



Revisiting PIMRS And Curriculum Instruction Management: Evaluation of Principalship in Banda Aceh

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Abstrak

Penelitian ini mengupas bagaimana kepala sekolah di Sekolah-Sekolah XYZ di Banda Aceh mengatur kurikulum dan pengajaran serta keterkaitannya dengan Principal Instructional Management Rating Scale (PIMRS) (Hallinger, 1985). Penelitian ini menjawab tiga pertanyaan penelitian dengan mengadaptasi PIMRS dalam survei terhadap 186 orang guru di sekolah lokal. Hasil penelitian mengidentifikasi bahwa kepala-kepala sekolah XYZ di Banda Aceh berperan moderat (sedang) ($\mu = 3.78$) dalam mengatur kurikulum dan pengajaran, dan tidak ditemukan perbedaan signifikan antara pendapat guru laki-laki dan perempuan dalam hal peran kepala sekolah mengatur kurikulum dan pengajaran. Selain itu hasil penelitian juga menunjukkan pentingnya pelatihan dan pembahasan kebijakan untuk meningkatkan pengajaran dan pemahaman menyeluruh terhadap kurikulum dan pengajaran bagi guru dan administrator sekolah.

Abstract

This research explored how the principals in Banda Aceh XYZ Schools manage the curriculum and instruction and its relatedness to Principal Instructional Management Rating Scale (PIMRS) (Hallinger, 1985). This research has 3 research questions and to answer them, cross sectional survey, adapted from PIMRS was used and administered to 186 teachers from local schools there. Research findings indicate that principals of Banda Aceh XYZ school played moderate roles ($\mu = 3.78$) in managing curriculum and instruction, and no statistical difference between male and female teachers' perception on principal's roles in managing curriculum and instruction. The results pointed the importance of having workshops and policy discussion to improve teaching and parallel understanding of curriculum and instruction for teachers and administrators.

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INTRODUCTION

Principals play significant roles in managing curriculum and instruction. These roles are one of the important factors for a successful school. A six-year study by the University of Minnesota and Toronto reported that the abstention of a principal in leading curriculum and instruction led to zero improvements (Mitgang, 2012; Stronge & Xu, 2021). Hence, principals are expected to help teachers in every phase of curriculum and instructional activities by being a manager, advocate, a navigator, a coordinator, and a consolidator, among others (Hsiao et al., 2008; Mulandi, 2019; Yue & Xu, 2019). Their acts will help create an effective school and a better implementation of curriculum (Lai & Cheung, 2013).

In order to explain the roles of principal at school it is important to address the works of Murphy (1990 as cited in Lunenburg & Lunenburg, 2013), especially related to curriculum and instructional management. The explanation will be given as follows.

First, curriculum. Glatthorn et al., (2016) believe principals can enable schools to achieve not just the school's goals but the quality learning directed to students. However, the involvement of Principal needs to be supported by teachers so that successful curriculum innovations can be sustained (Cowie et al., 2009). Billings et al., 2016 mentioned several types of Principal's roles, such as being the mentor, manager, observer, evaluator, and public relations director. However, Murphy (1990 as cited in Lunenburg & Lunenburg, 2013) narrowed down the roles of Principal in curriculum as coordinating curriculum, promoting content coverage, and monitoring students' progress.

Furthermore, students learning can be maximized by providing quality content that fulfils aims, goals and curriculum objectives as well as students' needs (Glatthorn et al., 2016). It is not an easy task because Principal have to decide what's to be excluded from the curriculum (Parkay et al., 2014). The aims, goals and objectives of curriculum are used by Principal as the framework to decide the subject content. Principal also needs to supervise the teachers to ensure the contents are being taught perhaps can be extended (Murphy, 1990 as cited in Lunenburg & Lunenburg, 2013). Though principal can decide in terms of teaching for curriculum improvement, the decision can be based on students' performances as reference, with the help

from teachers because they know which content should be taught to students (Glatthorn et al., 2016; Munguia, 2017).

Second, management. Coordinating means to involve and oversee the entire program of curriculum at schools and provide necessary directions to various aspects of its improvement (Ubben et al., 2001). This is done to ensuring that students receive appropriate instruction in areas identified by the school district (Hallinger & Murphy, 1987). Lai & Cheung, (2013) mentioned that the principal can coordinate the curriculum by acting as the catalysts that can identify parallel schools' goals fit with the official curriculum. The principal needs to empower teachers according to their specialties (Billings et al., 2016; Gunawan, 2017; Sebastian et al., 2016) and provide opportunity and empowerment to teachers to coordinate the curriculum based on their expertise. By doing this, the principal can ensure curriculum continuity across the grades (Murphy, 1990 as cited in Lunenburg & Lunenburg, 2013).

The principal also consistently checks and discusses with the teachers about types of programs, resources and assessments appropriate for students in order to achieve curriculum objectives (Lin & Lee, 2013). Then they ensure that the materials and standardized tests used by teachers are aligned with the curriculum knowledge (Lee & Dimmock, 1999). Through curriculum review and evaluation, principal helps teachers to notice necessary changes needed to make sure meaningful learning experiences (Glatthorn et al., 2016).

Third, student progress. According to Murphy (1990as cited in Lunenburg & Lunenburg, 2013), the evaluation and monitoring of students' progress must be based on valid data. Principals can modify school goals based on data from criterion and standardized reference that evaluate students' progress. Again, principal needs to work with classroom teachers to ease monitoring students' progress (Omogbehin, 2013), discussing and getting feedback from teachers' assessment (Hallinger & Murphy, 1987).

Fourth, instructional time and its quality. Principal can maximize instructional time by protecting the time and avoid interruption to students and teachers during classroom hours (Hallinger & Murphy, 1987). Principal can encourage teachers to use instructional time for teaching and practicing new skills and concepts, and ensuring that tardy and truant students suf-

fer specific consequences for missing instructional time.

Moreover, quality instruction for classroom teaching and learning is the major activity that need to be focused at school (Huitt, 2003). Principal can align quality instruction with school's curriculum and students' learning assessments (Lunenburg, 2010). The main aim is for coordination and classroom instruction improvement (Murphy, 1990 as cited in Lunenburg & Lunenburg, 2013). Quality instruction done properly can increase students' critical thinking. Principals should provide appropriate teaching materials and well-trained adequate teachers (Bellibaş, 2015). Besides that, he or she can promote better instruction by frequently conducting walkthroughs and observations in the class (Bellibaş, 2015; Murphy, 1990 as cited in Lunenburg & Lunenburg, 2013).

Fifth, supervise and evaluate the instruction. Since the connection between instructional leadership and classroom instruction is indirect (Grissom et al., 2013), the principal's role to achieve high school performance status can be achieved if the principal is involved in instructional strategies, supervision and evaluation (DiPaola & Wagner, 2018; Parkay et al., 2014). Principal can supervise and empower the teachers to choose the most suitable teachers' instruction or students' learning to instructional materials that fit into students dynamic (Gunawan, 2017; Hallinger & Murphy, 1985).

Through the supervision, the principal ensures that the schools' goals are translated into practice at the classroom level and to monitor classroom instruction through numerous classroom observations (Murphy, 1990 as cited in Lunenburg & Lunenburg, 2013). Meanwhile through the evaluation, the principal assesses overall teachers' performance in instructional implementation and in the instruction to ensure its quality (DiPaola & Hoy, 2013). In addition, as feedback, the principal is responsible for announcing or giving a report on the result of the evaluation process to the teachers as reference for future improvement (Hallinger & Murphy, 2001).

Based on the previous discussion on the importance roles of the principal at school, this paper aimed to describe Banda Aceh's Principals roles of managing instructional leadership from the curriculum and instruction perspectives by using PIMRS (Hallinger & Murphy, 1985). We felt the urgency to detail the principals' roles to

improve and reflect the practices based on the context of Indonesian Education system which supposedly to purport the sense of autonomous consciousness among Principal. The consciousness that leads to the localization of power creates principals' insensitivity of their ineffectiveness. At the end, there is no improvement for curriculum and instruction at schools (Glathorn et al., 2016; Victor & Emetarom, 2017).

Ideally, we wanted to see if the localization of power can create empowerment and lead the implementation of curriculum and instruction at school (Gunawan, 2017), although Desfandi et al., (2016) believed it is still not a reality. Rather, principals are seen as authoritarian protagonist whom facade changes at school through warnings and inelegant decisions. The ineffectiveness of instructional leadership can be seen not just specifically to Banda Aceh but all over Indonesia. In world ranking, Indonesia was ranked 110th placed out of 188th in Education Achievements Index (UNDP, 2020). According to Pannel & McBrayer (2022), there is always a need to retain high quality principals that to create schools that are resilient to challenges, and to develop a purposeful, collaborative, and sustainable professional learning climate.

According to the previous study on this topic, it is difficult to find the same topic in Indonesia, specifically in Aceh. In so doing, this study measured roles and assistance perceived by teachers which were provided by the principals in Aceh. We analyzed teachers' responses based on PIMRS (The Instructional Management Rating Scales) developed by Hallinger and Murphy (1985) to measure instructional leadership of the principals (Hallinger & Murphy, 2001). We felt the need to provide valid and reliable assessment through PIMS for leadership behavior of the principals bounded by curriculum and instruction dimension. From the PIMRS analysis, we are interested to know (1) the level of assistance received by teachers in managing curriculum and instruction at school, (2) the main roles played by Principals in managing curriculum and instruction, and (3) the gender perceptions of principal's roles in managing curriculum and instruction at Banda Aceh's schools.

The result of this research will contribute to the discourse of instructional leadership promoted by Hallinger and Murphy (1985, 2001), especially in Indonesian context, for specifically in Aceh. The rise and the use of instructional leadership as one among many types of leadership in educational setting by the government (Sy-

ahril et al., 2020), especially by the directorate general of teachers and educational personnel of Ministry of Education, Culture, Research and Technology, needs more information in order to know how this concept has been implemented in certain contexts in Indonesia.

METHOD

This research used cross sectional survey method, and the PIMRS was administered to 243 permanent teachers, from five government XYZ locals Schools out of six schools in Aceh, as tabulated in Table 1.

Table 1 The Population Distribution

No.	Schools' Code Identification	The Number of Teachers	Percentage (%)
1.	XYZ school A	62	25.5%
2.	XYZ school B	93	38.3%
3.	XYZ school C	59	24.3%
4.	XYZ school D	21	8.6%
5.	XYZ school E	8	3.3%
	Total Population	243	100%

Prior to this study, we approached the 6 Principals of the XYZ Schools and explained about our research. However, only 5 Principals gave responses to our request. The principals then conducted the meeting among their administrations about our research, and later informed their staffs about it. We obtained the teachers' consent through the letter explaining in detail the nature of our research. We mentioned specifically they could withdraw from our research at any time without any repercussions if they had concerns. We also detailed in our consent letter that this research received approval from our university's board of research ethics.

To determine the respondents of the research, the research used the accessible population as the entire respondents due to a small population (Creswell, 2012, p382). The accessible population was the population which the research of this study was able to generalize and reach (Fraenkel et al., 2012). All teachers from five government XYZ Schools (SMK) in Banda Aceh became the accessible population of this research. There were 243 respondents altogether, and they are the permanent teachers in the XYZ schools. Both genders were involved in the research.

There were two important sections of the questionnaire, (1) Section A was focused on the

demographic data, and (2) section B was focused on Principal's roles in the curriculum and instruction. The questionnaires were bilingual (Indonesian and English). Prior to this study, we had a pilot study with 42 teachers from various primary and secondary schools in Banda Aceh. The value of the Cronbach's alpha was 0.88. The instrument was adapted from the Principal Instructional Management Rating Scale (PIMRS) by Hallinger and Murphy (1985, 2001). The PIMRS was made to highlight the patterns in instructional leadership of Principals (Hallinger, 2008).

A. Instrument Adaptation Process

The original PIMRS consisted of fifty statements divided into ten constructs asking in detail about Principal's role in curriculum and instruction. Each statement used Likert's scale of 1 – 5, where 1 represents almost never, 2 represents seldom, 3 represents sometimes, 4 represents frequently, and 5 represents almost always. The original PIMRS also had three forms; the self-assessment form for the principals, the teachers form and the supervisor form. This research only used the teachers' form. The teachers' form was divided into two sections, part one was the section on the demographic data, and part two on the section about the description of Principal's job and behaviours.

However, in this current research, which adapted from the PIMRS did not include all constructs from the original. The first part of the instrument, the demographic part, was maintained. Although personal data about the respondents were required, the confidentiality of respondents is secured in this research. In addition, the second section consisted of six constructs. It is explained in table below:

Table 2 The Constructs of Adapted Questionnaire

No.	Construct
1.	Coordinating the curriculum
2.	Promoting content coverage
3.	Monitoring students' progress
4.	Allocating and protecting instructional time
5.	Promoting quality instruction
6.	Supervising and evaluating instruction

We made adaptations to ensure our questionnaire address the elements of curriculum and instruction for the research purpose. We retained four constructs (number 1, 3, 4 and 6)

Table 3 The Finalization of Instruments

No.	Constructs	Item No.	Explanation	Sample item	Cronbach's Alpha
1.	Demographic Information	4	Respondents' demographic data. The data were maintained anonymously	Gender, background of education, etc.	0,69
2.	Coordinating the curriculum	5	The principal translates curriculum knowledge into meaningful curriculum programs, matching instructional objectives with curriculum materials and standardized tests; and ensuring curriculum continuity vertically and across grade levels (Murphy, 1990).	Monitor the classroom curriculum to see that it covers the school's curricular objectives	
3.	Promoting the content coverage	5	The principal ensures that content of specific courses is covered in class and extended outside of class by developing and enforcing homework policies (Murphy, 1990).	Ensure that the school's academic goals are reflected in the content of the subject matters.	0.61
4.	Monitoring student progress	5	The principal uses both criterion- and standardized-reference tests to diagnose student problems and evaluate their progress, as well as using test results to set or modify school goals (Murphy, 1990).	Meet individually with teachers to discuss student's progress	0.84
5.	Allocating and protecting instructional time	5	The principal provides teachers with uninterrupted blocks of instructional time and ensuring basic skills and academic subjects are taught (Murphy, 1990).	Limit interruptions of instructional time by public address announcements	0.76
6.	Promoting quality instruction	5	The principal ensures consistency and coordination of instructional programs and defining recommended methods of instruction (Murphy, 1990).	Reinforce teaching instructions by teachers in staff meetings, newsletters, and/or memos.	0.81
7.	Supervising and evaluating instruction	5	The principal ensures that schools' goals are translated into practice at the classroom level and monitoring classroom instruction through numerous classroom observations (Murphy, 1990).	Ensure that the classroom priorities of teachers are consistent with the goals and direction of the school	0.65

from the original PIMRS Hallinger and Murphy (1985, 2001) and reconstructed the other two (number 2 and 5) from some of PIMRS original items and supported by Murphy's theory (1990 as cited in Lunenburg & Lunenburg, 2013). We maintained the Likert's scale as in the original PIMRS. 1 represents almost never, 2 represents seldom, 3 represents sometimes, 4 represents frequently, and 5 represents almost always.

The questionnaire was translated into Bahasa Indonesia since Indonesia Language (IL) is the operational and the national language in Banda Aceh. The process of translation was con-

ducted before the pilot test was carried out. It was translated by two language experts both in IL and English. The instrument was in English, so the first step was translating it into IL. Back translation was conducted to ensure accuracy of the translated version. It was done by another English expert.

B. Instrument Adaptation Process

There were six constructs under the dependent variable. They measured the frequency of assistance offered by the principals for teacher

Table 4 Detailed demography of Banda Aceh XYZ schools' teachers

Variable		N	%
Gender	Male	59	31.7
	Female	127	68.3
Background of education	Bachelor's	175	94.1
	Masters	11	5.9
	PhD	0	0.0
Years of teaching experience	Under 5	8	4.3
	6 – 10	40	21.5
	11 – 15	59	31.7
	Over 16	79	42.5
Subject Specialization	Core subjects	73	39.2
	Specialized subjects	113	60.8

Note: N = Size of Population, % = the Percentages of Population

in curriculum and instruction at Banda Aceh XYZ Schools' context. Among these six constructs, four of them were directly adopted from PIMRS (Hallinger & Murphy, 1985). The four constructs retained as in the original PIMRS are supervising and evaluating instruction, coordinating the curriculum, monitoring students' progress and, allocating and protecting instructional time as they directly could measure the involvement of Principals in curriculum and instruction at Banda Aceh XYZ Schools.

While the remaining two constructs (promoting the content coverage and promoting quality instruction) were developed from some of PIMRS original items and supported by Murphy's (1990 as cited in Lunenburg & Lunenburg, 2013) theories of principal roles in curriculum and instruction. The adaptation was made to ensure our questionnaire answer the research questions and address the elements of curriculum and instruction for the research purposes. Besides that, there were no constructs that directly measure about promoting content coverage and promoting quality instruction in the original PIMRS.

Research questions (1) and (2) were analyzed using descriptive statistics. However, inferential statistic was used involving the independent sample t-test for research question (3).

RESULT AND DISCUSSION

Table 4 presents the demographic profile in term of gender, educational background, years of teaching experiences, and subject taught by teachers. There were 186 respondents from five

Banda Aceh public XYZ schools instead of 243. They were 31.7 % male teachers (N = 59) and 68.3 % female teachers (N = 127). The teachers had various educational backgrounds, the majority (N = 175) had bachelor's degrees and the rest had post graduate degrees (N = 11). Eight (8) respondents (4.3%) were new teachers with less than five years of experience while 21.5 % (N = 40) teachers had 6 – 10 years teaching experience. The majority of the respondents (42.5 %) were teachers more than 16 years of experience (N = 79), while 59 teachers had taught for 11 – 15 years. In all, there were more teachers (N = 113) that taught specialized subjects than those who taught core subjects (N = 73).

Figures 1 and 2 show a visual demographic profile of teachers at Banda Aceh XYZ Schools based on gender. Figure 1 represents male teachers and their background of education, years of teaching experience, and subject specialization. There were 59 male teachers with the majority having Bachelor's degree qualification (94.9%) and a very small number had Masters qualification (N = 5.1%). Most of the male teachers (N = 42.4%) had taught for 11 – 15 years while eleven of them (N = 18.6%) had 6 – 10 years' experiences. On the other hand, six respondents (N = 10.2%) became teachers for less than 5 years, and seven teachers (N = 28.8%) were considered as senior teachers who had taught for more than 16 years. A large number of male teachers (N = 72.9%) taught specialized subjects while the others (N = 27.1%) taught core subjects.

Subsequently, figure 2 shows the demographic profile of 127 female teachers at five public XYZ Schools in Banda Aceh. Just as with the

Figure 1
The Demographic
Profile of Male Teachers

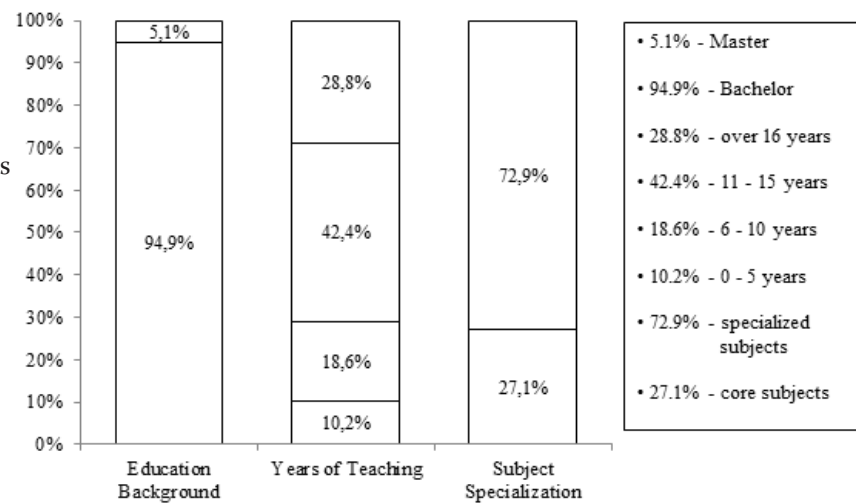
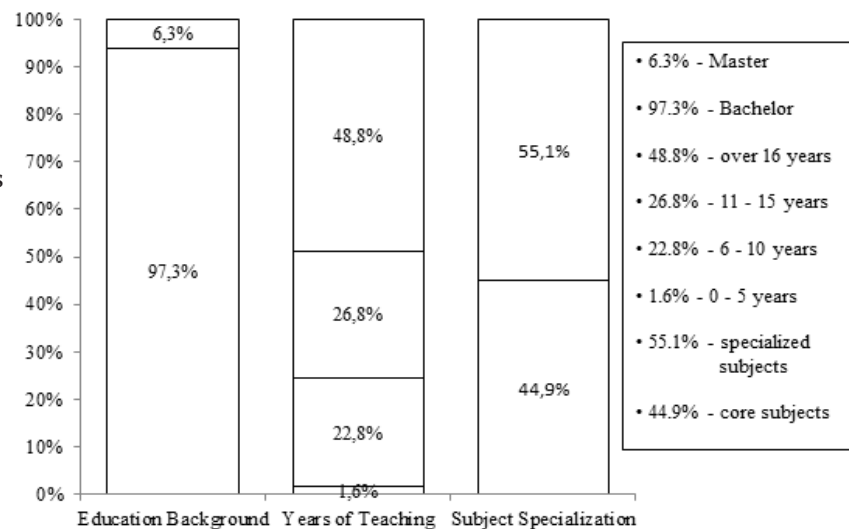


Figure 2
The Demographic
Profile of Male Teachers



male teachers, most female teachers also had bachelor's degree qualification ($N = 97.3\%$). On the contrary, compared to the male teachers, most female teachers ($N = 48.8\%$) had taught for over 16 years, while 26.8% had 11 – 15 years of teaching experience, and 1.6% of teachers who were considered new had taught for less than five years. More than half ($N = 55.1\%$) of the teachers taught specialized subjects, while another half ($N = 44.9\%$) taught core subjects.

A. The Level of Roles Played by Principal in Curriculum and Instruction Management

The average percentages from previous analysis were compared to get the most roles played by the principals in curriculum and instructions management (Table 4).

A large number of teachers frequently perceived that the principals played their roles in curriculum and instruction management ($N = 48.67\%$). It is supported by the value of the average mean of all constructs which is closer to 4 ($\mu = 3.78$, $SD = 0.86$). Next, teachers who perceived their principals only played their roles on sometimes, was 24.76% , followed by the principals who were perceived as almost always involved in managing curriculum and instruction as 19.25% . A small group of teachers believed that their principals seldom assisted the teachers at school ($N = 4.94\%$), while yet a smaller number of teachers were dissatisfied with their principals' work ethics because the principals almost never had any involvement in managing curriculum and instruction ($N = 2.33\%$). This is alarming because we considered the teachers' responses

Table 5 Roles of Principals in curriculum and instructions management

No.	Construct	Responses (%)					Mean of each construct	SD of each construct
		1	2	3	4	5		
1.	Promoting the Content Coverage	1.62	3.56	21.92	53.88	19.02	3.85	0.81
2.	Allocating and Protecting Instructional Time	2.4	4.96	23.42	45.38	23.46	3.83	0.89
3.	Promoting Quality Instructions	2.26	5.38	22.36	48.8	21.16	3.81	0.87
4.	Coordinating the Curriculum	2.38	3.34	25.82	49.06	19.5	3.80	0.84
5.	Supervising and Evaluating Instruction	2.14	6.24	25.7	48.38	17.54	3.73	0.84
6.	Monitoring Students' Progress	3.2	6.16	29.34	46.44	14.84	3.64	0.91
The Average of all constructs		2.33	4.94	24.76	48.67	19.25	3.78	0.86

Notes: 1=Almost Never, 2=Seldom, 3=Sometimes, 4=Frequently, 5=Almost Always, SD = Standard Deviation

from 3 (sometimes) to 1 (almost never) show the ineffectiveness of managing the schools in terms of its curriculum and instruction. After adding the average, the ineffectiveness amounted to 75.76%.

B. Difference in Perception on Principal's Roles in Curriculum and Instruction Management between Male and Female Teachers

All items under each construct of the principals' roles in curriculum and instruction management were categorized into six dimensions (coordinating the curriculum, promoting the content coverage, monitoring students' progress, protecting instructional time, promoting quality instruction, and supervising and evaluating instruction. A detailed distribution is presented in table 7 below.

Among the six validated dimensions, two dimensions, the dimension of promoting instruction and dimension of supervising and evaluating instruction, were found to have significant result between male and female teachers. The dimension of promoting quality instruction was found statistically significant between male ($\mu = 3.88$, $SD = 0.52$) and female teachers ($\mu = 3.78$, $SD = 0.69$), since the p - value was 0.03 smaller than 0.05, $t(184) = 1.00$. In this dimension male teachers appeared to have higher perception toward their principals' roles in curriculum and instruction management than female

teachers with a mean difference between the two groups at 0.1 which is medium at Cohen's $d = 0.3$. Secondly, another dimension which was found to be significantly different was the principals' role in promoting and evaluating instruction, $t(184) = 0.77$. The male teachers ($\mu = 3.78$, $SD = 0.54$) had higher confidence towards their principals rather than female teachers ($\mu = 3.71$, $SD = 0.64$). The mean deviation between the two groups 0.07 put the difference at small difference at Cohen's $d = 0.1$. Most of the male teachers feel have higher perceptions towards their principal, firstly due to the same gender, thus could initiate more interaction between the principals.

The dimensions found not statistically different were coordinating curriculum, promoting the content coverage, monitoring students' progress, and protecting instructional time. All those dimensions had p - value larger than 0.05. In addition, the average of p - value of all constructs also indicated that there was no significant different between male and female teachers in their perceptions toward Principals' role in general.

Among the dominant's roles, which were played frequently by Principals, were the roles in promoting content coverage ($\mu = 3.85$), and allocating and protecting instructional time ($\mu = 3.83$). Subsequently, there were 48.8% teachers who perceived that their principals assisted them frequently in promoting quality instruction ($\mu = 3.81$). Then, the positions were followed by the principals who coordinated curriculum

Table 6 Perception of Principal's roles in curriculum and instruction among genders

Dimension & Group	N	Df	μ	SD	T	p-value	Decision
Promoting the content coverage							
Male	59	184	3.797	.730	-.820	.768	Not Significant
Female	127		3.877	.568			
Allocating and protecting instructional time							
Male	59	184	3.73	0.56	-1.76	0.36	Not Significant
Female	127		3.89	0.58			
Promoting quality instruction							
Male	59	184	3.88	0.52	1.00	0.03	Significant
Female	127		3.78	0.69			
Coordinating the curriculum							
Male	59	184	3.85	0.61	0.81	0.27	Not Significant
Female	127		3.77	0.65			
Supervising and evaluating instruction							
Male	59	184	3.78	0.54	0.77	0.04	Significant
Female	127		3.71	0.65			
Monitoring students' progress							
Male	59	184	3.722	.635	1.164	.252	Not Significant
Female	127		3.595	.716			
All constructs							
Male	59	184	3.82	0.47	0.24	0.26	Not Significant
Female	127		3.80	0.49			

Notes: N = Size of Population, Df = Total of Population, μ = Mean, SD = Standard Deviation, T = t - test of Equality of Means, p - value = Significant at $p < 0.05$, not Significant at $p > 0.05$

as $\mu = 3.80$, and in supervising and evaluating instruction as $\mu = 3.73$. Finally, most Principals mostly rarely helped teachers in monitoring students' progress as $\mu = 3.63$. The graphic below visualizes the roles played by Principals in curriculum and instruction management showing the roles that were most frequently done to the role that was rarely done.

C. Discussion

Based on the descriptive analysis above, this research found that the teachers agreed that their principals helped them in managing curriculum and instruction. Most of the teachers (N = 92.68%) perceived positively towards the frequency of roles played by principals ($\mu = 3.78$, SD = 0.86). There were 48.67% teachers believed that the principals frequently assisted the teachers in managing the curriculum and instruction, and another percentage of teachers (N = 19.25%) even reported that the principals had consistently assisted them at schools. A quarter of population (N = 24.76%) agreed that the principals sometimes played their role in helping the teachers

very well.

The findings are consistent with the notion that to have a good school educational system (DiPaola & Wagner, 2018; Fullan, 2014; Glatthorn et al., 2016; Kempa et al., 2017; Sebastian et al., 2016; Yasin et al., 2016) needs the involvement of principals in helping/assisting the teachers. The roles are diverse and not limited to supervise the curriculum phases; understanding schools' needs and many more (Clark, 2016; Lin & Lee, 2013; Lunenburg & Lunenburg, 2013).

However, there were still teachers who perceived that the principals assisted less in managing curriculum and instruction. Although the numbers were small (N = 7.27%), it can be assumed that principals' assistances were perceived differently by some teachers. The differentiation of perception might happen since some teachers had different amount of information about what their principals should assist in managing curriculum and instruction, so that the teachers perceived less positively towards the principals' roles.

Besides, it was found that the principals did not put the same amount of attention towards every role they played in managing curriculum and instruction. The principals had the tendency towards certain roles such as focusing on promoting content coverage and coordinating curriculum, which will be discussed further in next topic.

1. Promoting Content Coverage

On teachers' perception, the role mostly played by the Principals at Banda Aceh XYZ schools is promoting content coverage ($N = 53.88\%$, $\mu = 3.85$). By promoting content coverage, the principals used their right to adapt the curriculum provided by the Indonesia's Ministry of Education according to the goals and the needs of their individual school. Ganon-Shilon and Schechter (2017) believe that principals can alter schools' curriculum and its content based on the school's necessity based on the given autonomy. However, it is crucial to align the changes of academic contents according to schools' academic goals. Another way to emphasize the promotion of content coverage of the classroom is through co-curricular activities implemented at school. This aligns with Murphy (1996) that wanted to extend the classroom learning outside academic learning hours. The principals also took consideration of teachers' and students' opinion in the decision of academic content changes as suggested by Clark (2016).

However, we realize that content coverage discussion should not be merely on the long duration of teaching as perceived by the principals but rather should be extended to depth versus breadth of teaching and learning (West, 2017). It is important to emphasize of in-depth teaching because it will sustain mastery learning when the students are out of the school. In relation to the context of our participants, the importance is obvious because our contexts are XYZ schools setting, which emphasize on technical skills and expertise in handling works. Furthermore, we were hoping that in depth content coverage will promote critical thinking rather than competing with technology that promotes new things daily. Having the critical thinking skills actually sustain students' survival due to the ability to master learning despite how new and challenging the works are.

2. Allocating and Protecting Instructional Time

The second dominant role played by Principals of Banda Aceh XYZ schools is in allocating and protecting instructional time ($N = 45.38\%$, $\mu = 3.83$). Generally, the problems in this area happened due to weak attention from school management, teachers' retention and discipline problem among the students which actually prolong classroom periods (Kaden et al., 2016; Kaya et al., 2015; Losen & Whitaker, 2017). There is a need to synchronize administration and academic's understanding on protecting instructional time by cutting short unnecessary activities or bureaucracy during academic hours such as meetings and proper scheduling.

However, the Principals in Banda Aceh XYZ can overcome this problem by allocating specific time for co-curricular activities or school events, and policy that do not allow students to be called out during classroom sessions. According to Murphy (1996), teachers should not be interrupted during classroom session and specific to teach and practice new skills during that. There is also specific punishment for being late and abstaining from class lessons. Hallinger and Murphy (1985) found the importance to Principals' role to assist and protect instructional time by taking discipline actions to stop truancy.

3. Promoting Quality Instruction

We were surprised at the result of promoting quality instruction because it became the third most important role, when it should be the top priority ($N = 48.8\%$, $\mu = 3.81$). In fact, according to DiPaola and Wagner (2018), and Ronfeldt et al., (2015), the quality instruction outweighs other motivating factors that influence students' studies. Principals should supervise teachers on improving their instruction for students' learning. The practices by the principals on promoting quality instruction were delivered during staff meetings and periodical reports. There were times when the principals attended and led activities to improve quality teaching. The activities increase the efficiency of teaching process because Principals were involved directly. Besides, the principals provided workshops and training to improve teachers' teaching at school in terms of their schools. AL-Othman (2014) believed good quality instruction at high school could

impact and sustained high performances of the students when they enter the university.

4. Coordinating Curriculum

The fourth role played by Principals in managing curriculum and instruction is coordinating curriculum ($N = 49.06\%$, $\mu = 3.80$). This study found that teachers agreed that the principals empowered teachers by dividing the responsibilities among teachers in coordinating curriculum. Sebastian et al. (2016) believed that empowerment must be systematic to capacitate teaching and learning, and will consign various works assigned to teachers. This study indicates the major coordination done by Principals after empowering teachers are monitoring the curriculum implementation at school ranging from programs, subjects and assessment reviews and ensuring teaching materials and test are aligned with knowledge gained by students through the scores obtained (Hallinger & Murphy, 1985). In-line, studies by Falk and McNamara, 2018, Ronfeldt et al., 2015, and Voogt et al., 2016, showed that curriculum coordination needs interactions and working together of teachers and to relate of their awareness of learning activities. This can be done through the help of principals by having a clear conception of well-planned activities for curriculum coordination.

5. Supervising and Evaluating Instructions

According to curriculum experts (Taba, 1962; Tyler, 1957 as cited in Hunkins & Ornstein, 2016), supervision and evaluation of instruction usually come last, however The Principals should focus more on supervising and evaluating instructions ($N = 48.38\%$, $\mu = 3.73$) because it ranked number five. Supervision and evaluation become a continuity as they are used to govern teaching and learning (Hunkins & Ornstein, 2016). In addition, DiPaola and Wagner (2018) and Parkay et al. (2014) also said that supervision and evaluation in teaching help to promote quality instruction because of this continuity elements of observing and overseer school teachings process. It means, principals can diverse his/her roles from managing to evaluators (Alvoid & Black, 2014; Kraft & Gilmour, 2016; Purwanto, 2017). Principals also need to give more attention to instruction as it functions as reflection to successful learning experience (Parkay et al., 2014; Rebore, 2014). There were times when the principal corrected teachers' teaching prac-

tices to ensure the instructions are aligned and work well with school vision. DiPaola and Hoy (2013) believe that it is done to improve teaching practices and to instill confidence that the teachers are working towards achieving schools' goals.

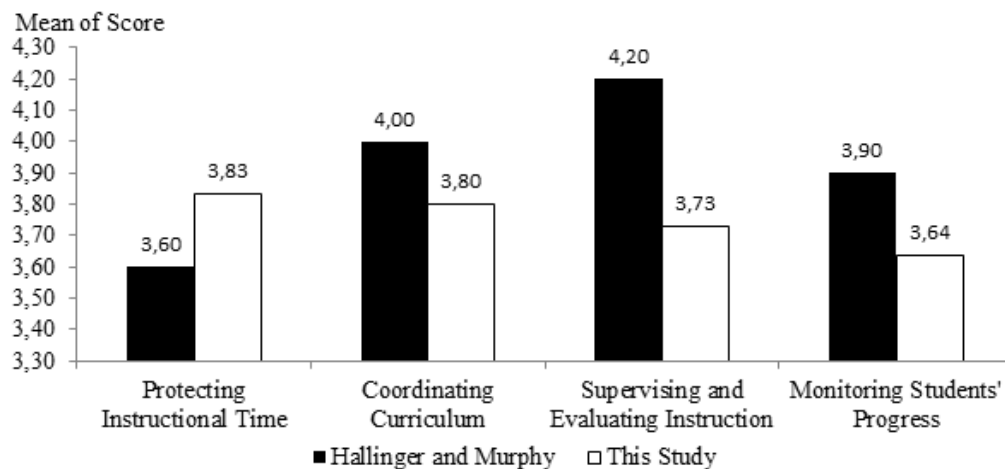
6. Monitoring Students' Progress

Monitoring students' progress was given least attention among the principals. ($N = 46.44\%$, $\mu = 3.64$). Even though it is placed in the last position, the data showed that the principals monitor students' progress by consistently meet teachers to exchange views on students' performance. It must align to schools' goals (Murphy, 1996). To that extent, the role of monitoring students' progress is associated with criterion and standardized exam result. The monitoring process needs a close-knit cooperation between teachers and the principals, so it went smooth (Aslanargun, 2015; Omogbehin, 2013). From the meetings, feedbacks were gathered (Ndungu et al., 2015) and must be tabled on time (Hallinger & Murphy, 1985, 1987).

Furthermore, even though this study had some similarities with Hallinger (2008) in term of its respondents, method and the focus, but it did not show the same result. Hallinger (2008) discovered that based on teachers' perceptions, the principals highest rating in the dimension of managing curriculum and instruction is the principals who supervise and evaluate instruction ($\mu = 4.20$), along with coordinating curriculum ($\mu = 4.00$), monitoring students' progress ($\mu = 3.90$) and protecting instructional time ($\mu = 3.60$).

Meanwhile, in comparison with Hallinger's (2008) findings that argued protecting instructional time is the lowest role ($\mu = 3.60$) played by the principals, this study showed a contradiction where this role played quite well ($\mu = 3.83$) by the principals in Banda Aceh XYZ schools. This result indicated that principals' awareness about the importance of instructional time run without disruption had increase over the years. However, in short Hallinger, Murphy and we agreed that the principals frequently involved and played their duties in managing curriculum and instruction.

Our independent sample t-tests result showed that there was no significant difference between male and female teachers' perceptions on the role of Principals in managing curriculum and instruction at Banda Aceh XYZ schools. Out

Figure 3 The Comparison of Hallinger and Murphy' research with this study

of six constructs employed in the comparative analysis, only two constructs are reported statistically significant. In term of promoting quality instruction, male teachers had higher expectation toward their principals rather than female teachers, with a mean difference between the two groups at 0.1 which is medium at Cohen's $d = 0.3$. Similarly, male teachers also have higher expectation toward Banda Aceh XYZ schools Principals in supervising and evaluating instruction with mean difference between two group is 0.07, which is small at Cohen's $d = 0.1$. It was proven by a score of p -value which is smaller than 0.05. Even though, Banda Aceh XYZ schools were dominated by female teachers ($N = 127$) and female Principals, nevertheless the male teachers supported the female Principals by showing more positive perceptions. In contrast, Range, Finch, Young and Hvidston (2014) mentioned that female teachers give more positive feedback toward female principals, which means female teachers prefer to have leaders of the same gender.

Overall, two out of seven constructs did have statistically different results, but these were not substantive enough to conclude in general that there was a significant difference between male and female teachers' perception. This premise is supported by Yasser and Amal (2015), Range et al. (2014) and, Waswas and Gasaymeh (2016). Yasser and Amal (2015) who claimed in their study that only one of three constructs resulted significant different between male and female teachers where the favour was on female teachers. Moreover, Range et al. (2014) mentioned that through the analysis of teachers' perception on their willingness to be observed by Principals and Principals' feedback based on teachers' te-

nure and gender, the significant different between male and female teachers were only founded in students' engagement, the believed-on Principal's classroom visit bring improvement for teachers and the encouragement for Principal to do classroom visitation. Which make the result was similar to this research that was insignificant. Similarly, Waswas & Gasaymeh, (2016) also denied the existence of any difference between male and female teachers' perception on the role of principals in strengthening the intellectual security attributed to the study variables (gender, academic level, years of experience in administration).

CONCLUSION

This study is not trying to belittle the efforts made by principals to improve their school's performance. Though the study might show deficit in instructional leadership among the principals, but it should be viewed as organizational problem rather than to attribute the weaknesses to the principals only. Principals of Banda Aceh XYZ schools offered a moderate level of assistance for their teachers in managing curriculum and instruction with the score of 3.78. The majority of teachers perceived that the principals was frequently involved in six roles outline in the framework of this study, while a noticeable number perceived that the principals almost always played the roles in managing curriculum and instruction. Even though this study employed six constructs, but there was no big difference among them in terms of how teachers perceived the principals. In general, there was no statistical difference between male and female teachers'

perceptions toward the six roles played by principals in managing curriculum and instruction at Banda Aceh XYZ schools.

Moreover, this study found that the role mostly played by Principals was promoting content coverage, followed by allocating and protecting instructional time. These two roles were the only two roles in which the principals had the autonomy to adapt the curriculum from the Ministry of Education into the needs and situations of the schools. The rest of the roles played by principals were as mentioned earlier: promoting quality instruction, coordinating curriculum, supervising and evaluating instruction, and monitoring students' progress need to be strengthened, involved and solidified.

In short, the result of this research will create awareness for the principals about teachers' perspective toward their performance in assisting teachers in curriculum and instruction. In reflecting and evaluating themselves, the research results can inform the principals to enhance their performance and enrich their knowledge as curriculum leaders for a better education and for the schools. Thus, the principals can consider the result as the impetus and catalyst for further development of themselves.

Furthermore, the result of the research will contribute information about principals' roles for the school and the community. The school and community can monitor principals' performance in curriculum and instructions as they are the representative of the schools that they lead. The report given by this research provides information on how principals play their roles and provide assistance for teachers in curriculum and instructions, which is a key factor to having successful school. In general, the result of this research will also contribute to the education system of Indonesia such as to the Department of Education in Aceh or to the Ministry in producing quality school principals.

Thus for, researches about principals' roles were mostly conducted in non-Muslim countries or districts, and the results were reported from the perspective of contemporary education perspective. By doing this research in Banda Aceh - Indonesia a country with Muslim majority, it is hoped that the result of this research can give some perspective in education led by a Muslim community. This research will give an insight into how the leader of a Muslim community such as a school leader, leads the school compared to its Western counterparts. This will create a big impact on awareness of the impor-

tant role of the leader for a Muslim community

According to the findings of this study, it is suggested that the principals still need to keep themselves parallel with development and enhance their knowledge and skills in managing curriculum instruction. Besides that, the principals also need to follow curriculum trends and to filter and select which trend that would be the most appropriate to be implemented for their schools. They should get frequently involved in workshops and meeting with faculty members, teachers and others stakeholders to discuss the implementation and problems of school curriculum. Additionally, future research could employ all constructs in "Principal Instructional Management Rating Scale" (PIMRS) proposed by Hallinger.

Future research could also involve more teachers, not only from Banda Aceh, but widening the population to all districts in Aceh province. This attempt will give a more general and varied result when the population is bigger and hence the study is able to represent all XYZ Principals and teachers in Aceh. Besides that, involving Principals as other respondents of research will give a deeper understanding about Principals' role in managing curriculum and instructions. Two perspectives both from teachers and principals could open up the possibilities to employ qualitative and quantitative research design at the same time. By having survey for teachers and interview for principals, it is hope that more complex understandings would be obtained in future research.

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