

# The Moderating Role of Tolerance Ambiguity in the Stressors-Strain Relationship: An Empirical Study among University Lecturers in Saudi Arabia

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## Abstract

Several studies reveal that the workplace is a critical source of stress. Researchers who analyze the relationship between stressors and strain in the context of the workplace have called for the need to examine moderator variables impact on the above relationship. The present study analyzed the relationship between role overload, role conflict, role ambiguity, and strain as well as to study the impact of tolerance ambiguity as a moderator in the relationship between job demands and strain. The structural equation modeling approach was adopted by the study. The sample study comprised of 217 lecturers from the University of Dammam, Saudi Arabia and the results show that the tolerance ambiguity significantly moderates the relationship between stress roles namely role conflict but not role overload and role ambiguity with strain. The results also confirmed the direct impact of role overload on strain but not that of role conflict and role ambiguity. The findings, with regards to theory, research and practice and their implications, were also discussed.

**Keywords:** tolerance ambiguity, stress-strain, academics life, moderating

## 1. Introduction

In the last twenty years, a significant amount of empirical studies have been carried out to examine the relationship between stress and strain; for example, Lee & Ashforth (1996), Fogarty, Singh, Rhoads & Moore (2000), Peiro et al. (2001), Posig & Kickul (2003), Idris (2011), Rath (2011), Kebelo (2012). In addition, studies concerning occupational stress have notably shifted to the identification and understanding of contextual variables that have the potential of moderating the relationship of occupational stress with the feeling of strain – many of the studies concentrating on environmental and personality factors (Rath, 2011; Idris 2009; Grau, Salanova & Peiro, 2001; De Rijk, Le Blanc, Schaufeli & De Jong, 1998; Heinisch & Jex 1997; Jex & Beliese, 1999; Jex & Elacqua, 1999). Specifically, several studies (for instance, Idris 2009, Delstra et al. 2003; Harvey et al. 2003) examined the level to which organizational support and peer support moderate the stressor-strain relationship. Others conducted research concentrated on the personality characteristics analysis in studying the moderating impact of self-efficacy and gender on stressors and feeling of strain (Chang & Lai, 2010; Srivastava 2009).

Despite the fact that prior and extant studies contributed to extending our understanding of the environment under which stressor roles may be potentially effective or ineffective in impacting workers and work outcomes with some exceptions (Posig & Kickul, 2003; Idris 2011; Rath 2011; Kebelo 2012), there has notably been little research that has examined the role of personality factors like tolerance ambiguity in the determination of the role stressors impact on psychological strain in general and particularly among lecturers (Idris 2009). It is evident that additional research is called for to investigate the role of individual factor tolerance of ambiguity level among academics with regards to being an active academician for tasks that are unstructured and to handle the work complexity requirements (Idri, 2009). Moreover, research dedicated to the stress-strain relationship in the workplace has received little attention when it comes to examining probable links between stress and strain among academicians (Kebelo 2012; Coetzee & Rothman, 2005), those contributing to the depression and anxiety development (Marine, Ruotsalainen, Serra & Verbeek, 2006), and those dedicated to low self-esteem and the inability to concentrate (Harris and Hartman, 2002).

Authors from this novel area of research stated that stressors can be critical factors impacting the worker's physiological and psychological well-being (Cooper & Cartwrighter, 1994; Landsbergis, Schnall, Belkic, Baker, Schwarts & Pickering, 2001; Geurts, Schaufeli & Rutte, 1999; Idris 2011). As a result, additional research and significant attention are called for to investigate the correlations between stress roles like role overload, role conflict and role ambiguity and individual ability like tolerance ambiguity that may by itself or combined with other influencing factors, impact the work outcomes and performance of lecturers. Hence, the present study has a double purpose; first, to examine the relationship between role stressors and psychological strain among lecturers. Despite the fact that prior research has addressed the relationship between role stressors and strain like role

overload and role conflict (e.g. Kebelo 2012; Rath 2011; Idris 2011; Beehr 1998), there is a crucial call for the examination of the correlation between these variables among academics. Second, this study examines whether or not the relationship between stress and strain is significant when lecturers have a high ability to tolerate work ambiguity rather than low ability. Higher lecturer's ability to tolerate work ambiguity refers to the lecturer's higher level of adjusting to new information perceptually and emotionally and his/her willingness to change methods for optimal social and personal effectiveness compared to their counterparts (Harper 2008). Moreover, the present study examines the moderating role of tolerance ambiguity in the stressors role-strain relationship.

## 2. Literature Review

A model was proposed by Beehr (1998) in his attempt to explain the process of workplace stress. The model postulates the general relationship between workplace stressors and strain experienced by workers. According to Beehr (1998), workplace stressors are events or conditions in the workplace, i.e. role conflict, role overload and role ambiguity which may directly result in strain. He added that the stressors at the workplace initially stem from human psychology and the physical process. This relation's outcome may result in strain at an individual and organizational level like emotional distress, low commitment and intention to leave. Furthermore, Beehr (1998) contended that the situational characteristics and personal characteristics are moderators in the stress-strain relationship and they can either strengthen or weaken the relationship. Other researchers (Rath 2011; Idris 2011; Beehr 1998; Kelloway & Barling, 1991; Lee & Ashforth, 1996) argued that although studies dedicated to occupational stress have concentrated on the stressor-strain relationship experienced at the individual and organizational level, more studies examining the moderating role in the relationship are called for. This study's model was adapted from prior studies which introduced a novel moderating variable namely tolerance ambiguity (Idris 2009; Hellosoy & Gundersen, 2011). The definitions of constructs introduced are presented in Figure 1. They are the role stressors comprising of role overload, role ambiguity and role conflict as exogenous variables, and their impact on strain as the endogenous variable, when moderated by the level of tolerance ambiguity (moderator variable). Moreover, the present study model identifies the variables outcomes of the university lecturers' feeling of strain.

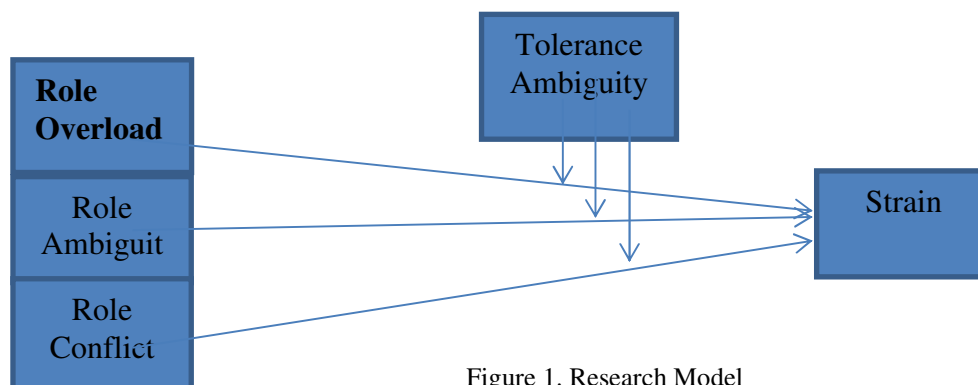


Figure 1. Research Model

### 2.1 Stress

Stress is a term with various meanings and applications based on the discipline under study. To date, there is no consensus on the definition of stress although there are some common elements that are highlighted in literature (Sutherland & Cooper, 1990). Specifically, Cooper et al. (2001) described stress as a continuous relationship between the individual and work environment whereas Fako (2010) defined occupational stress as the outcome of an individual's interpretation of a situation that is threatening his/her ability to achieve tasks or to satisfy occupational demands. On the other hand, Houtmann & Kornitzer (1999) defined occupational stress as reaction patterns occurring when workers are faced with work demands that do not match their knowledge, skills and abilities and those that go against their ability to cope. In other words, there is a feeling of imbalance between demands and environmental/personal resources. This definition matches to that of Kahn et al.'s (1964) definition. Kahn et al. (1964) defined stress as a composite construct comprising of role stressors namely role conflict and role ambiguity. Moreover, role conflict is described as the simultaneous presence of two or more than two sets of pressures in a way that adherence to one would make it challenging to adhere to another (Kahn et al. 1964, p.19). Additionally, researchers are of the consensus that role stressors consist of three separate but interlinked constructs which are role overload, role ambiguity and role conflict (Kahn 1980; Kelloway & Barling, 1991; Peiro et al. 2001; Shaubroeck, Cotton & Jennings, 1989). Role overload occurs when role expectations are higher compared to the abilities and motivation of the individual to carry out a task (Conley & Woosley, 2000;

Schaubroeck, et al. 1989; Spector & Jex, 1998). Role ambiguity occurs when individuals have an ambiguous knowledge concerning the performance of their assigned jobs (Ashforth & Lee, 1990; Ivancevich & Matteson, 1980; Rizzo, House & Lirtzman, 1970). Finally, role conflict is described as the incompatibility of expectations and demands related with the work role (Ashforth & Lee, 1990; Ivancevich & Matteson, 1980; Rizzo et al. 1970). Previous studies provided significant evidence that support the premise stating that work stressors exposure has a double effect on the worker's physiological and psychological well-being (Cooper & Cartwrighter, 1994; Landsbergis, Schnall, Belkic, Baker, Schwarts, & Pickering, 2001; Guerts, Schaufeli, & Rutte, 1999; Idris 2011). For example, Landsbergis et al. (2001) and Jones and Bright (2001) revealed that great level of stress can result in decreased physical well-being, various negative feelings like rejection, anger, depression, higher turnover and lower productivity. Other researchers supported that occupational stress may result in personal relations with peers, the feeling of minimal levels of understanding and tolerance, irritability, indecisiveness, ineffective communication, poor interpersonal skills, the perceptions of isolation and alienation (Brown, Ralph & Brember, 2002) and staff retention issues (Jepson and Forrest, 2006). Contrastingly, Idris (2009) revealed that stress may bring about a sense of excitement in the individual, which urges him/her to take actions that may lead to enhanced performance. In relation to these studies, most occupational stress models postulate that stressors in the occupational environment produce negative changes in the individual's psychological, physical and behavioral aspects (Beehr 1985). However, a great level of pressure on individuals at work is generally revealed to lead to higher productivity (Dollard, Winefield, Winefield & De Jonge, 2000). More importantly, Jones & Bright (2001) claimed that stressors at work can positively impact individuals, when they are identified, particularly since various stressors have various impacts and they need different actions and coping mechanisms.

## 2.2 Strain

Strain is defined as affective feeling states of the individual that is characterized by the depletion of emotional resources and lack of energy (Lee & Ashforth, 1996). In addition, Idris (2011) defined psychological strain as a specific form of emotional distress that stems from a reaction to a situation that involves feelings of threat to the well-being of the individual. Winnubst (1993) defined strain as a multi-process of behavioral, psychological and physiological factors occurring during stress and disturbing normal function. Hence, stress is conceptualized as a process that occurs in individuals who are stressed after which several outcomes are noted including cynicism, decreased professional efficacy, decreased organizational commitment and intention to leave (Idris 2011).

## 2.3 Relationship between Stress and Psychological Strain

On the basis of a thorough literature review, it was noted that the relationship between stress and psychological strain has been expansively examined by authors particularly in the context of Western countries. However, this does not hold true in Asian countries as studies of this caliber are few and far between (Acnour & Boerhannoeddin, 2011). The relationship between role stressors and the feeling of strain has been established in literature (Lee & Ashforth, 1996; Fogarty, Singh, Rhoads & Moore, 2000; Peiro et al. 2001; Posig & Kickul, 2003). Posig & Kickul (2003) claimed that the justification behind the occurrence of strain is fatigue that stems to adhere with a set of demands.

As for the experience of role stressors in academic literature, evidences that academics' experience role overload, role ambiguity and role conflict (Taris et al. 2001; Dua 1994; Gillespie et al. 2001). Moreover, Idris (2011) stated that role overload and ambiguity are predictors of psychological strain. Research has also revealed that role ambiguity, conflict and overload lead to the development of stress symptoms (Huda, Rusli, Naing, Tengku, Winn & Rampal, 2004). In a related study, Kinman (2001) showed that a great proportion of academicians are inclined to leave higher education or they regret selecting an academic career. Also, in another study, Sun, Woo & Wang (2011) revealed that role overload is a predictor of occupational stress among Chinese university teachers. In the context of Australia, Gillespie, Walsh, Winefield, Dua & Stough (2001) showed the lack of research finance, lack of support, task overload, poor leadership and job security were the topmost stress sources. Moreover, in New Zealand, Chalmers (1998) stated that dissatisfaction stemming from work overload was the primary cause of stress among university staff. Along the same line of study, Tytherleigh, Webb, Cooper & Ricketts (2005) showed that job insecurity, lack of control and communication issues are all interrelated with high job stress among UK university staff.

It is evident that literature has established the inter-linkage between role stressors and the feeling of strain (i.e. Lee & Ashforth, 1996; Fogarty, Singh, Rhoads & Moore, 2000; Peiro et al. 2001; Posig and Kickul 2003), but prior studies still call for future studies to examine academics (Idris 2011). Stress is defined as a non-specific reaction to an environmental demand (Cooper, Dewe & O'Driscoll, 2001). What is generally known as work-related stress is more accurately conceptualized as psychological strain. This is referred to the various

negative/positive specific responses. Psychological strain is described as psychological outcomes that appear in reaction to organizational demands and these are manifested in the form of stress. Moreover, various studies evidenced the relationship between stress and strain (e.g. Fogarty, Singh, Rhoads, & Moore, 2000; Posig & Kickul, 2003). Academics have been reported to face challenges in achieving their assigned jobs in a proper way owing to task overload (Gilispie, et al. 2001). Greater ambiguity may also occur owing to the lack of clarity of how to handle various teaching activities and research and professional services that are needed for a successful achievement of the academic role (Idris 2009). According to Idris (2009) role conflict impact academics with the various combination of factors namely higher teaching loads, limited resources and higher demands from stakeholders, and therefore, a great probability of strain occurrence exists. Researchers hence claim that role overload, conflict and ambiguity directly link to the feeling of strain (Idris 2009). On the basis of argument and prior studies, the present study presents the following hypotheses;

H1: Work overload is related to psychological strain.

H2: Role conflict is related to psychological strain.

H3: Role ambiguity is related to psychological strain.

#### *2.4 Moderating Role of Tolerance Ambiguity*

In the context of Saudi Arabia, the academic environment is characterized as a multicultural environment as lecturers come from different countries. Lecturers need to adjust to life in a different culture, conduct interactions with new peers, and host nationals and adapt to a new position with the corresponding tasks and responsibilities. Moreover, researchers such as Furnham & Gunter (1995), Caligiuri, Tarique & Jacobs (2009), Mol, Born, Willemssen & Van Der Molen (2005) and Idris (2011) brought forward specific success characteristics in a general work environment, and in an academic environment. It is notable that various studies stated that tolerance for ambiguity is not frequently utilized in work-related research (Furnham & Gunter, 1995; Herman, Stevens, Bird, Mendenhall & Oddou, 2010). The tolerance ambiguity, as a concept, has drawn the attention of research in different branches of psychology for over four decades (Furnham & Ribchester, 1995). Ambiguity tolerance is defined as the way an individual or a group perceives and processes information concerning ambiguous situations when confronted by a range of unfamiliar, complex and inconsistent clues (Furnham & Ribchester, 1995). Tolerance for ambiguity, was also defined by Bunder (1962) as the inclination to perceive and interpret information that is vague, incomplete, fragmented, multiple, probable, unstructured, uncertain, inconsistent, contrary, contradictory, having unclear meanings as actual or probable causes of psychological discomfort or threat. Moreover, Furnham & Gunter (1995) described a person with low tolerance of ambiguity as experiencing stress, reacting prematurely and avoiding ambiguous stimuli. Individuals having a low tolerance for ambiguous situations are more susceptible to stress (Keinan 1994). Contrastingly, a person having a high tolerance for ambiguity considers ambiguous situations as desirable, challenging and interesting and he/she does not distort complexity of incongruity and is inclined to handle ambiguous problems (Furnham & Gunter, 1995). According to Furnham & Ribchester (1995), tolerance ambiguity has been utilized in different contexts and it has been deemed as a personality variable (Katz, 2001) and a property of the organization (Furnham & Gunter, 1995), as well as national cultures (Hofstede 1980) and to date, it is still an individual difference variable of interest to both clinical and organizational psychology (Anderson & Shwartz, 1992; Nutt 1993; Tsui 1993). Bunder (1962) stated that an individual who is intolerant of ambiguity will not be able to categorize ambiguous situations because of the lack of sufficient cues. Furthermore, Norton (1975) investigated the concept of ambiguity in order to shed a light on the way an individual perceives, reacts and interprets unclear situations. Researchers (e.g. Bauer & Truxillo, 2000; Kang & Singh, 2001; Frone 1990) also contended that intolerance of ambiguity results in the perception of discomfort, lack of control and may it may also be considered as a source of stress. In the context of the workplace, Mol et al. (2005) showed that tolerance for ambiguity is a predictor of expatriate's success while other authors (Hellesoy & Gundersen 2011) revealed that tolerance for ambiguity significantly and positively relates with work adjustment but does not moderate the effectiveness of transformational leadership on work adjustment.

Despite the above argument, little research has been conducted on the role of tolerance of ambiguity in the occupational stress processes (Idris 2009; Hellesoy & Gundersen, 2011; Mol et al. 2005). On the other hand, Beehr (1998) contended that situational and personal characteristics are moderators in the stressor-strain relationship which may strengthen or weaken the relationship. Other researchers stressed on the importance of stress-strain by arguing that occupational stress has focused on this relationship in the work context both at the individual and organizational level (Rath 2011; Idris 2011; Beehr 1998; Kelloway & Barling, 1991; Lee & Ashforth, 1996). However, studies dedicated to examining the moderating role in the relationship between stressors and strain are still far and few between. Hence, this study attempts to minimize this gap in literature by

examining the differences in lecturers in terms of their tolerance for ambiguity ability impact the stress-strain relationship. More importantly, if lecturers have a great ability to tolerate work ambiguity, they are expected to have low level of feeling of strain. Based on the above, this study hypothesized that;

*Hypothesis 4: There is a moderating effect of tolerance ambiguity on the relationship between work load and strain.*

*Hypothesis 5: There is a moderating effect of tolerance ambiguity on the relationship between role conflict and strain.*

*Hypothesis 6: There is a moderating effect of tolerance ambiguity on the relationship between role ambiguity and strain.*

### 2.5 Objectives of the Study

The present study aims to identify the factors contributing to job security among lecturers that would assist the Ministry of Education in their decision making concerning the academic profession for the benefit of both learning and teaching. In this study, significant contributions are made to prior research in the area. First, although the relationship of role stressor and strain has been established in literature by Lee and Ashforth (1996), Fogarty, Singh, Rhoads & Moore (2000), Peiro et al. (2001) and Posig & Kickul (2003), there is still a need that was highlighted by prior studies to conduct an in-depth examination among academics (Idris 2011). The present study is designed to contribute to empirical research concerning the impact of work-related stress on strain through the investigation of the relationship between stressors (role conflict, role overload, role ambiguity) and strain. This study also attempts to examine whether or not the tolerance ambiguity level of academics moderate the stress factors-strain relationship (Idris 2009; Hellesoy & Gundersen, 2011).

### 3. Methodology

This study employed a descriptive method of study using a quantitative analysis as this is the most appropriate, given the purpose and problem statement of this research. The study design provides a description of what actually exists in current situations, practices and phenomena (Calderon and Gonzales, 2003). Swartzell & Jennings (2007) asserted that descriptive research designs are particularly useful for studies determining more information regarding a specific topic and to develop hypotheses and enable researchers to pinpoint variables and hypothetical situations that can be examined through other methods. Swartzell & Jennings (2007) added that the descriptive designs enable data collection from a small, as well as a large number of people. Hence, in this study, the research design focuses on a quantitative approach to achieve the research objectives. The use of this approach is suitable in the present research as it allows the researcher to get an overview of the attitudes of the respondents when it comes to the social phenomenon under study (Sekaran 2003). Moreover, Stacks (2002) stated that a survey questionnaire is a data collection method that manages to gather in-depth information concerning the attitudes and beliefs of the respondents, particularly when the number of lecturers is considerable, and it is challenging to gather original/objective data. More importantly, prior studies that match the research variables of this study utilized the same quantitative approach (e.g. Idris 2011; Fogarty, Singh, Rhoads, & Moore, 2000; Posig & Kickul, 2003; Sarah 2004).

#### 3.1 Procedures and Sample

After successfully receiving a written informed consent to conduct the study survey targeting a study sample of higher education university lecturers in Dammam city, Saudi Arabia, 217 participants were chosen through a stratified sampling technique. This sampling technique was employed to make sure that every lecturer has an equal chance to be chosen to represent all university faculties. Of the 217 participants, 168 were men and the remaining 49 were women and 20.7% of the participants were local and the remaining 79.93% were foreign.

#### 3.2 Measurements

Various measures were utilized in this study namely, the quantitative workload inventory (QWI) by Spector & Jex (1998), the six-item scale ambiguity measure by Lirtzman (1970), the eight-item scale role conflict measure by Rizzo et al. (1970), the GSH12 General Health Questionnaire by Goldberg (1978) and finally the tolerance ambiguity measurement by Norton (1975). Ability and reliability examination is associated with the first research question. Reliability analysis was run with the help of internal consistency measure (Cronbach Alpha), on the instruments and within sub-scales. According to the criteria, 0.60 or higher is adequate reliability, and 0.80 or higher is preferable reliability (Nunnally 1978). In addition, validity was confirmed through confirmatory factor analysis in an attempt to identify discriminant, convergent and nomnological validity. All measurements were proven to be valid and reliable following the deletion of some items. Reliability and validity results are

displayed in table 1. The study measurements proved to be reliable and valid with strain .93, overload .85, role ambiguity .84, role conflict .93 and finally, tolerance ambiguity .87.

Table 1: Measurements model fit

Fit Index	RMSEA	CFI	TLI	$\chi^2 = \text{chi}$	Recommender Value
	<0.10	> 0.90	> 0.80	$\leq 5.00$	.60
Strain	.093	.941	.925	2.849	.93
Roe Overload	.043	.996	.991	1.408	.85
Role Ambiguity	.057	.992	.980	1.704	.84
Role Conflict	.079	.978	.969	2.355	.93
Tolerance Ambiguity	.10	.988	.960	3.462	.87

The Root Mean Square Error of Approximation (RMSEA); Comparative Fit Index (CFI); Tucker Lewis Index (TLI); Ratio or Normed ( $\chi^2 = \text{chi}$ ).

### 3.3 Structural Equation Modeling

In order to gauge study measurements and evaluate whether or not the items are loaded on the variables, confirmatory factor analysis (CFA) was performed on the data set. CFA was initially run for all measures and reported that fit is improved with the deletion of some items which highly correlated with other items. Following the deletion of such items, the CFA model was retained and it produced a better model fit as shown by the goodness of fit indices like chi-square value, and the values; CFI >.80, RMSEA <.08, TLI >.80. The model fit indices are shown in table 2 below.

## 4. Results

First, the examination of predicted relationship was conducted through SEM (Structural Equation Modeling) with the help of AMOS software. This technique allows the estimation of multiple regression equations in a single model simultaneously. In other words, all the direct and indirect relationships in the model are simultaneously estimated allowing the method to assess the entire interrelationship among the variables in the same decision context. As mentioned, the sample size is 217, so SEM analysis could be employed on the basis of the suitable sample size for the analysis (200-300 samples) (Loehlin 1992). In addition, Schumacher & Lomax's (1996) two-staged process was used in this study's model, namely the measurement model and the construct model, in an attempt to validate the model measurement. The model, based on reliability and validity, was confirmed to be valid.

### 4.1 Hypotheses Testing for Construct Model

This section provides an overview of the results of the two approaches. According to the results, a significant overall model fit exists with the measurement; Ratio 2.621; RMSEA .087; CFI .877; and TLI .865 as presented in table 2. In addition, the hypotheses results in Table 2 show the significant and insignificant associations among variables. Based on these results, there are four significant SEM paths between three path models and the result partially supports the first hypothesis stating that a significant relationship exists between role stressors and the feeling of strain, particularly role overload with a significant critical ratio of 3.137 and significant coefficient estimate of 0.867; .002<0.05. The results rejected the second hypothesis stating that a significant association exists between role ambiguity and the feeling of strain with a critical ratio and significant coefficient result of 0.636;.118>.05. The third hypothesis stating that a significant association between role conflict and strain was also rejected with a critical ratio and significant coefficient of -.046; -.256>.05.

Table 2: Structural equation modeling of causal relation analysis

H	Structural Relation	Standardized coefficient	C.R	t-value	
H1	Role overload—>Strain	.198	3.137	.002**	Supported
H2	Role Ambiguity—>Strain	.210	.636	.525	Not-supported
H3	Role Conflict—>Strain	.152	-.256	.789	Not-supported

Note:\*\* $p < .05$   
 RMSEA= .087 CFI= .877 TLI= .865  
 Ratio= 2.621

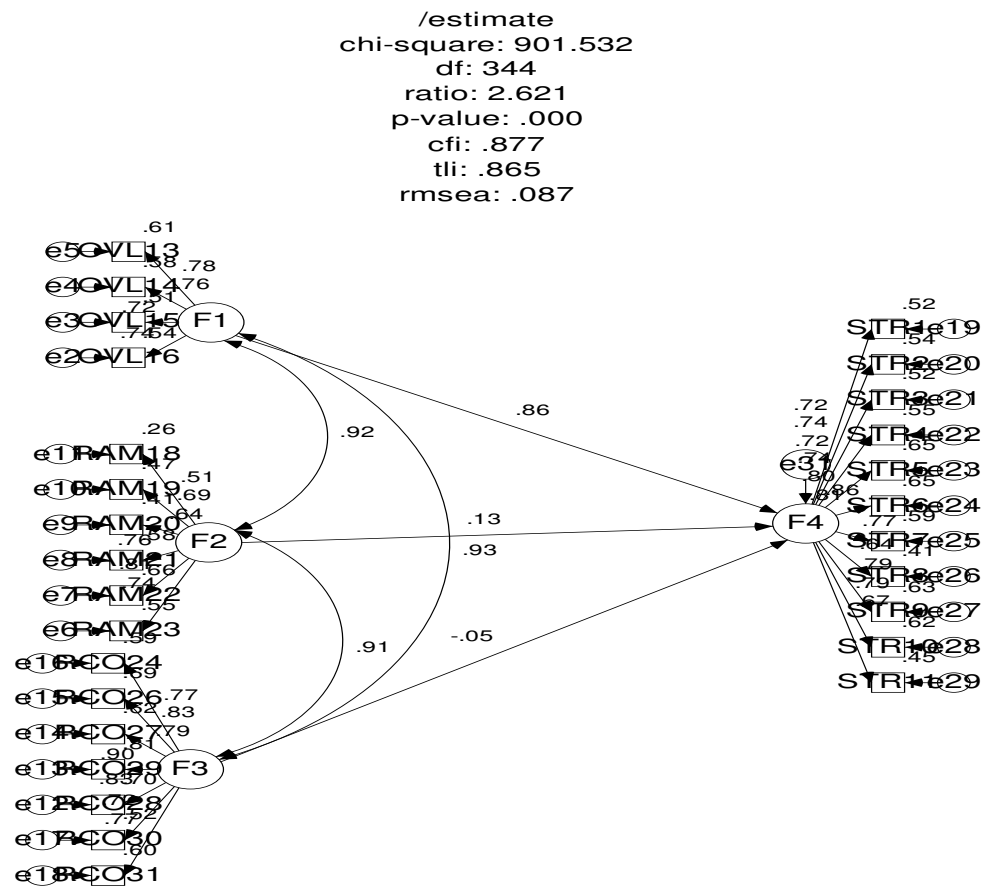


Figure 2: Construct Model

Partial least square (PLS) interaction model was employed to explore the impact of moderator on the influence of the independent variable on the dependent variable. This model tests the significance of the moderating variable between independent and dependent variables. The result did not support the moderating effect of tolerance ambiguity on the role overload-strain relationship with  $0.439 < 0.05$ , and the relationship between role ambiguity and strain with  $0.069 < 0.05$ . But the result supported that the relationship between role conflict and strain was moderated by tolerance ambiguity with  $0.046 < 0.05$ . In other words, the moderating effect hypotheses were partially supported.

### 5. Conclusion

The result of the present study reveals that work overload significantly relates to psychological strain among university lecturers in the University of Dammam. University lecturers have received little to no attention in the work-stress literature. The result of the present study rejected the hypothesis stating that role conflict and role ambiguity are significantly correlated with psychological strain. The reason behind this result lies in the fact that study sample's responsibility was not ambiguous and their roles were clear. In addition, individual

characteristics, like tolerance ambiguity, were examined and hypothesized to significantly moderate the relationship between strain feeling and the role of stressors. The significant role of work overload in the present study, matches that of many studies dedicated to examining work strain (e.g. Idris 2011; Posig & Kickul 2003; Winefield 2000). Academics, according to Giliespie et al (2001), faced difficulties in completing their assigned tasks properly owing to task overload. In this study, some of the respondents stated that working under a tight time schedule and being responsible for many different tasks in a limited time, and increasing job responsibilities may be the reason behind their experiencing of role overload which could lead to psychological strain. This result supports the first hypothesis stating that work overload predicts psychological strain.

However, role conflict and role ambiguity were revealed not to be predictors of psychological strain. The reason behind this result lies in the fact that the role of lecturers at university is different from other organizations and most of them lack the necessary special training as well as their awareness level about their roles is not so clear such as research publication and community service as these duties are not compulsory for them. However, this result is consistent with the result of prior study by Kebelo (2012) who also revealed that role ambiguity failed to predict strain. Contrastingly, this result is inconsistent with Idris (2011) who revealed that role ambiguity significantly impacted psychological strain. In the context of the respondents of the present study, they stated that they understood the scope of their responsibilities and their roles which were very clear. The present study's result is supported by Fako (2010) who claimed that employees perceiving unambiguous responsibilities were not as likely to experience occupational stress compared to their counterparts who perceive ambiguous responsibilities. With regards to role conflict, the present study result supports prior studies by Idris (2011) who revealed that role conflict did not predict strain. A plausible reason behind this result is the fact that this study's sample was not provided with many roles and their roles are quite clear.

Moving on to the hypotheses concerning the moderating role of tolerance ambiguity; the results supported the moderating role of this variable in the stress-strain relationship as claimed by Dewe, O'Driscoll & Cooper (2012) and Idris (2011). In other words, lecturers who are highly tolerant to the ambiguous situation experience less psychological strain compared to their counterparts who are not as tolerant of the ambiguity. Tolerance ambiguity was found to be a crucial factor moderating the effect of stress roles on psychological strain. According to Iederan, Curseu & Vermeulen (2008), tolerance ambiguity is described as the level to which a person is confident in decision-making even in unclear situations. They added that people who are characterized as having a high tolerance of ambiguity are often confident in their decision-making and they proceed with making decisions even when the information is ambiguous or insufficient. Contrastingly, individuals who are characterized as having a low tolerance for ambiguity perceive threatened by unclear situations in general and they try to minimize this ambiguity by searching for information and imposing a structure which would clarify the situation and categorize it and in turn, increase their confidence when taking action (Dremer 1973; Kirton 1981; Norton 1975; Teoh & Foo 1997). The results of this study partially supported the moderating hypotheses.

### *5.1 Study Implications*

Several contributions are made by the present study to literature dedicated to stress-strain relationship. First, this study successfully extended the stressors-strain relationship by examining work demand variables as predictors of strain. Additionally, the present study provides an insight into the tolerance of ambiguity as a moderator in the relationship between stress and strain as claimed by prior studies (Idris 2009). The study also investigated the stressor-strain relationship and moderating role of tolerance ambiguity on the university lecturers in Saudi Arabia. This context is significantly distinct from Western and other Asian countries and therefore the study contributes to knowledge by identifying tolerance ambiguity as a personal resource involved in the relationship between job demands and psychological strain. This study also provides a practical contribution by painting a clear picture of stress-strain feeling in higher education institution settings. With this study as a benchmark, the management of the university could take actions to minimize the lecturers' psychological strain and facilitate the introduction of positive psychological factors through training sessions which in turn, would lead to superior work attitudes.

### *5.2 Study Limitations and Recommendations*

Not unlike other studies, this study is characterized by some limitations. First, the study sample may not be considered as a representative of the bigger population as it was obtained from only one university in Saudi Arabia. This means that generalization throughout demographical and geographical areas is not confirmed. On the basis of this limitation, considerable opportunities are presented for future research while following the same design and framework as the present study. It is important that future studies should include all Saudi universities. Second, the present study employed the quantitative method of data collection through self-report



methods. Hence, there is sufficient chance for the participants to manipulate their answers for many reasons; among them is the fact that the participant might have become bored with the test battery and selected answers in order to get through with the survey quickly and to satisfy the researcher. Because of this, participants might have either voluntarily or involuntarily selected answers which were not their actual experience (Creswell 1994). Hence, the present study recommends that future studies employ the qualitative method to get a better understanding of the lecturers' perceptions of their work environment.

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