

Challenge and Hindrance Stress Relationship with Job Satisfaction and Life Satisfaction: The Role of Motivation-to-work and Self-efficacy

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Abstract

The research utilized structural equation modeling technique to further explore the pathway between challenge stressor, hindrance stressor and job satisfaction. The tested model included self-efficacy and motivation-to-work as intervening variables in the pathway. It also included life satisfaction so as to properly define the link between work variables, represented by challenge and hindrance stressors, and employee wellbeing. The included variables played critical roles in the hypothesized pathway as shown in the estimated model in Figure 2. The differential effect of the stressors was not confirmed, but motivation-to-work minimized the negative effect of challenge stressor. Self-efficacy and job satisfaction provided the missing link between work variables and employee wellbeing. Suggestions were made for the management of both challenge and hindrance stressors so as to enhance the job satisfaction and life satisfaction of employees.

Key Words: challenge and hindrance stress, job satisfaction, life satisfaction, self-efficacy

1. Introduction

Potential stressful situations are inevitable in the work environment (Sadri and Marcoulides 1994). Hence, the potential negative effects of stressful situations on employees' health and productivity must be managed to enhance employee wellbeing and productivity. There is no shortage of stress studies in literature in the developed and developing nations (see Ganster and Schraubroeck 1991; Koh and Lim 1996; Beehr, Sargent and Terry 2000; Cavanaugh, Boswell, Roehling, and Boudreau 2000; Dollard, Winefield, Winefield and Jonge 2000; Jex, Stacy, and Murray, 2000; Akinrele, Osanwonyi and Amah 2003; Amah 2012). However, there are no consistent results across the studies. Jex (1998) attributed the inconsistency to the fact that the nature of stress was not accounted for in past studies. To explore this assertion further, Cavanaugh et al. (2000) developed two-dimensional framework for work stressors. The dimensions are labeled as challenge stressor and hindrance stressor.

According to LePine, LePine, and Jackson (2004, p. 883), challenge stressor is appraised as enhancing and 'promoting mastery, personal growth or future gains', while hindrance stressor does not enhance these gains. Challenge stressor factor contains 'high work demand, job scope, and responsibility', while hindrance stressor factor contains 'role ambiguity, organisational politics, and job security' (Podsakoff, LePine and LePine 2007, p. 438). The factorial structure of the two-dimensional framework for work stressors has been confirmed with diverse samples (see Cavanaugh et al. 2000; Amah 2012). The differential effect of these dimensions in samples from the developed countries has been established for job satisfaction (see Cavanaugh et al. 2000), for job attitude and turnover (Podsakoff et al. 2007), and learning performance (LePine et al. 2004). However, Amah (2012) did not confirm the differential effect when a sample from a developing country setting was utilized. Amah (2012) study however, established that self-efficacy moderated the relationship between challenge stressor and job satisfaction, such that the negative effect of challenge stressor on job satisfaction did not occur for high self-efficacy participants. This finding agrees with the assertion of Jex, Bliese, Buzzell, and Primeau (2001) that only individuals with high self-efficacy will embrace challenge stressors. The conflicting finding is a pointer to the fact that the debate on the differential effects of the two dimensions of stressors is far from being settled. Thus, Amah (2012) called for more studies to establish the path of influence of the two dimensions of stressors on work attitude.

The first part of the current study addresses this call. In enriching the pathway through which the dimensions of stressors affect work attitudes, the current study included self-efficacy, and motivation-to-work in the model. Since appraisal is a major determinant of what is perceived as challenge or hindrance, personality variable must be part of any stress model. Self-efficacy was chosen as a personality variable to be included because it plays a major role in determining what is perceived as challenge or hindrance (Jex et al. 2001).

When individuals appraise a stressful situation as promoting personal growth and mastery, they may choose to increase their effort on the task, and even to persist in difficult situations, in order to benefit from successful completion of the task. Conversely, reduction of effort will occur for those stressors perceived as hindering personal growth and mastery. Hence, motivation-to-work, defined as the direction, intensity, and persistence of effort in order to complete a task is included in the model.

A second aspect of the current study is the extension of past studies to include life satisfaction. This extension is based on the review of life satisfaction literature by Erdogan, Bauer, Truxillo and Mansfield (2012). These authors concluded that despite the strategic role of life satisfaction as a key indicator of well-being, it has received scanty attention in management studies. Even within the few existing studies that included life satisfaction, activities in the work domain were excluded from the tested models. According to these authors, a way forward is to establish the antecedents of life satisfaction in the work domain, and also to confirm the proposed theories linking these antecedents to life satisfaction. Thus, a logical way to heed to the call is to extend the challenge stressor, hindrance stressor and job satisfaction model to include life satisfaction. In this way, events in the work domain can be linked to life satisfaction. Studying the relationships involving life satisfaction is beneficial, since it affects job performance (Jones 2006), commitment and withdrawal (Susskind, Borchgrevinck, Kacmar and Brymer 2000).

In summary, the current study has two main objectives. Firstly, the study explored the pathways through which challenge and hindrance stressors affect job satisfaction by including self-efficacy and motivation-to-work in the model. Secondly, the study included life satisfaction in the model so as to establish the link between events in the work domain and life satisfaction. It is expected that the addition of these variables will further explain the differential effects of the two dimensions of stressors on job satisfaction, and possibly life satisfaction. In doing this, covariance model analysis was employed as a method for the analyses of acquired data. This method is superior to regression analyses in that it allows for the inclusion of both the measurement and structural model. The methodology also accounts for measurement errors, thus better defines actual relationship between variables.

2. Literature review and hypotheses

The study of work stress has passed through many stages since it was first introduced by Seyle (1975). During the early stages of stress studies, emphasis was on the physiological effects of stress. Seyle (1982) advocated an inverted U-shaped relationship of work stress. Thus, it is believed that stress has negative effect only at high levels of stress. This assumption cannot explain why stress reactions vary among individuals in similar situation. After Seyle (1975), other researchers expanded the study of stress with the analyses of work stressors, and their effects on individual well-being (Beehr and Newman 1978). The approach adopted in the current study is the transactional stress model developed by Lazarus and Folkman (1984). The model postulates that the outcome of the individual's cognitive appraisal of an event determines his/her reaction to the event. Stress is thus, believed to result from the perceived imbalance between the environmental demand on the individual and the individual's resources. For example, if the individual perceives that his/her resources more than compensate for the environmental demand, his/her reaction to the stress will be positive. Stress affects the health of individuals (Cox 1993; Greenhaus et al. 2001), leads to compromising behaviours and substance abuse (Bray 1999), and will eventually affect individual's productivity and overall organisation's performance (Cooper 1986). These negative effects of stress justify the efforts aimed at unraveling the antecedents, mediators and moderators of the relationships between stress and important individual and work outcomes. Unless this is done, organisations will 'risk losing their edge in attracting and retaining talented men and women' (Greenhaus et al. 2000, p. 290).

2.1 Antecedents of motivation-to-work

Motivation-to-work expresses the level, and direction of efforts individuals apply to get assigned work done. According to the conservation of resources principle, individuals 'seek to acquire and maintain resources' (Grandey and Cropanzano 1999, p. 350). Two resources that are relevant in this study are the acquisition of knowledge and personal growth in the job.

Individuals will seek to acquire knowledge so as to enhance their future performance in the job. They will also seek environment with opportunity for personal growth so as to enhance their overall personal satisfaction in the job. In situations that provide prospect to enhance these resources, the individual will be motivated to put in effort and even persist in difficult situations, since success will provide the much expected gain in the resources. In the event that the individual perceives loss in the resources due to work environmental demand, the individual will be stressed according to the principle of transactional stress model (Lazarus and Folkman 1984). Thus, in situation of challenge stressor, where the individual has the opportunity to build resources through acquisition of mastery and personal growth, effort will be increased in order to complete the assignment. Conversely, in hindrance stressor where loss of resources is anticipated due to difficulty of performing task, the individual will withhold effort. These assertions are supported by a parallel study by LePine et al. 2004, in which challenge stress in the learning environment was positively related to motivation-to-learn. Thus, the following hypotheses are stated:

H1: Challenge stressor is positively related to motivation-to-work.

H2: Hindrance stressor is negatively related to motivation-to-work.

According to Bandura (1994, p.71), 'Self-efficacy beliefs determine how people feel, think, motivate themselves and behave'. He further identified cognitive, motivational, and affective and selection as four psychological processes through which self-efficacy affects human functioning. The cognitive and motivational psychological processes are relevant in the hypothesis involving self-efficacy and motivation-to-work. Forethought, defined as what a person thinks about his ability and demand of the work, will affect individual motivation-to-work, and self-efficacy will affect individual's forethought in the work setting (Bandura 1994). For example, people who have positive evaluation of their ability to go through difficult situations will be motivated to apply whatever effort required to succeed in the situation. Also in the event of failure, people with high self-efficacy will attribute the cause of failure to insufficient effort, and will therefore, apply greater effort so as to succeed in the situation they already believed they can master (Bandura 1994). Individuals with these pre-dispositions will always perceive their personal ability higher than environmental demand. Thus, based on the transactional theory of stress, these individuals will apply more effort since they already believe they can master their environment. Thus, self-efficacy provides additional resources (positive forethoughts) needed to counter the effect of failure and thus, motivate the individual to apply more efforts (Grandey and Cropanzano 1999). Hence, the hypothesis that:

H3: Self-efficacy is positively related to motivation-to-work.

2.2 Antecedents of job satisfaction

The expectancy theory has major contribution in the study of work motivation (Vroom 1964). The theory is based on the premise that there is a link between effort put at work, the performance at work and the achievement of desired outcome. Individual's desire of outcome is affected by the attractiveness, importance and anticipated satisfaction to be derived from the outcome. Two assumptions are prevalent in the theory, namely people join an organisation with the expectation of the attractiveness, importance and satisfaction of various organisational rewards, and people consciously choose the level of efforts to be applied at work based on the perception that effort will lead to performance and then to desired outcome. Thus when people expect positive and desired outcome from their job, they will be motivated to put in greater effort to get to the level of performance expected. Furthermore, when people expect and obtain the desired satisfaction from a work outcome, the principle of social exchange will predict that the individual will be favourably disposed to the work environment (job) that provides the outcome.

H4: Motivation-to-work is positively related to job satisfaction

The relationships involving challenge/hindrance stressors and job satisfaction can be understood by the cognitive appraisal process and social exchange theory. Folkman, Lazarus, Gruen, and DeLongis (1986) see cognitive appraisal process as an evaluative process in which individuals identify if their environment is threatening or supportive of their well-being. During this appraisal process, the individual determines:

- If his/her environment will drain or stimulate capabilities or resources
- If the environment will provide personal benefits or not
- The best way to cope with the environment

The outcome of the first and second item above, determines if the individual will adopt problem-focused, emotion-focused or maladaptive coping method in handling the situation in his/her environment (Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen 1986). Challenge stressor is appraised as enhancing and 'promoting mastery, personal growth or future gains', while hindrance stressor does not enhance these gains (LePine et al. 2004, p.883). Consequently, in an environment of challenge stressor, the individual will appraise it as stimulating capabilities and resources, and able to provide personal benefits. Thus, the individual will utilise problem focused coping method aimed at identifying how to manage the stress so as to obtain the anticipated positive benefits. Similarly, in an environment perceived as having hindrance stressor, the individual will appraise the environment as draining capabilities and resources, and not providing positive benefits. Hence, the individual will utilise maladaptive coping style aimed at conserving resources. By the social exchange theory, the individual will be positively disposed to the former environment and negatively disposed to the latter. Hence, the anticipated positive and negative relationships job satisfaction has with challenge stressor and hindrance stressor respectively. These postulations are supported by the results obtained Podsakoff et al. (2007).

H5: Challenge stressor is positively related to job satisfaction

H6: Hindrance stressor is negatively related to job satisfaction

H7: Motivation-to-work will partially mediate the relationship between challenge stressor and job satisfaction.

H8: Motivation-to-work will partially mediate the relationship between hindrance stressor and job satisfaction.

H9: Motivation-to-work will fully mediate the relationship between self-efficacy and job satisfaction.

2.3 Antecedents of life satisfaction

Life satisfaction is a global evaluation by an individual of the quality of life generally. It is a measure of well-being, since it embodies the satisfaction individuals have in the various domains of life. Life satisfaction is believed to have antecedents in the work domain, family domain, and personality traits. Two major approaches have been used in analysing the relationship between life satisfaction and its antecedents. These are top-down and bottom-up approaches (Erdogan, Bauer, Truxillo, and Mansfield 2012). The top-down approach assumes that life satisfaction is a function of stable personality traits, such that some individuals have the propensity to have high life satisfaction always. For example, studies have shown that the big five personality traits predicted 18 per cent of variance in life satisfaction (Steel, Schmidt and Shultz 2008).

H10: Self-efficacy, a personality trait, is positively related to life satisfaction.

The bottom-up approach is patterned in line with the additive model (see Frone and Cooper 1992). Life satisfaction is assumed to be an additive combination of the satisfaction individuals have in the various domains of life. The top-down and bottom-up approaches are not mutually exclusive (Diener 1996). Based on the bottom-up approach, significant correlations have been obtained between life satisfaction and challenging job (Burke, Divinagracia and Mamo 1999), growth opportunities (Greguras and Diefendorff 2000), and meaningful work (Xie 1996). All the studies listed here involve relationships between individual stressor and life satisfaction. The relationship between the two-dimensional framework of stressor, hindrance and challenge stressors, and life satisfaction has not received attention in past studies.

In the bottom-up approach, various patterns of the relationship between life satisfaction and work variables have been postulated. In an open pattern, satisfaction in one domain does not fully mediate the relationships between life satisfaction and variables in that domain. For example, job satisfaction will partially mediate relationship between life satisfaction and work stressors. A closed pattern is where satisfaction in a domain fully mediates the relationship between life satisfaction and its antecedents in the domain. Both patterns have been tested by past studies with mixed results (see Frone and Cooper 1992; Aryee, Fields, and Luk 1999; Carlson and Kacmar 2000). Since these patterns of relationships are not mutually exclusive, the current study will test the direct and indirect effects of the antecedents of life satisfaction as stated in the hypotheses below.

H11: Challenge stressor is positively related to life satisfaction.

H12: Hindrance stressor is negatively related to life satisfaction

H13: Job satisfaction is positively related to life satisfaction

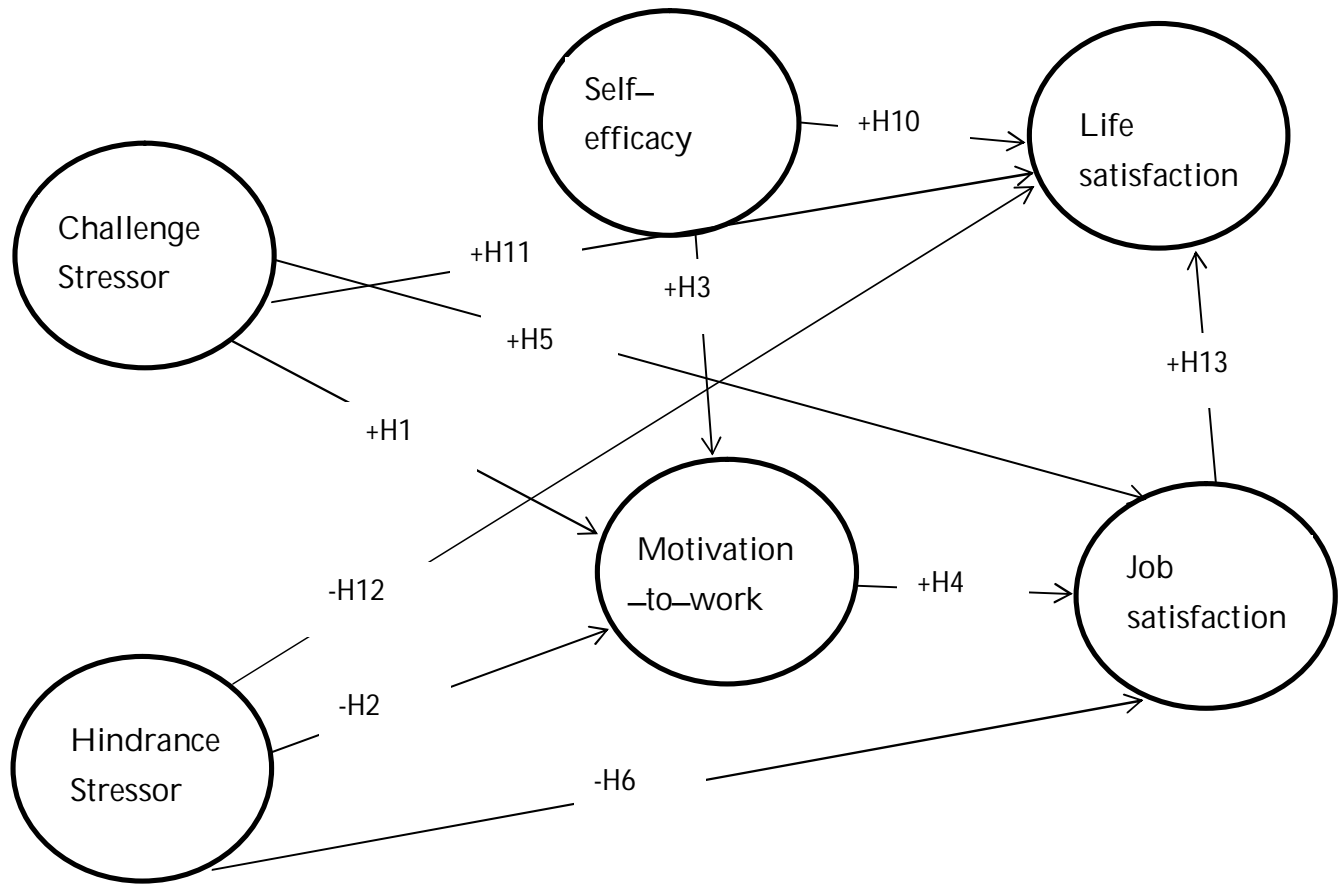
H14: Job satisfaction will partially mediate the relationship between challenge stressor and life satisfaction

H15: Job satisfaction will partially mediate the relationship between hindrance stressor and life satisfaction

H16: Job satisfaction will fully mediate the relationship between motivation to work and life satisfaction.

The hypotheses 1 to 16 are stated in the model in figure 1 and tested using structural equation modeling technique.

Figure 1: Hypothesised model



Note: H1 to H16= Hypotheses 1 to 16

3. Research design

3.1 Participants, site and Procedure

Participants for this study were drawn from the financial and oil industry based in Lagos Nigeria. The author facilitated part time MBA classes in which employees of some companies were students. Five students agreed to participate in the survey. They were given a total of 650 questionnaires to be distributed randomly to their fellow employees. The first page of the questionnaire describes the purpose of the questionnaire, and the assurance that all information provided will be used only for the survey. It also contains assurance to maintain the confidentiality of the information provided by the study participants. To enhance confidentiality, locked boxes (one in each organisation) were placed in the participating organisations. The keys to the boxes were kept with the researcher, and participants were told to put the filled questionnaires in the box.

The questionnaire had two parts. Part A contains four items that captured the demographic data of the participants. The second part contains 57 items that captured measures for 10 variables; six of the variables are used in the current research. The survey utilized cross sectional data acquired through self-report. 450 filled questionnaires were collected by the author, and, after removing the questionnaires with substantial missing data, only 389 questionnaires were used for analyses (60% return rate). Majority of the participants were female (67%), and single (56%). The average age of the participants was 41 years (SD=3.2), while 70% of the participants were either junior or senior employees.

3.2 Measuring instruments

Participants responded to the challenge and hindrance stressor items using Likert scale (one= no stress to five= very much stress), while the items for job satisfaction, life satisfaction, motivation-to-work, and self-efficacy had Likert scale of one= strongly disagree to seven= strongly agree.

3.2.1 Demographics

The following demographic variables were collected: Gender is measured as one for male and two for female. Job status (1.Junior; 2.Senior; 3.Supervisor; 4.Manager), age (1.Under 30 years; 2.31–40 years; 3.41–50 years; 5.Above 60 years), marital status (1.Single; 2. Married)

3.2.2 Job satisfaction

Five items measured the general satisfaction with current job. The measure was taken from the work of Sage, Zaidman, Amichai-Hamburger, and Schwartz (2002). Example item is 'Generally I am satisfied with my job'. Cronbach Alpha for the variable was 0.76. One of the items did not load highly on the job satisfaction factor during factor analyses and had to be dropped.

3.2.3 Self-efficacy

Self-efficacy reflects individual's belief about being able to perform tasks successfully. It is measured with eight items taken from Jerusalem and Schwarzer (1992) scale. Example item is 'I am confident I can deal efficiently with unexpected events'. Cronbach Alpha was 0.85. Only seven items were used for analyses since one item had high cross loading on other factors.

3.2.4 Challenge and hindrance stressors

Challenge stressors are perceived as enhancing mastery and personal growth, while hindrance stressor hinders mastery and personal growth. The items for both variables were taken from Cavanaugh et al. (2000) scale. The participants were expected to record on a scale of one to five the extent to which events result in stress in their job. Sample item for challenge stressor was 'The scope of responsibility my position entails', while that of hindrance is 'The degree to which politics rather than performance affects organisational decisions'. Challenge stressor had six items, while hindrance stressor had five items. One item in the hindrance factor cross loaded highly to another factor and was removed from analyses. Cronbach Alpha for challenge and hindrance stressor was 0.86 and 0.7 respectively.

3.2.5 Motivation- to- work

Motivation-to-work expresses the level and direction of efforts individuals apply to get assigned work done. It is captured with three items taken from the work of LePine et al. (2004). The items were however, modified for effort in job performance. Example item is 'In general, I am motivated to put maximum effort in my work'. The Cronbach Alpha is 0.70.

3.2.6 Life satisfaction

Life satisfaction is a global evaluation by an individual of the quality of life generally. It is measured by five items taken from the work of Diener, Emmons, Larsen and Griffin (1985). Example item is 'So far I have got the important things I want in life' The Cronbach Alpha for the scale is 0.76.

4. Statistical analysis

The factor structure for the study variables was determined using confirmatory factor analyses. Items that cross loaded by more than 0.4 to another factor were removed from analyses while determining final factor structure. The zero-order correlation between Self-efficacy and motivation-to-work is high; hence, confirmatory factor analysis was carried out to establish the factor structure for the two factors. Model estimation of the hypothesised model was done using Structural Equation Modeling technique. Model fit was determined using the criteria set by Hu and Bentler (1999), and the indexes used are comparative fit index (CFI), Normed fit index (NFI), and root-mean-error-of –approximation (RMSEA). For a well fitted model, the CFI and NFI must be greater than 0.9 (Hu and Bentler, 1999), while the value for RMSEA must be less than 0.08 (MacCallum, Browne and Sugawara, 1996). The items for the study variables were parceled to create only two or three indicator variables for each study factor. In this way the total number of indicator variables in the model was 14 (see Frone and Cooper 1992; Aryee, Fields and Luk 1999).

5. Results

5.1 Preliminary analyses

The study variables have Cronbach Alpha of 0.7 and above. The first factor in the unrotated factor analysis extracted only 14% variance compared to 60% extracted by the other factors. This test shows that common method variance is minimal (Koufteros, Vonderembse and Doll 2002). Discriminant validity is confirmed since the square of the bivariate correlation between any two factors is less than the variance extracted by each factor (Koufteros et al. 2002). When items that have high loading on another factor were removed, the final confirmatory factor analysis shows that a six-factor structure for the study variables is better than a single factor structure (Table 1). Self-efficacy and motivation-to-work has correlation of .49. The two factors were subjected to another confirmatory factor analyses. The result indicated that a two-factor model, made up of separate factors for self-efficacy and motivation-to-work has better fit than a single factor model (Table 2). Job satisfaction is negatively correlated with challenge stressor (-.17), hindrance stressor (-.23), positively correlated with motivation-to-work (.18) and life satisfaction (.4). Self-efficacy is positively correlated with motivation-to-work (.49), and life satisfaction (.21). The pattern of correlation shown here supported hypotheses H3, H4, H6, H10, H11, and H12, but did not support H1, H2, H5, and H9 (Table 3). All the correlations listed are statistically significant

Table 1: Confirmatory factor analyses for all study variables (N=389)

Model	X ²	df	Δ X ²	CFI	NFI	RMSEA	RMSEA 90% confidence interval
Six- Factor Model	1049.90*	358		0.9	0.92	0.056	(.050 – .065)
Single Factor Model	3380.56*	373	2330.66*	0.53	0.45	0.143	(.139 – .148)

Note: X²= Chi-square; df= Degree of freedom; CFI=Comparative fit index; NFI= Normed fit index; RMSEA=Root-mean-error-of-approximation

Table 2: Confirmatory factor analyses for self-efficacy and motivation-to-work

Model	X ²	df	Δ X ²	CFI	NFI	RMSEA	RMSEA 90% confidence interval
1.Two Factor	86.84*	39		0.97	0.95	0.056	(.04 – .072)
2. Single factor	206.34*	40	119.50*	0.83	0.87	0.103	(.089 – .117)

Note: X²= Chi-square; df= Degree of freedom; CFI=Comparative fit index; NFI= Normed fit index; RMSEA= Root-mean-error-of-approximation

Table 3: Descriptive statistics and zero order correlation (N=389)

Variable	1	2	3	4	5	6
1.Challenge stressor	-0.86					
2.Hindrance stressor	.30*	-0.7				
3.Self-efficacy	-0.01	0.01	-0.84			
4.Motivation to work	0.02	-0.09	.49*	-0.7		
5.Job satisfaction	-.17*	-.23*	0.08	.18*	-0.76	
6.Life satisfaction	-.20*	-.18*	.26*	.21*	.40*	-0.85
Sex	0.01	-0.03	-0.04	0.01	-.12*	-0.01
Age	-0.01	-0.07	-0.06	-0.08	.16*	-0.05
Marital status	-0.03	-0.02	-0.05	-0.03	.17*	0.03
Mean	3.01	2.72	5.62	5.67	3.74	4.19
SD	1.09	0.93	0.92	1.06	1.73	1.31

Note: SD= Standard deviation; ()= Reliability; *p<.05

5.2 Estimation of the structural model

The fit indexes indicate that the estimated model has good fit to data (Table 4). Hindrance stressor has negative significant relationship with motivation-to-work (-.20), and job satisfaction (-.27). These results support hypotheses H2 and H6 respectively. Its hypothesised relationship with life satisfaction is negative, but not significant (-.01). Hence hypothesis H11 is not supported. Challenge stressor has significant positive relationship with motivation-to-work (.17) and significant negative relationship with job satisfaction (-.17). The former relationship supports hypothesis H1, while the latter partially supports hypothesis H5, because the sign is opposite to what was hypothesised. Its relationship with life satisfaction is negative (-.11), but not significant; hence hypothesis H10 is not supported. Motivation-to-work has significant positive relationship with self-efficacy (.70), and job satisfaction (.28). These results support hypotheses H3 and H4 respectively. Self-efficacy has significant positive relationship with life satisfaction (.32), thus, supporting hypothesis H13. Job satisfaction has significant positive relationship with life satisfaction (.44), thus supporting hypothesis H12. Motivation-to-work partially mediated the relationship between job satisfaction and hindrance stressor, and between challenge stressor and job satisfaction. The former result supports H8, while the latter supports H7. Motivation-to-work fully mediated the relationship between job satisfaction and self-efficacy; hence H9 is supported. Job satisfaction fully mediated the relationship between life satisfaction and hindrance stressor, and between life satisfaction and challenge stressor. The former result supports hypothesis H15, while the later supports hypothesis H14. Job satisfaction fully mediated the relationship between motivation-to-work and life satisfaction; hence hypothesis H16 is supported. Out of the 16 hypotheses tested in this estimation, 13 are supported, one partially supported, and two are not supported. The entire model explained 26%, 5.3%, and 10% variance in motivation-to-work, job satisfaction, and life satisfaction respectively (Figure 2). The introduction of motivation-to-work and self-efficacy into the stress model reduced the total negative effect of challenge stressor by .05; but increased the negative effect of hindrance on job satisfaction by -.06 (Table 5).

Table 4: Fit indices for the hypothesised structural model (N=389)

Model	X ²	Df	CFI	NFI	RMSEA	RMSEA 90% confidence interval
Hypothesised Model	224.848	64	0.9	0.92	0.065	(.059 –.082)

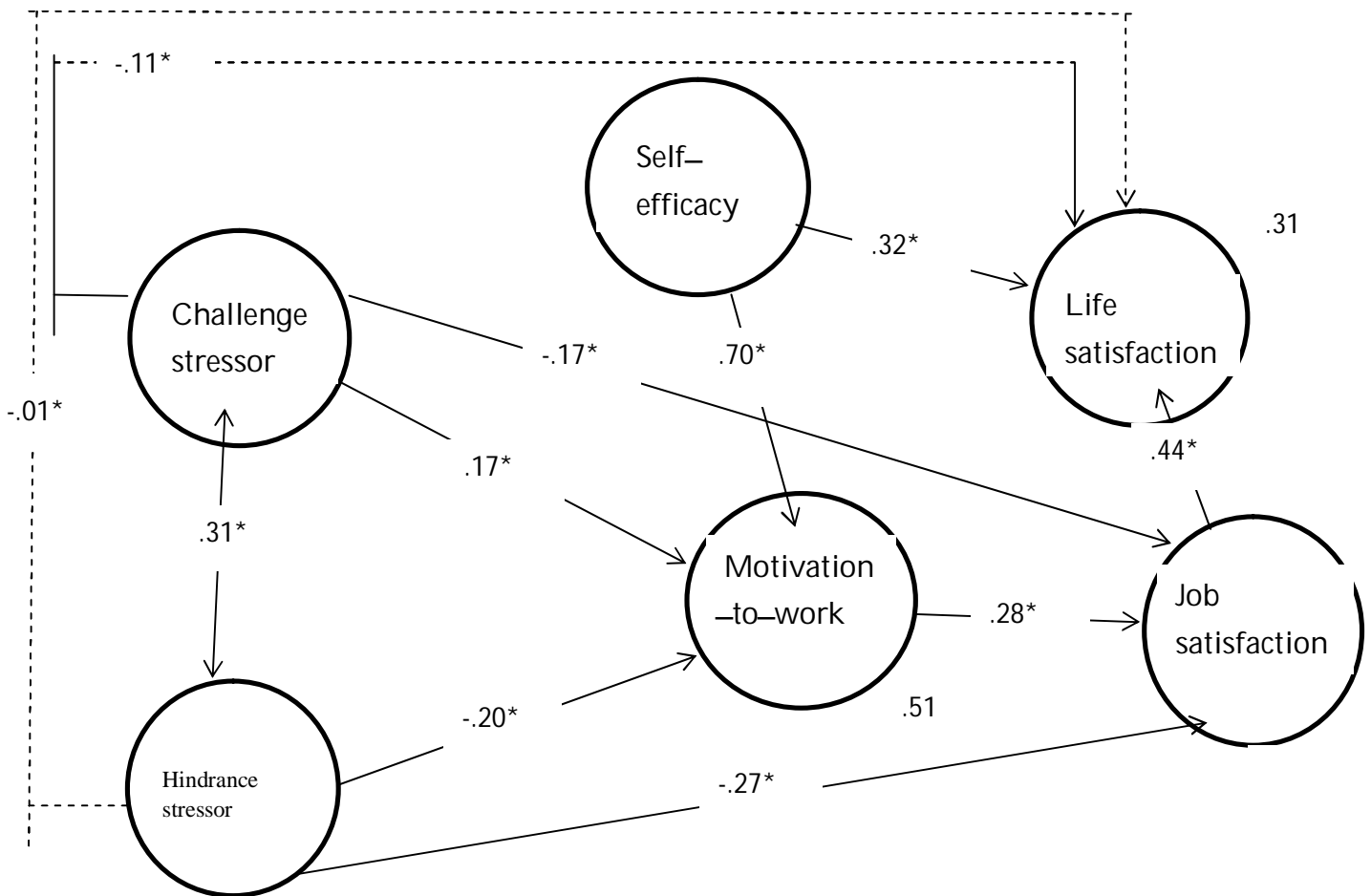
Note: X²= chi-square; df= Degree of freedom; CFI=Comparative fit index; NFI= Normed fit index; RMSEA= Root-mean-error-of-approximation

Table 5: Direct, indirect and total effects of study variables (N=389)

Exogenous Variables	Endogenous Variables				
	SEFF	HS	CHS	MOT	JS
MOT					
Direct effect	0.7	-0.2	0.17	-	-
Indirect effect	0	0	0	-	-
Total effect	0.7	-0.2	0.17	-	-
JS					
Direct effect	0	-0.27	-0.17	0.28	-
Indirect effect	0.2	-0.06	0.09	0	-
Total effect	0.2	-0.33	-0.08	0.28	-
LS					
Direct effect	0.32	0	0	0	0.44
Indirect effect	0.09	-0.1	-0.05	0.12	0
Total effect	0.41	-0.1	-0.05	0.12	0.44

Note: CHS=Challenge stressor; SEFF=Self-efficacy; JS=Job satisfaction; HS=Hindrance stressor; MOT-Motivation-to-work; LS=Life satisfaction

Figure 2: Estimated mediated model (N=389)



Note: $*= p < .05$

6. Discussions

6.1 Interpretation

There are two main objectives of this study. Firstly, the study included motivation-to-work and self-efficacy in the stress model to better define the pathway between the two dimensional framework of stressors and job satisfaction. Secondly, the study included life satisfaction, a measure of individual wellbeing, so as to define how work variables affect wellbeing. The latter addressed a vital gap in the life satisfaction literature (Erdogan et al. 2012). The pattern of significant relationships obtained in this study is an indication of the strategic role of motivation-to-work and self-efficacy in the stressor-work outcome model. Motivation-to-work partially mediated the relationship between work stressors and job satisfaction. Its positive relationship with challenge stressor resulted in reduction of the negative effect of challenge stressor on job satisfaction by $.05$. The reduction is an indication that addition of other variables that have positive relationship with challenging stressor will improve job satisfaction. For example, supervisor and peer social support in environment of high work demand, a component of challenge stressor, will reduce the effect of the stressor on individuals (Lazarus and Folkman 1991; Aryee et al. 1999; Carlson and Perrewe 1999). The negative relationship between motivation-to-work and hindrance stressor made the negative effect of the latter on job satisfaction worse by $-.06$. This is a pointer that organisations should work at eliminating or reducing to the barest minimum level any hindrance stressor in the work place. Managing hindrance stressor is not likely to yield any benefit, because of its negative consequences on the study variables.

The negative relationship between job satisfaction and challenge stressor obtained in this study is different from the results obtained by Cavanaugh et al. (2000) and Podsakoff et al. (2007), but agrees with the work of Amah (2012). Thus, the differential effect of challenge and hindrance stressors established by past studies is not supported. There are past studies that show that stress models behave differently when tested in the sample used for the current study (Aryee et al. 1999; Akinrele et al. 2003; Amah 2012). The result obtained here may be an indication that the differential effect postulated by past studies does not hold in the sample used for the current study.

Self-efficacy is positively related to motivation-to-work and life satisfaction. High self-efficacy individuals have high evaluation of their ability to operate in any environment, and this belief will affect both their perception of stress, and their motivation-to-work. Its role in directly enhancing motivation-to-work, and life satisfaction, and indirectly affecting job satisfaction, gives it an important role in the work stressor model. Consequently, enhancing self-efficacy will positively affect these variables. Self-efficacy is known to be malleable, and factors such as providing mentoring, feedback, and supporting environment have been determined to be ways to enhance self-efficacy (Gist and Mitchell 1992; Maurer 2001).

Erdogan et al. (2012) proposed the top-down and bottom-up approaches to determining life satisfaction. Self-efficacy is positively related to life satisfaction, thus supporting the top-down approach. The result implies that high self-efficacy individuals have the propensity to be satisfied with life across events. Thus, any attempt to enhance individual's self-efficacy will enhance their life satisfaction. Job satisfaction is positively related to life satisfaction, and fully mediated the relationships life satisfaction has with the work stressors and motivation-to-work. These relationships support the bottom-up approach, and the closed model pattern. They are also indication that job satisfaction plays very strategic role in how events in the work environment affect life satisfaction. Organisations should encourage events in the work environment that have positive association with job satisfaction, and manage or eliminate completely those that negatively affect job satisfaction. The approval given to both top-down and bottom-up approaches is an indication that the two approaches are not mutually exclusive.

7. Conclusions and recommendations

The first contribution of this study is the expansion of the two-dimensional framework of stressor and job satisfaction model to include self-efficacy and motivation to work. The inclusion of these variables better defines the pathway through which these stressors affect job satisfaction. Stressors, whether perceived as challenging or hindrance, have negative effects on job satisfaction within the sample used for the study. By introducing other variables that have potential to positively ameliorate the negative effects of challenge stressor, this study has shown that organisations can manage certain stressors by managing the work environment properly. Organisations may not be able to ameliorate the negative effects of hindrance stressors, hence, organisations should attempt to eliminate them or reduce them to a manageable level. For example, organisational politics, a form of hindrance stressor, can be eliminated by creating a just and equitable work environment.

The second contribution is the linking of life satisfaction to work variables and personality disposition. The relationship between self-efficacy and life satisfaction is an indication that some individuals have the propensity to be satisfied with life generally. Similarly, the relationships life satisfaction has with the work variables in the study model are indications that work environment plays a role in defining life satisfaction of participants. The study also demonstrates that job satisfaction plays a strategic role in transmitting what happens in the work environment to life satisfaction. Hence, every effort made in making work environment favourable to developing job satisfaction, ultimately gets back to developing life satisfaction.

8. Limitations

Certain limitations must be considered while interpreting the results of this study. The data for the variables was captured using cross-sectional methodology. Hence, common method variance cannot be ruled out. However, the preliminary results show that the level of common method variance is low. The study does not claim to have established all the mediating variables that can affect stressors, job satisfaction and life satisfaction. This is an area for future studies to expand the model tested here to include such variables as type 'A' personality, self-esteem, and organisational support. Future studies should also integrate the work and family domain into a single model. There are challenge and hindrance stressors in the family. The model may be large, but it is not impossible to develop and test.

References

- Akinrele, A.B., Osamwonyi, I., & Amah, O.E. (2003). Work-family conflict model: Application of Aryee's model. *African Journal for the Psychological Studies of Social Issues*, 10, 3-16.
- Amah, O.E. (2012). The role of self-efficacy in the relationship involving challenge and hindrance stressors and job satisfaction. *International Journal of Advances in Management and Economics*, 1(5), 37-44
- Aryee, S., Fields, D., and Luk, V. (1999). A cross-cultural test of a model of work-family Interface. *Journal of Management*, 25, 491-511.
- Bandura, A. (1994). Self-efficacy, in *Encyclopedia of human behaviour* Vol. 4, eds. V.S. Ramachaudran, New York: Academic Press, pp. 71-81
- Beehr, T.A., and Newman, J.E. (1976). Job stress, employee health and organisational effectiveness: A facet analysis, model and literature review. *Personnel Psychology*, 31, 665-699.
- Beehr, T.A., Jex, S.M., Stacy, B.A., and Murray, M.A. (2000). Work stressors and Coworker support as predictors of individual strain and job performance. *Journal of Organisational Behaviour*, 21, 391-405.
- Bray, R.M. (1999). Stress and substance use among military women and men. *American Journal of Drug and Alcohol Abuse*. 2, 239-250).
- Burke, R.J., Divinagracia, L.A., and Mamo, E. (1999). Predictors of life satisfaction Among Filipino managerial and professional women. *Psychological Reports*, 84, 805-808.
- Carlson, D.S., and Kacmar, K.M. (2000). Work-family conflict in the organisation: Do life Role values make a difference? *Journal of Management*, 26, 1031-1054.
- Carlson, D.S., and Perrewe, P.L. (1999). The role of social support in the stressor-strain relationship: An examination of work-family conflict. *Journal of Management*, 25, 513-540.
- Cavanaugh, M.A., Boswell, W.R., Roehling, M.V., and Boudreau, J.W. (2000). An Empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology*, 85, 65-74.
- Cooper, C.L. (1986). Job distress: Recent research and emerging role of the clinical occupational psychology. *Bulletin of British Psychology Society*, 39, 325-331.
- Cox, T. (1993). Stress research and stress management: Putting theory to work. *Health and Safety Executive Research Report*, 6/1993: London
- Diener, E. (1996). Traits can be powerful, but are not enough: Lessons from Subjective well-being. *Journal of Research in Personality*, 30, 389-399.
- Diener, E., Emmons, R.A., Larsen, R.J., and Griffin, S. (1985). The satisfaction with life Scale. *Journal of Personality Assessment*, 49, 23-45.
- Dollard, M.F., Winefield, H.R., Winefield, A.H., and de Jonge, J. (2000). Psychosocial job Strain and productivity in human service workers: A test of the demand-control-support model. *Journal of Occupational & Organisational Psychology*, 73, 501-510.
- Erdogan, B., Bauer, T.N., Truxillo, D.M., and Mansfield, L.R. (2012). Whistle while you work: A review of the life satisfaction literature. *Journal of Management*, 38, 1038-1083.
- Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A., and Gruen, R.J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping and encounter outcomes. *Journal of Personality and social Psychology*, 50, 992-1003.
- Folkman, S., Lazarus, R.S., Gruen, R.J., and DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology*, 50, 571-579.
- Frone, M.R., and Cooper, M.L. (1992). Antecedents and outcomes of work-family conflicts: Testing a model of work-family interface. *Journal of Applied Psychology*, 77, 65-78.
- Ganster, D.C., and Schraubroeck, J. (1991), 'Work stress and employee health. *Journal of Management*, 17, 235-271.
- Gist, M., and Mitchell, T. (1992), 'Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17, 183-211.
- Grandey, A.A., and Cropanzano, R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behaviour*, 54, 350-370.
- Greenhaus, J.H., Collanan, G.A., and Godshalm, V.A. (2000). *Career management*. 3rd, USA: Dryden Press Harcourt College Publishers.

- Greenhaus, J.H., Parasuraman, S., and Collins, R.M. (2001). Career involvement and family involvement as moderators of the relationship between work family conflict and withdrawal from profession. *Journal of Occupational Health Psychology*, 6, 91-100.
- Greguras, G.L., and Diefendorff, J.M. (2010). Why does proactive personality predict employee life satisfaction and work behaviour? A field investigation of the mediating role of the self-concordance model. *Personnel Psychology*, 63, 539-560.
- Hu, L.T., and Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Jerusalem, M., and Schwarzer, R. (1992). Self-efficacy as a resource factor in stress Appraisal process', in (Ed.) *Self-efficacy: Thought control of action*, eds. R. Schwarzer, Washington DC: Hemisphere, pp. 195-213
- Jex, S.M. (1998). *Stress and job performance*. Thousand Oaks: Sage.
- Jex, S.M., Bliese, P.D., Buzzell, S., and Primeau, J. (2001). The impact of self-efficacy on stress-strain relations: Coping style as an explanatory mechanism. *Journal of Applied Psychology*, 86, 401-409.
- Jones, M.D. (2006). Which is a better predictor of job performance: Job satisfaction or Life satisfaction. *Journal of Behaviour and Applied Measurement*, 8, 20-42.
- Koh, W.L., and Lim, C. (1996). Stress in social work: Testing a Singaporean sample, *Research and Practice in Human Resources Management*, 4, 25-41.
- Koufteros, X.A., Vonderembse, M.A., and Doll, W.J. (2002). Examining the competitive capabilities of manufacturing firms. *Structural Equation Modeling*, 9, 256-282.
- Lazarus, R.S., and Folkman, S. (1984). *Stress, appraisal, and coping*, New York: Springer.
- Lazarus, R.S., and Folkman, S. (1991). *Emotion and adaptation*, New York:Oxford University Press.
- LePine, J.A., LePine, M.A., and Jackson, C.L. (2004). Challenge and hindrance stress: relationships with exhaustion, motivation to learn, and learning performance. *Journal of Applied Psychology*, 89, 883-891.
- MacCallum, R.C., Browne, M.W., and Sugawara, H.M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1, 130-149.
- Maurer, T.J. (2001), 'Career-relevant learning and development, worker age, and beliefs about self-efficacy for development. *Journal of Management*, 27, 123-140.
- Podsakoff, N.P., LePine, J.A., and LePine, M.A. (2007). Differential challenge stressor- hindrance stressor relationship with job attitudes, turnover intention, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92, 438-454.
- Sadri, G., and Marcoulides, G.A. (1994). The Dynamics of occupational stress: Proposing and testing a model. *Research and Practice in Human Resources Management*, 2, 1-19.
- Sagie, A., Zaidman, N., Amichai-Hamburger, D.T., and Schwartz, D.G. (2002). An empirical assessment of the loose-tight leadership model: Quantitative and qualitative analysis. *Journal of Organisational Behaviour*, 23, 303-320.
- Sargent, L.D., and Terry, D.J. (2000). The moderating role of social support in Karasek's job strain model. *Work & Stress*, 14, 245-261.
- Seyle, H. (1975). *Stress without distress*. New York: Wiley.
- Seyle, H. (1982). History and present status of the stress concept, in *Handbook of stress*, eds. L. Goldberger and S. Breznitz, New York: Free press, pp. 7-17.
- Steel, P., Schmidt, J., and Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, 134, 138-161.
- Susskind, A.M., Borchgrevinck, C.P., Kacmar, K.M., and Brymer, R.A. (2000). Customer service employees' behavioural intentions and attitudes: An examination of construct validity and a path model. *International Journal of Hospitality Management*, 19, 53-77.
- Vroom, V.H. (1964). *Work and Motivation*. New York: Wiley.
- Xie, J.L. (1996). Karasek's model in the People's Republic of China: Effects of job demand, control, and individual differences. *Academy of Management Journal*, 39, 1594-1618.