

The Impact of Perceived Supervisor Support on OCB: The Moderating Effect of Introversion

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Abstract

This study examines the extent to which introversion moderates the relationship between perceived supervisor support and organizational citizenship behavior (OCB). Based on a sample of 586 employees working in Pakistan's education sector, we find that introverts have a positive moderating effect on the indirect relationship between perceived supervisor support, work engagement and OCB. This suggests that supervisor support fosters work engagement and, in turn, OCB.

Keywords: Supervisor support, organizational citizenship behavior, personality, introversion.

JEL classification: M19.

1. Introduction

Supervisors are a key part of the management hierarchy and play an important role in monitoring and training employees. They are also responsible for mediating between senior management and operational employees (Lu & Lin, 2014). Thus, they serve as problem solvers, designing procedures and policies and developing the skills and competencies needed to improve the quality of employees' daily tasks (Azman et al., 2009).

Supervisors are also responsible for providing employees with professional support and resources for development, removing any obstacles to their work and offering feedback on the latter's work. Ismail et al. (2010) show that supervisors have a positive impact on employee

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performance: their role involves training and motivating employees to develop their skills and improve their job performance.

In this context, supervisor support refers to the extent to which supervisors value their employees' work and care about their wellbeing (Liaw, Chi & Chuang, 2010). In turn, employees know that supervisors are responsible for evaluating their performance and see supervisor support as an indication of organizational support (Rhoades & Eisenberger, 2002).

The literature demonstrates the positive outcomes of supervisor support, including greater job satisfaction, organizational commitment, better working relationships with other employees, a willingness to assume additional responsibilities and lower levels of job tension and work–family conflict (Rhoades & Eisenberger, 2002). Job satisfaction as a result of better supervisor support strongly affects turnover intention (Galletta et al., 2011). Moreover, employees with higher levels of supervisor support experience less job stress, role conflict and role ambiguity (Steinhardt et al., 2003).

Eisenberger et al. (2002) investigate the relationship between perceived supervisor support (PSS) and employee turnover, moderated by perceived organizational support (POS). They find that both PSS and POS have a significant positive effect on employee turnover. The relationship between PSS, affective commitment and performance is also positive, but with other variables affecting the relationship between supervisor support and performance (Soulen, 2003). Coworker support, for instance, is also important in motivating employees to innovate and engage with their work (Arora & Kamalanabhan, 2013).

While organizational citizenship behavior (OCB) is not a formal job requirement, nor is it formally rewarded or recognized, it has a positive impact on organizational performance (Emami et al., 2012). OCB may be reflected in performance appraisals when supervisors and coworkers are favorably rated. This, in turn, leads to lower turnover intention and enhances job satisfaction and employee productivity (Lapierre & Hackett, 2007). Certain, though not all, personality types are correlated with OCB. Effective leadership, the social environment and supervisor awareness are all factors that determine OCB in the workplace (Zhang, 2011). Higher levels of OCB induce employee loyalty at an emotional and cognitive level (Paillé & Grima, 2011).

Section 2 reviews the literature on the outcomes of PSS and the impact of this construct on work engagement (WE) and OCB. In Section 3,

we hypothesize that PSS has a positive effect on OCB through the mediating role of WE. The boundary condition applied here is that introversion can strengthen or weaken the latter. Section 4 describes the data and methodology used. Section 5 presents our findings and Section 6 discusses the results. Section 7 concludes the study, outlines its limitations and suggests future directions for research.

While many studies have looked at the relationship between PSS and OCB (see, for example, Chen & Chiu, 2008; Wang, 2014), very few have employed WE as a mediator. Chen and Chiu (2008) demonstrate that job satisfaction moderates the relationship between PSS and OCB, while Deniz, Noyan and Ertosun (2015) examine the relationship between person–organization fit and job stress. However, other variables too can affect the relationship between PSS and OCB. We seek to address this gap in the literature by using extraversion and introversion as moderators. Under social exchange theory, we argue that PSS induces WE and, in turn, leads to OCB.

2. Conceptual Background

Chen and Chiu (2008) demonstrate the relationship between PSS and OCB using two cognitive mechanisms (job satisfaction and person–organization fit) and one effective mechanism (job tension). Their results build on social exchange theory, which holds that supervisor support will lead to OCB through different cognitive mechanisms. The presence of PSS drives employees to reciprocate and maintain the social exchange between employee and organization. Supervisor support helps them recognize the extent to which they are well matched to the firm.

When PSS enhances job satisfaction, employees are more likely to engage in OCB. Job stress, on the other hand, will have a negative effect on OCB. Ismail et al. (2010) conclude that supervisor support in the form of training programs plays a key role in employee learning. A good supervisor will explain firm procedures, goals and tasks effectively, thereby motivating employees to learn new skills and perform better. Under expectancy theory, employees will only be motivated to carry out a certain task if they perceive its value in terms of a return.

Maertz et al. (2007) describe the relationship between PSS, POS and turnover intention, based on the theory of social exchange and reciprocity: employees who receive support from their organization and supervisor will feel obligated to the firm. PSS and POS induce many employee

outcomes, including OCB and job performance, and directly influence turnover. Here, PSS is a stronger determinant of turnover than POS.

Griffin, Patterson and West (2001) show that PSS has a greater impact in companies where employees do not work in teams. This does not imply, however, that supervisor support is not important in teamwork situations because it is still positively correlated with job satisfaction. A higher level of teamwork may have a negative impact on job satisfaction because employees who are given more autonomy – and thus more responsibility – find greater job satisfaction.

Bolino, Turnley and Bloodgood (2002) argue that OCB enhances firm performance because it creates social capital. Behaviors such as obedience, loyalty and functional participation create trust and identification among employees. This has a positive effect on cognitive behavior and produces a shared language. Thus, social capital mediates the positive relationship between OCB and organizational performance.

Kidd and Smewing (2001) show that greater trust and autonomy between supervisors and employees increase the latter's organizational commitment. They use gender as a moderating variable in this relationship and find that an increase in supervisor support is associated with higher organizational commitment in the case of female employees. The results for male employees are more complex: both high and low levels of supervisor support have a positive linear relationship with organizational commitment, while moderate levels of support are associated with decreasing organizational commitment.

Baloyi, van Waveren and Chan (2014) demonstrate that PSS acts as a mediator, but not a moderator, in the relationship between performance management systems and perceived job satisfaction. Employees who receive a positive performance management response attribute this to higher levels of supervisor support and report greater job satisfaction. Conversely, a poor performance management response is associated with lower levels of supervisor support and job dissatisfaction.

DeConinck and Johnson (2009) show that better supervisor support improves performance and reduces turnover among salespersons. They find that PSS and POS mediate the relationship between organizational justice and employee turnover. Calderón, Battistelli and Odoardi (2013) establish that WE is determined by PSS and by employees' participation in decision making (the extent to which employees feel their input is valued).

Kuvaas and Dysvik (2010) argue that perceived investment in employee development mediates the relationship between PSS and employee outcomes. Under the theory of organizational support and social exchange, employees who feel they are valued by their supervisors and organization reciprocate with better performance, greater effort, effective organizational commitment and low turnover intentions. Similarly, Byrne et al. (2012) demonstrate that PSS influences the relationship between organizational justice (informational and interpersonal) and the extent to which employees trust their supervisors' appraisal decisions.

Neves and Caetano (2009) show that PSS mediates the relationship between supervisor competence and commitment to change. Using organizational support theory, the authors explain that competent supervisors are perceived as being more supportive because they do not see their employees as a threat. Thus, supervisor competence has a positive relationship with both normative and effective commitment to change, but is negatively associated with continuance commitment to change. Bhatnagar (2014) uses a multilevel model to show that PSS has a positive impact on innovation. Stronger levels of supervisor support create mutual expectations of input and outcomes. Employees who perceive that their work is valued in the form of reward and recognition are more likely to display innovative behavior.

Barnard's (1938) theory of equilibrium supports the relationship between PSS and the psychological contract, which underlines the significance of a task. Rashid et al. (2012) show that supervisor support reduces work-related stress as well as family-versus-work conflict among employees. In turn, PSS has a significant, positive effect on job satisfaction. Paillé and Grima (2011) find that OCB is negatively related to an employee's intention to leave his/her current organization. In organizations that foster higher levels of OCB, employees are likely to prefer changing jobs within the same organization to leaving it altogether.

3. Hypothesis Development

This section draws on the literature supporting our hypotheses.

3.1. PSS and OCB

OCB is constructive behavior: employees choose to help their co-workers, which in turn benefits the company (Organ, 1997). Supervisors who value their employees' work and help them develop the skills and competencies needed to achieve the organization's goals create higher

levels of motivation and job satisfaction (Chen & Chiu, 2008; Foote & Tang, 2008; Podsakoff et al., 2000). This improves person–organization fit and OCB among employees (Liaw et al., 2010). It also creates mutual trust between supervisors and their employees (Organ, Podsakoff & MacKenzie, 2006) and reduces job stress (Brough & Pears, 2004). The social exchange relationship between supervisor and employee implies that higher levels of PSS induce OCB (Liu, Cho & Seo, 2011). Based on these studies, we hypothesize the following:

- H1: PSS has a positive impact on OCB.

3.2. PSS and WE

WE is characterized by vigor, dedication and absorption on the part of employees (Bakker & Demerouti, 2008). Supervisors who communicate with their employees effectively and help them organize their work, carry out their assigned tasks and develop their skills are more likely to generate self-confidence and motivation. This, in turn, is associated with higher levels of WE (Chughtai & Buckley, 2008). Olivier and Rothmann (2007) show that meaningfulness, safety and availability are prerequisites for creating conditions conducive to WE. Kular et al. (2008) argue that WE depends on whether employees' immediate supervisor practices 'servant leadership'. Based on these findings, we hypothesize the following:

- H2: PSS has a positive impact on WE.

3.3. WE and OCB

The literature shows that the more involved employees are in their work, the more likely they are to display intrinsic motivation and carry out tasks over and above their formal job requirements (Saks, 2006; Kataria, Garg & Rastogi, 2013; Ariani, 2013; Rich, Lepine & Crawford, 2010). Based on social exchange theory, OCB is an outcome of WE because such employees act on the principal of reciprocity. Thus, there is a positive relationship between WE and OCB (Ahmed, Rasheed & Jehanzeb, 2012). Schaufeli et al. (2002) describe WE as a positive work-related state of mind that enables employees to work harder because it involves new opportunities, information and experiences (Bakker & Demerouti, 2008). Based on these studies, we hypothesize the following:

- H3: WE has a positive impact on OCB.
- H4: WE mediates the relationship between PSS and OCB.

3.4. Introversion as a Moderator

In this context, we differentiate between introverts and extraverts based on their relative ability to feel engaged in their work, depending on the level of supervisor support. Most people are ambiverts: they will behave as either extraverts or introverts depending on the situation (Grant, 2013). Introverts are less likely to feel as engaged as extraverts when provided the same level of supervisor support (Atamanik, 2013). This gives rise to the following hypothesis:

- H5: When introversion is high, PSS has a weak, positive impact on WE.

Introverts are more likely to be engaged in their work, given that they are less sociable. The literature suggests that introversion is strongly related to OCB (Harper, 2015). Thus, we hypothesize the following:

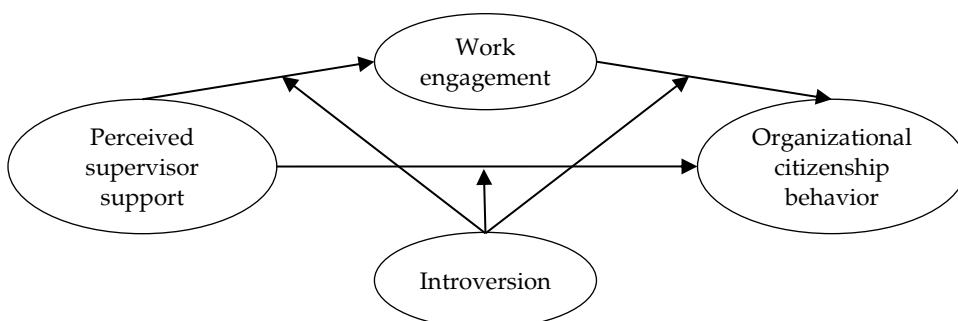
- H6: When introversion is high, WE has a strong, positive impact on OCB.

Introverts are more likely to be motivated by a sense of duty or fear of punishment than by the desire to expand their work-related experience. As a result, they tend to remain focused on routine tasks as opposed to additional tasks. Thus, introversion has a weak relationship with OCB (Shoaeshargh & Dadashi, 2013; Hakim et al., 2014). Van Emmerik and Euwema (2007) show that teachers are less likely to exhibit OCB because they have limited social interaction with their colleagues. This supports the following hypothesis:

- H7: When introversion is high, PSS has a weak, positive impact on OCB.

Figure 1 shows how WE mediates the relationship between PSS and OCB and how introversion acts as a moderator in this relationship.

Figure 1: Relationship between WE, PSS, OCB and introversion



4. Dataset and Methodology

The data for this study was collected from seven private educational institutions in Pakistan. The questionnaire was designed based on input from a focus group of four subject specialists and translated into Urdu (see Appendix). Using a nonprobability convenience sampling method, we distributed 650 questionnaires, of which 600 were returned. Another 14 were dropped due to missing values identified using the hot deck imputation method, whereby missing values are replaced with data from a similar observed response (Andridge & Little, 2010). This yields a total sample of 586 respondents.

Table 1 gives the sample characteristics. More than two thirds of the sample (68 percent) comprised male respondents. Almost half the sample (47 percent) was aged 18–28 years, followed by 44 percent in the 29–40 age group. About a third of the respondents had an intermediate degree and almost half had an undergraduate degree. Most respondents had worked for their current organization for up to two years (42 percent) or up to five years (37 percent).

Table 1: Descriptive statistics

	Sample characteristics	Percentage
Gender	Female	32%
	Male	68%
Age	18–28 years	47%
	29–40 years	44%
	41–55 years	7%
	> 55 years	2%
Level of education	Intermediate	32%
	Undergraduate	47%
	Postgraduate	12%
	Professional degree	2%
Job tenure	0–2 years	42%
	3–5 years	37%
	6–10 years	17%
	More than 10 years	4%

Note: Percentage values are rounded off.

Source: Authors' calculations.

The PSS variable is measured using four items adapted from Rhoades, Eisenberger and Armeli (2001). WE is measured using five items adapted from Bledow et al. (2011). OCB is measured using four items adapted from Podsakoff et al. (1990) and introversion is measured using three items adapted from Brown et al. (2002). The questionnaire was administered in both English and Urdu and each item examined closely for any translation problems. The items are measured on a seven-point Likert scale ranging from 1 ('strongly disagree') to 7 ('strongly agree'). The survey itself was preceded by a pilot comprising 15 questionnaires to fine-tune the design.

5. Analysis and Results

This section discusses the study's results.

5.1. Descriptive Statistics and Correlation Matrix

Table 2 gives the zero-order correlations, mean and standard deviation of all the scales. As expected, PSS, WE and OCB are strongly correlated with introversion.

Table 2: Descriptive statistics and correlation matrix

Variable	Mean	SD	1	2	3	3	4	5
Gender	1.1600	0.640	1.000					
Age	1.4200	0.850	0.449**	1.000				
PSS	5.4804	1.100	0.075	0.085*	1.000			
WE	5.7973	0.910	-0.074	-0.040	0.236**	1.000		
OCB	5.7675	0.100	-0.009	0.069	0.436**	0.399**	1.000	
Introversion	4.9659	1.342	0.126**	0.139**	0.151**	0.207**	0.295**	1.000

Source: Authors' calculations.

5.2. Confirmatory Factor Analysis

We carry out a confirmatory factor analysis (CFA) to determine if the three support-related variables, PSS, WE and OCB, are distinct theoretical constructs. The results indicate that a four-factor model provides the best data fit while a one-factor model (combining all four constructs) yields an acceptable model fit (Table 3). This supports the argument that PSS, WE and OCB are distinct constructs.

Table 3: Alternative CFA model

Model	Chi-sq.	df	RRMSEA	NFI	CFI	GFI	AGFI	IFI
One-factor	28.154	104	0.215	0.374	0.374	0.547	0.407	0.440
Four-factor	4.339	98	0.076	0.917	0.935	0.920	0.889	0.935

Source: Authors' calculations.

5.3. Validity and Reliability

Following Kline (2011), all the items achieve high factor loadings of between 0.62 and 0.90 in the four-factor model. Next, we measure the convergent validity, discriminant validity and reliability of the four instruments. The average variance extracted (AVE) of all four is greater than the recommended value of 0.50, indicating a satisfactory level of convergent validity (Table 4). The AVE of each construct is greater than any squared correlation, which establishes their discriminant validity. All four constructs show a high level of internal consistency and reliability, with Cronbach alpha values that are all greater than the recommended value of 0.7 (see Nunnally & Bernstein, 1994).

Table 4: Validity and reliability scores

Variable	AVE	1	2	3	4	α
WE	0.612	0.782				0.88
PSS	0.658	0.224	0.811			0.88
Introversion	0.524	0.206	0.173	0.724		0.75
OCB employees	0.618	0.372	0.463	0.291	0.786	0.86

Note: The diagonal values in the correlation of constructs matrix are the square root of the AVE. For adequate discriminant validity, these should be greater than the corresponding off-diagonal values.

Source: Authors' calculations.

5.4. Common Method Variance and Goodness of Fit

Data that is self-reported and collected using a cross-sectional questionnaire in the same period is potentially subject to common method bias (CMB) (Podsakoff et al., 2003). We apply one-factor CFA, Harman's one-factor method and common latent factors to test for the existence of CMB. The principal component analysis of all the variables produces four distinct factors, which together account for 71 percent of the total variance (the first factor accounts for only 34 percent). The common method latent factor test for the independent mediator and dependent variables yields a

score less than the acceptable threshold of 25 percent (see Podsakoff et al., 2003). Thus, CMB does not pose a serious problem in this case.

The results in Table 5 indicate that the one-factor model provides the best fit (adjusted goodness-of-fit index = 0.900).

Table 5: Goodness-of-fit indices

Model	Chi-sq.	df	RRMSEA	NFI	CFI	GFI	AGFI	IFI
One-factor	4.681	61	0.079	0.932	0.945	0.933	0.900	0.946

Source: Authors' calculations.

5.5. Direct and Indirect Effects of PSS

The results in Table 6 support the first hypothesis of a positive relationship between PSS and OCB (0.38, $p < 0.001$) as well as the second hypothesis of a positive relationship between PSS and WE (0.22, $p < 0.001$). The relationship between WE and OCB is also significant (0.33, $p < 0.001$).

Before examining the indirect effect of supervisor support on OCB when mediated by WE, we measure its direct effect. The results show that PSS has a positive impact on OCB (direct effect: 0.38, $p < 0.001$). The results also support the third hypothesis concerning the indirect effect of PSS and OCB (0.073, $p < 0.001$), that is, WE mediates the relationship between PSS and OCB.

Table 6: Direct and indirect effects

Independent variables	Dependent variables				
	WE		OCB		
	Direct effect	Direct effect	Indirect effect	Total effect	% Mediation
PSS	0.22***	0.38***	0.07***	0.45***	16%
WE		0.33***			

Source: Authors' calculations.

5.6. Moderating Effects

In Table 7, model 1 shows that introversion does not moderate the direct relationship between PSS and WE because the interaction value is 0.004 ($p > 0.005$). Thus, we reject the fifth hypothesis. Model 2 recognizes that introversion acts as a positive moderator in the direct relationship

between WE and OCB (interaction = 0.08, $p < 0.05$). When introversion is low, the positive effect of WE on OCB is 0.34 ($p < 0.001$). When introversion is high, the direct effect is high (0.51, $p < 0.001$).

Table 7: Introversion as a moderator in the relationship between independent and dependent variables

Model	Independent variables	WE	OCB
Model 1	Constant	4.850***	
	PSS	0.170***	
	Introversion	0.140	
	PSS x introversion	0.004	
Model 2	Constant		2.22***
	WE		0.34***
	Introversion		0.28
	WE x introversion		0.08*
Model 3	Constant		2.22***
	PSS		0.28***
	Introversion		0.28
	PSS x introversion		-0.10***

Source: Authors' calculations.

In model 3, introversion acts as a negative moderator in the relationship between PSS and OCB (interaction = -0.10, $p < 0.001$). A low level of moderation yields an interaction term of 0.39 ($p < 0.001$) and a high level yields 0.18 ($p < 0.001$). Moreover, introversion moderates the relationship between PSS and OCB through WE (low = 0.045, $p < 0.05$; high = 0.075, $p < 0.05$) (Table 8).

Table 8: Moderated mediation analysis

Independent variable	Moderator		OCB	
			Direct effect	Indirect effect via WE
PSS	Introversion	Low	0.39***	0.045*
	Introversion	High	0.18***	0.075*
WE	Introversion	Low	0.34***	
	Introversion	High	0.51***	

Source: Authors' calculations.

6. Discussion

This study examines the impact of PSS on OCB, where WE plays a mediating role and introversion acts as a moderator. Our findings support

the literature, which suggests that two cognitive mechanisms and an affective mechanism govern the relationship between PSS and OCB (Chen & Chiu, 2008). While supervisor support increases employee OCB (Jung & Avolio, 2000), Podsakoff et al. (2000) indicate that one should look beyond the causal relationship between the two. Accordingly, we identify WE as a mediator in this relationship and introversion as a moderator.

Our results show that PSS has a positive and significant impact on OCB. This is in line with studies such as Chughtai and Buckley (2008), who find that better supervisor support and communication between employee and supervisor generate self-confidence, motivating employees to work harder. Employees with a higher level of WE are more likely to be characterized by contextual performance (Kataria et al., 2013), whereby they reciprocate in the form of OCB, taking on additional tasks to meet the organization's goals (Ariani, 2013).

We also find that introversion acts as a negative moderator in the relationship between supervisor support and employee OCB: low levels of introversion are associated with higher OCB in the presence of supervisor support. The results indicate that introversion moderates the relationship between PSS and OCB indirectly through WE. In this case, higher levels of introversion are associated with higher OCB because introverts are more likely to focus on their work. Introversion is thus strongly related to OCB (Harper, 2015).

7. Conclusion

Having established that PSS is an important antecedent of OCB, we find that the relationship is mediated by WE. Supervisors who value their employees induce greater job satisfaction and WE, leading in turn to higher OCB. PSS strongly influences OCB in the case of high levels of introversion when the relationship is mediated by WE. This suggests that supervisors should identify and support introverted employees to encourage WE and drive OCB. Employees who are less introverted, however, are associated directly with OCB, where the effect is stronger and positive.

The study's main limitation is that it examines only one personality trait, i.e., introversion. Future research could look at other traits to see how they affect the relationship between PSS and OCB.

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Questionnaire

Part 1

Please mark **one** option in response to the following questions:

1. Nationality:
2. Gender:
 - Male
 - Female
3. Age:
 - 18 to 28 years
 - 29 to 40 years
 - 41 to 55 years
 - Over 55 years
4. Educational qualification:
5. Name of the company where you work:
6. How long have you worked at this company (years)?
7. What is your primary responsibility?
 - General manager
 - Faculty member
 - Administration or finance
 - Human resources
 - Marketing or sales
 - Technical, lab staff, etc.
8. What is your role?
 - Senior management
 - Middle management
 - Supervisory
 - Nonmanagement technical or professional

Part 2

Keeping in mind the company you work for, please rank the statements below. Mark the single most appropriate option on the right-hand side (1–7). Mark 1 if you disagree strongly with the statement and 7 if you agree strongly with the statement. If you agree or disagree to some extent, mark 3, 4 or 5 to indicate this. Please note that there is no wrong or right answer.

I frequently make suggestions for improving the work of my department (OCB). میں اکثر اپنے ڈیپارٹمنٹ کی بہتری کے لئے رائے دیتا ہوں۔	1	2	3	4	5	6	7
Part of my job is to think of better ways of doing the job. یہ میری جاب کا حصہ ہے کہ میں اپنی جاب کو بہتر طریقے سے کرنے کی کوشش کروں۔	1	2	3	4	5	6	7
I participate in activities that are not required of me, but that help build the image of my organization. میں اپنے ادارہ کی بہتری کے لئے اپنے کام میں بھی حصہ لیتا ہوں جو کہ میری نوکری کے لئے ضروری نہیں ہے۔	1	2	3	4	5	6	7
I keep up with developments in my organization. میں ان بہتریوں کا حصہ بنتا ہوں جو میرے ادارہ میں ہوتی ہیں۔	1	2	3	4	5	6	7
My supervisor cares about my opinion (PSS). میرا سپر وائزر میری رائے کا خیال رکھتا ہے۔	1	2	3	4	5	6	7
My supervisor cares very much about my wellbeing. میرا سپر وائزر حقیقت میں میری بہتری کا خیال رکھتا ہے۔	1	2	3	4	5	6	7
My supervisor strongly considers my goals and values. میرا سپر وائزر میرے مقاصد کا خیال رکھتا ہے۔	1	2	3	4	5	6	7
My supervisor shows very little concern for me. میرا سپر وائزر میرے لئے بہت کم تشویش کا اظہار کرتا ہے۔	1	2	3	4	5	6	7
I feel strong and vigorous about my work (WE). میں اپنے کام کے دوران پرجوش محسوس کرتا ہوں۔	1	2	3	4	5	6	7
At work, I feel as though I am bursting with energy. کام کے دوران میں اپنے آپ کو توانائی سے بھرپور محسوس کرتا ہوں۔	1	2	3	4	5	6	7
I am enthusiastic about my work. میں اپنے کام کے مطابق بہت پرجوش ہوں۔	1	2	3	4	5	6	7
My work inspires me. میرا کام مجھے متاثر کرتا ہے۔	1	2	3	4	5	6	7
I am happily engrossed in my work. میرا کام مجھے متاثر کرتا ہے۔	1	2	3	4	5	6	7
I generally feel more bashful than others (introversion). میں عام طور پر دوسروں کی نسبت زیادہ شرمندگی محسوس کرتا ہوں۔	1	2	3	4	5	6	7
I am generally quiet when with other people. میں جب لوگوں کے ساتھ ہوتا ہوں عام طور پر خاموش رہتا ہوں۔	1	2	3	4	5	6	7
I am generally shy. میں عام طور پر شرم و حیا والا ہوں۔	1	2	3	4	5	6	7