

PRINCIPAL'S TRANSFORMATIONAL LEADERSHIP AND TEACHER'S CREATIVITY: MEDIATING ROLE OF SELF EFFICACY

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Abstract

This quantitative descriptive study aimed to determine the link between principals' transformational leadership, teacher's self-efficacy and teacher's creativity. Particularly, the objective of the study was to classify whether the self-efficacy would be able to become a mediator in the connection between principal's transformational leadership and teacher's creativity. A total of 349 secondary schools teachers from Penang were randomly selected to participate in this study. Data was collected using a set of survey which was adapted from Leithwood and Jantzi (1999), Goddard, Hoy, and Woolfolk-Hoy (2000), George and Zhou (2001). The results of hierarchical regression analysis showed there was a relationship between principal's transformational leadership, teacher's self-efficacy and teacher's creativity. In addition, teacher's self-efficacy had a mediator impact on the relationship between principal's transformational leadership and teacher's creativity. In term of the implication, this study showed the role of transformational leaders in developing and increasing the creativity level and self-efficacy among the teachers.

Keywords Transformational leadership, self-efficacy, creativity

INTRODUCTION

The Ministry of Education has identified 11 major key shifts in the Malaysian Education Development Plan (2013-2025), which needs to be completed in order to transform our education system. Meanwhile, the fifth key shift drawn is to ensure high performance leadership placed in every school capable of improving their schools regardless of status quo of the school (MEB, 2013-2025). Consequently, the principal is required to practice transformational leadership to ensure that high character and compete globally of human capital is formed. Moreover, principals as school leaders must develop the ability of teachers through collective involvement in implementing the school improvement program (Roslee, 2011).

Transformational leadership has an enormous positive influence in improving the routine and attitudes of teachers (Abdul Ghani, 2005) and affect the followers' creativity (Shin & Zhou, 2003; Gumusluoglu & Ilsev, 2009). According to Jimenez (2016), creativity is a part of the revolution progression while innovation is the practice of applying inventive thoughts; one cannot be innovative if they do not have the ability to generate creative ideas. Creativity among teachers will appear in the presence of a high level of efficacy (Bandura, 1986). It is believed that principals' transformational leadership are able to develop their followers' efficacy (Bass, 1990) and consequently have a positive impact on their creativity.

Many researchers have found that creativity can be fostered through transformational leadership's practice (Shin & Zhou, 2003; Jaussi & Dionne, 2003). For example, Bass (1985) mentioned that transformational leadership has an in distinct visualisation for his group and also has the assistances to inspire workforces to think in different ways to develop inventive problem solving skills. It was clearly seen in which transformational leaders tend to encourage their followers to deliver results beyond optimizing the level of their expectations through creativity.

Various studies have been completed on the impact of transformational leadership on creativity in abroad, but few have been conducted among teachers in Malaysia. Therefore, the current study seeks to enhance our understanding by satisfying the gap in the literature in the field of educational management especially on organization in the school setting. Therefore, the focus of this study is to investigate the influence of principals' transformational leadership on teacher's creativity and collective efficacy as a mediator.

RELATED LITERATURE REVIEW AND HYPOTHESES

Transformational leadership

Transformational leadership has been extensively recognized for its ability to improve inspiration, motivation (Bass, 1985), polish their competence. According to Burns (1978), a leader who has been practicing transformational leadership traits also participate with others through a certain way so that leaders and followers together can increase motivation and enthusiasm to work at a higher level. Bass and Riggio, (2006), and Avolio and Bass (2004) stated that transformational leadership is a process to influence and is on composing awareness among subordinates about what is important, and moving them to know yourself, opportunities, and challenges in a new direction.

In the context of school, Leithwood, Jantzi and Fernandez (1993) found that there are seven dimensions of transformational leadership which focuses on schools consist of vision and mission of the school, intellectual stimulation, individual support, symbol of the practices and values of professional, involvement in decision-making, instructional support and monitoring the activities of the school. Menon (2013), Eyal and Roth (2011), Khasawneh et al. (2012), Thoonen, Slegers, Oort, Peetsma and Geijsel. (2011), and Zuriman (2013) also found that transformational leadership have a positive impact on attitudes, motivation, responsibility, innovation and commitment in teaching.

The Effects of Transformational Leadership on Creativity

Creativity refers to the ability to create new thinking and the decision to build to the problem (Amabile, 1988) and contribute to solving the problem (Unsworth, 2001). Bandura (1986) stated that the ability to produce creative results requires determination to meet the challenges of the organization and the environment. A large number of studies such as Mumford et al., (2002), Shin and Zhou (2003), Jaussi and Dionne (2003), Gumusluoglu and Ilsev, (2009) found that transformational leaders have a close relationship in helping to build a creative work, including having a clear vision, encouragement, autonomy and challenges and promote innovation and creativity among employees. Hence this study assumes that there is a connection between principals' transformational leadership and teacher's creativity. Therefore

we propose that, H₁: There is a relationship between transformational leadership of principals and teachers creativity.

The Effects of Transformational Leadership on Self-Efficacy

Collective efficacy refers to the belief shared by a group of organizations in incorporating the ability to design and implement the engagements necessary to produce an achievement (Bandura, 1997). Teacher collective efficacy also refers to the perception of the teachers at the school that the business faculty as a whole will have a positive effect on students (Goddard, Hoy & Hoy, 2000). In the school environment, collective efficacy refers to teachers' perception that the organization as a whole can perform the actions that have a positive impact on student achievement (Goddard et al., 2000).

When someone has a high self-efficacy, he sure could do with a broad creativity. This is proven by the studies of Bass and Avolio (1990), Boateng, (2014), Kurt, Duyar and Calik, (2011), Mulford and Silins (2005) that transformational leadership have an influence on creativity when the self-efficacy emerged as a mediator. Therefore we propose that H₂: There is a relationship between transformational leadership of principals and teacher's self-efficacy; and H₃: Self-efficacy mediates the relationship between transformational leadership principals and teachers creativity.

RESEARCH METHODOLOGY

Research Sample and Sampling

The study involved 349 teachers who were randomly selected from 72 secondary schools in Penang. Teachers who participated have working experience of at least 3 years in the school. Random sampling method was used in this study.

Research Instrument

The instrument consists of three parts. Part A measuring principals' transformational leadership containing 34 items from the questionnaire of Leithwood and Jantzi (1999). There are seven key dimensions of transformational leadership school consists of the vision and mission of the school (5 items), intellectual stimulation (5 items), individual support (4 items), the symbol of the practice and the professional (6 items), involvement in decision-making (4 items), instructional support (5 items) and monitor the activities of the school (5 items). Five points Likert scale was used to obtain the views of teachers about transformational leadership of principals where a scale of 1 - "Never" to scale 5 - "Always " is used in the questionnaire. Part B contains translated questionnaire of 14 items related to teachers' collective efficacy were built by Goddard et al. (2000). Five points Likert scale was used, from a scale of 1 (strongly disagree) to a scale of 5 (strongly agree) to obtain the views of teachers. Finally Part C contains 13 items related to the teacher creative behaviour. The questionnaire was translated from George and Zhou (2001). 5-point Likert scale was used, from a scale of 1 (strongly disagree) to a scale of 5 (strongly agree).

Research Findings

Descriptive Findings

Table 1 shows the mean, standard deviation, and inter-correlations between the variables of the study. Thus, this study showed that the dimension of principals’ transformational leadership, teachers’ self-efficacy and creativity are the variables that have positive relationship with each other with the $.24 \leq r \leq .80$.

Table 1 Mean, standard deviation and inter-correlation

	Mean	SD	1	2	3	4	5	6	7	8	9
1 The vision and mission of the school	3.88	.32	-								
2 Intellectual stimulation	3.74	.89	.24	-							
3 Individual support	3.61	.61	.34	.37	-						
4 The symbols of practice and professional values	3.51	.40	.36	.31	.35	-					
5 The involvement in decision making	3.45	.90	.38	.31	.37	.45	-				
6 Instructional support	3.34	.85	.47	.38	.34	.39	.30	-			
7 Monitoring school activities	3.32	.94	.33	.46	.34	.45	.39	.35	-		
8 Self-efficacy	3.23	.83	.40	.40	.56	.58	.69	.77	.72	-	
9 Creativity	3.24	.78	.80	.54	.32	.64	.63	.40	.40	.56	-

*** All the r values are significant at $p < .01$

Hypothesis Testing

For testing the hypotheses, a hierarchical regression analysis was conducted by putting the study variables in different steps. Table 2 shows the results of the hierarchal regression analysis performed to test H₁-H₃. H₁ proposed that transformational leadership is related to employee’s creativity. As shown in Model 3, principals’ transformational leadership (intellect stimulation, $\beta = .35, p < .01$ and involvement in decision making, $\beta = .31, p < .01$) is positively associated with teacher’s creativity (Model 2), supporting H₁. Further, H₂ stated that principal’s transformational leadership is associated with teacher’s self-efficacy. As shown in Model 1, principal’s transformational leadership (vision and mission, $\beta = .27, p < .01$; intellectual stimulation, $\beta = .28, p < .01$; individual support, $\beta = .27, p < .01$ and involvement in decision making, $\beta = .45, p < .01$) is related with teacher’s self-efficacy, thus supporting H₂.

Table 2 Result of hierarchical regression analysis

Transformational leadership	Self-Efficacy		Creativity	
	Model 1	Model 2	Model 3	Model 4
The vision and mission of the school	.27**		-.06	-.01
Intellectual stimulation	.28**		.35**	.13
Individual support	.27**		-.21	-.06
The symbols of practice and professional values	.15		.16	.07
The involvement in decision making	.45**		.31**	.18*
Instructional support	-.06		-.11	-.09
Monitoring school activities	.16		-.10	-.08
Mediator				
Self-Efficacy		.32**		.24**
R ² value	.14	.10	.16	.19
Adjusted R ² value	.12	.10	.14	.18
F value	5.62**	27.42**	6.53**	19.41**

* $p < .05$, ** $p < .001$.

H₃ was tested by following Baron and Kenny's (1986) method of mediation analysis that is frequently used in behavioural research. As presented in Table 2, principal's transformational leadership (intellectual stimulation and involvement in decision making dimensions) showed a significant positive association with teacher's creativity (Model 3). Thus, Baron and Kenny's Condition 1 was supported. The results of Model 2 and Model 3 provide support for Condition 2 since principal's transformational leadership (vision and mission, intellectual stimulation, individual support, and involvement in decision making dimensions) related with teacher's creativity showed a significant positive relationships and teacher's self-efficacy is related to the creativity ($\beta = .32; p < .01$) which supported Condition 3. When self-efficacy is entered into the relationship between principals' transformational leadership and teacher's creativity as shown in Model 4, the beta value for intellect stimulation was decreased and not significant which indicate self-efficacy merged as full mediator, while the beta value for involvement in decision making dimension was decreased but is significant whereby self-efficacy merged as partial mediator. Thus, H₃ was partially supported.

Discussion, Implication and Conclusion

Results of the study are in line with the previous research findings in which transformational leaders influence the situation of creative work, encourage innovation and creativity among employees (Cheung & Wong, 2011; Mittal & Dhar, 2015; Jyoti & Dev, 2015; Shin & Zhou, 2003; Jaussi & Dionne, 2003, Gumusluoglu & Ilsev, 2009). While the findings of this study show transformational leadership in schools affects positively and significantly to the efficacy of teachers and support studies of Leithwood and Mascall (2008), Bass and Avolio (1990), Boateng, (2014), Kurt Turker et al. (2011). Furthermore, this study also shows that the efficacy of teachers has an influence on the teachers' creative behaviour and in line with the findings of Amabile, Conti, Coon, Lazenby, and Herron (1996) and Milliken and Martins (1996).

The findings indicate that collective efficacy of teacher acts as a full mediator towards the relationship between transformational leadership of principals and creative behaviour of teachers. Results of this study is consistent with studies of Walumbwa, Wang, Lawler and Shi (2004), Ross and Gray (2006), Mulford and Silins (2005) in which the efficacy of teachers increased, if the principal uses intellectual stimulation and involves teachers in decision-making. In turn, this will provide an opportunity for teachers to improve their creative behaviour.

Organizations today especially educational organizations, should generate creativity among teachers through positive competitiveness continuously. It will widen challenge to any leaders. Hence, it is important for school leaders to have a deeper understanding of the relationship that exists between leadership style and creativity. Accordingly, the practice of transformational leadership is the best way for a school leader to develop creative skills among teachers and to develop effective teaching and learning. In addition, the principal must also improve the motivation of teachers as self-efficacy of teachers to enhance creative behaviour among teachers.

In summary it can be concluded that the findings of this study revealed that principal's transformational leadership is important to develop the creativity of teachers as transformational leaders are able to build confidence in the ability to perform certain tasks.

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