

# The Mediating Role of Work Engagement in the Relationship between Job Autonomy and Citizenship Performance

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*This study was aimed to examine the mediating effect of employee work engagement in the Job Autonomy-Organizational Citizenship Behaviour (OCB) link. Drawing upon the Job Characteristics Theory (Hackman & Oldham, 1975) and the Social Exchange Theory (Blau, 1964), this study specifically examined the direct effect of Job Autonomy on OCB and the indirect effect of Job Autonomy on OCB through Work Engagement as the mediator. A total of 646 nursing and clinical employees holding non-supervisory jobs in 3 public hospitals in Malaysia participated in this study. Hierarchical multiple regression results indicated a statistically significant positive relationship between Job Autonomy and OCB. Work Engagement was found to partially mediate the relationships between Job Autonomy and OCB. Theoretical implications, limitations of the study and the directions for future research were discussed.*

**Keywords:** Organizational Citizenship Behaviour, Work Engagement, Job Autonomy.

## 1. Introduction

One way for organizations to survive in this challenging era of communications and technology is to have employees who are committed, engaged, and loyal in doing work way beyond their prescribed job description. As such, employee engagement in extra role behaviour such as Organizational Citizenship Behaviour (OCB) is deemed important in sustaining competitive advantage, keeping abreast with changes, and promoting innovation (Organ, 1997). Managers of work organizations value OCB as it creates work environment that is conducive to cooperation and helps to reduce the amount of time a manager spends on an issue; thus, enabling them to focus on other opportunities for improving organizational performances (Turnipseed & Rassuli 2005). Review of literature shows that OCB has been studied in-depth both to determine its antecedents as well as its consequences. Studies have identified a number of predictors of OCB, including: job attitudes (Shore & Wayne 1993), interpersonal trust/loyalty to the leader, (Podsakoff et al. 1990), and task characteristics (Todd & Kent 2006). Although many studies have examined the direct relationship between task characteristics and OCB, studies examining the mechanism that explains this relationship are scarce (Su & Hsiao 2005, Krishnan et al. 2010).

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This study was intended to investigate to what extent the job autonomy-OCB link is mediated by work engagement. Although it is important to identify and examine the role of primary situational antecedents (i.e., job autonomy) on OCB, examining the mediating mechanism that may explain the job autonomy-OCB link will contribute to the existing body of knowledge in OCB.

The rest of this study is organized as follows: Section 2 reviews the relevant literature and discusses the hypothesis development, and Section 3 describes the research methodology including data collection, measures and the analytical procedures. Section 4 presents the empirical results, and section 5 provides discussion, practical implications, study limitations, suggestions for future research and finally concludes the study.

## **2. Literature Review**

### **2.1 Organizational Citizenship Behaviour**

Smith et al. (1983) introduced the notion of OCB as discretionary behaviour that goes beyond one's official role and is intended to help other people in the organization or to show conscientiousness and support toward the organization. Organ (1988:4) later defined this concept as: "an individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system and that in aggregate promotes the effective functioning of the organization." From the above definitions, OCB can be construed as a positive behaviour that is neither stated in job description nor enforced by employment contract. In the seminal conceptualization of OCB, (Smith et al. 1983) the concept was distinguished into general compliance and altruism. General compliance basically pertaining to behaviours that do not aid any one particular person, but rather represent compliance with general rules, norms, and expectations (e.g., being punctual, offering suggestions to improve organizational effectiveness) whereas altruism focuses on employees' willingness in helping others in face-to-face. Organ (1988) has expanded the conceptualization of OCB into five distinct dimensions namely, altruism, courtesy, conscientiousness, civic virtue, and sportsmanship.

### **2.2 Job Autonomy and Organizational Citizenship Behaviour**

Many researchers have argued that one way to increase employee work outcome is through enrich the job. The theoretical basis for many enrichment efforts of jobs is the Hackman and Oldham's (Hackman & Oldham 1975) job characteristics theory which focuses on facilitating high internal work motivation in the workplace in order to achieve positive work behaviours. To increase internal work motivation is to design jobs so they will provide (1) skill variety; (2) task identity; (3) task significance; (4) autonomy and (5) feedback. Job autonomy refers to the extent of freedom, independence, and discretion of an employee to plan his/her work pace and method. (Hackman & Oldham 1975). Organ et al. (2006:109) argued, autonomy increases employees' willingness to do whatever it takes (including citizenship) to accomplish the task. Employees in highly autonomous jobs, dictates their own job rather than being instructed by their bosses. Autonomy is expected to influence the employee's experienced responsibility for outcome of the work which in turn influences the final work outcome. The Social Exchange Theory (Blau 1964) provides a strong basis for this relationship. In explaining the relationship between job autonomy and OCB, employees who are provided the opportunity to make decisions in their task are

expected to feel obliged to respond with positive work behaviour such as OCB. A job with high job autonomy may lead to positive behaviour such as OCB and empirical research has supported this relationship. For example, Farh et al. (1990) found task scope, to directly impact OCB. Anderson and Williams (1996) found that task autonomy and task interdependence increased the incidence of employees' seeking help from others. On the other hand Todd and Kent (2006) found task significance to be positively related to OCB while Chien and Su (2009) found that task identity, task significance and autonomy to be positively related to employees. Krishnan et al. (2010) revealed that OCB was positively correlated with job autonomy, job variety, and job significance ( $r = .55, .64, \text{ and } .61$  respectively, all  $p < .01$ ) among 125 administrative support employees working in a public higher learning institution in Malaysia. Thus we proposed the following hypothesis:

H1: There is a positive relationship between job autonomy and OCB

### **2.3 Work Engagement as a Mediator of Job Autonomy-OCB Relationship**

One of the early study which examined the mediating role in the relationship between job characteristics and work outcomes is by Hackman and Oldham (1975) who identified job characteristics to increase employee job performance through three critical psychological states of employees: experience of job meaningfulness, sense of responsibility for work outcomes, and knowledge of work results which, in turn, result in positive employee attitudes (e.g., internal work motivation and job satisfaction) and work outcomes (e.g., job performance, lower employee turnover or OCB). However, subsequent research which explored this relationships shown inconsistent results. For example, Fried and Ferris's (1987) meta-analysis found no support for the mediating effect of critical psychological states on the relationship between job characteristics and work performance, but Renn and Vandenberg (1995) showed a partial mediating effect of critical psychological states on this relationship. Perhaps this has led researchers to examine other potential mediators of job characteristics–performance relationship. Researchers have conducted the mediating tests on the relationship between job characteristics and OCB using different attitudinal factors as mediating variable. For example, Su and Hsiao (2005) examined the role of job satisfaction (intrinsic and extrinsic) in the relationship between job characteristics and OCB found intrinsic satisfaction partially mediate the relationship between skill variety and task significance dimension of job characteristics with OCB. However extrinsic job satisfaction did not mediate this relationship in this study. Consistent with this finding, Todd and Kent (2006) revealed that job satisfaction partially mediate the relationship between intrinsically satisfying task on OCB and task significance on OCB. In another vein, Chien and Su (2009) found that through the mediating process of job involvement, three dimensions of job characteristics (task identity, task significance and autonomy) positively influenced employee's display of OCB.

However studies exploring work engagement as a mediator in the relationship between various antecedents and outcomes is still at a nascent stage. Work engagement is defined as a 'positive, fulfilling, work related state of mind that is characterized by vigour, dedication, and absorption'. (Schaufeli & Bakker 2004). Schaufeli and Bakker (2004) found that job engagement mediated the relationship between job resources and employee turnover intentions. In a similar vein Saks (2006) in his study on antecedents and consequences of employee engagement found two dimensions of engagement (job engagement and organizational engagement) serves as potential mediators in the relationship between some

antecedents (job characteristics, perceived organizational support, perceived supervisor support, rewards and recognition, procedural justice and distributive justice) and some work outcomes (job satisfaction, organizational commitment, intention to quit and organizational citizenship behaviour). However there are very few studies conducted to examine the mediating role of work engagement in the relationship between job autonomy and OCB. In a recent study, Ng and Tay (2010) found work engagement to mediate the relationship between job resources (job control and social support) and job performance. Therefore it is expected that job autonomy affect employee citizenship behaviour through their influence on work engagement. Thus, we hypothesized,

Hypothesis 2: Work engagement will mediate the relationship between job autonomy and OCB.

### **3. The Methodology**

#### **3.1 Sample and Data Collection**

This study has employed a convenience sampling method in selecting respondents who are consists of nursing and clinical employees holding non supervisory jobs employed in three public hospitals in Malaysia. Permission to conduct the study was sought from the Hospital Directors and the Directors of Nursing Services of these respective hospitals. Employees in the health sector were chosen as the main respondents because nurses are often required to demonstrate helping behaviour in their task in the caretaking of patients. A survey research design was chosen for this study whereby data on employees' perceived job autonomy, work engagement, and their involvement in OCB were collected, using a structured research questionnaire.

A dyadic response design (Alferes & Kenny 2009) was employed where both the employee and his/her supervisor participated in this study to overcome the same source bias (Podsakoff et al. 2003) or in other words the tendency to get biased response as a result of using the same respondent in answering both independent and dependent variables. In this dyadic response design, nurses were asked to rate their involvement in OCB (dependent variable). This was followed by the nursing supervisors who were asked to rate their subordinate's involvement in OCB. Because the nurses and their supervisor's response were correlated in this study, an average score of OCB from their responses was calculated and used for data analysis. Prior to distribute the study questionnaires, a pilot study involving 150 respondents were conducted to assess i) whether the items were easy to understand, and ii) the appropriateness of the questionnaire design. It was agreed that most of items were clear and understandable by both of the target groups. A total of 1200 questionnaires were distributed and 710 were returned. Out of the 710 survey forms that were returned, 64 cases with several missing values were removed, leaving a final research sample of 646 cases that were used in the final analysis. Response rate across the organization ranged from 51% to 61% with an overall response rate of 60% and overall non response rate of 40%. Of the 646 respondents, 97.4% were female and 2.6 % were male. There was no fair balance in respondents gender because female are the dominant workforce holding clinical jobs in hospitals. In terms of ethnic composition of the respondents, 93.3% comprised of Malays, 3.9 % comprised of Chinese 2.3 % comprised of Indians and the rest were from other ethnic groups. About 80% of the respondents were married, and 18 %

were not married and 98% held higher school certificates and diploma qualification. The age range of the sample of participants was 21 to 61 years, with an average age of 33 years old (s.d= 8.9). The mean organizational tenure was 8 years (s.d= 7.7).

### **3.2 Measures**

All constructs of the study was measured with scales adopted from existing scales.

*Organizational Citizenship Behaviour (OCB).* OCB was measured using the Organizational Citizenship Behaviour Scale developed by Lee and Allen (2002). This 15-item scale measures helping behaviours that benefit specific individual (OCB-I) and the organization as a whole (OCB-O) using a 5-point Likert-type scale ranging from 1 (very inaccurate) to 5 (very accurate). An example of OCB-I measure is “this employee helps others who have been absent”. An example of OCB-O measure is “this employee offer ideas to improve the functioning of the organization”. Lee and Allen (2002) reported the reliabilities of .83 (OCB-I) and .88 (OCB-O). In this study the overall measure of OCB was used. This study has reported a coefficient alpha reliability of .87 for the composite score for OCB. Chien and Su (2009) reported a coefficient alpha reliability of .94 for their composite score for OCB.

*Job Autonomy.* The job autonomy dimension of motivational job characteristics was measured with the corresponding subscales of the Job Diagnostic Survey (Hackman & Oldham 1980). This subscale consists of four items that was evaluated by the respondents based upon a 5-point Likert-type scale indicating the extent or amount of each characteristics ranging from 1 (very little) to 5 (very much). An example of autonomy measure is “my job allows me to make a lot of decisions on my own”. The respective coefficient alpha reliability for job autonomy in this study was .80.

*Work Engagement.* This study has adopted the 9-item questionnaire scales designed by Schaufeli and Baker (2006) to measure work engagement. These items assess three main dimensions of work engagement namely vigour, dedication and absorption in their jobs. A sample item is “at my work, I feel bursting with energy”. Participants indicated their response on a five point Likert-type scale with anchors (1) strongly disagree to (5) strongly agree. This study has reported a coefficient alpha reliability of .90 for work engagement.

### **3.3 Analytical Procedures**

The data was analysed using Statistical Package for Social Sciences (SPSS) for Windows Version 19.0. The bivariate relationship between all the study variables was investigated using Pearson product-moment correlation coefficient. A hierarchical multiple regression analysis was conducted to investigate the relationship between job autonomy and OCB (Hypothesis 1), and the mediating effect of work engagement in the relationship between job autonomy and OCB (Hypotheses 2). Prior to conducting the hierarchical multiple regression, data was screened for violations of the assumptions of normality, linearity, homoscedasticity and multicollinearity (Tabachnic & Fidell 2007). The testing for mediation in this study was carried out using the 4 step procedure suggested by Baron and Kenny (1986). To further assess the significance of the mediation, Sobel's (1982) test for indirect effects was used.

## 4. Findings

Table 1 shows the value of means, standard deviations, internal reliabilities and correlations among the variables. The mean value for most of the study variables were above 3.5. The Pearson product-moment correlation analysis shows that most of the variables are strongly and positively correlated with one another with correlation coefficient values of more than 0.3. The following data are noteworthy from the correlation analysis. OCB is found to be correlated positively and significantly with job autonomy and work engagement. Work engagement is also found to be correlated positively and significantly with job autonomy. The internal reliability for all the study variables recorded at a value of 0.8 and above.

**Table 1: Means, Standard Deviations, Correlations and Reliabilities of Measures**

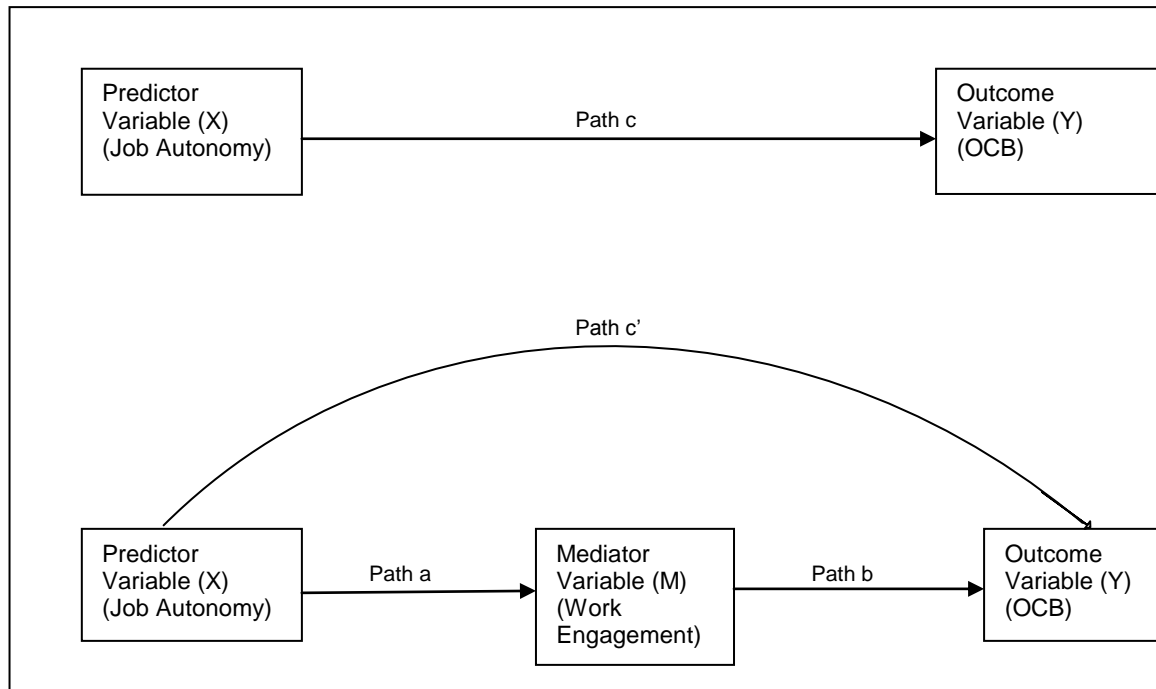
VARAIABLES	MEAN	S.D.	1	2	3
JOB AUTONOMY	3.85	0.32	<b>0.80</b>		
WORK ENGAGEMENT	4.35	0.84	0.56	<b>0.90</b>	
OCB	4.55	0.87	0.47	0.48	<b>0.87</b>

Notes: Bold figures are reliabilities at \* $p < 0.05$ ; \*\* $p < 0.01$

### 4.1 The Mediating Effect of Work Engagement

The first step of the Baron and Kenny's (1986) mediation test procedure is to establish that the independent/predictor variable (job autonomy) is correlated with the dependent /outcome variable (OCB). The second step of this mediation test procedures is to establish that the independent variable is correlated with the mediating variable (work engagement). The third step of this mediation test procedures is to establish that the mediating variable is correlated with the dependent variable. In this step, the independent variable and the mediating variable will be tested on the dependent variable. In this step also, if the strength of the relationship between the independent variable and the dependent variable established earlier (see Step 1b, equation 1, Table 2) is reduced with the addition of the mediating variable (see Step 2b, equation 1, table 2) then mediation effect can be assumed. The final step in the mediation test procedure is to determine the existence of full or partial mediation. To establish that work engagement completely mediates the job autonomy-OCB relationship, the effect of job autonomy on OCB controlling for work engagement (path c'-refer Figure 1) should be zero.

Figure 1: Diagram of Paths in Mediation Models



If this criteria is not met, but the first three steps are met, then partial mediation is indicated. The result of the mediating effect of work engagement in the relationship between job autonomy and OCB (Hypothesis 2) is shown in Table 2.

Table 2: Hierarchical Regression Results for the Mediating Effect of Work Engagement on the Relationship between Job Autonomy and OCB

Equation	Variable	Work Engagement		
		Step 1a	Step 1b	Step2b
1	Autonomy	.23***	.18***	.06**
	Work Engagement			.49***
	F	59.88***	44.89***	171.9**
	R <sup>2</sup>	.08	.06	.34

Notes: N=646; unstandardized coefficients are reported; \* $p < 0.05$ ; two tailed;

\*\* $p < 0.01$ ; two tailed; \*\*\* $p < 0.001$ ; two tailed † $p < .05$ , one tailed

In step 1a of the regression analysis (Equation 1, Table 2), job autonomy was found to be significantly related to work engagement ( $b = .23$ ,  $p < 0.001$ ). In Step 1b it was found that job autonomy was significantly related to the dependent variable OCB ( $b = .18$ ,  $p < 0.001$ ). The result in step 1b supports the first hypothesis which states that there is a significant positive relationship between job autonomy and OCB. Also it can be seen in Table 2 (Step 2b) that work engagement was positively related to OCB ( $b = 0.49$ ,  $p < 0.001$ ). It can be seen that the strength of the relationship between job autonomy and OCB, established earlier in Step 1b ( $b = .18$ ,  $p < 0.001$ ) was reduced with the addition of work engagement in Step 2b ( $b = .06$ ,  $p < 0.01$ ) thus a mediation effect can be assumed. The above results fulfilled the first three requirements of Baron and Kenny's (1986) mediation test procedures. The final step in the mediation

test procedure is to determine the existence of full or partial mediation. Because the effect of the independent variable on the dependent variable, controlling for work engagement ( $b=0.06$ ) is not zero, only partial mediation is assumed in this study (refer to path  $c'$  in Figure 1). To further assess the significance of this partial mediation effect, Sobel's (1982) test for indirect effects was used. The Sobel test result is summarized in Table 3.

**Table 3: Sobel Test Results for the Mediation Effect of Work Engagement on the Relationship between Job Autonomy and OCB**

Indirect effect	<i>a</i>	<i>sa</i>	<i>b</i>	<i>sb</i>	<i>z</i>
Autonomy - WE- OCB	0.228	0.029	0.497	0.030	7.10*

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ . WE=Work Engagement, OCB=Organizational Citizenship Behaviour.

Table 3 showed that the standardized regression analysis with autonomy as the predictor and OCB as the criteria yielded the following results:  $a = 0.228$ ,  $Sa = 0.029$ ,  $b = 0.497$ , and  $Sb = 0.030$ . The observed  $p$ -value of less than 0.05 as shown in Table 3 confirmed that work engagement has a significant partial mediating effect on the relationship between job autonomy and OCB ( $z = 7.10$ ,  $p < 0.05$ ). This provides support for a partial mediation effect; thus Hypothesis 2 in this study is partially supported.

## 5. Discussion & Implications

The main purpose of this study was to examine the relationship between perceived job autonomy and OCB as mediated by work engagement. As hypothesized, the results showed support for the direct effect of job autonomy on OCB. The results also showed support for a partial mediating effect of work engagement in the relationship between job autonomy and OCB. Consistent with the prediction and theorizing within the social exchange theory and job characteristics theory, the study shows that (a) employers who provide an autonomous job for employees, increases employee satisfaction and (b) as an exchange, employees reciprocated by engaging in positive work behaviours such as OCB. According to job characteristics theory, when employers provide employees the freedom and the choice in carrying out their job, employees will be more motivated in their jobs and will be more willing to invest their effort in non task performance such as voluntary helping behaviour at work. The findings of the significant positive effect of job autonomy on OCB are consistent with several research results. (Farh & Podsakoff 1990, Cappelli & Rogovsky 1998, Drago & Garvey 1998, and Chien & Su 2009). Our research result, however, is inconsistent with Su and Hsiao (2005) who found a non significant relationship between job autonomy and OCB.

The results of this study also showed that work engagement partially mediated the relationship between job autonomy and OCB (i.e., Hypothesis, 2). This result indicated that job autonomy predicts OCB directly and indirectly through work engagement. The direct effect shows that when employees are provided with the freedom and choice in carrying out their job, they will invariably reciprocate by engaging in helping behaviours as well as performing well in their work. The indirect effect of job autonomy on OCB through employees work engagement shows that



work engagement is also an important factor in the prediction of OCB among employees. This partial mediation effect could also serve as an explaining mechanism of the relationship between job autonomy and OCB. These findings are consistent with (a) Ng and Tay's (2010) empirical study that found work engagement to partially mediate the relationship between job resources (i.e., job control and social support) and in role performance and extra role performance of employees among 341 working adult in Malaysia, and (b) Salanova and Scaufeli (2008) who found that vigour and dedication dimensions of engagement partially mediated the relationship of job resources (i.e., job control, feedback, and variety) and proactive work behaviours study in two large samples of Spanish and Dutch managers and employees.

The dyadic response design used in this study is an important methodological contribution of this study. This method of data collection was used as a mean to reduce the same source bias (Podsakoff et al. 2003) which possibly exists when using same targets to answer all independent and dependent variables. Because, the supervisor could assess and observe his/her subordinate in this study, the use of a dyadic response design is more appropriate compare to self report because it provides a realistic response about employee involvement in OCB.

An obvious implication of this study is that employees' perception about their job autonomy matters in the workplace, particularly with regard to promoting helping behaviour among employees. This study has demonstrated that employees' positive perception on job autonomy was found to affect their job attitude, especially their engagement towards their work which could impact their work outcome especially their extra role behaviour. Specifically, this study shows that autonomy is an important job characteristic in promoting helping behaviour among employees. Therefore, employers who wish to promote extra role behaviours among their employees need to work at providing autonomy in organization. For example, in order to increase job autonomy, managers should consider certain amount of decision making or give employees freedom and choice in carrying out their work activities and encourage employees to do their work the way they think it could be done.

The job autonomy predictor variable examined in this study was found to affect OCB of employees through work engagement. The partial mediation effect of work engagement served as an explaining mechanism of the relationship between job autonomy and OCB. In other words, employees are more likely to display OCB when they are highly engaged in their work. As such management need to pay more attention to designing jobs and creating work environment with the strategy to increase employee work engagement level in organizations.

### **5.1 Limitations and Suggestion for Future Research**

Although this study has provided some important insights into the relationships among job autonomy, work engagement, and OCB, we acknowledge that there are also some limitations. First, the sample used in this study consists of rather a homogenous group of mostly female respondents (over 95%). Further, the respondents in this study are mainly registered staff nurses employed in the public hospitals in Malaysia. Thus, future study should replicate our study using samples drawn from different occupations and type of work with even gender distribution. Second, the current study has employed a cross-sectional design in which data were collected from respondents at a single point in time. One of the weaknesses in this

method is that it does not allow us to draw firm conclusion regarding the causal direction of the relationships among the predictor and outcome variables. Given this limitation, future research should examine the relationships among the variables using longitudinal designs that examine the continuity of the response. Finally, this study has focused on work engagement as the mediator in the relationship between job autonomy and OCB. Future research can be extended by examining other potential mediators in examining the relationship between job autonomy and OCB. For example, employee trust towards the supervisor, job self efficacy, and self esteem are potential mediators that can be explored in future research that examine the job autonomy-OCB link.

## **5.2 Conclusion**

This study has provided an empirical evidence for linking employees' perception of their job to OCB, thus providing support for a key theoretical proposition of social exchange theory and job characteristics theory. A main focus within research on job characteristics theory has been on the role of basic psychological needs satisfaction as an underlying mechanism for understanding various organizational outcomes. Nevertheless to further understand other mechanism that could lead motivational job characteristics to various work outcomes has led researchers to test other attitudinal variables as potential mediators. This study found a strong support for the partial mediating effect of work engagement between job autonomy and OCB. This suggests that employers who provide an autonomous job to their employees may increase the employees' intrinsic motivation at work that subsequently reflected as work engagement of employees. As an exchange to the motivating work, employees may display positive behaviour such as OCB. This finding reinforces the mediating role of work engagement consistent with theorizing in social exchange theory. Because work engagement did not account fully for the relationship between job autonomy and OCB, this implies that there could be other possible mediating mechanisms underlying the relationship that can be explored further.

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