Impact of Transformational Leadership on Professional Learning Community: Mediating Role of Emotional Intelligence

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ABSTRACT--- The Professional Learning Community (PLC) that was introduced by the Teacher Education Division or known as Bahagian Pendidikan Guru (BPG) serve the purpose to realize KPM's aspiration which is to deliver quality teachers in terms of teaching and learning. Consequently, the principal, who functions as a driving force in the school, must employ an energetic leadership style to accomplish this goal. Hence, the objective of this research is to recognize the relationship of principal's transformational leadership practice to the practice of the professional learning community of teachers in high performance school or known as Sekolah Berprestasi Tinggi (SBT). Another aim is to identify the role of the principal's emotional intelligence as a mediator in the relationship. Three hundred sixty-four teachers were selected as samples from 34 secondary schools in the SBT category in Malaysia. The survey method was conducted utilizing the questionnaire instrument. Data were analyzed applying Partial Least Squares-Structural Equation Modeling (PLS-SEM) version 3.0 software. The findings show that there is a relationship between leader's transformational leadership and the teacher's professional learning community. Besides, the study unveiled that emotional intelligence works as mediating role in the relationship.

Keywords--- Transformational Leadership, Professional Learning Community (PLC), Emotional Intelligence, High School (SBT).

I. INTRODUCTION

Transformational leadership is a very relevant style of leadership practiced in education organizations today as it is more likely to motivate its followers through intellectual stimulation and influence its followers to achieve the vision and mission of the organization. These aspects of transformational leaders are regarded as exciting and motivating for teachers as it is an indispensable emotional portion in the relationship between leaders and teachers (Yahya & Yaakob, 2011). Previous study has revealed that this transformational leadership tendency is admissible in the education field. Other than to enhance the potential of teachers (Asiah, 2012), it is to encourage teachers to feel extremely driven to execute transformation in professional learning community practise in schools (Nor Azlin et al. 2019) and thus enhance their professionalism and school excellence (Bass, 2006; Mohd Zabedi, 2014 & Siti Nadya & Mohd Izham, 2017). On the other hand, the teachers recognise transformational leadership as to improve the learning orientation (Bass & Riggio (2006) and to carry a positive impact on the learning organisation (Hoy & Miskel, 2013).

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The professional learning community is part of the learning organisation performed in schools to advance teacher quality and student excellence. The Continuing Development Plan (2013) introduced this professional learning community to intensify teacher excellence. The PLC is a collaborative practice between administrators, teachers and school staff (Mohd Faiz et al., 2016) with the objectives to explore, discuss shared learning to improve teachers' quality of teaching and learning (Zuraidah, 2012). The implementation of PLC was successfully executed with the support of leaders who are committed to initiate changes and to improving school excellence. Leaders who embrace productive leadership methods from transformational factors can be the catalyst for teacher's professional learning practice.

Leader emotional intelligence is a leader's ability to identify self and others' emotions, control others' emotions, motivate and manage relationships with others (Goleman, 2001). These emotional management skills are fundamental to be learned by a leader in educational organisations, to facilitate them in their management, such as decision making, to deal with the public and thus improve organisational success. High emotional intelligence can assist leaders to create a positive and comfortable organisational atmosphere that provides organisational effectiveness. Next, it allows efficient communication, promotes innovation and forms a positive competitive culture to accomplish the goals, visions and mission of the organisation (Yahya et al., 2016).

II. THEORETICAL FRAMEWORK

The principal theories employed in this study are i) Transformational Leadership Theory (Bass & Riggio, 2006), iii) Emotional Intelligence Theory (Goleman, 2001) and Learning Organization Theory (Senge, 1990). Additionally, the model employed is the Professional Learning Community Model (Hord, 1997). Figure 1 presents the theoretical framework for this study. The conceptual framework diagram of this research presents the complete elements in all three constructs. Transformational leadership (TL) contexts hold four elements: i) idealized influence; ii) inspirational motivation: iii) intellectual stimulation and iv) individual consideration. The formation of a professional learning community (PLC) consists of five elements: i) shared and supportive leadership; ii) shared values, goals, missions and visions; iii) collective learning and application; iv) shared personal practice and v) supportive conditions. Emotional intelligence (IE) establishment comprises of four elements: i) self-awareness, ii) self-management; iii) social awareness and iv) relationship management.

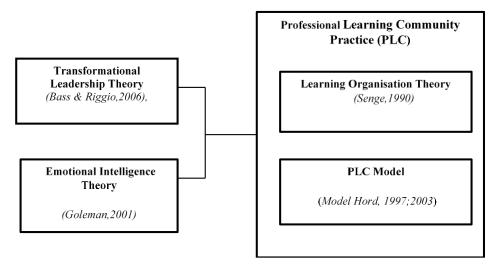


Figure 1: Theoretical Framewor

Sources: A combination of Transformational Leadership theories (Bass & Riggio, 2006), Emotional Intelligence theory (Goleman, 2001) and Professional Learning Community Models (Hord, 1997; 2003; Senge, 1990; KPM 2011).

Figure 2 is the model for this research. Transformational leadership is an independent variable, while the professional learning community is a dependent variable. Emotional intelligence serves as a mediator or mediator of the relationship between transformational leadership and the professional learning community.

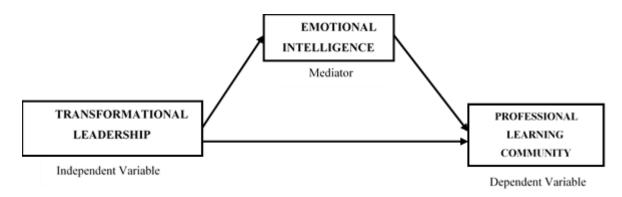


Figure 2: Model Study

III. PURPOSES OF STUDY

- To define the level of principal's transformational leadership practices through dimensions of idealized influence, inspirational motivation, intellectual stimulation and individual consideration in high performance school.
- 2. To identify the relationship between principal's transformational leadership and teacher professional learning communities' practices in high performance school.
- 3. Identify the effects of emotional intelligence as a mediator of the relationship between transformational leadership and teacher's professional learning communities' practice in SBT.

IV. HYPOTHESIS STUDY

Ho1: There is no significant relationship between the principal's transformational leadership and the teacher's professional learning community practice in SBT.

Ho2: There is no significant relationship between the principal's emotional intelligence and the practice of the professional learning community of teachers in SBT.

Ho3: There is no significant effect of emotional intelligence as a mediator of the relationship between the principal's transformational leadership to the teacher's PLC in SBT.

V. METHODOLOGY

Group random sampling was used because data collection includes the entire Malaysia. Samples were divided into five zones, specifically the central zone, south zone, east zone, north zone and Sabah / Sarawak zone. The number of samples by zone is as in Table 1.

Table 1: Distribution of samples by zone

Zones	Samples
Central	62
North	116
East	92
South	123
Sabah/Sarawak	35
Total	428

The sum of the items included in the questionnaire was 26 items. There are three parts to the questionnaire instrument. Part A is about demographics, Part B is about transformational leadership, Part C is about the professional learning community and Part D is about emotional intelligence.

VI. RESULTS AND DISCUSSION

This study includes descriptive and inference analysis. Descriptive analysis was conducted to recognise the level of transformational leadership application by utilising SPSS version 25 software. Besides, the inference analysis was administered to address the relationship between transformational leadership to the professional learning community and to identify the effect of principal's emotional intelligence as a mediator on transformational leadership relationships with the learning community professional. This inference analysis was performed employing Partial Least Squares-Structural Equation Modeling (PLS-SEM) version 3.0 software.

1) Descriptive Analysis

The transformational leadership level of the principal through the dimensions of idealized influence, inspirational motivation, intellectual stimulation and individual consideration in high performance school.

Table 2: Mean values, standard deviation and score interpretation for transformational leadership principal.

Variable	Mean	Standard Deviation	Score Interpretation
Idealized influence	4.33	0.468	Very High
Inspirational motivation	4.35	0.483	Very High
Intellectual stimulation	4.15	0.496	High
Individual consideration	4.23	0.532	Very High
Total	4.27	0.439	Very High

Table 2 shows the results of the descriptive analysis based on the respondents' information involving mean values, standard deviations. This finding will answer the first research question of identifying transformational leadership practices from the elements of idealized influence, inspirational motivation, intellectual stimulation and individual consideration. Overall transformational leadership practice was at a very high level (mean = 4.2723, SP = 0.439). The inspirational motivation element shows the highest reading mean score (mean = 4.35, SP = 0.483). Followed by the idealized influence (mean = 4.33, SP = 0.483) and individual consideration (mean

= 4.23, SP = 0.532). The mean score intellectual stimulation (mean = 4.15, SP = 0.496) also shows the lowest mean score reading compared to the other elements.

2) Inference Analysis

Before analysing the data, specific criteria must be met. The criteria are internal composite reliability, convergent validity and discriminant validity. Internal composite reliability tests the extent to which the indicators developed can measure each construct. It can be determined with Cronbach's alpha values and composite reliability (CR:> 0.7). Convergent validity ensures that there is no overlap in meaning between the indicators. It can be determined by the average value of the extracted variance (AVE:> 0.5) (Bryne, 2016). In the event of a lower specified value, the indicator will be discarded.

Discriminant validity refers to the degree of incompatibility between the constructs that the indicator should not measure. It is measured by utilising Fornell-Larker, Cross loading and Heterotrait-Monotrait (HTMT) values. Nevertheless, according to Henseler et al. (2015), the values of Cross Loading and HTMT are adequate to measure discriminant validity. The HTMT value that exceeds the value set by Kline (2011) is 0.85 or Gold et al. (2001), which is 0.90 is considered to have discriminant validity problems.

i) Internal composite reliability

Table 3: Composite Reliability and Croncbach's Alpha values for each construct

Matric	Composite Reliability	Croncbach's Alpha
TL	.969	.966
PLC	.966	.964
EI	.975	.973

According to the Table 3, all composite reliability and Cronbach alpha value is greater than 0.7, Cronbach alpha value for transformational leadership is .966, professional learning community is .964 and emotional intelligence is .974. While the CR value of transformational leadership is .969 and the professional learning community is .966. Hair et al. (2017) have determined that the composite reliability and Cronbach alpha values should be equal to or greater than 0.7.

ii) Convergent validity

Table 4: AVE values of each construct

Matric	Average Variance Extracted
TL	.544
PLC	.519
EI	.582

Table 4 shows the AVE values for transformational leadership (.544) and the professional learning community (.519) and emotional intelligence is .582 which exceeds .5. This has met the requirements set by Bryne (2016), this indicates that this item has already suitable for use as it can measure both construct.

iii) Heterotrait-Monotrait (HTMT)

Table 5: HTMT values for each construct

	TL	PLC
TL		
PLC	.820	
EI	.880	.819

Based on the HTMT values in Table 5, the items have met the indicate discriminant validity. Whereas the Heterotrait-Monotrait (HTMT) value for transformational leadership in professional learning communities is .820, transformational-emotional leadership is .880 and professional learning community-emotional intelligence is .819. In accordance with the criteria set by Gold et al. (2001), the value of HTMT must be at least .90.

The results of internal composite reliability (CR), convergent validity (CV) and discriminant validity revealed that the items met all three criteria. Hence, the hypothesis analysis can be done through the bootstrapping procedure to answer the research hypothesis. To assess the effects of emotional intelligence as a mediator of the relationship between the principal's transformational leadership to the professional learning community (PLC) practices in SBT, bootstrapping procedures were performed to identify the indirect influence of each construct. To identify the mediator effect using PLS-Sem, bootstrapping procedure is an appropriate procedure (Hayes, 2009) by looking at the indirect effect between variables.

Ho1: There was no significant relationship between transformational leadership of principals and the teacher's professional learning community in SBT.

Table 6: Hypothesis testing results based on empirical value t

Construct	Standardized	Standard	Standard t Value p		Result
Relationship	Beta (β)	Deviation			
TL→EI	0.855	0.019	44.786	0.000	Significant (Accepted)
TL→PLC	0.419	0.074	5.635	0.000	Significant (Accepted)
EI →PLC	0.437	0.075	5.802	0.000	Significant (Accepted)

TL = Transformational Leadership, EI = Emotional Intelligence, PLC = Professional Learning Community

The findings in Table 6 above show that there is a significant relationship between the transformational leadership practices of principals and the teacher's professional learning community ($\beta = 0.419$, t = 5.635, p = 0.000). Thus, the Ho1 hypothesis is rejected. The value of β is positive. This shows that as principals' practice transformational leadership, the practice of teacher professional learning communities will also increase. Similarly, there was a significant relationship between the principal's emotional intelligence and the teacher's professional learning community ($\beta = 0.437$, t = 5.802, p = 0.000). Thus, the Ho2 hypothesis is rejected. The value of β is positive. This indicates that the higher the emotional intelligence of the principal, the practice of teacher professional learning community is also increasing.

Ho3: There was no significant effect of emotional intelligence as a mediator of the relationship between the transformational leadership of principals to the practice of the teacher's PLC in SBT.

Table 7: Beta and t-values for Each Construct Relationship
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Relationship	Standard Beta	Standard Error	t-Value	Confidence Interval (BC)		Decision
				LL	UL	
TL > IE	0.855	0.019	44.78**	0.817	0.887	Supported
IE > PLC	0.437	0.075	5.802**	0.287	0.591	Supported
TL > PLC	0.419	0.074	5.635**	0.272	0.564	Supported

Table 7 shows bootstrapping analysis to test the effects of emotional intelligence as a mediator on transformational leadership relationships and professional learning communities. The results show three indirect effects, TL> EI (β = 0.855, t = 44.786), EI> PLC (β = 0.437, t = 5.802) and TL> PLC (β = 0.419, t = 5.635) where t1.96 is significant. The indirect effects 95% Boot CI Bias Corrected: [LL = 0.817, UL=0.887], [LL=0.287, UL=0.591] and [LL=0.272, UL=0.564], do not straddle a 0 in between (Preacher, 2004 and Hayes, 2008). Thus, there is a link between transformational leadership and the professional learning community mediated by emotional intelligence.

The findings of the study have shown that the principal's emotional intelligence is one of the mediators of the relationship between the principal's transformational leadership and the professional learning community of teachers. These results indicate that principals with high emotional intelligence can increase the level of principals' transformational leadership practices and thus enhance the practice of the professional learning community of teachers in SBT. Elements of emotional intelligence, such as self-awareness, self-management, social awareness and relationship management, can enhance the effectiveness of a principal's leadership. Figure 3 shows the structural model for this study.

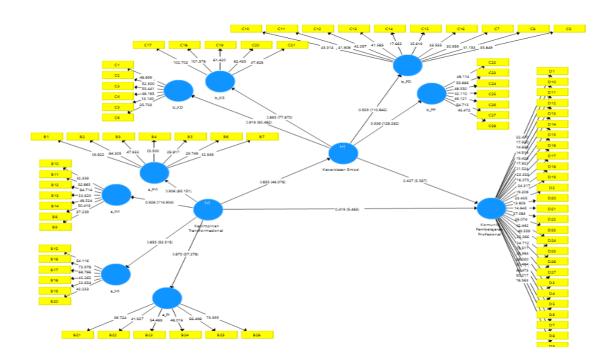


Figure 3: Structural Model

VII. CONCLUSION

This research adds to leadership science, particularly in the context of transformational leadership. This investigation demonstrates that emotional intelligence is practical as a mediator of transformational leadership relationships and professional learning communities. It carries implications for education, thus emphasizes the importance of the emotional intelligence of principals in leading organizations. Principals with high emotional intelligence can drive the organization more efficiently and boldly influence the practice of the professional learning community of teachers. Ergo, it grows the quality of teachers and intensifies student excellence. In an attempt to get a diverse and inclusive outlook, it is recommended to attend studies at full boarding schools, known as Sekolah Berasrama Penuh (SBP) and the MARA College of Science (MRSM) to look at the level of practice of the leader, the emotional intelligence of the principal and the impression on the PLC practice at the school.

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