Thai Students' Perceived Teacher Support on Their Reading Ability: Mediating Effects of Self-Efficacy and Sense of School Belonging

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Abstract: This study aimed to investigate whether Thai high school students' perceived teacher support could enhance their reading ability through self-efficacy and sense of school belonging. The theoretical foundation of this study included the theory of social-motivational processes and social cognitive theory. Structural equation modeling was used for analysis and validation. The student questionnaire from the Programme for International Student Assessment (PISA) 2018 survey questions regarding teacher support, sense of school belonging, self-efficacy, and reading ability. The sample consisted of the data collected from the Thai students in the PISA2018 survey, with an effective sample size totaling 7968. The research results of the overall model showed that the perceived teacher support of Thai high school students' had no direct effect on their reading ability, but their perceived teacher support had an indirect effect on reading ability through their self-efficacy and sense of school belonging. From the results can be seen that high school teachers in Thailand, in supporting and encouraging their students in learning, must simultaneously develop their perceived self-efficacy and sense of school belonging. Only thus can there be obvious help to their students' reading ability.

Keywords: *Perceived teacher support, self-efficacy, sense of school belonging, reading ability.*

Introduction

In most educational environments, reading ability has been seen as necessary for realizing learning objectives and achieving academic success (Lindeblad et al., 2019). Furthermore, while reading comprehension is an important indicator of success in one's studies, many students encounter difficulties in reading their textbooks. Alsuhaibani (2019) indicated that reading strategies and perceived reading self-efficacy are important factors for cultivating students' reading ability. If readers are confident of their own ability for effective comprehension, they will keep on reading (Solheim, 2011; Unrau et al., 2018). This view has been firmly established in the Social Cognitive Theory, which is that a learner's judgment of his/her capabilities to accomplish a task plays an important role in his/her success or failure. In addition, perceived self-efficacy could also unlock people's driving force required for successfully accomplishing their tasks in various fields (Bandura, 1986, 1997; Alias et al., 2018).

Likewise, students' ability beliefs are an important source of their learning results and behavior choices (Eccles, 2005; Eccles & Wigfield, 2002). As students' ability beliefs and internal task values play an important role in their educational development, attention should be paid to ability beliefs (Jacobs et al., 2002). Yet, the progression from primary to secondary schools is the key affecting students' ability beliefs. Such beliefs will gradually diminish from childhood to adolescence, because as the older children grow, the more social comparisons they will make, and thus their interest in or fondness for activities might become lower (Fredricks & Eccles, 2002). In light of this, the secondary school period is worth investigating.

In her study, Usher (2009) pointed out that for most interviewees, the encouraging voices from their teachers and parents would provide them great confidence in and motivating force for their performance in the future (Fong & Krause, 2014). Butz and Usher (2015) also mentioned a student feeling confident after being praised by her teacher, thereby achieving good results in the following examination. Eccles and Wigfield (2002) also presumed that ability beliefs and task values are affected by the important beliefs of other people. For example, their stereotypes might affect

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students' ability beliefs and task values, which in turn might have an effect on their performances in school. According to Wentzel (1997), the theory of social-motivational processes stipulates that an individual accepts the socially valued goals in his/her interaction with significant others to satisfy his/her need for a sense of belonging in society, which in turn affects his/her academic achievement. Hence, students' ability beliefs and task values might mediate the relationship between important others (teachers) and their academic results. Moreover, Souvignier and Mokhlesgerami (2006) empirical study confirmed the combination of cognition, meta-cognition, and motivational support as most effective in motivating students in reading comprehension. Therefore, teacher support could increase students' self-confidence and beliefs, improving their behavioral performance.

Students' higher sense of school belonging is associated with better average comprehension results (Trends in international Mathematics and Science Study [TIMSS] & Progress in International Reading Literacy Study [PIRLS] International Study Center, 2017). Dukynaite and Dudaite (2017) found that students' sense of school belonging depends on teachers, classmates and parents, arising from positive interpersonal relations based on care and support, which contributes to their sense of community. Teachers are responsible for ensuring proper student activities, possibility to contribute to class/school activities and feeling recognized for the contribution made (Albert, 2012); teachers' assignments must help children to feel able to achieve the set goal, receive help and support (Albert, 2012). In general, teachers and schools are seen as one of the key roles for fostering the sense of school belonging (Dukynaite & Dudaite, 2017; Green et al., 2016). The sense of belonging is subject to the influence of numerous factors, one of which is teacher-student relationship (Uslu & Gizir, 2017). When students consider themselves as a part of the school community, they might even achieve better results in their studies. It can be known from the above studies that teacher support helps in fostering students' sense of school belonging that in turn aids these students to achieve better reading performance.

However, in the Programme for International Student Assessment (PISA) 2018 survey of Thai students, it was found that the average score of the students of Thailand (393) in reading was lower than that of Organisation for Economic Co-operation and Development (OECD) (487), their reading ability being 16 points less than the assessment results in PISA 2015. About 24% of the students (OECD average: 16%) agreed or strongly agreed that they felt lonely at school; about 88% (OECD average: 74%) agreed or strongly agreed that their teachers showed interest in teaching; in particular, in the subject their teacher, they indicated, was interested in, students got higher reading scores (OECD, 2019). From this, Thai high school students are not as good as others in reading, and have a higher sense of loneliness in school. However, their perceived teacher support in the classroom is higher. Therefore, this study primarily aimed at exploring the influence of Thai high school students' perceived teacher support in the classroom on students' reading ability; and taking students' self-efficacy and sense of school belonging as the mediating variables, performed an analysis using the data of the PISA 2018 database, so as to understand whether such support can enhance students' reading ability. Finally, it seeks to provide a reference for Thai high schools and related studies.

Therefore, this study, with the theory of social-motivational processes and social cognitive theory as its theoretical foundation, sought to investigate whether the teacher support which Thai high school students perceive in the classroom, could affect their reading ability with their self-efficacy and sense of school belonging as mediators. It also performed an analysis of the data of the PISA2018 database to validate its model so as to serve a basis for subsequent researchers in conducting studies on Thai high students' reading ability, and to provide a reference for the high schools in present-day Thailand in enhancing their students' reading ability.

Literature Review

Relationships among Perceived Teacher Support, Sense of School Belonging, and Reading Ability

According to Alexander (2005), reading requires the simultaneous application of both subject and domain knowledge, which progressively develop from elementary to secondary education. Yet, scientific literature is made up of several components, whose attributes and relationships with one another are very complex (Graesser et al., 2002). Further, the language used in texts is usually different from the daily experience of students, rendering it difficult for them to absorb it into their knowledge structure. Therefore, it is no easy task for students to construct meaningful mental representation. For those young students lacking reading ability and science knowledge, such problems are even more serious.

As indicated in the studies on reading comprehension, teacher instruction and support had positive influence on students' reading comprehension (Babayigit, 2019; Cheung & Slavin, 2012; Lan et al., 2014; Lysenko & Abrami, 2014). Klem and Connell (2004) saw teacher support in terms of students' perception of teachers' care about and understanding of them in school. Mashburn et al. (2008) also pointed out that the teacher was an important adult for children at school, and the quality of teacher-student social interaction was related to students' studies and social achievements (Stipek & Byler, 2004). Actively developing the relationship between students and teachers facilitates students' social synchrony and emotional harmony, and opportunity to learn, and strengthen the concept of students as learners (Gregory & Korth, 2016). Effective teaching predicates on the quality of teachers, which includes teachers' social and emotional abilities, classroom management, development support, and abilities to accurately explain what

their students hints at, listen to students and understand the implications of their behaviors (Everston & Weinstein, 2006; Osher et al., 2010).

In the secondary school period, students' perception of caring from teachers was related positively to their motivations, such as the pursuit of social and academic goals, proficiency in learning and academic interest (Wentzel, 1997). Wentzel (1997) pointed out that the motivational process in social-motivational processes could be defined as "the relationship between beliefs and emotions of "a set of interrelated beliefs and emotions that direct behavior (Wentzel, 1999)." An important assumption of the process of socialization is that an individual will develop his/her own beliefs in interacting with others, and he/she will accept the socially valued goals in the process of getting along with important others so as to meet the need for social relationships and sense of belonging, and through interpersonal and psychological processes influence his/her academic achievement (Wentzel, 1999). Students' perception of their teachers' social relationships would be related to their self-concepts and academic results (Jensen et al., 2019). Metheny et al. (2008) argued that when teens were learning at school and engaging in activities, teachers were an important source providing support for students (Farmer, 1985).

At the same time, the PIRLS 2016 and PISA 2015 surveys also found that students' sense of school belonging was related to their average reading results (TIMSS & PIRLS International Study Center., 2017; OECD, 2015). Pittman and Richmond (2008) also indicated that students with a stronger sense of school belonging had better academic performance. According to Ni and Aust (2008), the sense of community belonging refers to the attachment, trust and commitment a person feels towards members of a community of which he/she is a part. The sense of belonging among peers would increase students' sense of responsibility towards their schoolwork and learning, and they would also help each other in schoolwork and share their expectations with respect to their goals. Shea et al. (2006) stated that peer interaction would generally engender mutual encouragement, thereby increasing students' initiative to learn. The strength of the sense of community belonging would also affect students' learning results and satisfaction. In Liu and Lu's (2011) investigation of the student trajectories over the senior high school transition period, it was found that whether in the initial state or the growth and change trajectories, students' sense of school belonging could significantly predict their academic achievements in the senior high school transition period.

Whether teachers are supporting students, helping them solve their problems, and making them feel respected, would affect students' sense of participation and sense of belonging in school, and commitment to their studies (Ryan & Patrick, 2001). Chun and Dickson (2011) noted that even though both peers and teachers helped students to integrate into their schools, only with greater overall expectations could school environment be transformed into drives for successful learning. The study of Hamm and Faircloth (2005) also indicated that sense of school belonging had a mediating effect on academic achievement. Based on this, hypotheses 1 and 2 are proposed:

H_1 Students' perceived teacher support has a positive effect on their reading ability.

H_2 Students' sense of school belonging has a mediating effect between perceived teacher support and reading ability.

Relationships among Perceived Teacher Support, Self-efficacy, and Reading Ability

Guthrie et al. (2013) indicated that students needed to understand the value of reading tasks or lower their perceived difficulty of reading, which means increasing their sense of self-efficacy to stimulate their interest in reading texts (Pajares, 2008). Mullis et al. (2012) also pointed out that reading confidence was an important variable affecting reading comprehension performance. Bandura (1986) proposed that of all the beliefs, perceived self-efficacy was most influential, as it determines the choices people are likely to make and plays a central role in facing challenges and persevering in their endeavors. The concept of self-efficacy originated from Bandura (1986) social cognitive theory, which holds that the achievements of an individual are based on the mutual interaction among personal behaviors, self-perception and environmental influences. In this theory, Bandura (1997) defined self-efficacy as the belief of people in their capabilities required for learning or executing on their own the designated standard to manage a specific situation. Perceived self-efficiency is also defined as a belief that a person has the ability to commence and complete a task that has an impact on what is happening in the environment (Bandura, 1994).

According to Askar and Davenport (2009), an individual might possess the knowledge and skills for executing a specific task, but failed due to his/her self-doubt, lack of motivation, or other emotional factors. According to Margolis and McCabe (2006), students with higher perceived self-efficacy usually had the inner motivation to take up challenging tasks, and made tremendous efforts to achieve the goal, while those without sufficient perceived self-efficacy would fail to take any action. In this respect, the concept of perceived self-efficacy includes the following elements: planned action, aware of and mastering the required skills, and motivated after reviewing the difficulties and possible gains (Yıldırım & Ilhan, 2010).

Furthermore, as McCrudden et al. noted (2005), possessing a sense of self-efficacy and strategic knowledge could furnish students with the "will" and "method" while facing challenging tasks. Reading comprehension is a complex process, affected by many factors, which include both cognitive and motivational factors (Sadeghi, 2007). Randall (2008) found that the sources of students' motivations and conditions were critically important in understanding their

reading achievement program. As a motivational factor, perceived self-efficacy beliefs would greatly influence the performance and perseverance of learners when confronting challenges. Zepeda et al. (2015) indicated that students receiving metacognitive instruction and training demonstrated greater task values, self-efficacy, and mastery-approach goals. Further, "verbal persuasion" has been seen as an important source of perceived self-efficacy, which consists of the feedback from important persons in one's life (i.e., parents, companions and teachers); and such feedback would influence personal performance (Bandura, 1986). In the training given by teachers, it is necessary to encourage students and increase their self-confidence, and in turn enhance their reading comprehension ability. Positive feedback is a source of perceived self-efficacy (Butz & Usher, 2015; Fong & Krause, 2014; Usher, 2009). In classroom learning, teacher support was a critical factor for students' learning and self-efficacy (Ali, 2006). Gutierrez and Tomas (2019) noted that perceived self-efficacy could mediate the effect of autonomous teacher support on academic achievement. Hallinan (2008) concluded that teacher support was a more important factor as it would affect students' self-academic expectations that in turn affect their results (Kong & Chang, 2019). In addition, a lot of studies have used perceived self-efficacy as a mediating variable (Coutinho & Neuman 2008; Diseth, 2011; Phan & Ngu, 2016; Wilson & Kim, 2016). Thus H_3: students' self-efficacy has a mediating effect between perceived teacher support and reading ability.

Methodology

Study Model

From the collation of literature above, and with the theory of social-motivational processes and social cognitive theory as the theoretical foundation, this study investigated the effect of high school students' perceived teacher support on their reading interest, with students' self-efficacy and sense of school belonging as the mediating variables. The research model is illustrated in Figure 1.
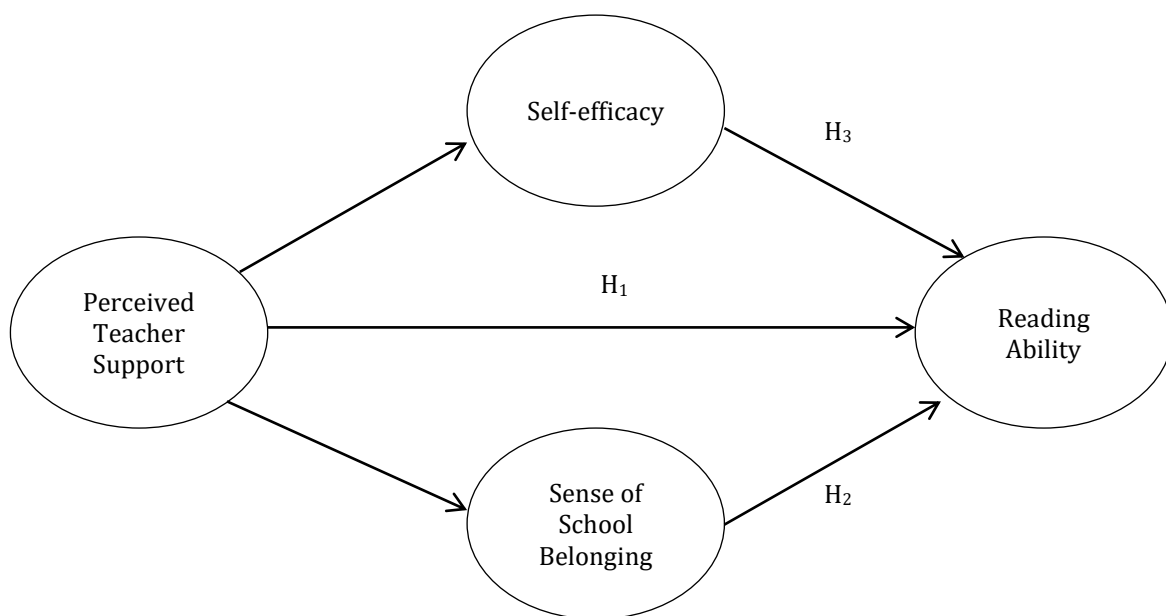

Figure 1 Research Structure

Sources of Sample Data

The samples of this study were taken from the PISA 2018 database. PISA is the Program for International Student Assessment in OECD, which is a survey conducted every three years that assesses 15-year-old students' ability to apply their reading, mathematics and science knowledge and skills to resolve real-life the challenges. The PISA 2018 survey focused on reading, with mathematics, science and global competence as minor areas of assessment.

Some 600,000 students completed the assessment in 2018, representing about 32 million 15-year-olds in the schools of the 79 participating countries and economies (OECD, 2019). In Thailand, 8,633 students, in 290 schools, completed the assessment, representing 575,713 15-year-old students (72% of the total population of 15-year-olds) (OECD, 2019). In the PISA 2018 Database, there were 8633 Thai students. The effective sample size after removing those not and not required to be filled was 7986, of which 4361were female students and 3607 were male.

Research Instruments

This study extracted the student questionnaire from the PISA 2018 survey questions regarding teacher support, sense of school belonging, self-efficacy, and reading ability. Analyses were conducted on these data. Reliability analysis and confirmatory factor analysis (CFA) were used to test the reliability, convergent validity, and goodness-of-fit of various scales. Awang (2012) stated that validity was the ability of an instrument to measure what it is supposed to measure for a latent construct. The convergent validity can be verified by computing the Average Variance Extracted (AVE) for each construct. Awang (2012) also stated that reliability was the extent that the measurement model measured the intended latent construct. Composite reliability (CR) is the reliability and internal consistency of a latent construct. A CR value of > 0.6 is required to attain the composite reliability for a construct. The AVE is the average percentage variation explained by the measuring items for a latent construct. An AVE > 0.5 is required for every construct, but we can accept 0.4, meaning that the convergence validity of the structure will still be sufficient.

Hair et al. (2006) pointed out that the goodness-of-fit test of the overall model includes three aspects in its index evaluation, namely, measures of absolute fit, which are χ^2/df, GFI≥ .90, AGFI ≥.90, SRMR≤ .05, RMSEA< .08; incremental fit measures which are CFI≥ .90, IFI ≥ .90, NFI ≥ .90; and parsimonious fit measures which are PNFI≥ .50, PGFI≥ .50.

Perceived Teacher Support

Regarding students' perception of teacher support, there were 4 questions (Delen & Bellibas, 2015), ST100Q01TA-ST100Q04TA (e.g., "The teacher gives extra help when students need it", "The teacher continues teaching until the students understands"). All items were measured on a four-point Likert scale ranging from 1 (Strongly disagree) to 4 (Strongly agree). In terms of the reliability of the perceived teacher support, Cronbach's α= .888, were all greater than .7, exceeding the standard recommended.

The perceived teacher support was then examined using CFA. The factor loadings of each dimension and item ranged from .761 to .868. Furthermore, CR values for latent variables was .889, which exceeded the evaluation standard of .60. AVE figures was .667 which exceeded the .40 evaluation standard. χ^2= 172.319; χ^2/df= 86.160. RMSEA= .103. GFI= .990, AGFI= .950. SRMR= .015 (Hu & Bentler, 1999). Incremental fit measures: CFI= .991, IFI= .991, NFI= .990. Parsimonious fit measures: PNFI= .330, PGFI = .198. These results indicate that the indices of teacher support scale have composite reliability and convergent validity, and fulfilling the standard of fit.

Self-Efficacy Scale

For self-efficacy, there were 5 questions (Lee & Stankov, 2018), ST188Q01HA, ST188Q02HA, ST188Q03HA, ST188Q06HA, ST188Q07HA (e.g., "I usually manage one way or another", "My belief in myself gets me through hard times"). All items were measured on a four-point Likert scale ranging from 1 (Strongly disagree) to 4 (Strongly agree). In terms of the reliability of the Self-efficacy, Cronbach's α= .760. The creative self-efficacy scale was then examined using CFA. The factor loadings of each dimension and item ranged between .460 and .721. Furthermore, CR values for latent variables was .766 exceeded the evaluation standard of .60. AVE figures was .401 the figures exceeded the .40 evaluation standard. χ^2= 574.844; χ^2/df= 114.969. RMSEA= .120. GFI= .973, AGFI= .918. SRMR= .042 (Hu & Bentler, 1999). Incremental fit measures: CFI= .940, IFI= .940, NFI= .939. Parsimonious fit measures: PNFI= .470, PGFI = .324. These results indicate that the indices of self-efficacy scale have composite reliability and convergent validity, and fulfilling the standard of fit.

Sense of School Belonging

Regarding the sense of school belonging, there were a total of 6 questions in ST034 (Schachner et al., 2017), which were divided into two dimensions, positive senses of belonging (e.g., "I feel like I belong at school") and negative senses of belonging (e.g., "I feel like an outsider (or left out of things) at school"). All items were measured on a four-point Likert scale ranging from 1 (Strongly disagree) to 4 (Strongly agree). In terms of the reliability of the school belonging, Cronbach's α of the two dimensions, .762 and .710.

The sense of school belonging was then examined using CFA. The factor loadings of each dimension and item ranged between .550 and .833. Furthermore, CR values for latent variables were between .769 and .711, which exceeded the evaluation standard of .60. AVE figures were between .534 and .453. χ^2= 248.932; χ^2/df= 31.117. RMSEA = .061. GFI = .990, AGFI= .973. SRMR = .038 (Hu & Bentler, 1999). Incremental fit measures: CFI= .980, IFI= .980, NFI= .979. Parsimonious fit measures: PNFI= .522, PGFI = .377. These results indicate that the sense of school belonging scale have composite reliability and convergent validity, and fulfilling the standard of fit.

Reading Ability

Regarding reading ability, there were 3 questions from the students' reading self-assessment, ST161Q01HA - ST161Q03HA (e.g., "I am able to understand difficult texts", "I read fluently"). All items were measured on a four-point Likert scale ranging from 1 (Strongly disagree) to 4 (Strongly agree). In terms of the reliability of the reading ability,

Cronbach's α = .739. The reading ability was then examined using CFA. The factor loadings of each dimension and item ranged between .643 and .734. Furthermore, CR values for latent variables was .743, AVE was .492. These results indicate that the indices of reading ability have composite reliability and convergent validity.

Data analysis

For this study, 7968 valid questionnaires were returned from students. Regarding the demographics, there were 3607 males and 4361 females.

This study adopts the Structural Equation Modeling to analyze the effects of perceived teacher support on reading ability, and takes the self-efficacy and sense of school belonging as a mediating, so as to carry out direct effect test and mediation effect test. Bagozzi and Yi (1988) held the idea that, before structural equation modeling, the measurement must be conducted in overall model fit.

With respect to the validation of the overall research model, the bootstrap method suggested by Shrout and Bolger (2002) was used. It will suffice so long as the indirect effect is calculated, and if the confidence intervals do not include 0, it can be claimed to have the mediating effect. What followed will be the test of the direct effect. If the confidence intervals also do not include 0, it will be partial mediation, but if they include 0, it will be complete mediation.

The overall fit measures values are as follows. Measures of absolute fit: χ^2= 2640.119, χ^2/df= 20.626, RMSEA = .050, GFI and AGFI were .964 and .952. SRMR = .029. Incremental fit measures: CFI, IFI, NFI were .947, .948 and .945 respectively and were all within the acceptable range. Parsimonious fit measures: PNFI and PGFI was .791 and .793. The above results show that although not all indicators were a good fit, they were still in the acceptable range. As such, the fit between the theoretical model and observation data is acceptable.

Finding / Result

Testing of Direct Effects

As seen from Table 1 and Figure 2 , the path coefficients Perceived Teacher Support and the Reading Ability of Thai students was .008 (p >.05). The show that while the Perceived Teacher Support of the Thai students had no impact on their Reading Ability. H_1 is not established.

In Table 1 and Figure 2, it can be seen that the structural coefficients of Sense of School Belonging and Self-Efficacy on Reading Ability are all statistically significant (p< .05), meaning that there are direct effects between these factors and Reading Ability. The standardized coefficients are .200 and .451, indicating that Sense of School Belonging and Self-Efficacy have a positive influence on Reading Ability.

Testing of Mediation Effects

In order to test the multiple mediation model, this study used the bootstrap method proposed by Shrout and Bolger (2002). This is a method of obtaining the median effect and the 95% confidence interval using a resampling procedure. If the 95% confidence interval for mediating effects obtained by resampling does not include 0, the mediating effect is statistically significant (p< .05) (Shrout & Bolger, 2002).

The indirect effect of Sense of School Belonging on Perceived Teacher Support of Reading Ability is .0592 (.296*.200), the indirect effect of Self-Efficacy on Perceived Teacher Support of Reading Ability is .0762 (.169*.451), and the confidence interval [.114, .159] does not contain 0, meaning that the effect is statistically significant (p< .05) and that Sense of School Belonging and Self-efficacy has a mediation effect. H_2 stands

The direct effect is .008 and the confidence interval [-.024, .039] does contain 0 while the total effect is .144 (.008+ .136) and the confidence interval [.115, .173] does not contain 0, meaning that the effect is statistically significant, and that Sense of School Belonging and Self-efficacy has a full mediation effect on Perceived Teacher Support and Reading Ability (Table 1 and Figure 2).
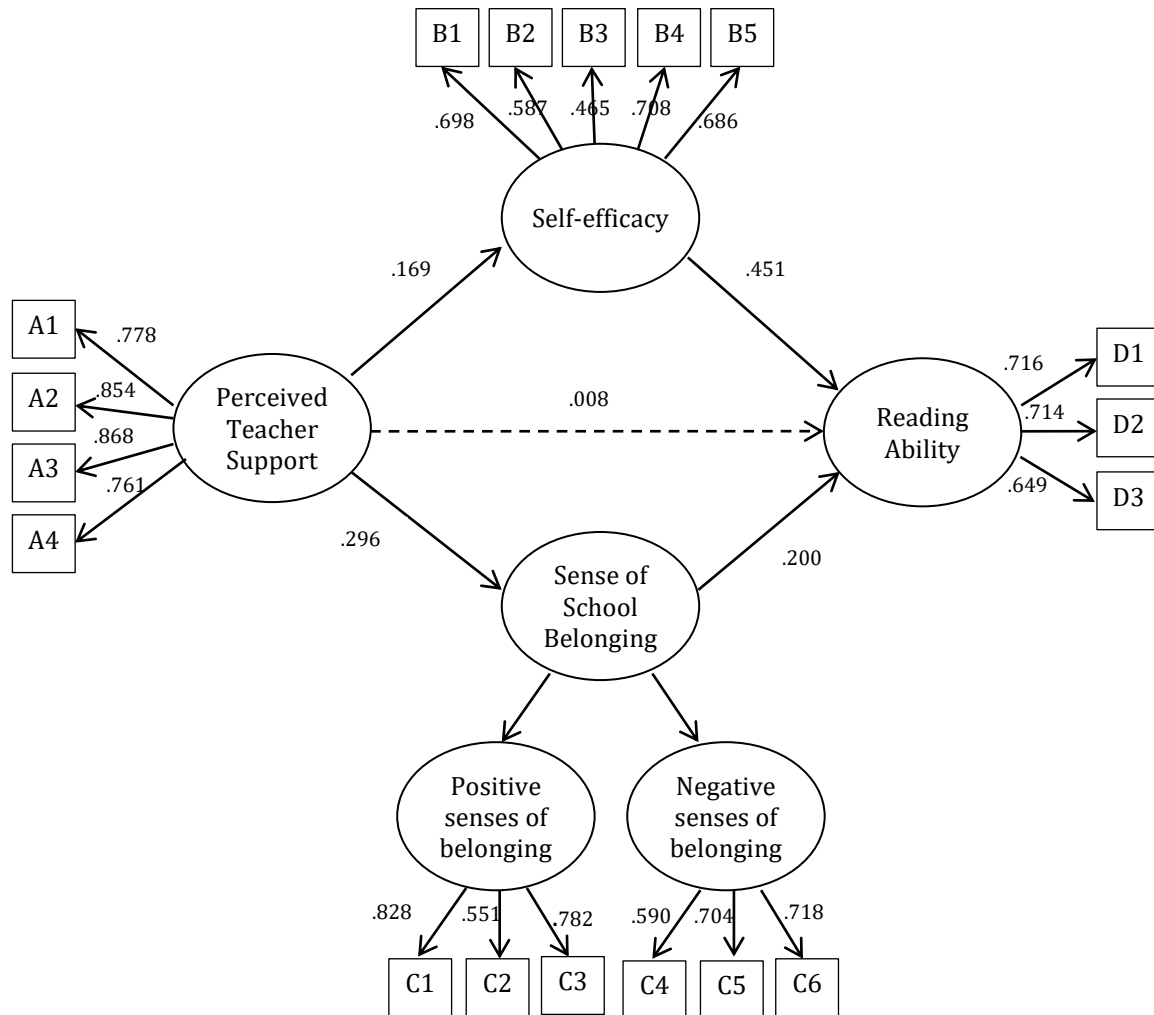
Figure 2 SEM Path Coefficient Diagram

Table 1 Bootstrap SEM analysis of total, direct, and indirect effects

Effect	Estimate	*p* value	Confidence Interval
Direct effect			
Perceived Teacher Support -> Sense of School Belonging	.296	< .05	[.256, .334]
Perceived Teacher Support -> Self-efficacy	.169	< .05	[.142, .197]
Perceived Teacher Support -> Reading Ability	.008	> .05	[-.024, .039]
Sense of School Belonging -> Reading Ability	.200	< .05	[.152, .249]
Self-efficacy ->Reading Ability	.451	< .05	[.416, .485]
Indirect effect			
Perceived Teacher Support -> Reading Ability	.136	< .05	[.114, .159]
Total effect			
Perceived Teacher Support -> Reading Ability	.144	< .05	[.115, .173]

The research results of the overall model showed that the perceived teacher support of Thai high school students' had no direct effect on their reading ability, but their perceived teacher support had an indirect effect on reading ability through their self-efficacy and sense of school belonging. This indicates that Perceived Teacher Support affects one's Reading Ability by influencing Sense of School Belonging and Self-efficacy. Therefore, H3 stands.

Discussion and Conclusion

Through the research model based on the Theory of Social-Motivational Processes and Social Cognitive Theory, this study investigated the effect of students' perceived teacher support on their reading ability, with their sense of school belonging and self-efficacy as the mediating variables. Findings showed that students' perceived teacher support had

no direct effect on their reading interest, but such perception could increase their reading interest respectively through their sense of school belonging and self-efficacy. From this can be concluded that students' sense of school belonging and self-efficacy has a full mediating effect between perceived teacher support and reading interest.

This also suggests that Thai high school students' perceived teacher support in the classroom does not obviously facilitate their reading interest. This is further supported by the PISA 2018 survey, which found that the average of their perception of teacher instruction was higher than that of the OCED, but their reading ability was lower than the OCED's (OECD, 2019). This indicated that students perceived their teacher's support for them in the classroom, but their reading ability was not high. Thai high school students consider that the help given by their teacher in their learning is not of much use in helping them in comprehending difficult passages and reading passages fluently.

Although teacher support fails to directly facilitate students' reading ability, it can increase their self-efficacy and sense of school belonging that in turn enhance their reading ability. As students perceive the support and encouragement from their teachers, their self-confidence can be increased, which is a critical factor for self-efficacy (Fong and Krause, 2014; Usher, 2009) that facilitates an individual' acceptance of challenges (Ali & McWhirter, 2006; Shehzad et al., 2019; Usher, 2009), thereby increasing their reading ability (Hallinan, 2008). Furthermore, students would think they are valued and trusted when they feel the support of their teacher in the classroom, thereby generating a sense of belonging to their school (Dukynaite & Dudaite, 2017; Green et al., 2016; Ryan & Patrick, 2001), which in turn increases their reading ability. Thus, students' reading ability can be improved through two aspects, their self-efficacy and sense of school belonging.

An important lesson is also derived from this research result, which is that teachers, in encouraging and supporting their students, must at the same time pay attention to the latter's perceived self-efficacy and sense of school belonging (Butz & Usher, 2015 ; Dukynaite & Dudaite, 2017). This is because without building students' confidence in themselves and fostering their identity with their schools, teachers' support for their students may only increase the latter's fondness of their teachers and courses, without however producing any practical help to their reading ability. Thus, in promoting teacher support in school, it is also necessary to enhance students' perceived self-efficacy and sense of school belonging for the sake of enhancing their reading ability. Such a result is also the research model obtained after the data analysis made in this study.

Suggestions

Thai high school students have better teacher support, yet without better reading performance. As seen from the research results, teacher support can improve students' reading ability through their sense of school belonging and self-efficacy. It is thus necessary to enhance their sense of belonging and self-efficacy. Increasing students' confidence, motivation, and sense of belonging can be achieved through positive interpersonal relationships such as support, care, and encouragement from their classmates and parents. In this way, students will come to like their school and classroom environments, and interact more positively with members of the school that will give them confidence and beliefs in learning, and a sense of full-fledged membership of the school. In turn, they will develop an interest in the curriculum and be willing to accept challenges so as to enhance their reading ability.

Although teacher support does not directly improve students' reading ability, it has positive effect on students' sense of belonging and self-efficacy. Thus, students still require teachers' support and encouragement to increase their sense of belonging and self-efficacy, and their reading ability in turn.

Limitations

The analysis conducted in this study was based on the questions of the student questionnaire of PISA 2018. However, as the questions had already been designed, there might exist questions that are not precise enough or with inconsistent measurement units. Moreover, this study only carried out a survey analysis, without conducting in-depth interviews with the students to validate the accuracy of the analysis results.

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