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**Samir A. Abdelmoteleb**

Port Said University Faculty of Commerce, Port Said, Egypt

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# Work role stressors and job strain: The moderating role of value congruence

Samir A. Abdelmoteleb

Port Said University Faculty of Commerce, Port Said, Egypt

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## Abstract

Work role stressors are generally associated with job strain. However, literature has made a distinction between the types of stress and there have been implications of these differences on individual and organizational outcomes. This study investigated the weighted effects of work role stressors on job strain. Moreover, it sought the moderating role of employees' perceived value congruence on the relationship between stressors and job strain. Using a sample of 287 pairs of employees and their immediate supervisors who were recruited from four medium-sized organizations, the study found that both role conflict and ambiguity predicted more variance in employees' depressive symptoms than role overload did. Importantly, value congruence mitigated the impact of work role stressors on depression such that employees with high level of perceived value congruence demonstrated lower level of depressive symptoms than did those reporting lower level of value congruence. Theoretical and practical implications of these findings are discussed.

**Keywords:** Job stressors; role conflict; role ambiguity; role overload ; strain; depressive symptoms; value congruence.

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## 1. Introduction

Job stress is a wide-spread phenomenon in organizations (Sonnetag, Kuttler, & Fritz, 2010; Wang, Khan, Sajjad, Sarki, & Yaseen, 2023). The burden of employee stress, including problems related to absenteeism, productivity and health care, have been costing organizations billions of dollars (Nixon, Mazzola, Bauer, Krueger, & Spector, 2011). The effect of work role stressors on employees has been an important topic in the literature (e.g., Fogarty et al., 1999; Glazer & Beehr, 2005; Koeske & Koeske, 1993; M. S. Mitchell, Greenbaum, Vogel, Mawritz, & Keating, 2019; Podsakoff, LePine, & LePine, 2007; Schaubroeck, Cotton, & Jennings, 1989; Um & Harrison, 1998; Wickramasinghe, 2010). This interest is primarily based on the assumption that an organization is an open dynamic system of roles, that the behavior of each person is partially determined by the behavior of other members, and that role stress occurs when organizational roles are associated with influence or pressure that results in negative consequences for the individual (Conley & You, 2013; Marzocchi et al., 2024). In particular, role ambiguity occurs as information about a certain job is not clear, which makes employees feel doubtful about their duties and tasks

in the organization. On the other hand, role conflict occurs when various persons in the organization give employees inconsistent or conflicting information concerning their job demands (Fay, Bagotyriute, Urbach, West, & Dawson, 2019; Nixon et al., 2011). While overload of role is the extent to which work demands exceed abilities and resources to comfortably perform work roles (Dodanwala, Santoso, & Yukongdi, 2023; Nasurdin & O'Driscoll, 2012).

There have been some important implications of the difference between types of stress and their unique associations on individual and organizational outcomes (Kern & Zapf, 2021). For example, a central notion in the Effort–Recovery (E–R) model (Meijman & Mulder, 1998) is that meeting work demands that require effort may lead to short term negative psychological and physiological responses. Importantly, these reactions are reversible in normal circumstances as employer's psychobiological systems will stabilize again after a short relief from these work demands (Anand, Tóth, Doll, & Singh, 2024; Geurts, Kompier, Roxburgh, & Houtman, 2003). On the contrary, role ambiguity and role conflict have been considered among the chronic job stressors, rather than acute stressors, that have long term negative impact on employees (Chen & Spector, 1991; Kern & Zapf, 2021). Nevertheless, there has been no research effort dedicated to explicitly differentiate the impact of role stressors based on this classification on strain indicators. Accordingly, one objective of this study is to seek the extent to which work role stressors demonstrate different impacts on strain and the implications of this potential distinction.

On the other hand, although scholars agree that individual differences play a key role in determining stress and that certain factors serve to buffer the effects of work stressors (Ganster, 2008), there has been scarcity of research that seek to investigate the factors that may modify the role stress-strain relationship. As an approach to study stress, person-environment (P-E) fit has advantage over other approaches that consider stress either as condition in a given situation or as a psychophysiological response of a focal person. As these alternate approaches overlook individual differences in how situations are cognitively appraised, and fail to capture variation in the psychological meaning of situations that yield the same response, respectively (Edwards, 1996). Rather, P-E fit defines stress as an individuals' perceived mismatch between their values, desires, or goals and those provided by the environment (Edwards & Rothbard, 1999). Two main types of P-E fit exist: supplementary and complementary. Supplementary fit occurs when a person possesses characteristics similar to other individuals in an environment while fit of complementary nature occurs when these characteristics add to it what is missing in the environment (Kristof, 1996). However, this approach to investigate stress-strain relationship needs to be extended for the following reasons. First, there has been shortage of studies on stress from a value fit perspective as most of the studies linking P–E fit and stress or well-being has focused on complementary type, whether needs–supplies fit or demands–ability fit (Dewe, O'Driscoll, & Cooper, 2012). This position is mainly based on seeing stress as a situation where environmental demands and supplies deviate from one's capabilities and needs (Blau, 1981; Parker & DeCotiis, 1983; Sonnentag, Tay, & Neshor Shoshan, 2023). Second, research indicated that there is a positive impact of congruence of value on both stress and well-being (Edwards, 1996; Edwards & Rothbard, 1999). However, no

research effort so far has tried to expand the conceptual framework of the interrelationship between value fit and job stress through investigating the potential impact of value fit on the role stressors-stress relationship.

## **2. Development of hypotheses**

### *2.1 Work role stressors and strain*

Researchers see a job stress as general process by which conditions in the workplace produce negative impact on well-being (Ganster, 2008). Role stress occurs when pressure of role produces negative consequences for the individual (Conley & You, 2013). Employees perceive work role stressors as barriers to task accomplishment and their personal growth (Podsakoff et al., 2007). However, recent research has demonstrated that not all work stressors negatively impact employee's well-being. That is, excess workload, time pressure, job scope, and responsibility are not always harmful as employees may perceive these job demands as an opportunity for personal development and achievement. While employees view some other work stressors such as organizational politics, ambiguity of their roles, and concerns about job security as obstacles to their opportunities for success (Podsakoff et al., 2007; Sonnentag et al., 2023). In this respect, stress means environmental demand, physiological or emotional reactions towards environmental conditions or specific types of cognitive appraisals that individuals generate when they face potential threats or opportunities (Ganster, 2008).

Role conflict and ambiguity, and work overload are among the wide array of variables that represent work role stressors (Conley & You, 2013; Dodanwala et al., 2023). In particular, role conflict and ambiguity often appear among the main stressors that may negatively affect employees' well-being (Antón, 2009). These types of stressors, i.e., hindrance, are expected to be relatively highly related to strain indicators given that they tend to dampen enthusiasm and motivation as the effort expended to cope with these stressors is most likely unsuccessful (Clarke, 2012; Wood & Michaelides, 2016). Incompatibility between employees' role expectations and insufficient information needed to perform their roles would hinder employees' effectiveness. Thus, high levels of role stressors would lead employees to perceive employers as unsupportive and unfair (Addae, Parboteeah, & Velinor, 2008).

In contrast, I posit that the magnitude of the association between work overload and strain is expected to be smaller than those between role ambiguity and role conflict, and strain. Research showed that we could express affective well-being of jobs using two interdependent factors: anxiety vs. contentment and depression vs. enthusiasm (Sevastos, Smith, & Cordery, 1992; Warr, 1990, 2007). It is noteworthy that high scores on these two factors reflect contentment and enthusiasm, respectively. Work overload as a challenge stressor is a dual-action demand; it depletes an employee's energy resulting in exhaustion and stress. However, it increases personal capabilities (Crane & Searle, 2016). Due to providing some opportunities for growth, challenge stressors would lead to high level of motivation (Lepine, Podsakoff, & Lepine, 2005). One outcome of high motivation is enthusiasm, which in turn is at the opposite end of the spectrum to

depression (Wood & Michaelides, 2016). Both enthusiasm and anxiety were found to be related to workload, rendering both arousal and negative feelings (Warr, 1990). Given the significant relations between these two factors, the patterns of interrelationships indicated opposing forces that would determine an employee's ultimate level of stress, which would be expected to be relatively low.

On the other hand, feeling of control leads to job-based well-being (Warr, 2007). There is research evidence that control over job facilitates an employee's ability to recover from and cope with experienced stress (Van Yperen & Hagedoorn, 2003). Although all types of role stressors, whether hindrance or challenge, may harm an employee's perception of autonomy due to the constraints they pose (Cavanaugh, Boswell, Roehling, & Boudreau, 2000), I contend that role ambiguity and role conflict negatively affects perception of control more than work overload does.

Based on the previous discussion, the following hypothesis was developed.

**Hypothesis 1.** There is difference in the explanatory power of work role stressors in predicting job strain such that both role ambiguity and role conflict have more negative impact on job strain than work overload has.

## *2.2 Value fit and job strain*

Both person variables including values, goals, and commitment and environmental variables including demands, resources, constraints could be key sources of stress (Cheng, Fan, & Lau, 2023; Jerusalem & Schwarzer, 1989). Job stressors may increase employees' emotional exhaustion and need for recovery as employees have to put extra effort and manage their emotions in order to meet the job demands (Sonnetag et al., 2010). Stress coping could operate in two ways: it may alter the stressful person-environment experience, or it may lessen an individual's stress feeling (Jerusalem & Schwarzer, 1989). Based on self-determination theory, intrinsic motivation is enriched as employees feel autonomy, and low level of control. Individuals with higher value congruence are expected to work more enthusiastically and demonstrate more extra-role behavior due to feeling lower discrepancy in interests (Ren, 2010), and have positive attitudes towards organizational behaviors and intentions (Pan & Yeh, 2012). Value congruence enhances communication inside the organization organizations since having shared standards concerning what is important establishes a common frame for describing, classifying, and interpreting events (Edwards & Cable, 2009; Meglino & Ravlin, 1998). Persons holding similar values are inclined to also show similar aspects of cognitive processing (Meglino, Ravlin, & Adkins, 1989). Value congruence impacts employees' interpretation of environmental stimuli and this would eliminate main sources of disputes between employees and further enhance their communication (Adkins, Ravlin, & Meglino, 1996), reducing the effect of role stressors that leads to anxiety.

Edwards and Cable (2009) argued that value congruence might reduce role ambiguity and role conflict given that value similarity would help employees better understand what the organization expects and subscribe to goals that are consistent with other organizational members. Naus, van

Iterson, and Roe (2007) posited that organizational values tend to be dominant and the personal values are the ones most likely to be violated. Therefore, any actions that are inconsistent with these values will result in feelings of guilt, shame, or self-depreciation. Value congruence forms a critical foundation for trust to develop, and violating such congruence was found to have profound effects in trust development (Lau, Liu, & Fu, 2007). This in turn leads to social distances between leaders and subordinates and consequently negatively affects communication. Poor communication increases role conflict and role ambiguity as subordinates may not in line with their leaders' expectations or plans (Tsui & O'Reilly, 1989). Accordingly, value incongruence may profound the misinterpretation on the part of employees regarding their roles and duties in the organization and accordingly harm their well-being. Based on the previous discussion, I hypothesized the following:

**Hypothesis 2.** Value congruence is negatively related to job strain.

**Hypothesis 3.** Value congruence between employees and their organization moderates the relationship between job stressors and job strain such that higher value congruence mitigates the negative effect of work role stressors on job strain.

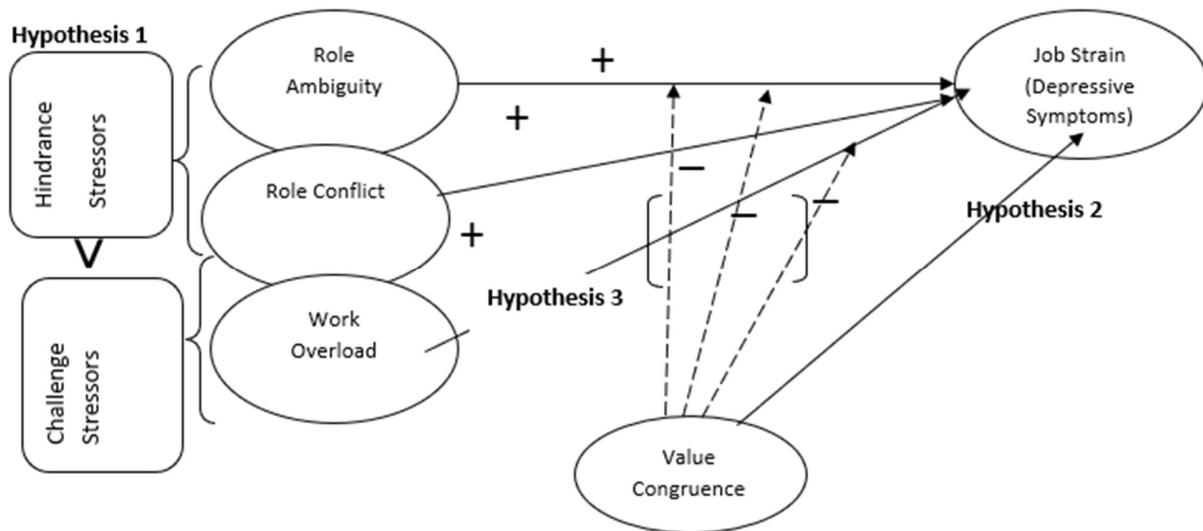
Based on the three hypotheses, Figure 1 summarizes and represents the model the current study will test.

### **3. Method**

#### *3.1 Participants and procedure*

The employees participating in this study were recruited from four medium-sized industrial organizations, in the city of Tanta, Egypt. Sixty hundred fifty employees participated in the study. Those employees were surveyed for all independent, moderators and control variables. To overcome the issue of common method bias, job strain was assessed by employees' co-workers. Working more closely with employees, peers have the advantage over supervisors to observe a wider range of behavior. Moreover, employees are more likely to behave more naturally in front of their peers (Penney & Spector, 2005).

Employees and peers were given clear instructions on how to fill in the questionnaires and return them and anonymity was guaranteed. Three hundred fifty-eight valid responses (approximately 55%) were gathered from employees. Peer-reported data were collected through asking supervisors to give a questionnaire to one of the co-workers who work closely with the participating employees. Fifty eight percent of peer responses were obtained, ultimately resulting in 287 complete pairs. Employing t-tests for independent samples resulted in no significant differences between the scores of the measures of participants with peer-data and those without peer-data. Moreover, there were no significant differences among the four organizations across the study variables.



**Figure 1:** Conceptual Framework of the current study

*Note.* The symbol < denotes that the impact of hindrance stressors, represented by role ambiguity and conflict on job strain, is larger than the impact of challenge stressors, represented by work overload. Dashed lines represent the mitigating effects of value congruence on the negative work role relationship between stressors and strains.

### 3.2 Analytical strategy

I employed structural equation modeling method to test the study hypotheses and proposed model using Mplus version 8.7 (Muthén & Muthén, 1998-2021). A number of fit indices were used including the chi-square statistic, Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). For CFI, a value of .95 or more indicates a good fit to the data. SRMR value below .9 indicates good fit. RMSEA value between .05 and .08 indicates good fit (Hu & Bentler, 1999; Trautwein et al., 2012; Williams & O'Boyle, 2011; K. H. Yuan, 2005). As there were some violations in multivariate normality in the current data set, it was necessary to apply a robust procedure that accounts for bias in parameter estimates and fit indexes (Lei & Lomax, 2005). Accordingly, the Yuan-Bentler (YB) estimator (K.-H. Yuan & Bentler, 2000) was used to evaluate first and second hypotheses. This estimator was used as it was found to be robust when using categorical variables as continuous and it also corrects test statistics and standard errors for nonnormality of the manifest variables (Beauducel & Herzberg, 2006; Finney & DiStefano, 2006; Trautwein et al., 2012). In this method, the regular chi-square ( $\chi^2$ ) statistic is divided by a scaling correction that accounts for the multivariate kurtosis distorting the test statistic in the data to properly approximate chi-square when non-normality exists (Bryant & Satorra, 2012). It is noteworthy that YB scaled chi-square cannot be used for chi-square difference testing of nested models because a difference between two scaled chi-squares does not comply to chi-square distribution (K. H. Yuan, Bentler, & Zhang,

2005). Therefore, a special calculation is performed to determine a  $\chi^2$  difference ( $\Delta\chi^2_{SB}$ ) for the YB scaled chi-square (Satorra & Bentler, 2001).

Furthermore, I employed the latent moderated structural (LMS) equations (Klein & Moosbrugger, 2000) to test the third hypothesis. An advantage of this approach to study interaction in the context of SEM is that it explicitly considers the nonnormality distributions of the interactions among the independent constructs through the analysis of the multivariate distribution of the joint indicator vector, leading to more accurate and precise estimates (Marsh, Wen, & Hau, 2004). Nevertheless, the conventional methods of evaluating models cannot be used in LMS given that interaction models are not sensitive to nonlinear misspecifications (Mooijart & Satorra, 2009). Alternatively, the interaction models is evaluated using the log-likelihood approach. Based on this technique, the model representing the linear relationship is considered the nested model while the interaction model is the comparison model. LMS presents the YB scaling correction in the output that could be used along with that provided by the linear SEM to calculate the log-likelihood-based  $\chi^2$  difference,  $\Delta-2LL \chi^2$  (*TRd*). If this difference is significant, that means there is fit improvement due to interaction terms (Dimitruk, Schermelleh-Engel, Kelava, & Moosbrugger, 2007). Because LMS does not provide standardized estimates of parameters, I standardized all the variables before data analysis so that I could obtain standardized coefficients for all study results (Maslowsky, Jager, & Hemken, 2015).

Finally, due to the potential high multicollinearity because of the existence of three interaction terms, I tested each interaction term separately through three different SEMs (Diestel & Schmidt, 2009; Kelava, Moosbrugger, Dimitruk, & Schermelleh-Engel, 2008).

### 3.4 Measures

Given that the participants in this study speak Arabic, the translation-back-translation procedure (Brislin, 1970) was used for all the study measures to maintain the correct content of the original measure items. Unless otherwise stated, participants indicated their responses on a seven-point scale ranging from *strongly disagree* to *strongly agree*.

**Work Role Stressors.** Four items for each of role ambiguity and conflict were used from the scale of Rizzo, House, and Lirtzman (1970). An example for the items used for role ambiguity is “I know exactly what is expected of me” (reversed score) and for role conflict is “I receive an assignment without the manpower to complete it.” Excessive load of work, occurring when work demands exceed abilities and resources to comfortably perform assigned tasks (Nasurdin & O'Driscoll, 2012), was assessed using the three-item scale of Bolino and Turnley (2005) and a sample item is “It often seems like I have too much work for one person to do.”

**Perceived Value Fit.** This measurement was adapted from Becker, Billings, Eveleth, and Gilbert (1996) and it contained four items. An example is “Since starting this job, my personal values and those of my organization have become more similar.”



**Job Strain.** Depressive symptoms were used as an indicator of an employee's job strain. In this study, I emphasized depressive symptoms as there has been scarcity of empirical studies that operationalized depression in the strain literature. This construct was evaluated using five modified items from the Depression Inventory developed by Bech, Rasmussen, Olsen, Noerholm, and Abildgaard (2001). Employees' peers were asked to indicate how frequently they observed *named* employees showed particular depressive behavior over the last two months. Examples are "Has (name of the employee) felt subdued?" and "Has he/she lost interest in his/her daily activities?" This measurement was assessed using a 7-point scale ranging from 1 (at no time) to 7 (all the time).

**Control Variables.** There is research evidence that irregular sleep hours are associated with depressive mood (Allgöwer, Wardle, & Steptoe, 2001; Anand et al., 2024). Accordingly, employees reported the average of the sleeping hours they have recently experienced. In response to Breslow and Enstrom (1980) and following Allgöwer et al. (2001), regular sleeping between 7-9 hours was coded 0 while less or more sleep than this (irregular sleeping) was coded 1. Although literature on the impact of age on depressive symptoms presented mixed results, the relationship with gender is more informing. Due to psychological attributes differences, including neuroticism, related to gender, females often report higher level of depressive symptoms than males do (Piccinelli & Wilkinson, 2000). Therefore, gender was added as a control variable in the current study.

## 4. Results

### 4.1 measurement model

Descriptive statistics, reliability coefficients and intercorrelations among the study variables are presented in Table 1. The measurement model that encompassed the five constructs and control variables fit the data well,  $\chi^2_{YB} (234) = 385.46 [p < .01]$ ; RMSEA = .05; CFI = .96; SRMR = .04.

**Table 1:** Descriptive statistics and correlations ( $N = 287$ )

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Gender	0.63	0.48	-						
2. Regular sleep	0.44	0.50	.16**	-					
3. Role ambiguity	4.25	1.06	-.16**	-.09	(.90)				
4. Role conflict	4.03	0.90	-.22**	.02	.55**	(.88)			
5. Work overload	3.86	0.96	-.13*	-.06	.49**	.39**	(.80)		
6. Value congruence	4.32	1.10	.19**	-.03	-.34**	-.42**	-.30**	(.89)	
7. Depression symptoms	4.17	1.03	-.21**	.03	.74**	.72**	.52**	-.57**	(.90)

Note. \*\* $p < .01$ . Alpha reliabilities are displayed in parentheses along the diagonal.

The manifest variables loaded properly on their relevant factors and the standardized factor loadings ranged from 0.67 to 0.93 for role ambiguity, 0.73 to 0.82 for role conflict, 0.71 to 0.80 for work overload, 0.75 to 0.84 for value congruence and 0.78 to 0.83 for depression symptoms. A number of CFA models were examined to test the discriminant validity of the constructs. Specifically, there are some debate that both role ambiguity and conflict are often so correlated they may threaten the discriminant validity of each (Harris, 1991).

Given the high correlation between these two constructs ( $\beta = .58, p < .01$ ), I tested the four-construct model in which I treated their manifest variables as representatives of a single construct. This model did not fit well,  $\chi^2_{YB} (240) = 810.97 [p < .01]$ ; RMSEA = .09; CFI = .86; SRMR = .06. I also tested the three-construct model that treated all the three work role dimensions as a single construct. This model also did not fit the data well,  $\chi^2_{YB} (245) = 970.48 [p < .01]$ ; RMSEA = .10; CFI = .82; SRMR = .07. Finally, I tested that two-factor model in which all self-reported data of independent variables were considered as a single construct besides the peer-reported construct representing the symptoms of depression. This model was the worst to fit the data,  $\chi^2_{YB} (249) = 1456.80 [p < .01]$ ; RMSEA = .13; CFI = .70; SRMR = .09. In all the previous models, the proposed model was found to much better fit the data than them,  $ps < .01$ . In addition, following Fornell and Larcker (1981), I assessed both the convergent and discriminant validity of the measured constructs through calculating the average variance extracted (AVE) of each construct. AVE for role ambiguity was .69, .66 for role conflict, .64 for work overload, .71 for value congruence, and .69 for depression symptoms. As all these values exceeded .50, the convergent validity of the measured constructs was confirmed. Furthermore, all the AVEs satisfied the discriminant validity requirements,  $AVE > \sqrt{V^2}$ . These findings confirmed that all the constructs are distinguishable or discriminant.

#### 4.2 Testing the hypotheses and the proposed model

As Table 2 indicates, Model 1 did not fit the data well although the associations of control variables with depressive symptoms were significant. The baseline model in which depressive symptoms were regressed on both role ambiguity and conflict, work overload, and perceived value congruence besides the control variables (Model 2) showed a good fit to the data,  $\chi^2_{YB} (241) = 402.3 [p < .01]$ ; RMSEA = .05; CFI = .96; SRMR = .06.

While gender did not affect depressive symptoms ( $\beta = -.05, p = .61$ ), the irregular sleep effect was marginally significant, ( $\beta = .12, p < .10$ ). The standardized regression coefficients of role ambiguity and conflict on depressive symptoms were .35, .46 ( $p_s < .01$ ), while it was .14 ( $p < .05$ ) for work overload.

Perceived value congruence was negatively associated with depressive symptoms,  $\beta = -.24, p < .01$ . To test the hypothesis that overload of work has a less negative impact on job strain than both role ambiguity conflict, I examined the following nested models: first, I assessed the model in which the regression coefficients of role ambiguity and conflict on depressive symptoms were equal and all other coefficients were set free. This model fit the data well,  $\chi^2_{YB} (242) = 402.26 [p < .01]$ ; RMSEA = .05; CFI = .96; SRMR = .06. It did not differ significantly from the baseline model,  $\Delta\chi^2_{SB} (1) = .81 [p = .37, ns]$ . According to this more parsimonious model, the standardized regression coefficients of both role ambiguity and role conflict on depressive symptoms were .39 ( $p < .01$ ), .14 ( $p < .05$ ) for work overload and  $-.25 (p < .01)$  for perceived value congruence.

**Table 2:** Structural regression models predicting depressive symptoms

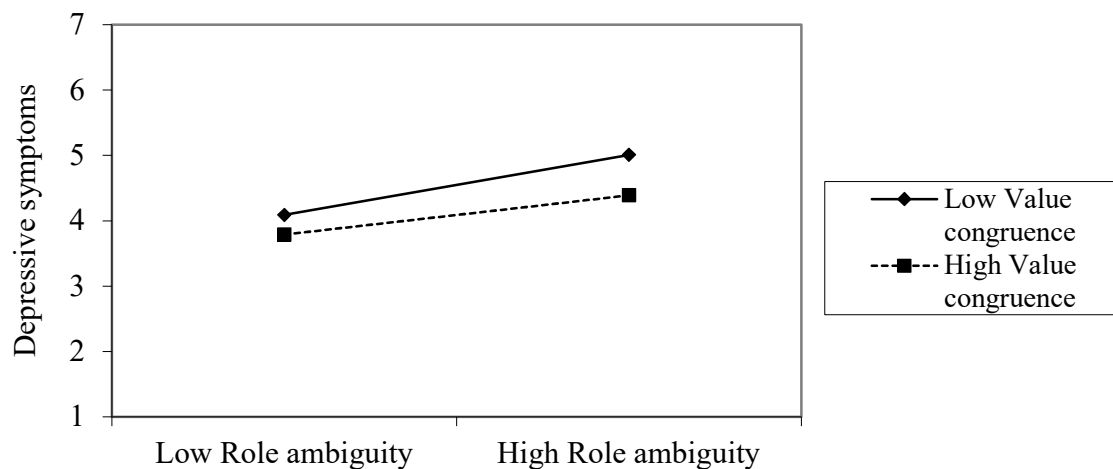
Variables	Model 1 (Control variables)	Model 2 (Effects of stressors )	Model 3 (Interaction effects; difference between interaction models and the linear model)		
			Analysis 1	Analysis 2	Analysis 3
Intercept	4.33(.06)***	4.17 (.08)***	4.08(.09)***	4.11(.09)***	4.07(.08)***
Gender	.15(.07)*	-.05 (.07)	-.05 (.07)	-.05 (.07)	-.05 (.07)
Regular sleep	.19 (.06)**	.12 (.07)†	.14 (.07)*	.14 (.07)*	.12 (.07)†
Role ambiguity		.35(.09)**	.36 (.09)**	.34 (.09)**	.30 (.09)**
Role conflict		.46(.11)**	.42 (.11)**	.40 (.11)**	.40 (.11)**
Work overload		.14(.06)*	.18 (.07)*	.17 (.07)*	.19 (.08)*
Value congruence		-.24(.05)**	-.33 (.08)**	-.35 (.07)**	-.36 (.09)**
Model Fit Indices:					
$\chi^2_{YB}$ (df)	632.3 (245)**	402.3 (241)**			
RMSEA	.09	.05			
CFI	.91	.96			
SRMR	.11	.06			
Value congruence × Role ambiguity			.08 (.04)*		
Value congruence × Role conflict				.13 (.06)*	
Value congruence × Work overload					.11 (.05)*
Fit statistic: ( $\Delta-2 LL \chi^2$ ) ( $\Delta df$ )			4.74 (1)*	8.99 (1)**	5.34 (1)*

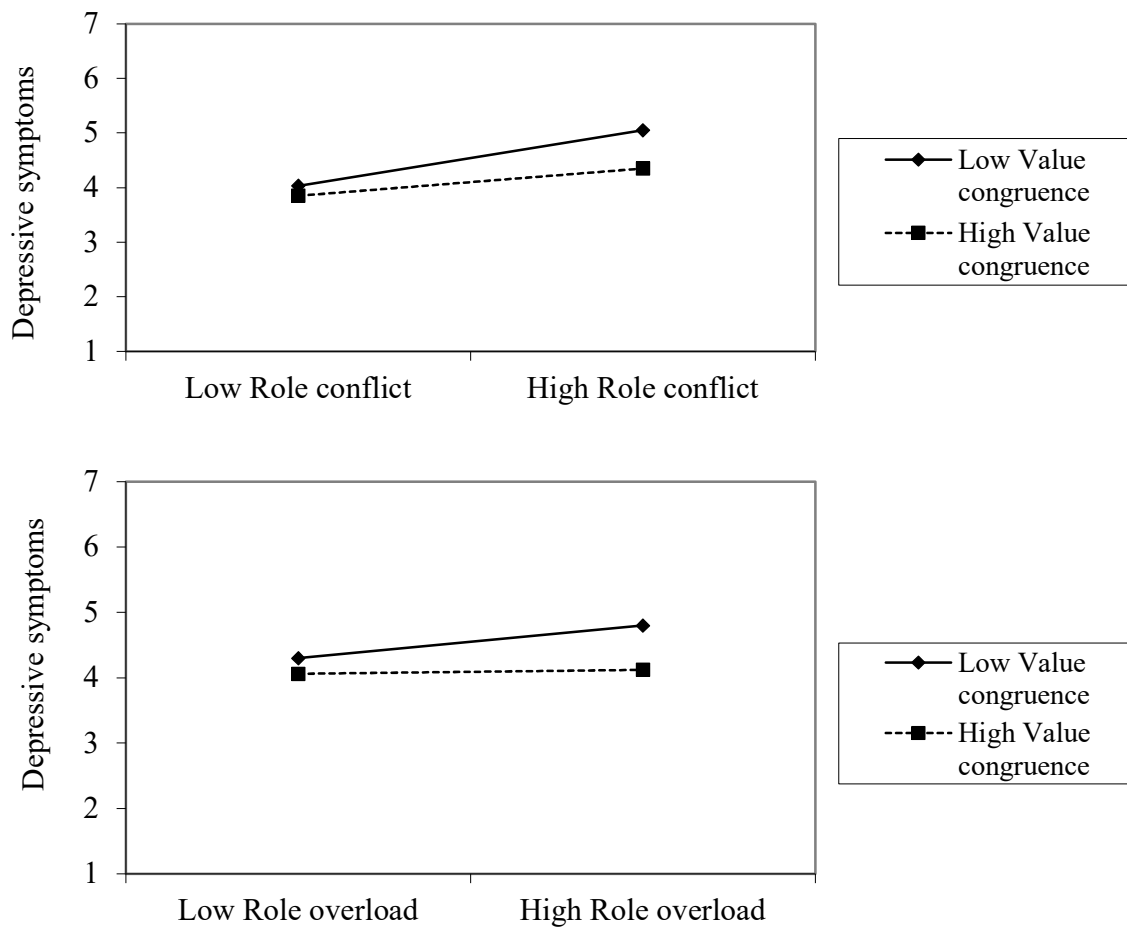
Note. N = 287. † $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Standardized coefficients are reported and values in parentheses are robust standard errors. Male = 0; Female = 1. Between 7-9 hours = 0; less / more sleep than this (irregular sleeping) = 1.  $\Delta-2 LL \chi^2$  is the difference in log-likelihood-based  $\chi^2$  values.  $\Delta df$  is the difference in degrees of freedom.

Second, I tested the model in which all the three regression coefficients of work role stressors on depressive symptoms were equal. This model fit the data well,  $\chi^2_{YB}$  (243) = 416.30 [ $p < .01$ ]; RMSEA = .05; CFI = .96; SRMR = .06. However, the baseline model fit the data better than this model,  $\Delta\chi^2_{SB}$  (2) = 12.15 [ $p < .01$ ]. Finally, I assessed the two models in which the regression coefficient of work overload is equal to those of role ambiguity ( $\chi^2_{YB}$  (242) = 406.75 [ $p < .01$ ]; RMSEA = .05; CFI = .96; SRMR = .06) and role conflict ( $\chi^2_{YB}$  (242) = 417.89 [ $p < .01$ ]; RMSEA = .05; CFI = .96; SRMR = .06), respectively, on depressive symptoms. Although these two models fit the data well, the baseline model fit the data better than these models,  $\Delta\chi^2_{SB}$  (1) = 5.32 [ $p < .05$ ] and  $\Delta\chi^2_{SB}$  (1) = 14.80 [ $p < .01$ ], respectively. Based on the above findings, the first model was the

only more parsimonious model that should be accepted and this model is the appropriate model to continue testing the third hypothesis with. In sum, these results supported the first hypothesis that the magnitudes of positive effect of both role ambiguity and conflict on depressive symptoms are similar and that the positive impact of work overload on depressive symptoms is less than them. Moreover, these results also confirmed the second hypothesis that perceived value congruence has a negative impact on depressive symptoms.

Regarding the third hypothesis that P-O value congruence moderates the relationship between job stressors and job strain such that higher value congruence mitigates the negative impact of job stressors on job strain (Model 3), I specified three separate interaction SEMs that reflected the potential moderating role of value congruence in the relationship between role ambiguity, role conflict, and work overload, respectively, with depressive symptoms. The interaction terms of value congruence and role ambiguity, role conflict, and work overload were all significant,  $\beta_s = -.08$  ( $p < .05$ ),  $-.13$  ( $p < .01$ ), and  $-.11$  ( $p < .05$ ), respectively. Following Aiken and West (1991), I plotted the areas of interaction significance. As Figure 2 indicates, the negative impact of the three role stressors takes to reduce as value congruence increases. In other words, higher level of value congruence mitigates the negative effect of work role stressors on depressive symptoms. supporting the third hypothesis.





**Figure 2:** Effects of latent interaction between value congruence and work role stressors on depressive symptoms.

Finally, to test the proposed model I tested the log-likelihood-based  $\chi^2$  differences comparing the linear parsimonious model and each of the interaction SEMs. For the role ambiguity\*value congruence term model,  $\Delta-2LL \chi^2(1) (TRd) = 4.74, p < .05$ . For the role conflict\*value congruence term model,  $\Delta-2LL \chi^2(1) (TRd) = 8.99, p < .01$ . For the work overload\*value congruence term model,  $\Delta-2LL \chi^2(1) (TRd) = 5.34, p < .05$ . These outcomes supported the validity of the proposed models that suggested that both role ambiguity and conflict have more negative impact than work overload on depressive symptoms and that an employee’s perceived value congruence with his/her organization negatively impacts depressive symptoms. Moreover, these models indicated that the value congruence interaction with each of the three work role stressors reduces the negative effect of such stressors on depressive symptoms.

## 5. Discussion

This study aimed to contribute to the extant literature through investigating the relative weights of negative impact of work role stressors on job strain. Moreover, it studied an employee's perceived value congruence between his/her organization and organizational values as a buffering effect of the role relationship between stressors and strain. The finding that these three types of stressors were positively related to depressive symptoms reflected a trend in the literature that even if hindrance stressors and challenge stressors may show different relations with various variables, both of them are positively related with psychological strain (Crane & Searle, 2016).

This is in line with the theory posting that both types of stress entails significant investment of personal energies to cope with work demand and ultimately leading to stress (Zhang, LePine, Buckman, & Wei, 2014). Empirically, these positive relationships agree with those of prior studies (e.g., Glazer & Beehr, 2005; Um & Harrison, 1998). However, this study highlighted the distinction of the magnitude of each of these stressors (i.e., ambiguity, conflict, and overload) that could have on strain. That is, it found that role ambiguity and role conflict explained more variance in depressive symptoms than role overload did. In this respect, these findings extended the current implications in the extant literature. Specifically, although the meta-analysis results of Podsakoff et al. (2007) found that both hindrance (e.g., role ambiguity and role conflict) and challenge stressors, such as subjective role overload, are associated with strain, it revealed that hindrance and challenge stressors were different in their correlational strengths to strain. While hindrance stressors demotivate people, challenge stressors usually motivate employees as they provide a space for some organizational benefits such as growth and sense of achievement (Wood & Michaelides, 2016). An important implication this study provides is that challenge stressors results in lower level of depressive symptoms. This finding could be understood from the perspective that while hindrance stressors substantively drain the resources of employees, challenge stressors may allow developing individual capacities such as coping strategies, i.e., perceived coping efficacy that facilitate downstream psychological resilience (Crane & Searle, 2016).

The current study also found that perceived value congruence moderated the role stressors-strain relationship such that value congruence mitigates the negative impact of the three role stressors on depressive symptoms. Higher levels of job stressors generally go against an employee's perception of job control. Employees' feeling of control over their job helps them alleviate depressive symptoms (Lamiani, Dordoni, & Argentero, 2017). Employees' feeling of congruence with their organizational values is one way to keep positive images of the self which could work as a buffer against stressor effect on strain and burnout (Naus et al., 2007). On the contrary, violation of such value congruence would cause frustration, difficulty in working effectively with others, and lack of role clarity (Ostroff, Shin, & Kinicki, 2005), ultimately dampening employees' abilities to cope with stressors. This finding could be interpreted in light of the potential moderating role of value congruence. Aligned values would create positive affective experiences for an employee while incongruent values may lead to negative affective experiences. Relatedly, perceived value congruence may enhance employees' feeling of being

socially supported at the organization while value incongruence would harm social support due to holding the opposing values (Boer, 2017). Accordingly, perceived value incongruence is expected to foster employees' perception of exhaustion symptoms related to work demands (Asensio-Martínez et al., 2017). Indeed, there are a number of implications for this finding. As indicated earlier, although both the two types of stressors are positively associated with strain, they demonstrate different linkage with job attitudes. On the one hand, hindrance stressors have dysfunctional relations with job attitudes such as job satisfaction and organizational commitment. On the other hand, challenge stressors could have positive relations based on the notion that these stressors provide opportunities for employees' growth and task accomplishment (Podsakoff et al., 2007). Research insisted that the positive relation between challenge stressors and desirable outcomes will not occur unless strain is controlled for (Boswell, Olson-Buchanan, & Lepine, 2004; Widmer, Semmer, Kälin, Jacobshagen, & Meier, 2012). In this sense, perceived value congruence would help foster the challenge stressors impact on job attitudes through mitigating the detrimental impact of stressors of challenge nature on job strain. Accordingly, the buffering role of value congruence is desired in all cases to manage stress regardless of the type of stressors causing it.

## **6. Practical implications**

The findings of the current study could have important implications for practice. This study revealed that not all job stressors are not equal in terms of their strength on strain. This study revealed that both role ambiguity and role conflict had similar impact of depressive symptoms. Moreover, work overload had less negative impact on depressive symptoms. This in turn informs practitioners that work over load is relatively more flexible so that they may find some space for increasing work duties without jeopardizing substantially increasing employees' strain. This is particularly relevant for employees who report higher perceived value congruence with their organization. Those employees are expected to tolerate the three types of stressors more than those employees who demonstrate low level of perceived value congruence. Accordingly, organizations should focus on increasing employees' perception of value congruence as a tool to lessen the negative effect work role stressors on employees' strain. For example, research indicated that the development of a collective vision may enhance perception of shared values and in turn value congruence (R. Mitchell, Parker, Giles, Joyce, & Chiang, 2012).

## **7. Limitations of study and future research**

One of the limitations of this study could be that it did not control for negative affectivity. People with a higher level of negative affectivity perceive the world more negatively than low-negative affectivity individuals do and are more sensitive to minor frustrations and irritations, and accordingly are more likely to experience negative emotions, such as anxiety, sadness, and distress (Penney & Spector, 2005). However, the routine of partialing out negative affectivity in the stressor-strain research would distort the relationships among variables under study (Spector, Zapf, Chen, & Frese, 2000). In response to this, this study employed the procedure of peer rating to address the potential bias of negative affectivity without removing true variance from the stressor-strain relations. Eliminating negative affectivity that has a substantive effect could lead to

increasing Error II by rejecting relationship between stressors and strain while this link exists in reality.

Another limitation pertains to the cross-sectional design of the current study, which precludes us from any causal implications among the study variables. Moreover, although this study used depressive symptoms as an indicator of job strain, employing more than one indicator of job strain such as anxiety and burnout, would be more informative. Furthermore, this study was conducted in an Eastern environment where power distance (PD), the extent to which people in a particular society accept inequalities of power among its members (Hofstede, Neuijen, Ohayv, & Sanders, 1990), is high. Individuals with high PD usually perceive lack of needs of resources including organizational facilities with less tension. Those people accept and conform to authority. Additionally, bureaucracy and formalization in organizations may even reduce employees' perception of stress related to role ambiguity at work (Lee & Antonakis, 2012). Therefore, I recommend replicating this study in a Western environment to assess the extent to which we could obtain similar results; specifically, to test PD as a potential moderator in the relationship between role stressors and strain.



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