = jobdec X organsup

R-square increase due to interaction(s): int\_1 R2-chng = .002 from Table 4 (Model Summary) which shows that there no significant result for the effect of the moderator variable (organizational support) on the relationship between job decision latitude and mental strain (R = .078; R<sup>2</sup> = .006; coeff = .279; t = 2.350; F= (3, 1532) = 3.110; P>.001) implies that there is no significant moderating effect of organizational support in the relationship between job decision latitude and mental strain. Although the effect of organizational support on mental strain (coeff = .279; t = 2.350) is stronger than the effect of job decision latitude on mental strain (coeff = -.305; t = - 2.589). The result further reveal that there is positive relationship between organizational support and criterion variable (mental strain) while there is negative relationship between job decision latitude and mental strain. Therefore the null hypothesis is accepted and it is concluded that there is no significant moderating effect of organizational support on the relationship between job decision latitude on mental strain

Ho5: There is no significant moderating role of organizational support in the mediating role of job decision latitude between job demand and mental strain

**Table 5:** Moderating Role of Organizational Support in the Mediating Role of Job Decision Latitude between Job Demands and Mental Strain

Model	R	R Square	MSE	Coeff	df 1	df 2	F	t	P
(Constant)	.588	.346	24.371	37.260	4.000	1531.000	202.434	75.617	.000
Org support				.124				1.286	.199
Job decision				-.087				-.908	.364
Job demand				.295				28.206	.000
Int_1				-.016				-1.109	.268

The results in Table 5 indicated that there was no significant moderating role of organisational support in the mediating role of job decision latitude between job demand and mental strain. A three-step moderated regression was used where organizational support, job decision latitude and the interaction term (jobdec \* organsup) were entered at each step. The result demonstrated that the moderator variable (organizational support) positively predicted job demand and mental strain (coeff= .124; t= 1.286, p > 0.01). While the mediating variable (job decision latitude) negatively predicted job demand and mental strain (coeff= -.087; t= -.908; P > 0.01). As a result, there was negative interaction effect of job decision latitude and organizational support on mental strain (coeff= -.016; t= -1.109; p>0.01). It is consequently concluded that there is no significant interaction effect of job decision latitude and organizational

support on job demand and mental strain. Therefore, null hypothesis five is accepted.

### 5. Discussion

This research theme is hinged on the need to provide an empirical basis for psychological intervention in the improvement of mental strain of personnel of Nigeria immigration officers. Results demonstrated that the criterion measure has significant effect with the predictor variable (job demand) the result shows that there was significant total effect of job demand on mental strain. This result supported Warren et al. (2002) who found strain results from high job demands. The findings of this study were in agreement with both the JDC and JDCS models which affirmed that mental strain especially results from the combination of high job demands, low decision latitude, and low social support. The

findings corroborated Rollinson (2005) who found a positive relationship between job demands and mental strain. The finding also agreed with Maslach et al. (2002) who noted that too much work produces the greatest stress.

The effect of organizational support on mental strain is stronger than the effect of job decision latitude on mental strain. The findings revealed that there was positive relationship between organizational support and mental strain while there was a negative relationship between job decision latitude and mental strain. This was in agreement with Pomaki and Anagnostopoulou (2001) who investigated Greek teachers and concluded that organizational support does not support the strain outcome measured and job control has no additional effect. Tetrick and La Rocco (2007) figured out that the relationship between role stressors and job satisfaction was moderated by job control, but job control did not moderate the relationship between stressors and psychological state of happiness. This finding however contradicted Johnson and Hall (1988) who found that organizational support plays a vital role in the interaction between psychological strain and job control. Also Wong et al. (2007) mentioned that negative strain should be very low when organizational support and decision latitude are high.

Also the findings of this study was in agreement with Karasek's model who gave another form to his model by adding supervisory support where supervisory support has a influence on his or her well-being, then a lot of research has taken place to study the level of supervisory support/organizational support within a group. Some studies show the relationship between supervisory support and occupational stress (Leather, Lawrence, & Dickson, 1998; Winnubst & Schabracq, 1996). The job strain buffering hypothesis assumes organizational support is effectively mobilized to counteract job stress so that negative consequences of job stress are reduced (Gore, 1985). Based on this analysis and in accordance with the JDCS model, it is anticipated that low support combined with high job strain conditions (i.e. high job demands and low job control) will have negative effects on mental health, as compare to either low support

and low strain environment or high support and high strain environment. This implies that employees who feel that their organization values their contribution and cares about their well-being will report lower levels of mental strain.

The results further indicated that there was no significant moderating role of organizational support in the mediating role of job decision latitude between job demands and mental strain. The results demonstrated that the organizational support) positively predicted job demand and mental strain while the mediating variable (job decision latitude) negatively predicted job demand and mental strain. As a result, there was negative interaction effect of job decision latitude and organizational support on mental strain. It is consequently concluded that there is no significant interaction effect of job decision latitude and organizational support on job demand and mental strain. the findings was in line with Landsbergis et al. (2002) who established an important interaction between job demands, job control and organizational support but did not reproduce the expected stress moderating effect of social support. The results of their study showed that in active jobs that are characterized by high job demands and high job control, poor organizational support was related to job dissatisfaction. Similar results were found by Schaubroeck and Fink (1998) who suggested that workers facing high demanding job situations coupled with high job control and low support, or low job control and high support will tend to experience difficulties in coping because one key ingredient for successful coping is required the equality of job control and social support.

## 6. Conclusion and Recommendations

Mental strain especially results from the combination of high job demands and other work related stress. This implies that employees who are exposed to high job demands in the form of high workload and physical demands tend to become fatigued and develop negative attitudes towards their job. By struggling, the employee can cope better at work for a little while, but if the employee has no time to recover

from strain related problem, the longer term health effects of mental strain may set in: heart disease, diabetes, high blood pressure, gastrointestinal disorders, lower fertility, anxiety, and depression.

The impact of job demands is reduced by the amount of control that the employee has over important aspects of his or her work role also the effect of organizational support on mental strain is stronger than the effect of job decision latitude on mental strain, there is positive relationship between organizational support and criterion variable (mental strain) while there is negative relationship between job decision latitude and mental strain. This implies that employees who feel that their organization values their contribution and cares about their well-being will report lower levels of mental strain. Furthermore, it is therefore concluded that the moderator variable (organizational support) positively predicted job demands and mental strain while the mediating variable (job decision latitude) negatively predicted job demands and mental strain. As a result, there was negative interaction effect of job decision latitude and organizational support on mental strain. It is consequently concluded that there is no significant interaction effect of job decision latitude and organizational support on job demand and mental strain. However, job demands have additive effects on mental strain, whereas high job control can ameliorate the negative effects of high job demands.

*The following recommendations were made based on the result of analysis of this study:*

- Paramilitary training institutions should review their programmes to ensure the inclusion of mandatory basic training in guidance and counselling. Government should mobilize resources to facilitate and support immigration programmes. More personnel should be employed to reduce workload. The management of paramilitary services in Nigeria should give more attention to organizational support and reduction in officer workload in order to minimize the effect on mental strain among the immigration officers.

- Government should make provision for holiday or leave for Nigerian immigration officers that will give room for reasonable rest after a long period of work. There is need to enforce the 8-hour shift system for immigration officers as against the prevailing 12-hour shift in line with extant labour laws and regulations in order to achieve high performance levels and reduce mental strain related symptoms among Nigerian immigration officers. In the same vein, compensation should be paid for overtime or excess work hours in order to cushion the psychological effect of long hours of work.
- Finally, Government should address the problems of lack of administrative support for individual officers, autocratic management styles, the inconsistent enforcement of rules, the excessive or unnecessary paperwork, workload, equipment deficiencies lack of resources, shortages of staff, poor inter-personal relationships are factors most often cited as causes of occupational stress. The management of the Nigerian Immigration Service should also look better ways of working on the aforementioned administrative lapses in order to enhance the performance of the Service.

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