

PRINCIPALS' LEADERSHIP BEHAVIOURS ON TEACHERS' PROFESSIONAL DEVELOPMENT IN BASIC EDUCATION HIGH SCHOOLS

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Abstract

The main aim of the paper was to study principals' leadership behaviours on teachers' professional development in Basic Education High Schools, Tada-U Township. The specific aims were to study the levels of teachers' perception of principals' leadership behaviours, to study the levels of teachers' professional development, to investigate the relationship between principals' leadership behaviours and teachers' professional development, and to identify the predictors of principals' leadership behaviours on teachers' professional development. Principals' leadership behaviours questionnaire developed by House (1996) and the teachers' professional development questionnaire developed by Loucks-Horsely, Stiles, Mundry, Love and Hewson (2010) were used to collect the necessary information. A total of 198 teachers participated in the study. Descriptive statistics, Pearson product-moment correlation and multiple regression analysis were used to analyze the data. There were moderate level of teachers' perceptions of principals' leadership behaviours and moderate level of teachers' professional development. Moreover, there is a strong and positive relationship between the dimensions of principals' leadership behaviours and teachers' professional development. The multiple regression result of the study showed that directive leadership behaviour was appeared as the most influential predictor of teachers' professional development. Open-ended responses verified that the impact of leadership behaviours is organized and directed by the principals that lead to a great change in teachers' professional development.

Keywords: principals' leadership behaviour, teachers' professional development

Introduction

Many schools today are in strong need of understanding the purpose of the effective and the importance of principals' leadership behaviour. The school leaders, principals, need to understand the new modern strategies to achieve success in the education process. Principals' leadership behaviours in schools play a vital role in achieving the growth of instructional process and improving the development of administrative process.

Teachers' development is the main reason for enhancing the students' educational level and their achievement. Thus, the principals should focus on teachers' professional development, as teachers are considered to be the most important element in the educational process. The role of the principal in supporting teachers' professional development activities appears to be crucial to the success of the professional growth of teachers (Berube, Gaston, & Stepan, 2004).

It is essential to have principals who create a positive school climate in the school that allows teachers to realize their potential. They can support a learning environment in which teachers can experiment with new ideas and practices for teaching and exercise creativity. They ought to look into their sense of fulfillment of teachers' needs, which will let them focus on their work and improve their job involvement.

Therefore, the principals need to have the strong theoretical knowledge, skill and adequate experiences in school leadership. They should have various trainings on school leadership that can play active and effective teachers' professional development in school improvement programs.

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Aims of the Study

The main aim is to study principals' leadership behaviours on teachers' professional development in Basic Education High Schools, Tada-U Township.

The specific aims are:

1. to study the teachers' perception of principals' leadership behaviours in Basic Education High Schools of Tada-U Township,
2. to study the levels of teachers' professional development in Basic Education High Schools of Tada-U Township,
3. to investigate the relationship between principals' leadership behaviours and teachers' professional development, and
4. to identify the predictors of principals' leadership behaviours on teachers' professional development.

Research Questions

1. What are the teachers' perceptions of principals' leadership behaviours in Basic Education High Schools of Tada-U Township?
2. What are the levels of teachers' professional development perceived by teachers in Basic Education High Schools of Tada-U Township?
3. Is there any relationship between principals' leadership behaviours and teachers' professional development?
4. What are the predictors of principals' leadership behaviours on teachers' professional development?

Theoretical Framework

The study is concerned with the principals' leadership behaviors on teachers' professional development. Principal leadership behaviours were developed into four dimensions based on House (1996). They are directive leadership behaviour, supportive leadership behaviour, participative leadership behaviour and achievement-oriented leadership behaviour.

Directive leadership behaviour is the principal behaviour that tells teachers what are expected from them and shows how to perform jobs assigned to them. This includes giving teachers schedules of specific work to be done at a specific time.

Supportive leadership behaviour is the principal behaviour directs towards the satisfaction of teachers' needs and preferences, such as displaying concern for their welfare and creating a friendly and psychologically supportive work environment.

Participative leadership behaviour is the principal behaviour that directs towards encouragement of teachers and taking their opinions and suggestions into account when making decisions.

Achievement-oriented leadership behaviour is the principal behaviour that directs towards motivating performance in setting challenging goals, seeking improvement, emphasizing excellence in performance, and showing confidence that teachers will attain high standards of performance.

Teachers' professional development was developed into six dimensions: aligning and implementing curriculum, collaborative structures, examining teaching and learning, immersion experiences, practicing teaching and vehicles and mechanisms developed by Loucks-Horsely, Stiles, Mundry, Love and Hewson (2010).

Aligning and implementing curriculum refers to studying how to implement new curriculum materials, teaching a unit on a topic that is new to them or is taught in a new way, all of which can build in teachers new content knowledge, teaching skills, and dispositions towards other ways of teaching.

Collaborative structures refer to teachers' professional networks inside schools and across school boundaries, and partnerships with experienced teachers. These afford teachers important opportunities to share and build a professional culture that focuses collective energy on student learning.

Examining teaching and learning refers to teachers' own practice afford direct "job-embedded" learning. This includes students' work, their responses to assessments, and thinking, as carefully observed and documented by their teachers.

Immersion experiences refer to being immersed in intensive experiences in which they focus on subject and content in-depth, learning through inquiry and problem solving.

Practicing teaching refers to peering and coaching among teachers. Experienced teachers mentor and demonstrate the lesson and share experiences with teachers to get the desired the student learning outcomes.

Vehicles and mechanisms refer to activities that teachers have opportunities to attend workshops based on new initiatives or changing teaching strategies, giving training to use technology-based professional learning opportunities.

Definitions of Key Terms

Principal Leadership Behaviours: Principal leadership behaviours are defined as the process of motivating other people to act in particular ways in order to achieve specific goals (Hannagan, 2002, as cited in Porter, 2014).

Teachers' Professional Development: Teachers' professional development refers to any activities engaged in by principals that enhance teachers' knowledge and skills and enable them to consider their attitudes and approaches to the education of learners, with a view to improving the quality of teaching and learning (Van der Nest, 2012, as cited in Mashaba, 2015).

Operational Definition

Principals' Leadership Behaviours on Teachers' Professional Development refers to teachers' view of principals' behaviours that their teachers' professional development that help them build their academic content knowledge and how to reach students with this knowledge as being the most valuable.

Review of Related Literature

Leadership Behaviour

Leadership behaviour is a process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task (Hoy & Miskel, 2013). Hannagan (2002, as cited in Porter, 2014) defined leadership behaviour as the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives.

Principals' Leadership Behaviour

Laschinger (1999) defined leadership behaviour as the behaviour that significantly influenced teachers' perceptions of formal and informal power and access to empowerment

structures (information, support, resources and opportunity). According to Huber-Dilbeck (1988), leadership behavior is the interpersonal influence, exercised in situations and directed through the communication process, toward the attainment of a special goal or goals.

The Path-goal Leadership Theory

The path-goal theory is a leadership theory in the field of organizational studies developed in 1971 and revised in 1996 by Robert House. This theory of leadership styles are also used as leadership behaviours.

Directive Leadership Style: Letting subordinates know what is expected of them, giving guidance and direction, and scheduling work (similar to initiating-structure and task-oriented behavior).

Supporting Leadership Style: Being friendly and approachable, showing concern for subordinate welfare and treating members as equals (similar to consideration and relationship-oriented behavior).

Participative Leadership Style: Consulting subordinates, soliciting suggestions and allowing participation in decision making.

Achievement-oriented Leadership Style: Setting challenging goals, expecting subordinates to perform a high level, encouraging them and showing confidence in subordinates' abilities.

Principal Leadership Styles

Harris (2003) divided principals' leadership into four leadership styles.

Autocratic or authoritative leadership style: An autocratic leader tries to exert powerful authority using reward and coercion to influence his/her follower, focusing his/her attention on the product instead of making human needs the centre of attention. An autocratic or authoritative style leader shows consistent behavioural patterns involving acting alone and making unilateral decisions.

Democratic or participative leadership style: A democratic or participative leader is a leader who can motivate humanness, teamwork and participation of teachers. Democratic or participative leadership style is used by leaders to involve followers in the managerial task giving guidance and support. It is also one of the most convenient styles that allow followers to present their ideas or opinions freely in the organization for which they are working.

Laissez-faire or permissive leadership style: A laissez-faire or permissive leader is a leader who gives complete freedom to followers to make decisions regarding any issue in the organization and to solve any problems they encounter on their own with very little guidance from their leader. However, working on different activities and making various decisions on different issues or topics alone without a leader, leads to low productivity and low job satisfaction.

Teacher Professional Development

Teacher professional development is the process of improving staff skills and competencies needed to produce outstanding educational results for students (Hassel, 1999). Professional development is a lifelong collaborative learning process that nourishes the growth of individuals, teams, and the school through a daily job-embedded, learner centered, focused approach (Du Four, 2006, as cited in Trehearn, 2010).

Professional development is a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement (National Staff Development Council, 2007, as cited in Porter, 2014).

California University's Dr. Kornhauser (n.d, as cited in Khin Zaw, 2001) had distinguished the features of the professions with the following characteristics:

1. Expertise
2. Autonomy
3. Commitment
4. Responsibility

In-service preparation is also one of the most important components in the total teacher education programme. Growth into a full professional teacher is also aided by reading of three types:

1. Professional
2. Expansive and
3. Slice-of-life and variety reading (Khin Zaw, 2001).

Loucks-Horsley et al., (2010) identified six categories which included eighteen different strategies that are used for professional development of teachers

1. Aligning and Implementing Curriculum

Curriculum Alignment and Instructional Materials Selection: It refers to studying the national standard to identify the meeting and intent of student learning goals, developing a clear picture what curriculum was needed based on the standards and students learning goals.

Curriculum Implementation: It refers to learning content and teaching strategies, organizing the support for teaching strategies and learning environments, and using them, preparing such as selecting teaching learning materials and planning teaching steps to teach curriculum.

Curriculum Replacement Units: It refers to having access to replace quality units suitable, learning some parts or some lessons of curriculum, having opportunities to broaden their application of the new approach to other parts of the curriculum.

2. Collaborative Structures

Partnerships with Schools and Universities: It refers to being two ways exchange of knowledge and resources with experts from other schools, discussing subject matter and teaching learning strategies through network that can make important contribution to students' learning improvement.

Professional Networks: It refers to joining network voluntarily to share their own knowledge and experience and learn from other network participants, broadening members' perceptions by learning the lesson's content, learning situation of students, etc.

Study Groups: It refers to structuring study groups to support teachers' implementation strategies recently learned in the workshops or other short team sessions and using study groups once teacher have already implemented new practices in the classroom.

3. Examining Teaching and Learning

Doing Research: It refers to identifying a problem to be solved, planning, action, observing, reflection and collaborating with other teachers to contribute to the teaching learning process.

Case Discussions: It refers to writing case materials presented a focus picture of specific aspects of teaching and learning involved students' participation, discussion and thinking and learning and offering groups of teacher the opportunities to reflect on teaching and learning.

Examining Student Work and Thinking, and Scoring Assessments: It refers to being a power examining students' work as a team, applying what is learned and discussed to practice through colleagues' thinking and perceptions and reflecting on individual thinking.

Lesson Study: It refers to using lesson study for the result in teachers developing a thorough understanding of how particular lesson should be conducted and why, based on data that go on teaching learning improvement.

4. Immersion Experiences

Immersion in Inquiry in Subjects and Problem Solving: It refers to being immersed in an intensive experience in which teachers focus on subject and content in-depth, learning through inquiry and problem solving, changing through strategies as a result of teachers' conceptions about subjects and experiences.

Immersion into the World of Science and Art: It refers to having opportunities for them as learning the content, process, culture and development work, attending lectures and seminars and reflection on their experiences as members of research teams and content experts.

5. Practicing Teaching

Coaching: It refers to enhancing the learning of both the coach (experienced teachers) and the one being coached (beginner teachers), sharing ideas and providing feedback, examining together particular teaching strategies and learning strategies and having opportunities for interaction with trust.

Demonstration Lessons: It refers to presenting the exemplary model of teaching facilitated by an experienced teachers while other teachers observe and discuss, having clear purpose and intent focus on the discussion and observation, using a pre-lesson and classroom observation.

Mentoring: It refers to occurring between a teacher new to the field and a more experienced teachers that sustain long-term ongoing professional learning, having valuable expertise to share each other, paying attention to match mentor and new teachers on the alignment in content areas.

6. Vehicles and Mechanisms

Developing Professional Developers: It refers to designating teachers as leaders of other teachers in regard to lead their professional development activities, training professional developers as skillful organizers, coordinators and flexible, adaptable and creative problem solvers.

Technology for Professional Development: It refers to giving training to use technology-based professional learning opportunities, meeting participants learning needs, improving qualities by using technology such as computer, internet, etc.,

Workshops, Institutes, Courses, and Seminars: It refers to having opportunities to attend workshops based on new initiatives or changing teaching strategies, etc. and having chances to attend seminars for sharing subject, teaching learning experiences.

Quality professional development and experiences help teachers recognize the high-quality ongoing professional development that deepen teachers' content knowledge and pedagogical skills: provides opportunities for practice and reflection and includes efforts that are job-embedded, sustained and collaborative will assist in the goal to remain make up-to-date (Spark, 2002).

Research Methodology

Research Method

Descriptive research method was used to collect the required data in this study.

Population and Sample

The participants of this study were chosen from Basic Education High Schools in Tada-U Township, Mandalay Region. There are nine Basic Education High Schools in Tada-U Township. These schools were labeled as S1, S2, S3, S4, S5, S6, S7, S8 and S9. All the teachers from nine Basic Education High Schools in Tada-U Township were chosen as sample. Totally 198 teachers participated in this study. The respondent rate was 94.29%.

Instrumentation

The set of questionnaire for all participants was developed after reviewing the related research and literature thoroughly. Then, in order to get the required data, an instrument was developed and made necessary changes under the advices and guidance of the supervisor.

The questionnaire was composed of three parts: part (A) demographic information of teachers, part (B) principals' leadership behaviour questionnaire and part (C) teachers' professional development questionnaire. Part (A) consisted of demographic information about gender, age, qualification, total services, current position teaching services, class and subject taught. Part (B) was composed of 28 items based on the four dimensions of leadership behaviour that were developed by House (1996): 7 items were related to directive leadership behaviour, 7 items were related to supportive leadership behaviour, 7 items were related to participative leadership behaviour and 7 items were related to achievement-oriented leadership behaviour.

Part (C) was composed of 54 items based on the six dimensions of teachers' professional development that were developed by Loucks-Horsely et al (2010): 9 items were related to aligning and implementing curriculum, 9 items were related to collaborative structures, 12 items were related to examining teaching and learning, 6 items were related to immersion experiences, 9 items were related to practicing teaching and 9 items were related to vehicles and mechanisms.

All items of the questionnaires were analyzed through the use of five point Likert type scale ranging from 1 to 5 (1=never, 2=seldom, 3=sometimes, 4=often, 5=always) was used to measure teachers' perception of principals' leadership practices and teachers' professional development.

Open-ended questionnaires were used to know the ways that improve the principals' leadership practices and teachers' professional development. These questionnaires were interpreted based on the teachers' answers. The respondent rate for open-ended questionnaires was 92%.

Procedures

The researcher thoroughly reviewed related research and literature and received some pieces of advice and guidance for the questionnaire from the panel of experienced teachers from Department of Educational Theory, Yangon University of Education. The uses of words and contents items were modified. Piloting was conducted with 42 teachers in Basic Education High School, No. (3) and Basic Education High School No. (4) in San Chaung Township, Yangon Region, in 16th January, 2018. According to the test of pilot study, the reliability coefficient (Cronbach's alpha) were (0.89) for questionnaire part (A) and (0.81) for questionnaire part (B). The reliability coefficient (Cronbach's alpha) of overall questionnaires was (0.84).

In 2nd February, 2018, the questionnaires for teachers were distributed to the schools. One week later, the distributed questionnaires were recollected. The respondent rate was (94.29%).

Data Analysis

The collected data of this study were analyzed by using the Statistical Package for the Social Science (SPSS) version 22. The descriptive analysis technique, One Way ANOVA, Pearson product-moment correlation and multiple regressions were used to analyze the required data. Open-ended responses were grouped into similar groups to interpret the collected data.

Research Findings

The analysis of collected data concerned with principals' leadership behaviours on teachers' professional development as research findings are presented. The descriptive analysis technique was used to find out the levels of teachers' perceptions of principals' leadership behaviours and teachers' professional development.

Table 1 Means and Standard Deviations for Teachers' Perception on Levels of Dimensions of Principals' Leadership Behaviours in Basic Education High Schools

Dimensions	Schools									Total
	S1	S2	S3	S4	S5	S6	S7	S8	S9	
Directive Behaviour	3.01 (.57)	3.71 (.36)	3.42 (.62)	3.13 (.53)	3.58 (.24)	3.56 (.47)	3.63 (.38)	3.57 (.39)	3.67 (.24)	3.46 (.50)
Supportive Behaviour	3.22 (.39)	3.27 (.47)	3.44 (.47)	3.27 (.35)	3.34 (.63)	3.51 (.66)	3.76 (.50)	3.57 (.40)	3.53 (.49)	3.43 (.51)
Participative Behaviour	3.00 (.43)	3.30 (.40)	3.29 (.38)	2.90 (.75)	3.41 (.31)	3.39 (.36)	3.55 (.38)	3.41 (.41)	3.65 (.77)	3.31 (.53)
Achievement-oriented Behaviour	3.03 (.46)	3.30 (.42)	3.25 (.35)	3.06 (.59)	3.56 (.44)	3.21 (.47)	3.27 (.36)	3.20 (.41)	3.64 (.38)	3.27 (.47)

Note: 1.00-2.33 = Low level 2.34-3.67 = Moderate level 3.68-5.00 = High level

Table 1 displayed the means and standard deviations of principals' leadership behaviours. According to the data presented in the table, all schools had moderate levels of teachers' perception on the four principals' leadership behaviour: directive leadership behaviour, supportive leadership behaviour, participative leadership and achievement-oriented leadership behaviour. Moreover, S2 had a high level of directive leadership behaviour. Then, S7 had high level of supportive leadership behaviour.

One-way ANOVA was used to analyze whether there were significant variations in the teachers' perceptions of principals' leadership practices. Table 2 described the ANOVA result for the levels of teachers' perceptions of principals' leadership behaviour in Basic Education High schools, Tada-U Township.

Table 2 showed that the teachers' perceptions on levels of dimensions for principal' leadership behavior regarding directive leadership behaviour ($df=8$, $F=6.833$, $P<.001$), supportive leadership behavior ($df=8$, $F=2.793$, $P<.01$), participative leadership behavior ($df=8$, $F=5.244$, $P<.001$) and achievement-oriented leadership behavior ($df=8$, $F=4.669$, $P<.001$). There were significant variations on teachers' perceptions on all levels of dimensions of principals' leadership behaviours in schools.

Table 2 One-Way ANOVA Results Showing Teachers' Perceptions on Dimensions of Principals' Leadership Behaviours in Basic Education High Schools

Dimensions		Sum of Squares	df	Mean Square	F	p
Directive Behaviour	Between Groups	11.114	8	1.389 .203	6.833	.000***
	Within Groups	38.424	189			
	Total	49.538	197			
Supportive Behaviour	Between Groups	5.510	8	.689 .247	2.793	.006**
	Within Groups	46.605	189			
	Total	52.116	197			
Participative Behaviour	Between Groups	9.295	8	1.162 .197	5.244	.000***
	Within Groups	37.297	189			
	Total	46.593	197			
Achievement-oriented Behaviour	Between Groups	7.028	8	.879 .155	4.669	.000***
	Within Groups	29.261	189			
	Total	36.289	197			

Note: *** $p < .001$, ** $p < .01$

According to the data presented in the Table 3, S7 and S9 had a high level of teachers' professional development. S2 had a high level of teachers' practicing teaching. S5 had high level of teachers' immersion experiences and practicing teaching. Moreover, S7 had a high level of teachers' aligning and implementing curriculum, collaborative curriculum, practicing teaching and teachers' professional development. Then, S9 had a high level of teachers' collaborative curriculum, examining teaching and learning, immersion experiences, practicing teaching, vehicles and mechanism, and teachers' professional development.

Table 3 Means and Standard Deviations for Levels of Teachers' Professional Development in Basic Education High Schools

Dimensions	Schools									Total
	S1	S2	S3	S4	S5	S6	S7	S8	S9	
AIC	2.93 (.64)	3.17 (.39)	3.25 (.79)	2.82 (.68)	3.44 (.66)	3.51 (.72)	3.91 (.55)	3.50 (.54)	3.51 (.40)	3.34 (.68)
CS	2.84 (.62)	3.27 (.56)	3.04 (.58)	2.71 (.58)	3.35 (.64)	3.29 (.80)	3.75 (.66)	3.39 (.69)	3.77 (.49)	3.26 (.71)
ETL	2.88 (.65)	3.59 (.46)	3.22 (.72)	2.72 (.67)	3.66 (.64)	3.38 (.88)	3.55 (.52)	3.48 (.50)	3.68 (.36)	3.34 (.69)
IE	2.93 (.77)	3.53 (.80)	3.44 (.98)	2.83 (.88)	3.74 (.88)	3.47 (.99)	3.59 (.52)	3.33 (.46)	3.71 (.61)	3.38 (.83)
PT	3.02 (.68)	3.89 (.44)	3.41 (.75)	2.80 (.51)	3.81 (.56)	3.50 (.95)	3.71 (.46)	3.50 (.55)	3.76 (.36)	3.47 (.69)
VM	2.88 (.65)	3.59 (.46)	3.22 (.72)	2.72 (.67)	3.66 (.64)	3.38 (.88)	3.55 (.52)	3.48 (.50)	3.68 (.36)	3.34 (.69)
TPD	2.91 (.60)	3.51 (.39)	3.26 (.69)	2.77 (.62)	3.61 (.55)	3.42 (.81)	3.68 (.46)	3.45 (.43)	3.69 (.26)	3.35 (.63)

Note: 1.00-2.33 = Low level 2.34-3.67 = Moderate level 3.68-5.00 = High level

AIC = Aligning and implementing curriculum

CS = Collaborative structures

ETL = Examining teaching and learning

TPD = Teachers' professional development

IE = Immersion experiences

PT = Practicing teaching

VM = Vehicles and mechanisms

In order to analyze whether there were significant variations in the teachers' professional development, One-way ANOVA was showed in Table 4.

Table 4 ANOVA Table for Teachers' Professional Development in Basic Education High Schools

Dimensions		Sum of Squares	df	Mean Square	F	P
Aligning and implementing curriculum	Between Groups	20.260	8	2.532	6.549	.000***
	Within Groups	73.089	189	.387		
	Total	93.349	197			
Collaborative structures	Between Groups	23.495	8	2.937	7.257	.000***
	Within Groups	76.483	189	.405		
	Total	99.978	197			
Examining teaching and learning	Between Groups	21.466	8	2.683	6.887	.000***
	Within Groups	73.641	189	.390		
	Total	95.108	197			
Immersion experiences	Between Groups	18.530	8	2.316	3.716	.000***
	Within Groups	117.809	189	.623		
	Total	136.339	197			
Practicing teaching	Between Groups	23.726	8	2.966	7.877	.000***
	Within Groups	71.068	189	.376		
	Total	94.794	197			
Vehicles mechanisms	Between Groups	21.466	8	2.683	6.587	.000***
	Within Groups	73.641	189	.390		
	Total	95.108	197			
Professional Development	Between Groups	19.419	8	2.427	7.627	.000***
	Within Groups	60.146	189	.318		
	Total	79.565	197			

Note: *** $p < .001$

As shown in Table 4, there was significant difference on teachers' perceptions of levels of teachers' professional development ($df=8$, $F=7.627$, $P<.001$). Then, there were significant differences on the teachers' professional development regarding aligning and implementing curriculum ($df=8$, $F=6.549$, $P<.001$), collaborative curriculum ($df=8$, $F=7.257$, $P<.001$), examining teaching and learning ($df=8$, $F=6.887$, $P<.001$), immersion experiences ($df=8$, $F=3.716$, $P<.001$), practicing teaching ($df=8$, $F=7.877$, $P<.001$) and vehicles mechanisms ($df=8$, $F=6.587$, $P<.001$).

To find out the relationship between principals' leadership behaviour and teachers' professional development in Basic Education High Schools, Pearson product-moment correlation was used to analyze the data.

As presented in Table 5, there was a strong and positive relationship between teachers' perceptions of directive leadership behaviour and teachers' professional development in Basic Education High Schools ($r = .705$). Moreover, there was a moderate and positive relationship between teachers' perceptions of supportive leadership behaviour and teachers' professional development ($r = .613$). There was a Moderate and positive relationship between teachers' perceptions of participative leadership behaviour and teachers' professional development ($r = .633$). There was also a moderate and positive relationship between teachers' perceptions of achievement-oriented leadership behaviour and teachers' professional development ($r = .557$). The relationship was statistically significant at 0.01 levels. This implies that increase in principals' leadership behaviours helps to increase professional development of teachers.

Table 5 Relationship between Teachers' Perception on Dimensions of Principals' Leadership Behaviours and Teachers' Professional Development in Basic Education High Schools

	1	2	3	4	5
1. Directive Behaviour	1				
2. Supportive Behaviour	.401** .000	1			
3. Participative Behaviour	.505** .000	.419** .000	1		
4. Achievement-oriented Behaviour	.523** .000	.253** .000	.541** .000	1	
5. Teachers' Professional development	.705** .000	.613** .000	.633** .000	.557** .000	1

**Correlation is significant at 0.01 level (2 tailed).

Regression analysis was used to identify the predictors that influence the teachers' professional development in Basic Education High Schools, Tada-U Township.

Table 6 Regression Model (Principals' Leadership Behaviour on All Variables) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.834 ^a	.695	.689	.354

Predictors: (Constant), Directive leadership behaviour, Supportive leadership behaviour, Participative leadership behaviour, Achievement-oriented leadership behaviour.

Table 6 showed that the adjusted R squared value was .689 and this indicated that 68.9% of the variance in principals' leadership behaviour was predicted from teachers' professional development.

The Potential Factors Affecting Teachers' Professional Development

A standardized beta coefficient compares the strength of the effect of principals' leadership behaviour to teachers' professional development was presented in Table 7.

Table 7 Simultaneous Multiple Regression Analysis for Principals' Leadership Behaviours Dimensions Predicting Teacher Professional Development

Dimensions	B	Std. Error	β	<i>p</i>
Constant	2.738	.366		.000***
Directive Behaviour	.451	.064	.356	.000***
Supportive Behaviour	.396	.055	.320	.000***
Participative Behaviour	.294	.068	.225	.000***
Achievement-oriented Behaviour	.275	.077	.186	.002**

Note: $R=.834$, $R^2=.689$, $F(4,198) = 110.143$,

*** $p < .001$, $p < .01$

All leadership behaviours were significantly predicted teachers' professional development. The adjusted R squared value was .689 ($R=.834$). This indicates that 68.9% of the variance in

teachers' professional development was explained by the model, and this is a typical effect according to Cohen (1988).

According to the β weights, directive leadership behaviour variable ($\beta=.356$, $p<.001$) appears to be the best predictor of teachers' professional development. Supportive leadership behaviour variable ($\beta=.32$, $p<.001$) appears to be the second predictor of teachers' professional development. Participative leadership behaviour variable ($\beta=.225$, $p<.001$) appears to be the third predictor of teachers' professional development. Achievement-oriented leadership behaviour variable ($\beta=.186$, $p<.001$) appears to be the fourth predictor of teachers' professional development.

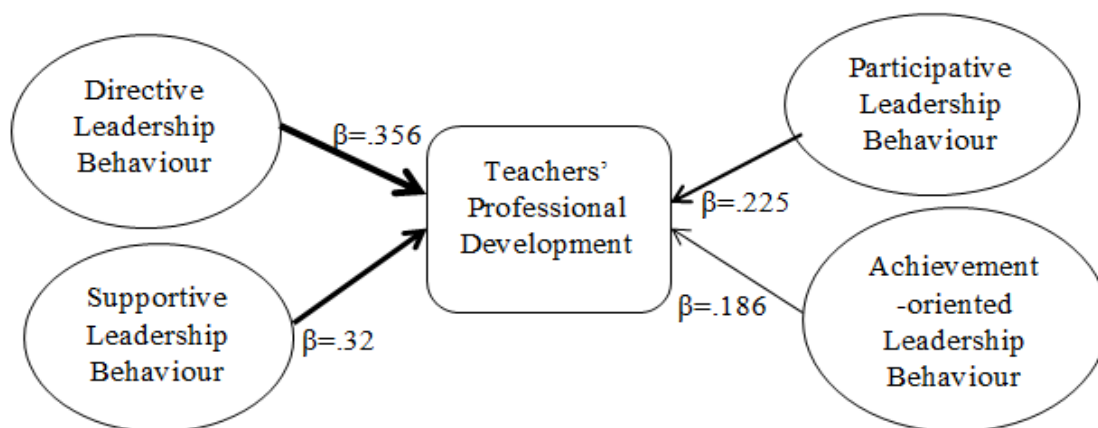


Figure 1: Potential Factors Affecting Teachers' Professional Development

————→ Predicting on Teachers' Professional Development (Statistically significant)

Open-Ended Responses

Teachers' responses to open-ended questions were used to fulfill the meaningful answers. The first question was "Do the leadership behaviours of principal affect teachers' professional development in your school? Discuss?" According to open-ended response, principals' leadership behavior was necessary for professional development of teachers. Most of the teachers in school knew how to prepare their subjects and how to teach their subjects well when they were good and motivated professional development by their principals.

The second question was "Do your principals give the opportunities to improve your professional development?" According to open-ended response, their principals gave opportunities to attend workshops based on new initiatives or changing teaching strategies, etc. Teachers also had the opportunities that they can join or seek to enhance their efficacy by going through continuous learning programs or by getting diplomas and master's degrees in order to reach higher professional levels and to reflect on the educational attainment for students.

The third question was "List principals' actions that you want to improve your professional development at school?" According to their responses, they wanted to provide reflective teaching aids for their professional development. They wanted to have a good support of updated teaching methodology to reach the desired target. Moreover, they wanted to work together to improve classroom instruction. Teachers wanted to be considered as active learners and wanted to participate in professional development to refine their knowledge and teaching strategies.

Discussion and Conclusion

Analyses of quantitative data collected from the study attempted to answer the four questions.

Research question 1 studied the levels of principals' leadership behaviours in schools. When studying teachers' perception of principals' leadership behaviour, it was found that all schools have moderate levels of teachers' perception on the four kinds principals' leadership behaviour. S2 had a high level of directive leadership behaviour and S7 had high level of supportive leadership behaviour. There were significant variations on teachers' perceptions on levels of principals' leadership behaviours in schools.

Research question 2 examined the levels of teachers' professional development in schools. According to the result, S2 had a high level of teachers' practicing teaching. S5 had high level of teachers' immersion experiences and practicing teaching. S7 had a high level of teachers' aligning and implementing curriculum, collaborative curriculum, practicing teaching and teachers' professional development. S7 had a high level of teachers' collaborative curriculum, examining teaching and learning, immersion experiences, practicing teaching, vehicles and mechanism, and teachers' professional development.

Research question 3 investigated the relationship between the principals' leadership behaviours and teachers' professional development in school. The result showed that there was a strong and positive relationship between teachers' perceptions of directive leadership behaviour and teachers' professional development ($r = .705$). Moreover, there was a moderate and positive relationship between teachers' perceptions of supportive leadership behaviour and teachers' professional development ($r = .613$), between teachers' perceptions of participative leadership behaviour and teachers' professional development ($r = .633$) and between teachers' perceptions of achievement-oriented leadership behaviour and teachers' professional development ($r = .557$).

Research question 4 predicted the indicators of teachers' professional development in schools. According to beta coefficients, all leadership behaviours were significantly predicted teachers' professional development. The value of adjusted R squared was .689 ($R = .834$). This implies that 68.9% of the variance in teachers' professional development was explained by the model. According to result, principals' leadership behaviour affects the teachers' professional development in the schools.

β weights indicated that directive leadership behaviour variable ($\beta = .356$, $p < .001$) was the best predictor of teachers' professional development. Supportive leadership behaviour variable ($\beta = .32$, $p < .001$) was the second predictor of teachers' professional development. Participative leadership behavior was to be the third predictor of teachers' professional development ($\beta = .225$, $p < .001$). Achievement-oriented leadership behaviour ($\beta = .186$, $p < .001$) was the fourth predictor of teachers' professional development.

According to open-ended response, teachers' professional development was organized and rolled by the schools' principals and they lead to a great change in teachers' academic performance. Principals played a major role in professional development of teachers who guided one another in improving instruction. The main focus of the school principal was developing and maintaining effective educational programs and promoting the improvement of teaching and learning within their schools. They worked together to improve classroom instruction. Teachers also considered themselves as active learners and participated in professional development to refine their knowledge and teaching strategies.

In conclusions, principals should be effective leaders who should motivate teachers by acting as a supporter, professional developer, a resource provider, a team member, an identifier of talent and an architect of change, a transformer, a facilitator, a coordinator, a good communicator

and a visionary leader. They should interact directly with teachers on instructional issues, and they should provide professional support to teachers to actively participate in the process. They need to consistently communicate with teachers and persuade them that academic gains are priorities. Thus, the principals need to provide teachers with all modern teaching strategies and with updated modern curricula in order to comply with the 21st century culture and requirements.

Recommendations for Further Research

This paper contributed to study principals' leadership behaviour on teachers' professional development in Basic Education High Schools, Tada-U Township. According to the finding of this study, the following recommendations are made for further research. Like this paper, principals' leadership behaviour and teachers' professional development should be expended to the schools in other schools and universities of our country, Myanmar. Moreover, factors affecting principals' leadership behaviour on teachers' professional development should be studied. Then, a qualitative research should be conducted to bring a deeper understanding of knowledge, skills and attitudes of participants about their perceptions of the effective principals' leadership behaviour.

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