Abstract
This study examined the structural relationship between principal leadership styles and teachers’ organizational commitments using Structural Equation Modeling technique (SmartPLS). The researchers used G-power program to calculate and reaffirm the study sample size (n) adequacy. Using mailed questionnaires, 255 lower secondary teachers from 29 bottom-ranking secondary schools in the state of Perak based on 3 consecutive years (2009, 2010, and 2011) of PMR examination results had voluntarily participated in this study. The study concluded that transformational leadership significantly predicted on continuance commitment (p<0.001) and normative commitment (p<0.01) but not on affective commitment. Transactional leadership was significantly related to affective commitment (p<0.05). The nurturant leadership had a positive significant relationship on affective commitment (p<0.001) and normative commitment (p<0.01). The variance explained by the three principal leadership styles on affective commitment was 42.3% and normative commitment was 12.9% respectively. Nurturant leadership was the most perceived and influential leadership style among teaching profession while the most perceived commitment was normative commitment in these schools.

Key Words: Transformational (TF), Transactional (TS), Nurturant (NT), Affective (AC), Continuance (CC) and Normative (NC).

Introduction
Studying the leadership traits of school principals would allow today’s school management to examine and apply successful leadership styles in their respective institutions. An effective principal can exercise indirect but powerful influence on teacher’s commitments and subsequently enhance school efficiency and
achievement of the pupils (Harris, et al. 2003). Committed teachers are more motivated to achieve school vision. Less committed teachers can bring numerous undesirable adverse effects on school effectiveness that could be extensively and financially costly. The number of non-performing schools in the state of Perak is substantial enough to question the level of teachers’ commitment. Theoretically, principal leadership styles may influence the level of teachers’ commitment. Malaysian principals who are socially and culturally expected to be humble, modest, and dignified may be effectively enhancing teachers’ commitment formerly could be no longer bear its significance in the current environment (Dorfman, 2004). The study will provide the answer for this problem statement.

Literature Review

There are not many researchers in Malaysia studying different types of school leadership and its effects on different types of teachers’ commitment on a mass scale except Sabariah (2008), Cheah (2008) and Abdul (2005). Most researches mainly focus on general perception of teachers’ commitment influenced by principal transformational leadership styles in teaching profession. No specific research has focuses on the non-performing schools in the state of Perak, Malaysia. Leadership styles like instructional, transformation (TF), and laissez-faire were the most common leadership types under study, while teachers’ commitment was focus mainly only on general terms. Sabariah (2008) and Cheah (2008) in their studies concluded that TF indeed had the predicting power on teacher’s commitment to certain extent. Principals with too rigid and autocratic style will eliminate consensus and collective decision that ultimately buried teachers’ creativity and commitment (Azlin, 2006).

Abdul Syukor (2004), Abdul Rafie (2002), and Dunford et al. (2000) stated that an effective and excellent leader should possess the abilities to interchange his or her leadership style at different phenomenon. Previous studies done by Avolio (1999) and Bass (1998) also concluded that TF leadership found to generate higher subordinates’ commitment in numerous studies as compared to transactional leadership (TS). This further supported by Jones (2007), Geijsel, et al. (2003), Blase & Blase (2003), Jung & Sosik (2002) and Foels, et al. (2000), where TF leadership is the prototype of leadership that subordinates have in mind when they describe their ideal leader. Meanwhile nurturant leadership (NT) which originated from the Indian Continent refined that leader has the responsibilities to instill positive work values beside his affection, personal care, and warmth for the subordinates. This caring attitude in return brings in the subordinates a sense of competence and self-sufficiency that eventually reduces the salience of dependency, personalized relationship, and status differentials among the leader-follower relationship. The leader will eventually let his subordinates look for more freedom, autonomy, and recognition of his potential that contribute to the tasks (Sinha, 1980).

Behaviors of school leaders have a greater influence on pupil performance than school structures or models. The strongest themes emerge from existing literature on effective school leadership is related to the importance of developing staff and nurturing talents as well as related to empowerment throughout the organization. Many teachers feel that their commitment toward their jobs is linked to their principal who is able to create work communities that are supportive, stimulating, student-oriented, facilitate feelings of community, and foster their feelings of efficacy (Joffres, 1998). Those teachers leave school and teaching profession because of factors remote from the school administrators’ control, there are still many who cite poor, inefficient leadership and the absence of administrative support as reasons for leaving (Fiore, 2004).

Yu, et al. (2002) has indicated that there is a weak but significant effect of TF leadership on teachers’ commitment to change and reform. Their works were reinforce by Geijsel, et al. (2003) who demonstrated TF leadership had indeed influenced on teachers’ commitment to school reform. School TF leadership is considers highly significant in influencing teachers’ levels of commitment to and engagement with new initiatives and reforms (Mohamad, 2008; Fullan, 2002; Day, 2000; Louis, 1998). Technically, everything school principals do could be regarded in one way or another as bringing support for teaching and learning (Prestine & Nelson, 2005).
According to Chance & Chance (2002), understanding the interaction between principal as a leader and teacher as subordinates will help to: i) assess personal strengths and weaknesses related to skills necessary for effective leadership; ii) realize the importance of moral purpose and ethical values for leadership and, iii) use power appropriately in order to positively influence and gain commitment from others. Studies by Geijssel, et al. (2003), Fullan (2002), Yu, et al. (2002), Day (2000) and Louis (1998) demonstrated that TF leadership had indeed influence on teachers’ commitment to school reform as compared to other types of leadership styles. In educational institutions, the central and most effective factor required to enhance teachers’ commitment is leadership (Bennis & Nanus, 2003 and Lambert, 2002). Lokman (2008) who used Bolman and Deal Four Leadership Model in his recent finding supported Ross (2006) finding that there is no fixed model of leadership styles in all situations. Both findings articulate that all types of leaderships have its own advantages and disadvantages. These findings were congruence with studies done by Abdul Syukor (2004), Abdul Rafie (2002), and Dunford et al. (2000). This dynamic world had stipulated the continuing researching on behaviors and practices of school principals are significantly important in the light of the changing role of the principal.

Significance of Study

Present and future academic administrators are able to utilize the results of this study to deliver powerful leadership influences among their school community. It serve as evidence and empirical framework for Ministry of Education (MOE) and Amiruddin Baki Institute (IAB) to plan, reorganize and provide leadership training program for school leaders and prospective leaders. School principals should take heed of their leadership behavior and more sensitive to human interaction especially in Malaysian educational institutions.

Structural Research Framework and Hypotheses

Principal’s leadership styles are considering the agent of change, influencing directly through their behavior on teachers and the attainment of commitment as the outcomes. Figure 1 below shows this research structural framework and nine suggested hypothesis.

Methodology

Principal’s leadership styles are measured using MLQ-5X leadership questionnaires developed by Avolio and Bass (1996) and NT leadership is acquired using Sinha (1980) questionnaires, while Organizational Commitment Questionnaires (OCQ) developed by Allen and Meyer (1996) determines the teachers’ organizational commitment. Using quantitative research and deductive approach, respondent’s schools are selected based on three consecutive years (2008, 2009 and 2010) in PMR achievement. The non-
performing schools are characterized as less than 50% passes in PMR examination. The good reasons behind choosing the PMR Public examination as the basic for segregation are: a) in PMR examination, candidate is required to pass all the assigned subjects in order to consider a pass in PMR. b) For the present SPM examination requirements, a pass in SPM means candidate only needs to pass Malay Language and from 2013 onwards, History is inclusive.

The last bottom 29 schools with less than 50% passing rate (Average School Grade Index (ASGI between 2.99 to 3.91 point- Grade A: 1, Grade B: 1.01-1.99, Grade C: 2-2.99, Grade D: 3-3.99 and Grade E or fail: 4) in PMR were chosen for this study. 435 questionnaires were distributed to all 29 schools. 15 teachers teaching in the lower secondary form from each stratified schools have equal chances to be selected as respondent since they were directly involved in the process and have the first hand knowledge of their own organizational commitment influenced by their present principal leadership styles. The participants ranged in age from 24 to 57 years old. Two hundred and fifty five teachers had voluntary participated in this study yielding a response rate of 58.62% (255/435) which was higher than suggested by Dilman (2000) and Johnson & Owens (2000) that at least a minimum of 50% of return rate are needed by a survey research using mailed method. However, 7 respondents were discarded as an outliers. Respondents cover a range from normal teachers to senior assistance except the principal. To reconfirm the samples adequacy, the number of samples is re-calculated using the G-power proposed by Faul and Erdfelder (2009, 2007). For ANOVA f-test with fixed effects, omnibus and one-way, the required sample size is 210 after specifying the effect size, \( f = 0.25 \) (medium), \( \alpha = 0.05 \), power = 0.95 and Groups = 2 (If the power is to fix at 0.80 suggested by Cohen (1992) while the effect size, \( \alpha \) and groups remained unchanged then the required sample size is only 128). Finally for the F-test in multiple Regression (fixed model, \( R^2 \) deviation from zero), by specifying the value of effect size, \( p = 0.15 \) (medium), \( \alpha = 0.05 \), power = 0.95 and the number of predictors = 3, the total sample size required is 119 (If the power is to fix at 0.80 suggested by Cohen (1992) while the effect size, \( \alpha \) and groups remained unchanged then the required sample size is only 77).

As a rule of thumb, any number above 200 is sufficient to provide statistical power for data analysis as supported by Hox & Bechger (2001) and Ding, et al (1995). Since this study gathers 255 samples, which is more than suggested by Hox & Bechger (2001) but less than suggested by Marsh, et al. (1988) and Tanaka (1987), this sample size is sufficiently large enough to test the theoretical model using SEM in this study. The statistical level of significance for most educational studies is often fixed at alpha = .05. Any less stringent alpha would increase the risk of false rejection (Eagle, 1999), which casting doubts on the validity of the results (Ary, et al., 1996).

All the four instruments used are reliable since they are adapted from previous research studies. Since the factor loading of all items extracted from the questionnaires assigned in this study are more than 0.7 (Table 1) as suggested by Hair et al (2010), the construct validity is not an issue (Sekaran & Bougie, 2010).

<table>
<thead>
<tr>
<th>Variable/items</th>
<th>Regression Weight</th>
<th>T–test significant at 0.05. Value should be ≥1.967</th>
<th>Items Loading should be ≥ 0.7</th>
<th>T–test significant at 0.05. Value should be ≥1.967</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Construct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>0.354</td>
<td>14.658</td>
<td>0.756</td>
<td>30.566</td>
</tr>
<tr>
<td>A3</td>
<td>0.338</td>
<td>14.605</td>
<td>0.743</td>
<td>26.892</td>
</tr>
<tr>
<td>A7</td>
<td>0.335</td>
<td>14.858</td>
<td>0.761</td>
<td>32.190</td>
</tr>
<tr>
<td>A8</td>
<td>0.334</td>
<td>11.984</td>
<td>0.678</td>
<td>15.981</td>
</tr>
<tr>
<td>Continuance Construct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3</td>
<td>0.306</td>
<td>4.176</td>
<td>0.739</td>
<td>13.537</td>
</tr>
<tr>
<td>C6</td>
<td>0.259</td>
<td>2.992</td>
<td>0.711</td>
<td>10.067</td>
</tr>
<tr>
<td>C7</td>
<td>0.288</td>
<td>3.591</td>
<td>0.799</td>
<td>16.386</td>
</tr>
<tr>
<td>C8</td>
<td>0.435</td>
<td>4.834</td>
<td>0.826</td>
<td>19.917</td>
</tr>
</tbody>
</table>

Table 1: shown the extracted items for each construct after CFA with their loadings.
The composite reliability, convergent, discriminant validity and average variance extracted were well above the required value (Table 2).

Table 2 Composite Reliability, Convergent and Discriminant Validity for Leadership Styles and Organizational Commitment Component

<table>
<thead>
<tr>
<th>Leadership Construct</th>
<th>Composite Reliability ≥ 0.7</th>
<th>AVE should be ≥ than 0.5</th>
<th>NT</th>
<th>TF</th>
<th>TS</th>
<th>Cronbach’s α should be ≥ 0.7</th>
<th>Communality should be ≥ 0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NT</td>
<td>0.922</td>
<td>0.627</td>
<td>0.792</td>
<td>0.792</td>
<td>0.900</td>
<td>0.627</td>
<td></td>
</tr>
<tr>
<td>TF</td>
<td>0.916</td>
<td>0.550</td>
<td>0.717</td>
<td>0.717</td>
<td>0.741</td>
<td>0.550</td>
<td></td>
</tr>
<tr>
<td>TS</td>
<td>0.843</td>
<td>0.642</td>
<td>0.440</td>
<td>0.440</td>
<td>0.458</td>
<td>0.725</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commitment Construct</th>
<th>NT</th>
<th>TF</th>
<th>TS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>0.824</td>
<td>0.540</td>
<td>0.735</td>
</tr>
<tr>
<td>CC</td>
<td>0.846</td>
<td>0.581</td>
<td>0.149</td>
</tr>
<tr>
<td>NC</td>
<td>0.836</td>
<td>0.633</td>
<td>0.477</td>
</tr>
</tbody>
</table>

Note: a Composite Reliability (CR) = (square of the summation of the factor loadings)/(square of the summation of the factor loadings) + (square of the summation of the error variances)
b Average Variance Extracted (AVE) = (summation of the square of the factor loadings)/(summation of the square of the factor loadings)+ (summation of the error variances)
Findings

From Table 3, the highest commitment means score for non-performing schools is NC (2.19). The highest means score for leadership styles is NT (3.42).

Table 3 Means Score and Standard Deviations for Non-Performing schools (n=248)

<table>
<thead>
<tr>
<th>Type of school</th>
<th>AC</th>
<th>CC</th>
<th>NC</th>
<th>Commitment</th>
<th>TS</th>
<th>TF</th>
<th>NT</th>
<th>Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Scores</td>
<td>2.12</td>
<td>2.07</td>
<td>2.19</td>
<td>3.08</td>
<td>3.07</td>
<td>3.31</td>
<td>3.42</td>
<td>3.28</td>
</tr>
<tr>
<td>N</td>
<td>248</td>
<td>248</td>
<td>248</td>
<td>248</td>
<td>248</td>
<td>248</td>
<td>248</td>
<td>248</td>
</tr>
</tbody>
</table>

Table 4 Structural Model on Principal Leadership Styles Influencing Teachers’ Commitment

<table>
<thead>
<tr>
<th>Leadership styles</th>
<th>Teachers; Commitment Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF NP</td>
<td>AC hypothesis</td>
</tr>
<tr>
<td></td>
<td>H1 rejected (t=1.235)</td>
</tr>
<tr>
<td></td>
<td>0.075</td>
</tr>
<tr>
<td>TS NP</td>
<td>H4 accepted (t=2.523)</td>
</tr>
<tr>
<td></td>
<td>0.089*</td>
</tr>
<tr>
<td>NT NP</td>
<td>H7 accepted (t=8.809)</td>
</tr>
<tr>
<td></td>
<td>0.539***</td>
</tr>
<tr>
<td></td>
<td>0.423</td>
</tr>
</tbody>
</table>

R² NP by TS, TF & NT

* significant at p<0.05
** significant at p<0.01
*** significant at p<0.001

Figure 2: Path Analysis between principal leadership styles and teachers’ organizational commitment in non-performing schools.
Discussion

TF had the strongest regression weight on CC which accounted for 0.389 (p<0.001, t=6.366, H2 accepted,) followed by NC at 0.200 (p<0.01, t=3.184, H3 accepted,) but not for AC (H1 rejected) in this non-performing schools. The study concluded that TF leadership still has great impact on teachers’ organizational commitment. The predicting power of TF towards CC has the highest coefficient in this study. Principals who practice TF leadership may be able to convince teachers to spend more of their resources in the present school. This type of commitment is relates to profiting from participation and a cost to leaving. Increased effort and energy by teachers will increase their continuance commitment, because leaving the organization will result in the loss of the valuable resources spent for the organization or investment that is “nontransferable” investments. With a shared vision, good communication skills, highly visible and personalized consideration among subordinates, these principals will be able to inspire their motivation and idealized their influence. These create a sense of obligation among teachers in the present schools.

Principal TS leadership had an impact only on AC in these non-performing schools. Refering to Table 4, 1 unit rises in transactional (TS) will drive up 0.089 unit (p<0.05, t= 2.523, H4 accepted) in AC. While the relationship between TS with CC and NC were not significant (H5 and H6 were rejected). This result implies that TS was only able to perdict AC in this study. With TS leadership engages in clarify expectations, exchange promises and resources, arrange mutually satisfactory agreements, negotiate for resources, exchange assistance for effort, and provide commendations for successful follower performance may cause teachers that work under such circumstances to be more psychologically attaching to their job specification.

The path coefficient (β) between NT and AC is statistically significant (p<0.001, t=8.809, H7 accepted) followed by NT with NC (p<0.01, t=3.091, H9 accepted). NT with CC is not significant (H8 rejected). The study concluded that NT principal leadership had the most influence on teachers’ AC. With every 1 unit increases in NT there is a 0.538 unit increases in AC. NT leading means the leader is required to be task oriented and at the same time cares for his or her subordinates, shows affection, takes personal interest in their well being and above all, is committed to their growth. This affectionate style of leadership may generate the growth of psychological attachment towards the present school. The uniqueness of the Nurturant model is once the teachers reach a reasonable level of maturity, they pressure on the leader to shift to the participative and consultative style.
The R² value for AC in this study is 0.423. It means the study is predicting a mere 42.3% of variance in AC due to the predictive variables of TS, TF and NT model, while CC is the least accounted explanatory power of the estimated model. The variances accounted for NC is only 12.9% for these non-performing schools. According to Falk and Miller (1992), R² must be at least 0.10 or 10% in order for the latent construct to be deemed adequate. The analysis revealed that both variances in AC and NC but not CC (7.5%) could be explained by the leadership model satisfying the criteria suggested in this study.

Conclusions and Recommendations

This study reveals that TF leadership style is an important predictor for teachers’ organizational commitment. In addition to this type of leadership, NT leadership style introduced in this study based on cultural similarities and “caring school” policy implemented by the Malaysian Education Ministry (MOE) had indeed served as another predictor for teachers’ organizational commitment with a greater magnitude. As the teaching profession became more vibrant and challenging, TS leadership type of leading is facing out in due time. With NT predicting AC and NC significantly, teachers in these non-performing schools need more room for transition of authority and power. As the study is limited to non-performing secondary schools in the state of Perak, suggestion of wider coverage of respondents in future study will enhance this empirical study. Nevertheless, the study does serve as an indicator for further research.

References


