RELATIONSHIP BETWEEN SCHOOL PRINCIPALS' TRANSFORMATIONAL LEADERSHIP PRACTICES AND COLLECTIVE TEACHER EFFICACY

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Abstract

The general objective of this study is to study the relationship between school principals' transformational leadership practices and collective teacher efficacy in Basic Education Primary Schools in Pathein Township. In this study, sample size of 161 respondents from (21) Basic Education Primary Schools were selected by using cluster sampling. The questionnaires and open-ended questions were developed based on the literature review, Leithwood and Sun's (2012) dimensions of principals' transformational leadership practices and Barr's (2002) dimensions of collective teacher efficacy. Five-point Likert-scales were employed. The internal consistencies (Cronbach's alpha) were (0.97) for the instruments of transformational leadership practices and (0.95) for the instruments of collective teacher efficacy. Descriptive statistics, One-way ANOVA, Independent Sample *t*-Test and Pearson-correlation were used to analyze the quantitative data. The level of principals' transformational leadership practices in this study was moderately high. There were no significant differences in these practices grouped in terms of principals' personal factors. However, there were significant differences in three dimensions except setting direction and overall transformational leadership practices according to their academic qualification. Overall collective teacher efficacy was high level. Among the dimensions of teacher collective efficacy, student discipline was also high but instructional strategies was moderately high. In qualitative findings, teachers did not believe in instructional strategies (N=10, 6.21%) because of lower staffing level, weakness in lesson plan and new curriculum reform. There were no significant differences grouped in terms of teachers' personal factors. The results of Pearson-correlation indicated that there were significant and positive relationships between principals' transformational leadership practices and collective teacher efficacy. The results of qualitative study were consistent with the findings of quantitative study.

Key words: Transformational leadership, Collective teacher efficacy

Introduction

Education plays a central role in reducing poverty and inequity, strengthening the community, expending economic development and building national unity (Ministry of Education, 2016). Therefore, Myanmar government reformed the implementing long-term and short-term plans including a new National Education Strategic Plan (NESP) during the period 2016-2021. This new education reform required a new vision and new teaching methods, which in turn required powerful and inspiring leadership that can motivate and engage all teachers in the change process. Moreover, the important factor is collective teacher efficacy which refers to teachers' collective belief in their capacity to influence student learning that can motivate teachers to be part of the school improvement process (Bandura, 1997).

Therefore, the collective efficacy refers to the exercise of the action in the ambit of the group, being comprehended as the shared beliefs by the body of teachers to produce effects over determined actions (Bandura, 1997). Transformational leadership model was suitable for this study because improving teaching capacity is the starting point of transformational leadership (Liu et al., 2019). Collective teacher efficacy levels may be influenced by school administrators' transformational leadership (Kurt et al., 2012). Transformational leadership contributes to teachers' positive beliefs about themselves, and such beliefs are the foundation of collective teacher efficacy (Goddard et al., 2015). Transformational leadership is also effective in motivating and engaging teachers in change processes (Leithwood & Sun, 2012; Liu et al., 2019; Ross & Gray, 2006). Therefore, it has been assumed that transformational leadership could emerge in the context of curriculum reform and strengthen teachers' collective capacity beliefs.

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Objectives of the Study

The general objective is to study the relationship between school principals' transformational leadership practices and collective teacher efficacy.

The specific objectives are as follow:

(1) To investigate the extent of school principals' transformational leadership practices
(2) To find out the variations of school principals' transformational leadership practices in terms of principals' personal factors
(3) To investigate the level of collective teacher efficacy
(4) To find out the variations of collective teacher efficacy in terms of teachers' personal factors
(5) To investigate the relationship between school principals' transformational leadership practices and collective teacher efficacy

Research Questions

(1) What is the level of school principals' transformational leadership practices?
(2) Are there any variations of school principals' transformational leadership practices in terms of principals' personal factors?
(3) What is the level of collective teacher efficacy?
(4) Are there any variations of collective teacher efficacy in terms of teachers' personal factors?
(5) Is there any significant relationship between school principals' transformational leadership practices and collective teacher efficacy?

Definition of the Key Terms

Transformational Leadership is defined as the influence process of transforming the values and priorities of the followers and motivating them to perform beyond their expectations (Yukl, 1998).

Collective Teacher Efficacy refers to teachers' beliefs about the ability both of the team and of the faculty of teachers at the school to have positive effects on students (Goddard, 2001).

Theoretical Framework

In this study, transformational leadership practices of school principals were investigated with four dimensions of transformational leadership model developed by Leithwood and Sun (2012). They are:

Setting Direction: Leithwood et al. (1999) and Mascall (2003) noted that 'setting directions' included building a school vision, establishing school goals, and creating high performance expectations. Setting a clear vision is paramount to organizational success (Leithwood et al., 2006). A critical aspect of leadership is helping a group to develop shared understandings about the organization and its activities and goals that can undergird a sense of purpose or vision (Hallinger & Heck, 2002).

Developing People: Leithwood et al. (1999) contended that 'developing people' concerns building capacity among teachers, which can be conceptualized as three core leadership practices: providing individualized support, creating intellectual stimulation, and modelling best practices and organizational values. The ability to engage in practices that help develop people depends on leaders' knowledge of the "technical core" of schooling often invoked by the term "instructional leadership." This process is facilitated when the transforming leader attends to the followers' needs (Leithwood & Jantzi, 2005).

Redesigning the Organization: This third category focuses on the creation of conditions to facilitate second-order change, which includes the establishment of essential organizational routines, systems, and structures that enhance the collaborative culture and collective learning (Leithwood & Jantzi, 1990, 2005). Leithwood and Jantzi (2006) classified these dimensions as developing a collaborative school culture, creating structures and policies to foster participation in school decisions, and creating productive community relationships. Successful schools have strong functional cultures that include values, symbols, beliefs, and shared meanings among all stakeholders (Leithwood et al., 1999; Schein, 1985; Sergiovanni, 2007).

Improving the Instructional Program: This includes leadership practices such as establishing effective staffing practices, providing instructional support, monitoring school activities, and buffering staff from excessive and distracting external demands. Staffing a school means finding teachers whose interests and abilities are a match with school vision and goals that ensure the provision of instructional support to enhance the student achievement (Leithwood et al., 2006).

In this study, collective teacher efficacy is investigated with two dimensions based on teacher collective efficacy developed by Barr (2002). They are:

Student Discipline: Student discipline is a faculty's collective capability to manage student behavior. This means that the perception of teachers in a school of how well the efforts of the faculty as a whole manage student behavior and discipline (Chen, 2009; Hung et al., 2012; & Tschannen-Moran & Barr, 2004). Schools with high collective efficacy, teachers believe to construct rules for promoting students' learning, to follow school rules, to control their behavior and to teach proper etiquette with their faculty (Chiang et al., 2016).

Instructional Strategies: Instructional strategies are a faculty's collective capability to promote student learning. This means that the perception of teachers in a school of efforts of the faculty as a whole promote student learning (Chen, 2009; Hung et al., 2012; Tschannen-Moran & Barr, 2004). A greater sense of collective efficacy leads teachers to help students master content. They can help students think critically and promote deep understanding. All of teachers use multiple teaching methods and assessments for promoting student learning. Moreover, they can adopt individualized instruction after evaluation and can create the effective teaching methods for students (Chiang et al., 2016).

Review of Related Literature

The primary focus of the transformational leadership is the advancement of the organization. This was accomplished through the leader's capacity to foster a sense of efficacy and hope among the followers to attain the established goals of the organization. Bass (1990; 1997) and Yammarino (1994) posits that transformational leadership contains the following four set of behaviors referred to as the four I's to assist in building follower commitment to organizational goals: (a) Idealized Influence (Charisma): Leader articulates a vision and fosters a since of pride among the organization's members and earns their respect and trust; (b) Inspirational Motivation: Leader sets high standards for members, but offers encouragement and hopefulness for the achievement of set goals; (c) Intellectual Stimulation: Leaders encourages the contribution of ideas and the participation in the decision making process; and (d) Individualized Consideration: Leader offers individualized attention to members and considers their needs, capabilities and desires.

Goddard et al (2000) identified the four sources integral to the development of collective teacher efficacy (CTE) as mastery experience, vicarious experience, social persuasion, and

affective states. Like teacher efficacy, collective teacher efficacy was described as cyclical, with positive outcomes leading to higher collective teacher efficacy. Barr (2002) proposed two other dimensions of collective teacher efficacy; student discipline and instructional strategies. Student discipline is a faculty's collective capability to manage student behavior. Instructional strategies are a faculty's collective capability to promote student learning.

The link between collective efficacy and principal transformational leadership is of growing interest in the literature as a means to chart the indirect effects of leadership on student achievement through a leader's direct effects on efficacy beliefs (Kurt et al., 2012). Demir's (2008) study of 66 elementary schools in Turkey focused on the direct relationship between transformational leadership practices with collective efficacy and the indirect relationship of transformational leadership with collective teacher efficacy through teacher self-efficacy and the collaborative nature of the school culture. Dumay and Galand's (2012) hypothesized that school principals play an important role in the interpretation of performance information for teachers, which would influence teacher collective efficacy beliefs. Transformational leadership was found to be significantly and positively related to collective efficacy.

Methodology

Research Method

In this study, both quantitative and qualitative methods were used to collect the required data. In quantitative study, questionnaire survey was used and in qualitative study, open-ended questions were used to explain the survey responses.

Population and Sample

Participants for this study were selected from Pathein Township. Cluster sampling method was used to collect the participants who were teachers of (21) Basic Education Primary schools in January, 2022-2023 academic years. All of participants were selected (161) primary teachers from randomly selected of (21) school clusters.

Validity and Reliability

In order to obtain the content validity of the questionnaire, instrument was reviewed by (12) experts who have sound knowledge and experience from the Department of Educational Theory, Yangon University of Education. To measure the reliability of the questionnaire, a pilot test was conducted with (30) primary teachers. The internal consistency (Cronbach's alpha) of the instruments was (0.97). Specifically, the internal consistency was (0.97) for transformational leadership instruments and (0.95) for the instruments of collective teacher efficacy. Therefore, the questionnaire was reliable to use for this study.

Data Analysis

The data obtained from questionnaire survey were analyzed by using the Statistical Package for Social Science (SPSS) version 26 as it is widely used in quantitative research. Descriptive statistics, Independent Sample *t* Test, One-way ANOVA and Pearson-correlation were used to analyze the quantitative data.

Findings

Quantitative Findings

Principals' transformational leadership practices were investigated in four dimensions. According to Table 1 for **research question (1)**, the mean value for overall principals' transformational leadership practices showed by teachers was 4.17, principals conducted them ***moderately high level***.

Table 1 Mean Values and Standard Deviation for the Levels of Principals' Transformational Leadership Practices (N=161)

Dimensions of Transformational Leadership Practices	Mean	SD	Level
Setting Directions	4.14	.37	Moderately high
Developing People	4.19	.41	Moderately high
Redesigning the Organization	4.20	.39	Moderately high
Improving the Instructional Program	4.13	.42	Moderately high
Transformational Leadership Practices	**4.17**	**.37**	**Moderately high**

Scoring Direction: 1.00-1.80=Low 1.81-2.60=Moderately low
2.61-3.40=Average 3.41-4.20=Moderately high 4.21-5.00=High

For investigating the variations for **research question (2)**, principals' transformational leadership practices grouped in terms of principals' personal factors were considered in this study. First of all, according to *t*-Test results, there were no significance differences not only in overall principals' instructional supervision practices but also in the dimensions between the groups of gender in table 2, age in table 3 and administrative services in table 4.

Table 2 Independent Samples *t* Test Result Showing Mean Values of Principals' Transformational Leadership Practices Grouped by Gender (N=161)

Variables	Gender	N_1	N_2	Mean	SD	*t*	*df*	*p*
Setting Direction	Male	5	6	4.11	.34	-.943	159	ns
	Female	16	155	4.16	.38			
Developing People	Male	5	6	4.15	.38	-.983	159	ns
	Female	16	155	4.21	.43			
Redesigning the Organization	Male	5	6	4.19	.40	-.336	159	ns
	Female	16	155	4.21	.39			
Improving the Instructional Program	Male	5	6	4.11	.36	-.565	159	ns
	Female	16	155	4.15	.45			
Transformational Leadership Practices	**Male**	**5**	**6**	**4.14**	**.33**	**-.739**	**159**	**ns**
	Female	**16**	**155**	**4.18**	**.39**			

ns=no significance, N_1 = number of principals, N_2 = number of teachers
Scoring Direction: 1.00-1.80=Low 1.81-2.60=Moderately low
2.61-3.40=Average 3.41-4.20=Moderately high 4.21-5.00=High

Table 3 Independent Samples *t* Test Result Showing Mean Values of Principals' Transformational Leadership Practices Grouped by Age (N=161)

Variables	Age Groups	N_1	N_2	Mean	SD	*t*	*df*	*p*
Setting Direction	Below 50 years	3	85	4.16	.32	.175	159	ns
	51 and above	18	76	4.14	.37			
Developing People	Below 50 years	3	85	4.17	.33	-.112	159	ns
	51 and above	18	76	4.18	.41			
Redesigning the Organization	Below 50 years	3	85	4.15	.31	-.554	159	ns
	51 and above	18	76	4.20	.39			
Improving the Instructional Program	Below 50 years	3	85	4.13	.31	.008	159	ns
	51 and above	18	76	4.13	.42			

Variables	Age Groups	N_1	N_2	Mean	SD	*t*	*df*	*p*
Transformational Leadership Practices	**Below 50 years**	**3**	**85**	**4.15**	**.31**	**-.147**	**159**	**ns**
	51 and above	**18**	**76**	**4.16**	**.37**			

ns=no significance, **N_1 = number of principals,** **N_2 = number of teachers**
Scoring Direction: 1.00-1.80=Low 1.81-2.60=Moderately low
2.61-3.40=Average 3.41-4.20=Moderately high 4.21-5.00=High

Table 4 Independent Samples *t* Test Results Showing Principals' Transformational Leadership Practices Grouped by Administrative Services (N=161)

Variables	Administrative Services	N_1	N_2	Mean	SD	*t*	*df*	*p*
Setting Direction	under 10 years	1	52	4.16	.51	.309	159	ns
	11 years and above	20	109	4.13	.34			
Developing People	under 10 years	1	52	4.13	.47	-.550	159	ns
	11 years and above	20	109	4.19	.40			
Redesigning the Organization	under 10 years	1	52	4.08	.44	-1.269	159	ns
	11 years and above	20	109	4.21	.38			
Improving the Instructional Program	under 10 years	1	52	3.95	.45	-1.848	159	ns
	11 years and above	20	109	4.15	.40			
Transformational Leadership Practices	**under 10 years**	**1**	**52**	**4.07**	**.42**	**-1.046**	**159**	**ns**
	11 years and above	**20**	**109**	**4.17**	**.36**			

ns=no significance, **N_1 = number of principals,** **N_2 = number of teachers**
Scoring Direction: 1.00-1.80=Low 1.81-2.60=Moderately low
2.61-3.40=Average 3.41-4.20=Moderately high 4.21-5.00=High

According to one-way ANOVA the results, there were significant differences not only in principals' transformational leadership practices (df=2, F=6.39, p<0.01) but also in the dimensions of developing people (df=2, F=4.24, p<0.05), redesigning the organization (df=2, F=8.56, p<0.001) and improving the instructional program (df=2, F=7.60, p<0.001) grouped by their course training shown in Table 5.

Table 5 One-Way ANOVA Result Showing Mean Values of Principals' Transformational Leadership Practices Grouped by Course Training (N=161)

Variables		Sum of Squares	*df*	Mean Square	*F*	*p*
Setting Direction	Between Groups	.44	2	.220	1.654	ns
	Within Groups	20.99	158	.133		
	Total	21.43	160			
Developing People	Between Groups	1.36	2	.681	4.235	.016*
	Within Groups	25.39	158	.161		
	Total	26.75	160			
Redesigning the Organization	Between Groups	2.39	2	1.196	8.563	.000***
	Within Groups	22.07	158	.140		
	Total	24.46	160			
Improving the Instructional Program	Between Groups	2.43	2	1.216	7.597	.001***
	Within Groups	25.28	158	.160		
	Total	27.71	160			

Variables		Sum of Squares	*df*	Mean Square	*F*	*p*
Transformational Leadership Practices	Between Groups	1.62	2	.814	6.391	.002**
	Within Groups	20.11	158	.127		
	Total	21.74	160			

***p<.05, **p<.01, ***p<.001, ns=no significance**

Next, by using one way analysis variance, further detailed analysis and computation were undertaken. To find what particular principals' transformational leadership practices had great difference, the Tukey HSD multiple comparison results for principals' transformational leadership practices in two dimensions. According to Table 6, there were significant differences in developing people between principals who attended Diploma in Teacher Education (DTEd) or Diploma in Teacher Education Competency (DTEC) and principals who attended Elementary or Secondary Correspondence Course (ECC/SCC) ($p<0.05$). And, there were significant differences in redesigning the organization among principals who attended DTEd/DTEC, ECC/SCC ($p<0.01$) and Preservice Primary Teacher Training (PPTT) ($p<0.01$).

Table 6 The Results of Tukey HSD Multiple Comparison of Principals' Transformational Leadership Practices Grouped by Course Training (N=161)

Dependent Variable	(I) Course Training	(J) Course Training	Mean Difference (I-J)	Std. Error	*p*
Developing People	DTEd/DTEC	ECC/SCC	-.17115	.07343	.054*
Redesigning the Organization	DTEd/DTEC	ECC/SCC	-.22813*	.06846	.003**
		PPTT	-.63438*	.19600	.004**

***p<.05, **p<.01**

According to Table 7, it presents the Games-Howell multiple comparison results that there were significant differences in improving the instructional program between DTEd/DTEC and ECC/SCC ($p<0.001$). And, there were significant differences in overall practices of transformational leadership between DTEd/DTEC and ECC/SCC ($p<0.01$).

Table 7 The Results of Games-Howell Multiple Comparison of Principals' Transformational Leadership Practices Grouped by Course Training (N=161)

Dependent Variable	(I) Course Training	(J) Course Training	Mean Difference (I-J)	Std. Error	*p*
Improving the Instructional Program	DTEd/DTEC	ECC/SCC	-.25097	.06147	.000***
Transformational Leadership Practices	**DTEd/DTEC**	**ECC/SCC**	**-.19225**	**.05710**	**.003****

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

For **research question (3)**, collective teacher efficacy was investigated in two dimensions such as (1) student discipline and (2) instructional strategies. The descriptive statistics for collective teacher efficacy show the mean values, standard deviation and the levels in Table 8.

Table 8 Mean Values and Standard Deviation for the Levels of Collective Teacher Efficacy (N=161)

Dimensions of Collective Teacher Efficacy	Mean	SD	Level
Student Discipline	4.24	.40	High
Instructional Strategies	4.19	.38	Moderately high
Collective Teacher Efficacy	**4.21**	**.37**	**High**

Scoring Direction: 1.00-1.80=Low 1.81-2.60=Moderately low 2.61-3.40=Average 3.41-4.20=Moderately high 4.21-5.00=High

According to Table 8, the mean values for overall collective teacher efficacy and student discipline of collective teacher efficacy were between 4.21 and 5.00 and that they perceived ***high level***. However, the mean value of instructional strategies of collective teacher efficacy was 4.19 and that it perceived ***moderately high level.***

Investigating the variations for **research question (4)**, the differences in collective teacher efficacy in terms of teachers' personal factors such as gender, age, course training and services were considered in this study. There were no significant differences between any groups in terms of teachers' personal factors.

For **research question (5),** Pearson-product Moment Correlation was used to determine whether there was significant relationship between principals' transformational leadership practices and collective teacher efficacy. Table 9 indicated that there were correlations between principals' transformational leadership practices and collective teacher efficacy.

Table 9 Relationship between Principals' Transformational Leadership Practices and Collective Teacher Efficacy (N=161)

	Transformational Leadership Practices	Collective Teacher Efficacy
Transformational Leadership Practices	1	.588**
Collective Teacher Efficacy	.588**	1

** Correlation is significant at the 0.01 level (2-tailed)

Qualitative Research Findings

In open-ended question (1) for setting direction of transformational leadership practices, teachers responded that their principals negotiated and collaborated with teachers, School Board of Trustees, Parents Teachers Association, and Staff to make consensus decisions (N=153, 95.03%). Moreover, principals explained group goals to acceptance the whole staff in order to discuss teachers' different perceptions so that they will adopt a consensus decision and if necessary, they precisely participated in making a decision (N=21, 13.04%).

In question (2) for developing people of transformational leadership practices, teachers responded that principals provided money, materials, advise in order to improve teaching practices and they are trying to understand teachers' feelings and difficulties to support duties and opportunities individually (N=90, 61.49%). Principals encouraged teachers to confer with each other by holding the conferences in school in order to create collaborative culture of teaching-learning processes (N=60, 37.26%). In schools, principals encouraged teachers to consider new ideas for teaching methods, evaluation and class control by sharing the better ways

to improve teaching-learning processes (N=20, 12.42%) in carrying out developing people in their schools.

In the third question for redesigning the organization of transformational leadership practices, teachers responded that principals encouraged parents to negotiate, participate and discuss widely in the school improvement efforts in order to be clear and open (N=96, 59.62%). Principals encouraged collaborative culture among the staff in solving the problem (N=67, 41.62%). Principals oversaw without bias in problem solving, giving responsibilities, and adopting discipline fairly to promote morale (N=9, 5.59%). Some teachers (N=3, 1.86%) responded that their principals buffered the interference of teaching process from community.

In last question for improving the instructional program of transformational leadership practices, teachers responded that principals took responsibilities for problem solving, providing the needs for teaching aids and references books (N=126, 78.27%). Principals sent teachers to course and held the conferences in school for encouraging creativity in teaching aids and methods which were flexible with lessons and environment (N=54, 33.54%). Then, principals supervised the records of achievement, lesson planning and library (N=18, 11.18%). Moreover, only one of the teachers responded that his principal celebrated the ceremonies of competence (N=1, 0.62%).

Moreover, the teachers were asked with two open-ended questions about collective teacher efficacy. Various responses for open-ended questions are described as follows.

In open-ended question (1) for student discipline of collective teacher efficacy, they believed that students obeyed their adopted disciplinary rules in daily actions and behaviors (N= 91, 56.52%). Students were attending class regularly, interesting in discussion (N=27, 16.77%). Teachers in their schools can admonish students with others in order to obey the rules (N=14, 8.70%) and they are model of actions (N=16, 9.94%). Some teachers (N=7, 4.35%) little believed in student discipline because students did not obey in cleaning discipline. Teachers (N=13, 8.78%) did not believe in student discipline because of the weakness of students.

In open-ended question (2) for instructional strategies of collective teacher efficacy, they have many teaching experiences and can use multiple teaching methods with the needs of real life in order to make interesting and participating in teaching (N=124, 77.02%). They can teach all improvement of students according to their strengths and weakness (8.70%). Teachers can collaborate for improving instructional strategies (N=7, 4.35%). Teachers did not believe in instructional strategies (N=10, 6.21%) because of lower staffing level, more absent students, weakness in lesson plan and new curriculum reform.

Discussion and Conclusion

Principals, as a transformational leader, should empower teachers to achieve the collective task of school through the development of self-efficacy (Demir, 2008). The objective of this study was to determine the relationship between transformational leadership practices (independent variable) and collective teacher efficacy (dependent variable).

According the findings for **research question (1)**, the overall mean value of principals' transformational leadership practices was 4.17 and so principals conducted at ***moderately high level*.** The result of the descriptive statistics showed that majority of principals had a positive perception of practicing transformational leadership and they seemed to have a moderately high level on their perception. The result of this study confirmed the study of Salleh and Saidova (2013) where principals had a positive perception of practicing transformational leadership but

they seemed to have an average level on their perception in the study of primary schools, Malaysia. In qualitative findings, only (21) teachers answered that their principals explained group goals to get a consensus decision. And only (12) teachers answered that principals adopted discipline and gave responsibilities without any bias when they redesigned the organization. Therefore, the school principals had a positive attitude and moderately high level toward the importance of practicing of four dimensions of transformational leadership in the primary schools of Pathein Township.

For **research question (2)**, according to teachers' perceptions on principals' transformational leadership practices grouped by gender, the result of the t-test analysis showed that there was no significant difference between male and female principals in their practicing transformational leadership. This finding contradicts with three studies reported by Chmer (2020) in which female managers were more likely to be rated by their followers more transformational than were their male counterparts. However, this study may be explained the same by the groups of gender in the principals' transformational leadership practices.

According to the groups of principals' age, there were no significance differences in this result. This result is consistent with the findings of Salleh and Saidova (2013) that there was no significant difference of respondents' perceptions of practices according to age. Therefore, this study may be explained the same in the principals' transformational leadership practices according to their age groups.

According to the groups of principals' administrative services, although there were no significance differences in this result, there were significance differences in results between principals in the groups of principals' administrative services (Chmer, 2020) where there were differences between principals with more than 10 years of experience and other principals as seen from the teachers' perspectives because the principals with more experience are more likely to be adept at dealing with different kinds of people in the workplace. In this study may be explained the same by the groups of administrative services in the principals' transformational leadership practices.

However, when principals grouped by course training, there were significant differences in the dimensions except setting direction and overall transformational leadership practices. As the results, principals who attended DTEd/DTEC were less in practicing transformational leadership practices than teachers who attended ECC/SCC and PPTT. The most experienced principals know more clearly which practices will best improve and develop their schools and teachers (Al-Quran, 2016; Al-Ghamdi, 2011). Therefore, it seems that teachers who attended ECC/SCC and PPTT are more likely to recognize a teacher's nature and try to meet the teacher's needs and support his/her professional growth.

Regarding to the level of collective teacher efficacy for **research question (3)**, the mean values for overall collective teacher efficacy and student discipline were high level. The role of an elementary school teacher incorporates authority and dignity. In addition, elementary school teachers must promote personal development and foster normative behavior in their students while providing them with the tools to navigate social and cultural situations (Hsieh et al., 2009). Therefore, elementary homeroom teachers believe that they can influence can influence student discipline and instructional strategies.

However, the mean value of instructional strategies of collective teacher efficacy was moderately high level. According to the open-ended question, teachers believed that all of the teachers cannot teach students for the improvement according to their strengths and weakness and cannot collaborate with teachers in teaching. They did not believe in instructional strategies

(N=10, 6.21%) because of lower staffing level, weakness in lesson plan and new curriculum reform. Therefore, collective teacher efficacy was moderately high in instructional strategies.

For **research question (4)**, according to collective teacher efficacy grouped by gender, there were no significant differences between groups. In studying teachers' collective efficacy according to their age groups, there were no significant differences among groups. It is consistent with the results of Skaalvik and Skaalvik (2007). According to their services, there were no significant differences but the mean values teachers under 5 years services were ***moderately high*** and less efficacious than other greater experienced teachers' groups. It contrasts with the result of Skaalvik and Skaalvik (2007) that collective efficacy was negatively related to numbers of years in the teaching profession. In this study, the more teaching experiences they got, and the more efficacious they are.

According to their course training, there were no significance differences but the mean values of teachers who were attended PPTT and DTEd/DTEC had more collective efficacy than teachers who attended ECC/SCC. According to the length of course, PPTT is 6.5 months and DTEd/DTEC is 2 years long. Ware and Kitsantas (2007) stated that technical and administrative support of the principal associated to collective teacher efficacy. The change in curriculum followed with the evaluation and assessment process in basic education. Therefore, teachers who attended PPTT and DTEd/DTEC were more efficacious than teachers who attended ECC/SCC (UNESCO STEM, 2016).

According to their positions, Assistance PAT are less services and less efficacious than Vice PAT and PAT. Collective teacher efficacy includes important implications in education because teachers with grater efficacy have greater desires for teaching and more likely to continue staying teaching position. Tschannen-Moran et al. (1998) suggested that the past experience, communication with principals, students, peers and parents can mediate the development of teachers' efficacy.

For **research question (5)**, the results of Person-product moment correlation indicated that there were significant and positive relationships between principals' transformational leadership practices and collective teacher efficacy. This finding is relevant to Cansoy (2020). Based on this finding, it can be stated that as the school principals' transformational leadership practices increase, collective teacher efficacy will increase. On the other hand, it can be stated that as the school principals' transformational leadership behavior decreases, collective teacher efficacy will decrease. It means that if principals by serving as appropriate transformational leadership practices and making trust and respect between the followers will increase the level of collective teacher efficacy.

This finding is similar with findings of a previous study conducted by Ross and Gray (2006). The notion that principals practicing instructional and transformational leadership types in their schools are likely to contribute to the teachers' increased belief in their capacity to overcome problems and enhance student learning outcomes. Another study carried out in school contexts have shown that transformational leadership is positively related to collective teacher efficacy (Demir, 2008; Horn-Turpin, 2009; Ross & Gray, 2006; Walumbwa et al., 2004; Ninkovic & Floric, 2018; Prelli, 2016).

The aim of this study is to study the relationship between transformational leadership practices and collective teacher efficacy in Basic Education Primary Schools. The results in this study show that principals should try to practice transformational leadership practices. To enhance the level of collective teacher efficacy, principals should create a climate of trust in their schools by respecting the school members' ideas and listening to them and as transformational

leader in their schools by considering the follower's needs, values and morals. Principals should try to build a collaborative culture in their schools and to encourage teachers to be creative and cooperative for the instructional improvement in high expectations of school success. Moreover, principals should hold the conferences to discuss and share the knowledge with the board of study so that the experienced teachers can give the suggestions for improving the instructional strategies.

Recommendation for Further Study

This study tried to investigate the relationship between the school principals' transformational leadership practices and collective teacher efficacy at Basic Education Primary Schools in Pathein Township. Then investigating how high school principals and middle school principals performed their transformational leadership practices will need to be done as further research. This study has explored the differences based on personal factors, so, further study recommended to examine the other demographic factors such as type of schools, location and school size. More researches can conduct to search for the other types of leadership and other dimensions of transformational leadership for implementation of the effective schools.

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References

Al-Ghamdi, G. (2011). The Practice of Public Schools' Principals of Transformational Leadership in Al-Mokhwa Governorate [e-thesis]. Master, Umm Al-Qura University, KSA. Retrieved June 13, 2019, from http://www.almajmaa.org/bibn/upload/L20150605023226.pdf

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.

Barr, M. F. (2002). Fostering student achievement: A study of the relationship of collective teacher efficacy and student achievement. *Dissertation Abstracts International*, 63(02), 475A.

Bass, B. (1997). Does the transactional/ transformational leadership transcend organizational and national boundaries? *American Psychologist*, 52, 130-139.

Bass, B. M. (1990). *Bass and Stogdill's handbook of leadership: Theory, research and managerial applications* (3rd ed.). New York, NY: The Free Press.

Cansoy, R. (2020). Transformational school leadership: Predictor of collective teacher efficacy. *Sakarya University Journal of Education*, 10(1): 90-103. doi: https://doi.org/10.19126/ suje.569750

Chen, C. W. (2009). The relationship between teacher's self-efficacy and collective teacher efficacy in junior high schools: An application of hierarchical linear modeling (Unpublished master's thesis, National Changhua University of Education, Taiwan).

Chiang, C., Hsu, W., & Chaung, H. (2016). Development and Implementation of Collective Teacher Efficacy Scale among Elementary School Homeroom Teachers. *US-China Education Review*. 6(2): 99-109. https://doi:10.17265/2161-6248/2016.02.003

Chmer, A. A. (2020). Investigating Transformational Leadership Practices in Private Schools from Teachers' Perspectives. *Foundations of Education Theses*. 6. https://scholarworks.uaeu.ac.ae/ foundation_theses/6

Demir, K. (2008). Transformational leadership and collective efficacy: The moderating roles of collaborative culture and teachers' self-efficacy. *Eurasian Journal of Educational Research*, 33, 93-112. Retrieved from https://researchgate.net

Dumay, X., & Galand, B. (2012). The multilevel impact of transformational leadership on teacher commitment: Cognitive and motivational pathways. *British Educational Research Journal,* 38, 703-729. doi:10.1080/01411926.2011.577889

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37, 479-507. Retrieved from http://www.jstor.org/ stable/1163531

Goddard, R., Goddard, Y., Kim, E. S., & Miller, R. (2015). A theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning. *American Journal of Education*, 121(4), 501–530. https://doi.org/10.1086/681925

Goddard, R.D. (2001). Collective Efficacy: A neglected construct in the study of schools and student achievement. *Journal of Educational Psychology*, 93 (3), 467–476.

Hallinger, P, & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*, 9, 157- 191. https://doi:10.1080/0924345980090203

Horn-Turpin, F. D. (2009). A Study Examining the Effects of Transformational Leadership Behaviours on the Factors of Teaching Efficacy, Job Satisfaction and Organisational Commitment as Perceived by Special Education Teachers. Unpublished doctoral thesis, Virginia Polytechnic Institute and State University.

Hsieh, F. J., Lin, P. J., Chao, G., & Wang, T. Y. (2009). Policy and practice of mathematics teacher education in Taiwan. http://tedsm.math.ntnu.edu.tw/Teds-m%20Taiwan%20Policy%20Report.pdf

Hung, F. Y., Chiou, S. Y., & Huang, T. H. (2012). The measurement and structure verification of high school teachers' collective teacher efficacy scale. *National Chiayi University Journal of the Educational Research*, 28, 35-58.

Kurt, T., Duyar, I, & Calik, T. (2012). Are we legitimating yet? A closer look at the causal relationship mechanisms among principal leadership, teacher self-efficacy and collective efficacy. *Journal of Management Development,* 31(1), 71 – 86. doi:10.1108/02621711211191014

Leithwood, K., & Jantzi, D. (1990). Transformational leadership: How principals can help reform cultures. School Effectiveness and School Improvement: *An International Journal of Research, Policy, and Practice*, 1(4). doi:10.1080/0924345900010402

Leithwood, K., & Jantzi, D. (2005). *Transformational leadership.* In The essentials of school leadership (pp. 31-43), UK: Sage Publication.

Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School effectiveness and school improvement*, 17(2), 201-227.

Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly*, 48, 387-423. doi:10.1177/0013131X11436268

Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). Seven strong claims about successful school leadership, Nottingham, National College for School Leadership

Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. Buckingham, United Kingdom: Open University Press.

Liu, P., Li, L., & Wang, J. (2019). Understanding the relationship between transformational leadership and collective teacher efficacy in Chinese primary schools. *International Journal of Leadership in Education,* 23(5), 604-617. https://doi: 10.1080/13603124.2019.1623922

Macall, M. B. (2003). *Leaders helping teachers helping students: The role of transformational leaders in building teacher efficacy.* https://www.oise.utoronto.ca/Curriculum-Vitae/Blair-Mascall-CV.pdf

Ministry of Education. (2016) National Education Strategic Plan 2016-21. http://www.britishcouncil.org/sites/default/files/myanmar-national-education-strategic-plan-2016-21.pdf

Ninkovic, S. R., & Floric O. C. (2018). Transformational school leadership and teacher self-efficacy as predictors of perceived collective teacher efficacy. *Educational Management Administration & Leadership,* 46(1), 49-64. https://doi: 10.1177/1741143216665842

Prelli, G. E. (2016). How school leaders might promote higher levels of collective teacher efficacy at the level of school and team. *English Language Teaching*, 9, 174-180. https://doi:10.5539/elt.v9n3p174

Ross, J. A. & Gray, P. (2006). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement,* 17, 179-199. https://doi:10.1080/ 09243450600565795

Ross, J. A., & Gray, P. (2006). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement,* 17, 179-199. doi:10.1080/ 09243450600565795

Salleh, M. J. & Saidova, P. (2013). Bast practice of transformational leadership among multi-ethnic headteachers of primary schools, Malaysia. *Journal of Humanities and Social Science (IOSR-JHSS).* 9(3): 01-09

Schein, E. H. (1985). *Leadership and organizational culture*. San-Francisco, CA: Jossey Bass.

Sergiovanni, T. J. (1991). *The Principalship A Reflective Practice Perspective* (2nd ed.). Massachusetts: Allyn and Bacon.

Sergiovanni, T. J. (2007). *Rethinking leadership: A collection of articles*. Thousand Oaks, CA: Corwin Press.

Skaalvik, E. M. & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology, 99(3), 611-625.* https://doi.org/10.1037/00220663.99.3.611

Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective efficacy and student achievement. *Leadership and Policy in Schools*, 3(3), 189–209. https://doi.org/ 10.1080/ 15700760490503706

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202–248.

UNESCO, Strengthening Pre-Service Teacher Education in Myanmar (STEM). (2016). Education College Curriculum Review. https://www.lextutor.ca/myanmar/ montrose-1.pdf

Walumbwa, F. O., Wang, P., Lawler, J. J., & Shi, K. (2004). The role of collective efficacy in the relations between transformational leadership and work outcomes. *Journal of Occupational and Organizational Psychology,* 77(4), 515-530.

Ware, H & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research,* 100(5): 303-3010

Yammarino, F. J. (1994). Indirect leadership: Transformational leadership at a distance. In B. M. Bass & B. J. Avolio (Eds.) Improving organizational effectiveness through transformational leadership. Thousand Oaks, CA: Sage Publications.

Yukl, G. (1998). *Leadership in organizations.* Englewood Cliffs, NJ: Prentice Hall.