

Organizational Citizenship Behavior as a Predictor of Student Academic Achievement

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Abstract

This study employed social exchange theory to examine the connection between one of the elements of teaching strategies, that is, lecturers' organizational citizenship behavior (OCB) and students' academic achievement. Student needs for achievement was used as moderator. Analysis was conducted on a survey data of 196 students in one of the local public institutions of higher learning. The results revealed that OCB dimension of altruism and courtesy were significantly related to students' academic achievement. In addition, conscientiousness positively predicted students' academic achievement among students with high needs for achievement. These findings indicate that, in order to enhance motivation and learning among students, altruism, courtesy and conscientiousness are some of the important behaviors among lecturers. Interpretations of results, implications and future research are discussed.

Keywords: Organizational citizenship behavior, Academic achievement, Student, Needs for achievement

1. Introduction

Employees' behaviors that go beyond formal duties and responsibilities such as assisting co-workers or superiors, willingness to compromise inconvenience at workplace, complying with organisational rules, policies and procedures and actively involved in the organisational development can contribute to organizational success (Katz & Kahn, 1978). Because OCB is believed to contribute to organizational, team and individual performance, studies have attempted to investigate the subordinate characteristics, task characteristics, organizational characteristics and leadership behaviors as antecedents of OCB which lead to a basic understanding of the causes of OCB. Although it is important to understand antecedents of OCB, most prior researches have not adequately assessed the effects of OCB. According to Podsakoff & MacKenzie (1994) and Walz & Niehoff (1996), not much research has concentrated on the effects of OCB on individual, group and organisational performance.

Despite an expanding of OCB literature, there is a gap in the empirical study on the relationship between OCB and its possible outcomes. Bolino (1999) states, "...in contrast to the numerous studies exploring the antecedents of OCB, there is a paucity of research examining the outcomes of citizenship behaviours in organisations." Specifically, only a limited study (e.g. Dipaola & Hoy, 2005; Allison et al., 2001) have been conducted that examine the relationships between OCB and student academic achievement. Hence, this study is attempted to determine the relationship between lecturers' OCB and student academic achievement. Additionally, this study will also investigate the role of students' needs achievement as a moderator of the relationship between lecturers' OCB and students' academic achievement.

2. Review of Literature

OCB has been defined as, "individual behaviour that is discretionary, not directly or explicitly recognised by the formal

reward system, and that in the aggregate promotes the effective functioning of the organisation" (Organ, 1988, p.4). According to Organ (1988), the word discretionary, means that the behaviour is not part of employee's job description. Moorman and Blakely (1995) state that a good citizen is an employee who offers support to the organisation, even when such support is not verbally demanded.

High performance organizations rely on employees who go beyond their formal job duties to carry out their task successfully. In universities, teaching is a challenging and complex task due to continuous interaction with students for the purpose of imparting knowledge and development of related skills and abilities. The expanding roles of lecturers cannot be sufficiently prescribed in lecturers' job descriptions (Dipaola & Hoy, 2005; Mazen, Herman & Ornstein, 2008). OCB should be considered as an important element of lecturers' performance. The extent to which lecturers are willing to engage in discretionary behaviours such as OCB may greatly influence the learning outcomes of students. The willingness of lecturers to exert greater efforts through altruism (e.g. helping students to understand a difficult subject matter), courtesy (e.g. give advance notice to students for postponement of classes), civic virtue (e.g. voluntarily attending students activities), conscientiousness (e.g. efficient use of time allocated for lectures and tutorials) and sportsmanship (e.g. avoid complaining when dealing with wayward students) can be expected to improve students' academic achievement. A study by Yilmaz and Tasdan (2009) indicate that educators had positive perceptions regarding organizational citizenship.

Studies in OCB have generally adopted the social exchange theory as the theoretical underpinning. The social exchange theory proposes the giving and receiving of material or intangible resources on the expectation of some return in future (Blau, 1964). In general, research findings suggest that positive and beneficial actions directed at employees by an organisation and/or its representatives contribute to the establishment of high-quality exchange relationships (Konovsky & Pugh, 1994). The citizenship behaviours by lecturer's will make the recipient of the benefits (students) to feel morally obligated to repay the lecturer in beneficial ways by exerting greater efforts to attain higher academic achievement. Lecturers may support the students' learning by exhibiting a strong determination in the teaching activities, providing personal attention to the students, coaching of the students' career, or being available if needed. It is possible that recipients of positive actions from the lecturers may seek to reciprocate in beneficial ways by not only viewing OCB as an acceptable commodity for exchange (Settoon, Bennett, & Liden, 1996) but also demonstrating a strong determination to succeed in their study. To date there is only one research conducted to investigate the relationship between educators' level of OCB and students' academic achievement. A study by DiPaola and Hoy (2005) found a significant relationship between OCB and student achievement on standardized tests among a group of high school students in USA.

Originally formulated by Murray in 1938, the concept of achievement motive has been refined and extended over the years (Matheiu, 1990). In this study, students' needs for achievement can be argued to moderate the relationship between lecturers' OCB and students' academic achievement. Students with high level of need for achievement may have a strong desire to attain and maintain a high academic accomplishment compared to students with low needs for achievement. Therefore, the extent to which OCB affects academic achievement may vary depending upon a student's needs for achievement. The extent to which lecturers exhibit OCB in facilitating students' learning should be most rewarding to students with higher needs for achievement. Conversely, students with lower needs for achievement may not be driven to attain high academic achievement even with continuous support from the lecturers. Therefore, it can be argued that the positive relationship between lecturers OCBs and academic performance is weaker for students who have lower needs for achievement compared to those who have higher level of needs for achievement.

3. Methodology

The subjects for this study include undergraduate students enrolled in courses in the Faculty of Business Management in one of the local public Universities in Malaysia. The study used self-administered questionnaires to capture information relating to the study topic. Questionnaires were administered to 500 students – 219 of the surveys were completed at a response rate of 44 percent. After eliminating a total of 23 survey results due to incomplete information, the resulting sample consisted of 196. The sample consisted of 120 female (61 percent) and 76 male (39 percent). The mean age of the subjects was 20.23 years ($SD=1.54$). With regards to the sampling method, the method of random quotas was used. In considering the randomness of the data the quotas of the sample were constructed according to the gender of the student.

The independent variable of the present study is OCB. OCB and its five dimensions were assessed from scales developed by Podsakoff and MacKenzie (1994). Overall, there were 17 items measuring OCB. The wording of the items was modified to accommodate the context of the present study. Each dimension of OCB was scored by obtaining the average rating of its component items. The scales have been found to have sufficient levels of reliability and validity (Podsakoff & MacKenzie, 1994). Students were asked to rate the overall level of OCB among their lecturers. Students' academic performance, that is, GPA is the dependent variable of this study. GPA was measured through a single question: "On a 4.0 scale, what is your cumulative GPA?". Students' needs for achievement is the moderator variable.

This variable was measured using a 7-item scale from Steers and Braunstein's (1976) Manifest Needs Questionnaire (MNQ). Sample items are: "I take moderate risks and stick my neck out to get ahead on my assignments" and "I enjoy working hard as much as relaxation". The coefficient alpha for this 7 items scale as reported by Mathieu (1990) was .70. Except for the academic achievement, which was measured as a ratio-scale, all items were rated on five-point Likert scales ranging from strongly disagree (1) to strongly agree (5).

Bivariate correlation was used to test the relationship between OCB dimensions, needs for achievement and students' academic achievement. Correlation coefficient reveals the magnitude and direction of relationships. The magnitude is the degree to which variables move in unison or in opposition (Sekaran, 2000). Hierarchical multiple regression was utilized to test the main effect of each OCB dimensions on students' academic achievement and the interaction terms between OCB dimensions and students' needs for achievement. Aiken & West (1991), Cohen & Cohen (1983) and Stone-Romero & Hollenbeck (1984) recommended the use of hierarchical multiple regression in research concerned with the detection of moderating effects. Baron and Kenny (1986) suggested that a moderator effect is most appropriately tested with multiple regression. The general procedure for testing moderating effects was to enter the sets of predictors into the regression equation in the following order. At step 1, the main effects of the OCB dimensions were entered. At step 2, the moderator variable of needs for achievement was entered into the equation. The two-way interaction terms obtained by multiplying the moderator variable by the independent variables were added at step 3 (Zhang & Leung, 2002). All the variables were mean-centered to minimise the threat of multicollinearity in equation when interaction terms were included (Aiken & West, 1991).

Although regression analysis with tests for anticipated interactions are appropriate for assessing the moderating effect, split regression is useful to illustrate the effect. Significant interactions were further analysed via sub-grouping analysis, in which participants were split into appropriate groups on the basis of hypothesised moderator variable (Sharma, Durand & Gur-Arie, 1981). In this study, the moderator variables of students' needs achievement are split at the median into 2 groups (lower needs for achievement and higher needs for achievement). After sub-grouping the respondents, regression analysis was used to investigate the relationship between the predictor variable and the criterion variable for each subgroup and then the differences between the regression coefficients are compared (Arnold, 1982; Sharma et al., 1981). A moderator exists if participants in one subgroup have significantly higher regression coefficient between the predictor and the criterion than those in other groups (Weiner, Muczyk & Martin, 1992).

4. Results and discussions

The Cronbach-alpha for each variable is presented in Table 1. Internal consistency of the scales can be gauged through these coefficients. The Cronbach-alpha range from .73 to .86, which suggested the specified indicators are sufficient for use (Nunnally, 1978). No alpha coefficient existed for the academic achievement variable because it consisted only one item.

The descriptive statistics and the intercorrelations of the variables are shown in Table 2. All variables were tapped on a five-point scale except for students' academic achievement, which was measured as a ratio-scale. It can be seen that the mean of student academic achievement is 2.97, which is rather high. The data in Table 2 indicate that the use of OCB among lecturers was relatively high, with the mean of all OCB dimensions exceeding the scale midpoint of 3.

<<INSERT TABLE 1>>

The correlation analysis was done to explain the relationship between all variables in the study. Pearson correlation was used to examine the correlation coefficient among the variables. As can be seen from Table 2, the measure of student's academic achievement is significantly correlated with all the five dimensions of OCB. More importantly, each of these variables is significantly correlated with the five dimensions of OCB. The strength of the relationship ranges from .20 to .35. Student's academic achievement correlated significantly and positively with altruism ($r=.35$, $p<.01$), civic virtue ($r=.20$, $p<.01$), conscientiousness ($r=.21$, $p<.01$), sportsmanship ($r=.21$, $p<.01$) and courtesy ($r=.28$, $p<.01$). The positive relationship indicates that high OCB levels among lecturers were more likely to result in high academic achievement among students. Additionally, student's academic achievement was also correlated significantly and positively with the moderator variable, that is, student's needs achievement. The intercorrelations were also inspected for multicollinearity. The majority of the correlation coefficients were below .70. Therefore, variable redundancy did not appear to be of concern (Nunnally, 1978).

<<INSERT TABLE 2>>

The hierarchical multiple regression analysis was carried out to test the lecturer's OCBs and students' academic achievement and academic performance for students. First, the main effects of the five dimensions of OCB were entered. Next, in step 2, the moderator variable of student's needs achievement was entered into the model. Finally, five two-way interactions, that is, between each dimension of OCB and needs achievement, were entered. Results of these regression procedures are shown in Table 3. The set of main effect of OCB dimensions entered at step 1 accounted for approximately 15% of the variance in student academic achievement. However, only altruism ($\beta=.38$, $t=3.25$, $p=.00$)

and courtesy ($\beta=.30$, $t=2.98$, $p=.00$) were significantly and positively related to student academic achievement. Sportsmanship ($\beta=.02$, $t=.13$, $p=.90$), conscientiousness ($\beta=.04$, $t=.26$, $p=.79$) and civic virtue ($\beta=.12$, $t=.93$, $p=.35$) were not significantly related to student academic achievement.

The moderator variable entered at step 2 accounted only 1% of the variance in student's academic achievement ($\beta=.05$, $t=.50$, $p=.62$). At step 3, when the two-way interactions were entered, an increase in R² was observed and one of the interactions was significant. This interaction is between conscientiousness student's needs for achievement ($\beta=4.79$, $t=2.30$, $p=.02$). Based on the standardized beta weights, conscientiousness explained the student's academic achievement for students with higher level of needs for achievement ($\beta=.24$, $t=2.02$, $p=.04$) than students with lower needs for achievement ($\beta=.03$, $t=.28$, $p=.78$).

The present study found that altruism was related significantly to students' needs for achievement, which is generally consistent to a previous study by DiPaola and Hoy (2005). Specifically, results as presented in Table 3, indicated that among the five OCB dimensions, only lecturers' altruism and courtesy were significant predictors for students' academic achievement.

<<INSERT TABLE 3>>

This finding is consistent to the theory of social exchange. The lack of relationships among the other dimensions of OCB deserves some comments. Perhaps, sportsmanship, conscientiousness and civic virtue were not related to students' academic achievement, at least in this particular context. Lecturers could be high on these OCB dimensions, but these behaviors might not translate into any effect on the students' academic achievement. Second, the bivariate analysis showed a weak relationship between these dimensions and students' academic achievement. This relationship may not be strong enough to hold up in the multivariate analysis. Another plausible explanation is that the mean of sportsmanship, conscientiousness and civic virtue were not sufficiently high for the effect to be apparent in the regression analysis, as compared to altruism and courtesy. Certainly, further research need to confirm these findings.

In terms of offering an explanation for findings pertaining to the strongest effects of lecturers altruism and courtesy on student academic achievement, it appears that altruism and courtesy are the OCB dimensions that benefits specific individual such as students than sportsmanship or civic virtue that are viewed as mainly benefiting the organization as a whole (William & Anderson, 1991). In other words, a lecturer's propensity to engage in altruism and courtesy may strongly influence students to reciprocate by exerting greater efforts in their study.

As discussed earlier, there is evidence to suggest that the relationships between OCB dimensions and students' academic achievement may be moderated by students' needs for achievement. Although intuitively appealing, to date, no study has assessed the possible moderating role of student needs for achievement in the OCB-academic achievement relationship. As such, the findings of this study are preliminary and regarded as exploratory. While previous studies (e.g., Dipaola & Hoy, 2005; Allison et al., 2001) found a direct relationship between OCB and student academic achievement, the result of the present study go beyond this important finding by providing some moderated relationships between lecturers' conscientiousness and students' academic achievement. There are some possible reasons for this finding. Conscientiousness appeared to capture a person's internalization and acceptance of the organization's rules, regulations, and procedures, which results in adherence to them, even without observer or monitor compliance. Perhaps, by being conscientious, the lecturers will exhibit a true willingness to help the students attaining good academic achievement (e.g., always punctual, extra classes). Those students with strong needs for achievement will be benefited from the positive actions by the lecturers. However, these behavior, may not affect those students with lower needs for achievement.

5. Conclusion

This study contributes to the existing literature in several ways. First, one of the hallmarks of university performance is students' academic achievement. The present study which attempted to investigate relationships between lecturers' OCB and students' academic achievement will supplement other universities' efforts (e.g. physical facilities, trained lecturer, academic regulations, etc.) in increasing the students' academic achievement. This study makes a second contribution to current OCB literature as the findings complement the findings of previous studies on the relationship between OCB and organizational effectiveness (e.g. Podsakoff & MacKenzie, 1994) which demonstrate that OCB is related to organizational effectiveness. This is because, students' academic achievement investigated in this study is one of the elements of university's effectiveness (Dipaola & Hoy, 2005). Third, this study extends beyond previous research by not only investigating OCB as a predictor of student's academic achievement, but also investigates the roles of students' needs achievement as a moderator of the relationships. As such, the present study will provide a more comprehensive explanation on the effects of OCB on students' academic achievement. A previous research by Dipaola & Hoy (2005) only analysed the main effect of OCB on academic performance without paying attention to any possible moderating effects. This study investigated the needs for achievement as a possible moderator for the relationship between OCB and academic performance.

The fourth contribution relates to the sample investigated. Despite considerable efforts in understanding antecedents and consequences of OCB, there is a dearth of empirical research exploring this concept in the context of university. This study will also provide practical value for university management. To address the students' academic performance, one strategy has been suggested to facilitate students' learning process. University faculty members can act as key players in facilitating students' learning by exerting extra effort, such as OCB.

Whereas this study provides some insights into the importance of OCB, several limitations of the research are notable. First, other potentially important variables beyond facets of OCB, especially the student's family background were not controlled in the model. The importance of OCB may have been reduced if these variables have been included in the model. Second, this study is based on cross-sectional data and thus, causality cannot be firmly established. More longitudinal studies are needed. Lastly, the sample size of this study is considered small. With these limitations in mind, the current results suggest several avenues of future research, which is worthy of pursuit. Since the impact of OCB on individual performance is only beginning to be explored, the findings of the present study suggested that future research should examine the effects of OCB on other forms of student criterion variables such as achievement in extra-curricular activities. Secondly, the present research focused on the relationships between OCB and one of the students' criterion variables at the individual level analysis. Another avenue for future research is to examine this relationship at the organizational level. This is consistent to the suggestion by Schnake & Dumler (2003) that OCB occurs at the individual level. However, it is OCB in the aggregate that impacts organizational effectiveness.

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Table 1. Cronbach alphas for the study variables

Variable		Alpha	Number of Items
Altruism		.77	4
Courtesy	.76		3
Sportsmanship		.73	3
Conscientiousness	.81		3
Civic Virtue		.86	4
Needs for achievement		.77	7

Table 2. Intercorrelation between study variables

	M	SD	1	2	3	4	5	6	7
1. Academic Achievement	2.97	.33	-						
2. Altruism	4.09	.41	.35**	-					
3. Courtesy	4.01	.57	.28**	.64**	-				
4. Sportsmanship	3.64	.62	.21**	.54**	.50**	-			
5. Conscientiousness	3.89	.60	.21**	.62**	.59**	.74**	-		
6. Civic virtue	3.91	.63	.20**	.64**	.58**	.61**	.72**	-	
7. Needs for achievement	4.03	.45	.20**	.54**	.46**	.45**	.59**	.65**	-

** p<.01 *p<.05

Table 3. Hierarchical multiple regression

Variables	β	t	Sig.	R2	R 2Δ	F Change
Step 1 (Main Effect)						
Altruism	.38**		3.25	.00	.15	-
Courtesy	.30**	2.98	.00			4.91**
Sportsmanship	.02		.13	.90		
Conscientiousness	.04	.26	.79			
Civic virtue	.12		.93	.35		
Step 2 (Moderator)						
Needs for Achievement	.05		.50	.62	.16	.01
Step 3 (Interaction Effect)						
Altruism x NA	.59		.32	.75	.22	.06
Courtesy x NA	2.94		1.49	.14		2.31*
Sportsmanship x NA	1.03	.59	.55			
Conscientiousness x NA	4.79**		2.30	.02		
Civic virtue x NA	.29		.15	.88		

*p<.05 **p<.01

NA – Needs for achievement