

Stress at Work: Linear and Curvilinear Effects of Psychological-, Job-, and Organization-Related Factors: An Exploratory Study of Trinidad and Tobago

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In this study, the authors operationalized job stress as a two-dimensional construct consisting of time pressure and anxiety. The authors hypothesized that the relationship between job stress and job-related attitudes such as job involvement and job satisfaction would be curvilinear but would be linear with psychosomatic problems. In addition, the authors proposed that attitudinal factors would mediate the relationship between job stress and organizational commitment. Data were obtained from 241 respondents in Trinidad and Tobago. Our findings revealed that curvilinear relationships were supported for anxiety and the outcome variables but not for time pressure. The results also provided full support for our mediation hypotheses in the case of anxiety. However, partial support for mediation was obtained for time pressure.

Keywords: work stress, job satisfaction, job involvement, psychosomatic, organizational commitment

Stress has been extensively studied in North America and the United Kingdom and more recently in Northern and Western Europe (Glazer & Beehr, 2005). Although cultural nuances may lead to differences in the perception of stress across countries, and in spite of organizations conducting

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business globally, Jamal (1997) pointed out that very few studies have been conducted in developing countries to assess the impact of stress on employees' attitudes toward their job and their organizations, with a few exceptions in the recent work of Glazer and Beehr (2005) and Xie and Johns (2000). The present study attempts to fill this gap by examining the relationship between stress and employee's job-, psychological-, and organization-related factors using a sample from a developing country.

Consistent with the conceptualization of stress by Parker and De Cottiis (1983), we examined stress as a two-dimensional construct comprising of time pressure and anxiety. Time pressure relates to employees' perception of insufficient time to accomplish the demands of their job. On the other hand, anxiety is an unpleasant emotional state that has adaptive or maladaptive consequences. Anxiety, therefore, relates to tensions or pressures experienced by employees brought on by their job requirements. Anxiety is context-related and should be distinguished from trait anxiety (Raffety, Smith, & Ptacek, 1997), which is a predisposition toward anxiety regardless of the situation or context. Examining stress as a multidimensional construct is important because, for example, whereas time pressure is expected to be positively related to job involvement as eustress, it is anticipated that there will be a negative relationship between anxiety (distress) and job involvement.

THE PRESENT STUDY

This study was conducted in a developing country using a sample of teachers. A number of reasons guided our choice of country and sample for our study. First, researchers such as Travers and Cooper (1997) as well as Pithers and Soden (1998) have found that teachers in North America, the United Kingdom, France, and Australia report relatively high levels of stress. Poor working environments have been consistently reported in these studies as one of the major factors that influence stress among teachers. Specifically, there is an increasing breakdown in discipline and security in schools. This is coupled with poor parent-teacher relationships. However, teachers have no control over these environmental factors.

Thus, the inability to control these factors leads to stress among teachers and significantly affects their attitudes toward their jobs and organizations. The issues raised in those countries are similar to those experienced by teachers in Trinidad and Tobago who complain about increasingly poor working environments in schools. Notably, in some schools there have been incidents of violence against teachers committed by both students and parents, leading to government plans to install metal detectors in schools in

response to this problem (School Violence, 2001). Related to these issues, teachers express their dissatisfaction with their jobs and complain that teaching is a very stressful job, whereas students complain about incidents of absenteeism among teachers (see TTUTA President, 2005).

Furthermore, in Trinidad and Tobago, although parents complain about afterschool lessons and their costs, many students attend off-campus, paid private lessons aimed at providing them with better chances of passing very competitive national examinations. Although some parents are sympathetic to the concerns of teachers, it is often believed that teachers are not sufficiently involved or committed to their jobs, resulting in the need for additional private tutoring.

In spite of the problems and concerns raised by both teachers and the general public, no systematic study has been conducted to assess the validity of these assertions. Moreover, there is evidence of cross-cultural differences in employees' attitudes and behaviors (Hofstede, 2001). Because schools in North America and the United Kingdom recruit teachers from Trinidad and Tobago, the findings of our study should help us understand whether cultural differences could affect employees' attitudes toward their work and organizations. In the context of these issues, we are interested in the extent to which teachers' stress influence their job involvement, satisfaction, psychosomatic symptoms, and organizational commitment.

Specifically, we applied "activation theory" in this research. Activation theory (Scott, 1966) suggests that both low and high levels of stress are dysfunctional. However, there is an optimum level of stress that would have positive effects on employees' job satisfaction and job involvement because at that level, employees would be challenged to be more involved in their jobs. That is, an increase in job stress is assumed to be beneficial for job satisfaction and job involvement to, but not beyond, a certain level; after attainment of that optimum level of job stress, teachers' job satisfaction and job involvement is expected to decline.

Accordingly, we proposed in our study that the relationship between job stress and job satisfaction as well as job involvement would be curvilinear. However, we expected a linear relationship between job stress and psychosomatic problems. In addition, we speculated that job satisfaction, job involvement, and psychosomatic problems would mediate the relationship between job stress and organizational commitment.

Job Stress and Job Involvement

Job involvement reflects the extent to which individuals are preoccupied with and immersed in their present jobs (Diefendorff, Brown, Kamin, &

Lord, 2002). It is therefore expected that employees' job stress levels will affect the extent to which they are preoccupied with and immersed in their jobs. On the basis of activation theory, we proposed that as teachers experience heightened levels of time pressure and anxiety, they may perceive that greater job involvement could lead to better control of their time pressures and anxiety. Teachers would immerse themselves in their jobs in order to cope with and accomplish their responsibilities.

However, it is unlikely that teachers would continue to increase their levels of job involvement regardless of the amount and intensity of time pressure as well as anxiety they experience in that context. Intolerable amounts of time pressure and anxiety would tax employees' capabilities to cope with the demands of the work environment. We argue that there is an optimum level beyond which time pressure and anxiety would lead to *decreased* job involvement. Therefore, intermediate rather than low or high levels of time pressure and anxiety would result in higher levels of job involvement among teachers, and curvilinear relationships between both time pressure and anxiety and job involvement are to be expected (Janssen & Van-Yperen, 2004).

Based on the preceding, we offered the following hypothesis:

Hypothesis 1: There will be a curvilinear relationship between both employees' time pressure and anxiety and their job involvement.

Job Stress and Job Satisfaction

Consistent with our previous assertions based on activation theory, we proposed that up to a certain point, teachers' time pressure and anxiety could have positive effects on their level of satisfaction. This is because certain amounts of increased time pressure and anxiety could be motivating. However, beyond tolerable levels of time pressure and anxiety, it would be expected that teachers would be unable to adapt and cope, thus causing them to experience diminished job satisfaction.

Studies have found negative relationships between various operationalizations of time pressure and job satisfaction. For example, Jamal (2005) as well as Jamal and Baba (2003) found a negative relationship between the time pressure dimension of Type A behaviors and employees' job satisfaction. Other researchers have reported a negative relationship between time pressure and job satisfaction (Nordqvist, Hovmark, & Zika-Viktorsson, 2004).

In addition, studies have found significant negative relationships between anxiety and job satisfaction (Parmar, 2001). Nevertheless, we contend that

the relationships between the time pressure and anxiety experienced by teachers and their job satisfaction will be curvilinear (see also Zivnuska, Kiewitz, Hochwarter, Perrewé, & Zellars, 2002).

In light of the above, we offered the following hypothesis:

Hypothesis 2: There will be a curvilinear relationship between both employees' time pressure and anxiety and their job satisfaction.

Job Stress and Psychosomatic Symptoms

Psychosomatic symptoms are stress-induced emotional or mental states that have physical manifestations. Although some researchers have questioned the causal relationship between job stress and psychosomatic symptoms (Frese, 1985), there is ample positive evidence. For example, Burke, Oberklaid, and Burgess (2005) found a positive relationship between stress and psychosomatic symptoms of psychologists in Australia. In addition, De Croon, Van Der Beek, Blonk, and Frings-Dresen (2000) reported that teachers who were stressed were more likely to experience psychosomatic problems. A number of studies have shown that time pressures at work have a bearing on employees' psychosomatic complaints (Mauno & Kinnunen, 1999). Because anxiety is an unpleasant emotional state, teachers exposed to anxiety on the job would have a high likelihood of experiencing increasing psychosomatic problems. Furthermore, as teachers experience greater amounts of time pressure and are unable to cope, they could exhibit psychosomatic symptoms. We therefore proposed the following hypothesis:

Hypothesis 3: There will be a positive relationship between both employees' time pressure and anxiety and their psychosomatic problems.

Job Stress, Job Involvement, and Organizational Commitment

So far, we have postulated that job-related and psychosomatic factors are proximal outcomes of job stress. However, we believe that organizational-related factors such as organizational commitment, which is the extent to which employees identify with the goals of their organization, would be a distal outcome of job stress. Therefore, we argue that employees' job stress would likely influence their organizational-related attitudes through their job-related attitudes.

Meyer and Allen (1991) proposed a three-dimensional model of organizational commitment: affective, normative, and continuance commitment.

They advocated that employees with affective commitment remain with their organization because they identify with and have an emotional attachment to it. Normative commitment is the extent to which employees feel a sense of obligation to their organization and, therefore, remain with the organization because they believe they ought to. However, employees with continuance commitment stay with their organization because of perceived costs of leaving.

As we indicated earlier, teachers' job stress will affect the extent to which they are involved with their jobs. Nonetheless, their time pressure or anxiety may not necessarily predict their commitment to their organizations. This is because teachers may not necessarily directly link their time pressure and anxiety to their organizations' goals. However, teachers who are more involved with their jobs are expected to be more committed to their organizations.

In fact, studies have shown that job involvement influences employees' continuance (Tansky, Gallagher & Wetzel, 1997) and affective commitment (Cohen, 1999). Earlier in this article, we demonstrated that time pressure and anxiety are related to job involvement. Moreover, Randall and Cote (1991) found that job involvement mediated the relationship between the Protestant work ethic and continuance commitment. Freund and Carmeli (2003) also found that job involvement mediated the relationship between the Protestant work ethic and affective commitment. These findings give credence to our assertion that the relationship between teachers' job stress and organizational commitment is indirect and is enacted through their job involvement. We, therefore, hypothesized the following:

Hypothesis 4: The influence of time pressure and anxiety on organizational commitment will be mediated by job involvement.

Job Stress, Job Satisfaction, and Organizational Commitment

We have already established a link between job stress and job satisfaction. Because job satisfaction relates to employees' positive feelings about their job and is based on the extent to which their expectations are met, teachers with higher levels of job satisfaction would likely be more committed to their organizations than those with low job satisfaction. In a recent meta-analysis of the discriminant validities of the various forms of commitments and their outcomes, Cooper-Hakim and Viswesvaran (2005) reported significant correlations between employees' job satisfaction and various conceptualizations of organizational commitment.

However, because job satisfaction is an affective state, we expect its

relationship with affective commitment to be strongest among the three dimensions of organizational commitment. Indeed, Huang (2005) found that job satisfaction is positively related to affective commitment but negatively related to continuance commitment. We have demonstrated that job stress influences job satisfaction and that the latter also affects organizational commitment. It is therefore safe to assert that job satisfaction can serve as a mediator between job stress and organizational commitment. Consistent with our assertions, Yousef (2002) found that job satisfaction mediated the relationships between role conflict and affective, normative, and continuance commitment. Therefore, we hypothesized that:

Hypothesis 5: The influence of time pressure and anxiety on organizational commitment will be mediated by job satisfaction.

Job Stress, Psychosomatic Problems, and Organizational Commitment

A few studies such as Grebner, Semmer, Lo Faso, Gut, Kälin, and Elfering (2003) have examined the relationship between psychosomatic problems and organizational commitment. In spite of the paucity of research in this area, in the current environment of rapid organizational changes with its attendant problems and uncertainties as well as changes in employee-employer relationships, it is conceivable that employees' stress coupled with their psychosomatic symptoms could influence their organizational commitment. This means that teachers whose stress lead to psychosomatic symptoms would be most likely less committed to their organizations. Accordingly, we hypothesized that:

Hypothesis 6: The influence of time pressure and anxiety on organizational commitment will be mediated by psychosomatic problems.

METHOD

Sample

Data were collected from teachers located in various parts of Trinidad and Tobago. The locations were selected with the aim of obtaining a representative sample from each geographic area. Schools were invited to participate, and questionnaires were distributed by a research assistant who contacted the teachers. Data were collected at prearranged collection dates in the various schools. A total of 300 questionnaires were distributed to teachers in

various secondary schools in Trinidad and Tobago. Overall, 241 usable responses were received yielding an 80% response rate. The sample was 78% female, and average age and tenure were 39 and 15 years, respectively. Sixty-five percent of the sample was married.

Measures

Job Stress

Job stress was measured with Parker and DeCotiis' (1983) two-dimension scale—time pressure and anxiety. Both time pressure and anxiety were measured with six items each. A 5-point scale was used with scores ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). High scores indicated high levels of time pressure and anxiety. Consistent with our assertion that job stress is two-dimensional, we conducted principal component factor analysis with varimax rotation. As Table 1 illustrates, two factors labeled time pressure and anxiety were obtained with factor loadings from .48 to .79. Reliabilities for time pressure and anxiety were .78 and .75, respectively.

Table 1. Principal Components Analysis of Job Stress Items

Job Stress Items	Factor 1:	
	Time pressure	Factor 2: Anxiety
Working here makes it hard to spend enough time with my family.	.78	.10
Working here leaves little time for other activities.	.73	.08
I spend so much time at work I can't even take a simple walk to relax.	.73	.16
I feel like I never have a day off.	.60	.30
I frequently get the feeling I am married to the institution.	.58	.25
I sometimes dread the telephone ringing at home because the call might be job-related.	.49	.26
There are lots of times when my job drives me right up a wall.	-.01	.79
My job gets to me more than it should.	.16	.70
Sometimes when I think about my job I get a tight feeling in my chest.	.18	.65
I have felt fidgety or nervous as a result of my job.	.42	.55
I have too much work and too little time to do it.	.30	.54
Too many people at my level in the company get burned out by job demands.	.27	.48
Item Not Included		
I feel guilty when I take off from my job.	.42	.16
Eigenvalue	4.46	34.27%
Proportion of variance accounted for	1.37	10.52%

Note. Boldface means significant loading on respective factors.

Job Involvement

Job involvement was measured using a five-item short form of the Lodahl and Kejner (1965) scale. These items were measured on a 1- to 5-point Likert scale. Because of concerns raised regarding contamination of Lodahl and Kejner's scale (Reeve & Smith, 2001) we omitted the question on work. The reliability for the adapted measure was .71.

Job Satisfaction

Job satisfaction was measured with Robinson, Connors, and Whitache's (1966) four-item scale. A 7-point scale was used with scores ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal consistency for the scale was .76.

Psychosomatic Symptoms

Psychosomatic symptoms were measured with the Caplan, Cobb, French, Harrison, and Pinneau (1975) scale. A 5-point scale was used with scores ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency for the scale was .82.

Organizational Commitment

Organizational commitment was measured using Meyer and Allen's (1990) 26-item scale that measures affective, continuance, and normative commitment. A 5-point scale was used with scores ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency of the measures were .75, .78, and .66, respectively, for affective, normative, and continuance commitment.

RESULTS

Table 2 presents the descriptive statistics, reliability coefficients, and correlations for all variables and shows that all the reliabilities for the variables in the study are acceptable. In addition, correlation coefficients are in the predicted directions.

It has been advocated that a correlation of .80 and above between

Table 2. Correlation Matrix of Study Variables (*N* = 241)

Variable	<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6	7	8	9	10	11	12
Age	38.69	9.57	NA												
Marital status	.50	.50	NA	.41 ^{***}											
Gender	.21	.41	NA	.09	.19 ^{**}										
Tenure	14.91	10.07	NA	.75 ^{***}	.29 ^{***}	.08									
Promotion	.23	.42	NA	-.15 [*]	-.22 ^{***}	.04	-.03								
Time pressure	2.26	.75	.78	-.06	.03	.04	.01	-.10							
Anxiety	2.96	.79	.75	-.09	-.06	-.07	.07	-.03	.58 ^{***}						
Job involvement	2.82	.58	.71	.18 ^{**}	.17 [*]	.10	.21 ^{**}	-.01	.17 [*]	.01					
Job satisfaction	4.96	.88	.76	.20	.06	-.03	.18 ^{**}	.06	-.06	-.19 ^{**}	.48 ^{***}				
Psychosomatic problems	1.70	.63	.82	-.18 ^{**}	.01	-.09	-.09	-.03	.19 ^{**}	.34 ^{***}	.05	-.20 ^{**}			
Affective commitment	3.12	.68	.75	.36 ^{***}	.14	.02	.36 ^{***}	.01	-.01	-.05	.48 ^{***}	.51 ^{***}	-.16 [*]		
Continuance commitment	3.34	.74	.78	-.01	.04	-.13	.02	-.11	.12	.14	.06	.00	.14	.14 [*]	
Normative commitment	2.89	.56	.66	.20 ^{**}	.12	.07	.11	-.01	.07	-.06	.36 ^{***}	.38 ^{***}	-.07	.43 ^{***}	.19 ^{**}

Note. NA = not applicable.
^{*} *p* < .05. ^{**} *p* < .01. ^{***} *p* < .001.

variables is a clear indication of multicollinearity, and researchers such as Pedhazur and Schmelkin (1991) have recommended combining such variables to obtain one construct as opposed to treating them as separate constructs. Table 2 illustrates a significant correlation between time pressure and anxiety ($r = .58, p < .001$) and gives credence to our assertion that stress ought to be examined as a two-dimensional construct. Because multicollinearity is not a problem for these two independent variables, consistent with our hypotheses, we conducted separate hierarchical regression analyses for time pressure and anxiety and their relationships with the job and organizational related factors.

To test for our hypotheses relationships, we performed a series of hierarchical regression analyses controlling for age, gender, marital status, tenure, and promotion. Hypothesis 1 predicted a curvilinear relationship between both time pressure and anxiety and job involvement. We found a significant positive relationship between time pressure and job involvement ($\beta = .18, p < .01$), but this relationship was linear as opposed to the predicted quadratic relationship, which was not significant ($\beta = -.09, p > .05$). However, in the case of anxiety, the predicted curvilinear relationship was confirmed. Our results indicate that after controlling for the effects of the control variables and the linear effects of anxiety, the quadratic effects of anxiety is significant ($\beta = -.21, p < .001$). This quadratic relationship is illustrated in Figure 1A.

Hypothesis 2 predicted that relationships between both time pressure and anxiety and job satisfaction will be curvilinear. After controlling for the effects of the control variables and the linear effects of time pressure and anxiety, the quadratic effects of time pressure and anxiety on job satisfaction were both significant ($\beta = -.13, p < .05$ and $\beta = -.28, p < .001$), respectively, for time pressure and anxiety. Thus, Hypothesis 2 was supported. Figure 1B and 1C illustrate these quadratic effects.

Hypothesis 3 predicted a positive relationship between both time pressure and anxiety and psychosomatic well-being. After controlling for the effects of the control variables, we found significant positive relationships between both time pressure and anxiety and psychosomatic problems ($\beta = .14, p < .01$; $\beta = .24, p < .001$), respectively. Thus, Hypothesis 3 was supported.

Hypotheses 4 to 6 predicted that job involvement, job satisfaction, and psychosomatic well-being will mediate the relationship between both time pressure and anxiety and organizational commitment. To test for these hypotheses, we conducted hierarchical regression analyses controlling for the effects of control variables and the mediators based on the three steps for the test of mediation advocated by Baron and Kenny (1986).

First, the independent variables (time pressure and anxiety) ought to be

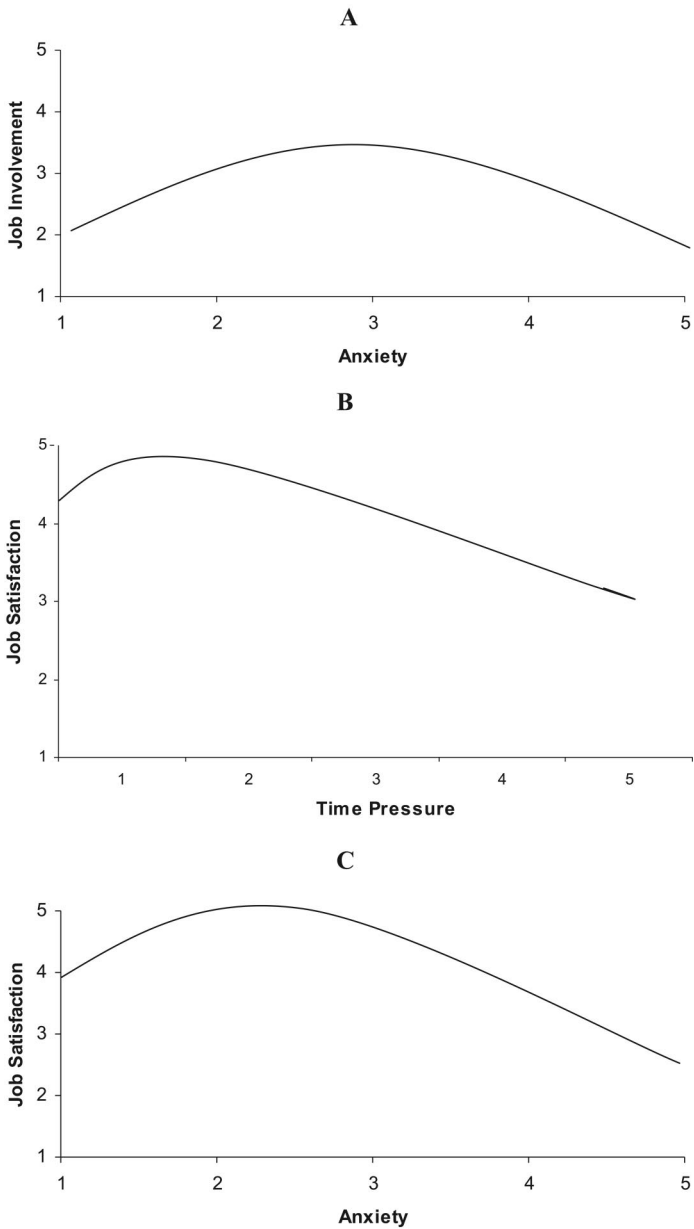


Figure 1. Anxiety and job involvement (A); Time pressure and job satisfaction (B); Anxiety and job satisfaction (C).

related to the mediators (job involvement, job satisfaction, and psychosomatic problems). Second, the independent variables ought to be related to the dependent variable (affective, normative, and continuance commitment). Finally, the independent variable ought to be regressed on the dependent variable after controlling for the effects of the mediator. Full mediation is established if the relationship between the independent variables and the dependent variables is nonsignificant. On the other hand, if the incremental variance explained by the mediator is reduced, partial mediation is established.

In accordance with Baron and Kenny (1986), we first tested for the direct effects of the independent variables (time pressure and anxiety) on the dependent variables (affective, continuance, and normative commitments). Next, we tested for the impact of the independent variables on the dependent variables after controlling the effects of mediators (job involvement, job satisfaction, and psychometric well-being). For the mediation tests based on time pressure, we indicated earlier that the linear relationship between time pressure and job involvement ($\beta = .18, p < .01$) as well as psychosomatic symptoms ($\beta = .14, p < .01$) was significant. Furthermore, the quadratic relationship between time pressure and job satisfaction was significant ($\beta = -.13, p < .05$). Additional analyses, however, demonstrated that time pressure was not significantly related to any form of commitment. Thus, the second condition of mediation was not supported for affective, continuance, and normative commitment in the case of time pressure. Additional tests of mediation were not conducted for time pressure.

Similarly, for the mediation tests based on anxiety, the linear relationships between anxiety and job satisfaction ($\beta = -.22, p < .01$), as well as psychosomatic problems ($\beta = .24, p < .01$), were significant. Moreover, the quadratic relationship between anxiety and job involvement was also significant ($\beta = -.21, p < .01$). Thus, the first test of mediation is supported.

Furthermore, the quadratic relationships between anxiety and affective commitment ($\beta = -.15, p < .01$), as well as normative commitment ($\beta = -.11, p < .05$), were significant. In addition, there was a significant linear relationship between anxiety and continuance commitment ($\beta = .12, p < .05$). Thus, the second condition of mediation was supported for affective, continuance, and normative commitment in the case of anxiety. After controlling for the effects of the mediators (job involvement, job satisfaction, and psychometric well-being), anxiety did not have any incremental effect on any of the dimensions of organizational commitment. Therefore, Hypotheses 4, 5, and 6 were confirmed for anxiety but not for time pressure. Job involvement, job satisfaction, and psychosomatic well-being fully mediates the relationship between anxiety and affective, normative, and continuance commitment.

DISCUSSION

In the current study, we advocated that job stress ought to be treated as a two-dimensional construct (time pressure and anxiety) because the antecedents of each dimension might differ according to dimension. Results from factor analyses indicated that job stress indeed has two dimensions. We investigated the curvilinear relationships between both time pressure and anxiety and job involvement and job satisfaction. In addition, we examined the positive relationships between both time pressure and anxiety and psychosomatic problems.

Contrary to our hypothesis (Hypothesis 1) that the relationship between time pressure and job involvement would be curvilinear, we found a significant linear relationship between time pressure and job involvement. This implies that as teachers experience increased time pressure they get more involved with their jobs. However, incremental levels of time pressure do not necessarily decrease their job involvement. This may be because of the nature of their work, decreasing their job involvement would only serve to increase teachers' time pressure because their workload will not necessarily be reduced. Consistent with previous research (Janssen & Van-Yperen, 2004), our findings indicated that as teachers experienced increased time pressure they tended to get more preoccupied and immersed in their work.

In addition, we proposed that the relationship between employees' anxiety and job involvement will be quadratic. This hypothesis was supported, indicating that as teachers' anxiety increases, they get more involved with their jobs. However, as their anxiety increases to intolerable levels, they decrease their involvement in their jobs. Anxiety is an unpleasant emotional state. Therefore, excessive amounts could have maladaptive consequences. Thus, Hypothesis 1 was partially supported.

Hypothesis 2 (that the relationship between both time pressure and anxiety, and job satisfaction would be quadratic) was supported. Time pressure induced job satisfaction among teachers. However, beyond a certain threshold, incremental time pressure apparently led to decreased levels of satisfaction. Similarly, anxiety can stimulate job satisfaction up to a certain point but increased anxiety would cause satisfaction levels to wane. In sum, although teachers' time pressure and anxiety may have positive effects on their satisfaction, incremental levels of either could be dysfunctional and lead to job dissatisfaction.

Furthermore, we hypothesized and found support for positive relationships between both time pressure and anxiety and psychosomatic problems (Hypothesis 3). Thus, as teachers experience increased time pressure and anxiety, their psychosomatic symptoms also increase. These findings are consistent with findings from the work of Burke et al. (2005).

We also hypothesized that job involvement, satisfaction, and psychosomatic problems will mediate the relationship between both time pressure and anxiety and the three dimensions of organizational commitment. The results demonstrate that time pressure was not related to any form of organizational commitment and thus none of the mediators held true. A plausible explanation for this finding could be that time pressure is temporal so its boundary may be limited to job-related factors. Therefore, the strength of a teacher's relationship with his or her employer may not be affected by experienced time pressures.

On the other hand, our findings indicated that teachers who experience anxiety may be committed to their organizations only if they are involved or satisfied with the jobs. In addition, teachers who are anxious about their jobs would be committed to their organizations if they do not experience high levels of psychosomatic problems. Thus, whereas teachers' anxiety is proximal to their job attitudes, it is distal to organization-related factors.

IMPLICATIONS

Investigations into curvilinear relationships in stress research have mainly tested curvilinear relationships between stress and performance (Muse, Harris, & Field, 2003). This study is the first, to our knowledge, to test curvilinear/linear relationships between stress and job and organization-related factors in teachers in a developing country. As we have indicated, the results of our study demonstrate consistency with findings of studies conducted in North America and Western Europe. Thus, our results demonstrate that in spite of the cross-cultural differences in employees' attitudes toward their work and organizations, similarities do exist (Hofstede, 2001). This is important from an international stress management perspective because teaching is a portable occupation so the job market for teachers is international, and both teachers and organizations look for employment and employees worldwide.

In fact, recruiters from North America and the United Kingdom have been actively recruiting teachers from Trinidad and Tobago and other Caribbean nations (Sanders, 2005). Therefore, findings from our study may help to understand the impact of stress on teachers' job-related attitudes and commitment not only in Trinidad and Tobago but also in countries that have recruited teachers from these islands.

From a practical point of view, our findings indicate that time pressure may stimulate greater levels of job involvement. Should organizations therefore deliberately inject time pressure in order to foster job involvement? It is anticipated that such actions will certainly raise ethical concerns and may

have some legal implications. Although time pressure may increase the level of employees' job involvement, it may only increase satisfaction only up to a certain point. Thus, employers should be cognizant of employees' threshold of tolerance for pressure.

On the other hand, our findings also suggest that organizations should pay attention to amount of anxiety their employees experience, because it has implications for their job attitudes, their psychological well-being, and their commitment to their organizations. In addition, we found that time pressure and anxiety were differentially related to employees' job involvement, job satisfaction, psychosomatic well-being, and their commitment to their organizations.

A main limitation of our study was the relatively low reliabilities of our study variables. This may be because the scales used in the study were developed and primarily used in research conducted in North America. Therefore, our exploratory findings should be interpreted with caution and cannot be generalized. However, our findings suggest that additional investigation of both linear and quadratic effects of job stress on employees' job attitudes and psychological well-being ought to be explored. It is advocated that more research, specifically longitudinal studies, should be conducted in the area to foster greater understanding of the relationship between employees' job stress and their job- and organizational-related attitudes.

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