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Predictors of Teachers' Self-Efficacy for Self-Regulated Learning among Saudi Teachers

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Abstract

Self-Regulated Learning (SRL) is an important process for students' independence and thus their academic development, especially with the increase of knowledge and the emergence of technology. Although SRL may not develop naturally, fortunately, it can be taught and learned. Therefore, the role of teachers is important in this regard. This descriptive study aimed to reveal the level of general and special education teachers' self-efficacy in promoting self-regulated learning (SRL) in classrooms. Moreover, it investigated the extent of influence of teachers' gender, area of specialization (General education and special education teachers), and years of experience in teachers' self-efficacy on the promotion of SRL. The study sample consisted of 142 male and female teachers in primary and middle schools in Riyadh. The study used Teacher Self-Efficacy to Implement SRL Scale (TSES-SRL) developed by (De Smul. et al., 2018). The results showed that teachers had a moderate degree of self-efficacy in terms of promoting SRL among their students. The variables of gender, years of experience and subject-area of specialization had no effect on teachers' self-efficacy in promoting SRL.

Keywords: Self-Regulated Learning (SRL) – Teachers 'Self-efficacy – SRL Implementation.

Introduction

Self-Regulated Learning (SRL) may develop spontaneously in some learners. However, according to Bandura's social cognitive theory, this does not happen with everyone (Bembenutty, 2011). For example, students with learning disabilities (SLD) face challenges in self-regulation (Reid et al., 2012). They find difficulties in identifying their strengths and needs, motivating themselves, executive functions, and planning and organizing (Btonutler & Schnellert, 2015). Fortunately, self-regulation is a process that can be taught and learned (Oates, 2019; Peeters et al., 2014). Therefore, teachers play a fundamental role to promoting SRL among students (Moos & Ringdal, 2012).

The acquisition of students' self-regulation skills is influenced by many factors. Some factors are personal, such as students' possession of knowledge about self-regulation, having motivation, self-efficacy, high academic grades in school, while others are external, such as: support and supervision from a family, teachers, peers, as well as the support in educational environment for self-regulation practices (Jones et al., 2008; Jouhari et al., 2015; Thomas et al., 2020; Xia et al., 2016). The most influential factors that may lead a student in childhood

and adolescence to become a highly self-regulated learner are the teaching methods they receive as well as interaction with peers (Tsiakala, 2019). Teachers' support and their teaching methods is an important factor affecting students' acquisition of self-regulated skills. It is influenced by a number of factors, including: their knowledge about SRL, beliefs, self-efficacy, years of experiences, gender, and subject area of specialization (De Smul, et al., 2018; Ewijk & Büttner, 2018; Ewijk & Werf, 2012; Lawson et al., 2018; Soliman & Alenazi, 2017; Yan, 2017).

Teachers must be competent to promote SRL among their students. However, studies showed inadequate teachers' practice of SRL (Spruce & Bol, 2015; Thomas et al., 2020; Xu & Ko, 2019), which can be reflected negatively in students' performance development (Kistner et al., 2010). There are studies that discussed teachers' self-efficacy of instructing self-regulated learning. These studies have proved that teachers' self-efficacy in SRL is an important factor in promoting it in their classrooms. (De Smul et al., 2018; Ewijk, 2016; Gan et al., 2020; Smul et al., 2019). However, in Saudi , although there are studies that have dealt with teachers' self-efficacy (Alhumaid, 2021; Alhumaid et al., 2020; Alnahdi, 2019; Alwaleedi, 2017; Alzahrani, 2021), there is insufficient evidence of Saudi teachers' self-efficacy in SRL and their practice of SRL either in general or special settings according to the researcher's knowledge. Moreover, previous literature showed an inconsistency in its outcomes about the relationship between self-efficacy and some variables such as gender, years of experience and specialization. While some studies found that self-efficacy is affected by the variables, some studies come to negate this relationship (Aziz & Quraishi, 2017; Hofman & Kilimo, 2014; Klassen & Chiu, 2010; Özokcui, 2017; Ross et al., 1996; Sharma et al., 2015). Hence, this study came to explore Saudi teachers' self-efficacy of SRL, and the effects of teachers' gender, area of specialization (General education and special education teachers), and years of experience in teachers' self- efficacy of SRL. This will create a baseline for decision makers to develop teachers' skills and practices to apply the SRL. This in turn will help students to achieve success and independence.

Teachers' Practice of SRL

Teachers promote SRL among their students both directly and indirectly. Direct promotion for SRL occurs when a teacher teaches SRL skills implicitly, where the teacher acts as a model applying strategy in front of students without discussing it with them. Direct promotion of SRL can also occur explicitly as the teacher teaches students the strategy by discussing what the strategy is, when, and how it applies and its relevance for their learning. In contrast, indirect promotion of the SRL is to provide students with an appropriate learning environment that supports their practice of self-regulating (Kistner et al., 2010).

Students' mastery of self-regulating skills requires a mixture of direct and indirect teaching methods (Ewijk & Büttner, 2018). Reliance on indirect methods only will impede students' reaching independence in using the strategy (Pressley et al., 1992). Also, focusing on direct teaching only may increase the burden on students, especially if there is lack of good planning to apply it (Paris & Paris, 2001).

Teachers' Self-Efficacy

Self-efficacy beliefs was introduced by the founder of social cognitive learning theory, Albert Bandura, in the 1970s (Bandura, 1977). It refers to "*Beliefs in one's capabilities to organize and execute the courses of action required to produce given levels of attainments*"(Bandura,

2000, p16). Bandura believes that self-efficacy beliefs can be obtained from four main sources: mastery experiences, indirect experience (observation), verbal persuasion (motivation), and finally somatic and psychological states (Bandura, 1977). Mastery experiences mean previous experiences that the individual passed, whether successfully or not, while indirect experience can be obtained through observing others. As for verbal persuasion, or what is called social persuasion, it consists in convincing the individual that he has the skills and capabilities necessary for success. Finally, somatic and psychological state can affect how a person feels about his or her personal abilities in a particular situation.

Self-efficacy is not a personal trait in individuals, as it varies with context and situations (Albert Bandura, 1982). For example, an individual may possess high self-efficacy in accomplishing a specific academic task, but the same individual may have low self-efficacy to accomplish another task. Self-efficacy in individuals is associated with many positive outcomes. Individuals' high self-efficacy has a positive impact on their career and academic performance, motivation (Cherian & Jacob, 2013; Robbins et al., 2004), persistence, and the selection of activities (Schunk, 1995). Moreover, self-efficacy can influence self-regulated learning (Bouffard-Bouchard et al., 1991), and mediate the relation between metacognition and performance (Coutinho, 2008).

Self-efficacy acts as an inner motivation for teachers to meet various teaching challenges. An interest in teacher self-efficacy began in the late 1970s (Armor et al., 1976). This interest may be due to the positive role that teachers' self-efficacy beliefs play on the quality of classroom environment (Zee & Koomen, 2016). Also, high self-efficacy of teachers has an impact on students' achievement (Caprara et al., 2006), as it can affect positively teachers' teaching practices and educational behavior (Skaalvik & Skaalvik, 2007), teachers' job satisfaction (Collie et al., 2012), and teachers' commitment (Klassen & Ming, 2011). Moreover, there is an inverse relationship between teachers' self-efficacy and negative feelings such as burnout (Aloe et al., 2014).

Research on Teacher's Self-efficacy

In recent years, many studies have been conducted on self-efficacy of teachers. A study conducted by Caprara et al (2006) relied on self-report questionnaires of more than 2,000 high school teachers in Italy, with a focus on their self-efficacy and job satisfaction as well as the average final grades of students at the end of middle school in two subsequent academic years. The results showed positive effects of teachers' self-efficacy beliefs on their job satisfaction, students' academic achievement, as well as controlling the level of previous achievements. Holzberger et al (2013) conducted a longitudinal analysis that dealt with the relationship between self-efficacy and educational quality (regarding assessing cognitive activation, classroom management, and individual learning support for students). The analysis found that there is a partial causal relationship of self-efficacy in instructional quality with respect to individual learning support for students. However, the more significant impact was the impact of instructional quality on teachers' self-efficacy, especially in cognitive activation, classroom management. Moreover, the latter had a long-term effect. This indeed confirms the effective role of direct experience as a source of self-efficacy. Zee & Koomen (2016) conducted a critical review of 165 articles that examined the effects of teachers' self-efficacy over a period of 40 years. These studies demonstrated the positive relationship between teachers' self-efficacy and students' academic adaptation, teacher behaviour patterns, practices related to classroom quality, and causes of psychological well-being for teachers such as personal achievement, job satisfaction and commitment. In contrast, the

results revealed the negative relationship between teachers' self-efficacy and burnout factors. Moreover, a number of researches revealed the mediation of educational support, the relationship between self-efficacy and academic adaptation, the mediation of classroom organization, and the relationship between self-efficacy and psychological well-being. In another analysis of 43 studies, it was intended to systematically analyse the research that examines the impact of two psychological characteristics: self-efficacy and personality on the teaching performance of teachers and student achievement. The results revealed a significant but small effect size between psychological characteristics and effective teaching. Self-efficacy formed the strongest effect in evaluating teaching performance (Klassen & Tze, 2014).

Research on Teachers' Self-Efficacy and Self-regulated Learning

Zimmerman (1990) highlighted the role of high self-efficacy in activating self-regulatory processes such as: goal setting, planning, and self-evaluation. This agrees with what Bandura (1986) has suggested about the association of self-efficacy with self-regulated learning. If the foregoing is related to the learners, then teachers' self-efficacy is considered an essential personal determinant in the promotion of SRL (Smul et al., 2019).

A study conducted by De Smul et al (2018) revealed a direct association between teachers' self-efficacy and SRL implementation in classrooms, where self-efficacy had the most direct impact, followed by teachers' beliefs. Additionally, the teachers' self-efficacy mediated between their beliefs and the implementation of SRL. With similar results, Dignath-van Ewijk , (2016) conducted a study that investigated the influence of primary school teachers' cognitive beliefs, beliefs, knowledge about enhancing SRL and their self-efficacy beliefs, as determinants of SRL enhancement . Results indicated that teacher self-efficacy has the strongest predictive value of teacher behaviour in promoting SRL. Additionally, self-efficacy beliefs mediated the relationship between teachers' beliefs and the enhancement of SRL, and between teachers' knowledge and enhancement of SRL. The cognitive beliefs of the teachers also showed a direct influence on their self-efficacy beliefs. The importance of teachers' self-efficacy in promoting self-regulated learning within their classrooms was emphasized. Hence, teachers need to be well trained pre and during service in order to raise their self-efficacy to enhance the SRL. Gan et al (2020) highlighted the necessity of teaching student-teachers SRL skills and how they apply SRL strategies in teaching and learning.

Effects of Teachers' Gender, Years of Experience, and Area of Specialization in TSE

Demographic variables such as gender, years of experience, and subject-area of specialization may affect TSE. Studies' outcomes are varied with regard to the effect of pervious demographic variable on TSE. Ross et al., (1996) conducted a study to find the within-teacher predictors of TSE. The sample consisted of 52 male and female teachers in Canadian secondary schools in rural areas. The study found that females seem to have strong self-efficacy on feeling successful and student engagement, while they have weak self-efficacy on feeling well prepared. Years of experience did not appear to have affected teachers' self-efficacy in terms of feelings of success and student engagement, while feelings of well-preparedness were stronger for more experienced teachers. Finally, the study also revealed that teachers of English, social studies, and art demonstrated more self-efficacy in terms of feeling successful than teachers of math and sciences. However, the latter had high self-efficacy in terms of feeling well prepared and student engagement.

Aziz & Quraishi (2017) study gave different results from the previous study. They conducted a study that aimed to explore the impact of gender, professional education, and experience on the self-efficacy beliefs of 2400 secondary school teachers in Punjab province. The results concluded that gender did not significantly affect teachers' self-efficacy. On the contrary, experience played a positive role in increasing teachers' self-efficacy. Teachers with more experience and holding a bachelor's degree displayed greater self-efficacy than teachers with less experience, even with higher professional qualifications. Aziz & Quraishi recommended to look for other factors affecting self-efficacy.

In the same context, Klassen & Chiu (2010) sought to investigate the relationship between teachers' years of experience, gender, level of teaching and three areas of self-efficacy (instructional strategies, classroom management, and student engagement), two types of job stress (workload and classroom stress), and job satisfaction. The results revealed that teachers' self-efficacy increases in all areas from the beginning of their professional life to about the middle, and then begins to decline after nearly 23 years of experience. It was also noted that female teachers have low self-efficacy in terms of class management because they have greater work pressure in terms of student behaviour in the class. Finally, the study also found that teachers who teach young children (primary and kindergarten) showed high self-efficacy in terms of classroom management and student engagement.

In the field of special needs, Özokcu's study (2017) aimed to investigate the relationship between teachers' self-efficacy beliefs and efficacy of inclusive education. 1204 teachers from different schools in Turkey participated in this study, including general education and special education teachers. The results showed a positive mid-level relationship between teachers' efficacy of inclusive education and inclusive practices such as student participation, classroom management, use of teaching strategies and their self-efficacy. The results also revealed that female teachers had higher self-efficacy and efficacy about inclusion compared to male teachers. It was found that the level of self-efficacy of experienced teachers was higher than that of junior teachers. In contrast, the results of the study showed that the level of inclusion efficacy for teachers with less professional experience was higher. Teachers who have taken at least 40 credit hours of special education courses have higher self-efficacy and efficacy regarding inclusion. Finally, teachers who have previously interacted with an individual with special needs have shown higher self-efficacy and efficacy about inclusion.

Sharma et al (2015) conducted a study on 194 Pakistani pre-service teachers, which aimed to determine the attitudes and self-efficacy of pre-service teachers' teaching towards inclusion of students with disabilities in general classrooms. The results showed that male teachers had more positive attitudes than female teachers regarding the inclusion of students with disabilities in the general classroom. Moreover, pre-service teachers who are specializing in special education did not express more positive attitudes towards inclusion than their counterparts specialized in education in regular classes. However, pre-service teachers with special education training, knowledge of disability legislation, teaching experience, and personal experiences with people with disabilities reported a higher level of self-efficacy for working in general classrooms.

Hofman & Kilimo (2014) study aimed to investigate factors related to teachers' attitudes and perceptions of self-efficacy towards students with disabilities and the problems teachers

face in implementing inclusive primary education in Tanzania. The study included a sample of 100 teachers from 10 schools. The results showed that variables such as gender, class size, type of disability, and prior training in special needs education did not affect teachers' attitudes and self-efficacy toward inclusion, while work experience in inclusive education was positively and closely related to teachers' attitudes toward inclusion. Moreover, lower self-efficacy is associated with more problems in implementing inclusive education.

Study Objectives

There are two main objectives of the current study:

- To explore self-efficacy of SRL among Saudi teachers.
- To explore the effects of teachers' gender, area of specialization (General education and special education teachers), and years of experience in teachers' self-efficacy on the implementation of SRL.

Study Questions

- 1- What is the level of self efficacy for self-regulated learning among Saudi teachers?
- 2- Are there any significant predictors (gender, teacher specialization, and years of experiences) of teachers' self-efficacy for self-regulated learning?

Method

Participants

In this quantitative study, data were collected from 142 teachers at middle and primary schools in Riyadh city of Saudi Arabia. 14.1% of the participants were male (N=20), and 85.9 % were female (N=122). 18.3% were Special Education teachers (SE) (N=26), and 81.7% were General Education teachers (GE) from varied specialties (N=116). Participants' years of experience ranged from 1 to 28 years.

Instruments

The questionnaire consisted of two sections. The first section dealt with demographic data, including gender, years of experience, and subject-area of specialization. In the second section, the researcher adopted the Teacher Self-Efficacy to Implement SRL Scale (TSES-SRL) developed by (De Smul, et al., 2018). TSES-SRL is a self-report tool consisting of 24 items. The aim of this scale is to assess teachers' self-efficacy in implementing SRL in the classroom through direct and indirect instructions. Teacher self-efficacy of using direct instruction of SRL is measured through the first eight components. One example of these items is: how well can you demonstrate self-regulated learning strategies (i.e., without explicitly explaining the how and the why of the strategy)? The teachers answered these questions through a five-point Likert scale (1 = cannot do at all, 2 = can do limitedly, 3 = can do moderately, 4 = can do certainly, 5 = highly certain can do). Teachers' self-efficacy in using the indirect instructions of SRL was measured by the last 16 components, e.g. How well can you make decisions with your students about where they learn?

The scale's internal consistency was highly reliable. De Smul, et al. (2018) conducted the TSES-SRL reliability test on a group of (331 teachers). The scale was compared with another similar but more general scale, the Ohio State Teacher Proficiency Scale (OSTES) by Tschannen-Moran & Woolfolk Hoy (2001). The comparison emphasizes the special nature of TSES-SRL. The results showed weak and medium correlations between the two scales. Weak

correlations justify measuring the two scales for different concepts, while moderate correlations are explained by the presence of some elements in OSTES that appear when SRL is practiced in the classroom, such as assessment, adapting classroom activities to students' needs, and asking questions.

Moreover, the validity of the TSES-SRL was detected using multiple regression analysis. A model was built for the relationship between self-efficacy and the practice of self-reported SRL, and teacher self-efficacy was added to the SRL to see any possible effect it had on the relationship. The results revealed a significant impact of teacher competence on the practice of scientific research. Similarly, the competence of the teacher at SRL had a positive and significant effect on the practice of SRL in the classroom.

Procedure

After obtaining permission to use the questionnaire from the author (Dr. Mona De Smul), the questionnaire was translated into Arabic (the participants' mother tongue). The researcher has worked to follow the procedures of using a foreign tool. A researcher can check the quality of the translated tool through one or more of the following methods: a) bilingual techniques, b) reverse translation, c) committee approach, d) pilot study (Brislin et al, 1973 as cited on Alquraini, 2011). The researcher used Back Translation and Expert Validation to verify the accuracy of the tool. Following that, the questionnaire was distributed via an electronic link to principals of primary and intermediate schools that have learning difficulties programs in the city of Riyadh to pass on to teachers.

Participants received written questionnaire instructions before the start of the questionnaire. They were informed that their identity will not be revealed through the survey and the data would be used for research purposes only. Data were collected from 142 male and female teachers from primary and middle schools that include a learning disabilities program in Riyadh. The aim of the study is to determine participants' self-efficacy in promoting SRL in classrooms.

Results

General and Special education teachers' self-efficacy levels toward self-regulated learning
According to the results of descriptive analysis, the average of both general and special education teachers in terms of self-efficacy toward self-regulated learning was 3.12 out of 5.

Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SRLSE	142	24.00	119.00	3.12	0.82

Predictors of Self-efficacy for Self-regulated Learning (SESRL)

The following tables show multiple regressions (standard) between SESRL and scores of the gender, years of experiences and teacher specialization. Table 2 shows variables entered. The independent variables (gender, years of experiences and teacher specialization) together explain 1.8% of the variance (R squared) in self-efficacy for self-regulated learning (SESRL),

which is insignificant, as indicated by the F- value of 0.822 in Table 3 & 4. T-values shown in Table 5 indicate that gender, years of experiences and teacher specialization did not contribute to the SESRL. There was no significant relation between gender and SESRL ($t=1.075$, $p=0.284$), years of experiences and SESRL ($t= 0.737$, $p=0.462$), and teacher specialization and SESRL ($t= 0.771$, $p=0.442$).

Table 2
Variables Entered/ Removed^a

Model	Variables Entered	Variables Removed	Method
1	gender, years of experiences, teacher specialization ^b		Enter

a. Dependent Variable: SESRL

b. All requested variables entered.

Table 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.132 ^a	.018	-.004	19.75329

a. Predictors: (Constant), gender, years of experiences, teacher specialization

b. Dependent Variable: SESRL

Table 4

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	962.232	3	320.744	.822	.484 ^b
	Residual	53846.557	138	390.192		
	Total	54808.789	141			

a. Dependent Variable: SESRL

b. Predictors: (Constant), gender, years of experiences, teacher specialization

Table 5
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	78.802	3.974		19.827	.000
	Gender	-5.142	4.784	-.091	-1.075	.284
	Yrs. of experience	-3.114	4.225	-.062	-.737	.462
	Teacher specialization	-3.319	4.302	-.065	-.771	.442

a. Dependent Variable: SESRL

Discussion

In this study, our aim was to identify the extent of self-efficacy of general and special education teachers at the primary and middle schools in Riyadh regarding promoting self-regulated learning among their students. Moreover, we tested the influence of some variables related to teachers, namely: gender, years of experience, and subject-area of specialization, on their promotion of self-regulated learning.

Overall, the results showed that teachers have a medium degree of self-efficacy regarding the promotion of SRL among their students. This will likely result in an average SRL promotion in the classroom. Zimmerman (1990) emphasized the importance of self-efficacy in the process of self-regulation. Moreover, De Smul et al (2018) emphasized that teachers' self-efficacy is an important personal determinant of SRL promotion among students. De Smul, et al. (2018) and Ewijk (2016) also asserted that teachers' self-efficacy on SRL can mediate teachers' knowledge and beliefs about SRL in its promotion in their classrooms.

Harding et al (2018) mentioned that some of the challenges that teachers face in integrating SRL's instructions into their practice are: lack of time, lack of sufficient teaching resources or teacher experience, student behaviour, student attitude and student's willingness to learn. Moreover, teachers' low self-efficacy about SRL may be considered one of the main reasons for its low promotion among their students (Ewijk, 2016).

In fact, teachers' average level of self-efficacy to promote self-regulated learning (SRL) in this study may have several justifications. First, the lack of SRL instructions in the pre-service teacher training curricula. It is possible that teachers may lack knowledge about SRL, one, because it was not included in their curriculum at university level and two, they did not receive it in previous stages of study. Gan et al (2020) emphasized the necessity of including the Instructions of SRL in the university's teacher training curricula to enhance the SRL of these teachers in learning and teaching. In his study of students - teachers of English as a Foreign Language (EFL), which aimed to investigate the self-efficacy beliefs of these students-teachers in the SRL application, it was found that the students and teachers had a medium score of self-efficacy in SRL application and a low score of a self-efficacy in direct instruction for SRL. Second, the lack of in-service teachers training courses in SRL and its promotion in

classrooms. Harding, et al (2018) pointed out the need to provide professional training for existing teachers in relation to the Instructions of SRL. Third, teachers may not believe in the students' ability to work independently. Some teachers may consider that teaching SRL for students may be a burden on them and lead to failure, especially if the student has special needs (Spruce & Bol, 2015). This in turn may lead teachers to frustration and thus weaken their belief in their self-efficacy. However, according to the participants in Soliman's and Alenazi (2017) study, Saudi in-service teachers hold high beliefs in SRL. Various explanations for average self-efficacy rating in promoting SRL in classrooms among Saudi teachers have been provided. First, teachers have poor self-regulation skills themselves, hence they are not able to promote it in their classes. Second, the expectations that teachers have about their role in the educational process, as teachers believe that they must play the major role in classrooms, not their students. Third, teachers tend to be traditional; they care more about what students learn than how they learn. Fourth, teachers' burnout affects their self-efficacy as they lack sufficient effort to promote SRL in their classroom due to job stress. Schools and principals' expectations; school policies are reflected on teachers' performance. Schools tend to place a teacher in a specific role, which is the tutor only. Therefore, since SRL is an attempt to move from teacher-centred to student-centred education, it is considered an attempt to break away from teachers' familiar role.

Regarding gender, the results showed that teachers' self-efficacy in SRL was not affected by gender variable. This is consistent with Aziz's and Quraishi (2017) study, which concluded that teachers' self-efficacy does not differ between males and females. This is also consistent with Hofman's & Kilimo (2014) study, which demonstrated that gender did not affect teachers' self-efficacy towards inclusion. However, these findings contrast with Ross's et al. (1996) study, which found that females appeared to have strong self-efficacy in feeling successful and student participation, while weaker in feeling well-prepared. The results of Özokcui's (2017) study also showed that female teachers have higher self-efficacy and effectiveness in inclusion compared to male teachers, while a study by Klassen & Chiu (2010) showed that female teachers have lower self-efficacy than male teachers in terms of classroom management.

Like gender, teachers' years of experience and subject-area of specialization did not affect their self-efficacy. This finding is in line with a Ross et al (1996) study that showed that years of experience did not affect teachers' self-efficacy, at least in terms of feelings of success and student engagement, while feelings of well-preparedness were stronger for more experienced teachers. However, a study conducted by Aziz's and Quraishi (2017) proved that years of experience play a positive role in increasing teachers' self-efficacy. Teachers with greater experience are more self-efficacious than teachers with less experience. Moreover, the results of Özokcui's (2017) study found that the level of self-efficacy of experienced teachers is higher than that of novice teachers. Meanwhile, the results of the same study showed that the level of self-efficacy regarding inclusion for teachers with less professional experience was higher. The results of Klassen and Chiu's (2010) study differed from previous findings in that it found that teachers' self-efficacy increases from the beginning of their careers to approximately middle, and then begins to decline after nearly 23 years of experience.

Finally, regarding subject-area of specialization, the results of the current study contrast with a study by Ross et al (1996), which revealed that teachers' self-efficacy varies according to specialization. The teachers of English language, social studies and the arts excel in self-efficacy in terms of feelings of success, while the results showed that math and science teachers have higher self-efficacy in terms of feeling well prepared and student participation. Moreover, in the inclusion context, in a study conducted by Sharma et al (2015), teachers with special education training, knowledge of disability, and experiences with persons with disabilities demonstrated a higher level of self-efficacy for working in public classrooms compared to general education teachers. This is consistent with Özokcui's (2017) study, which found that teachers who obtained credits from special education courses have high self-efficacy in terms of inclusion. The results of this study agree with Hofman and Kilimo's (2014) study which showed that there is no difference between general education teachers and teachers who received previous training in special needs education in terms of self-efficacy towards inclusion.

There are many reasons for the lack of teachers' gender, specialization, and years of experience's influence on their self-efficacy in SRL. For example, almost all groups of teachers have insufficient experience or have inappropriate qualification in relation to SRL. This incompetence is a possible reason for the lack of teachers' exposure to appropriate preparation to promoting SRL either before or during service. Almost all teaching preparation programs in Saudi universities, whether those programs are for male or female, and general or special teachers pay insufficient attention to prepare teachers to promote SRL or even teach them how to regulate their learning. Also, all male and female teachers, as well as general or special education teachers in Saudi, go through the same pressures and are subject to the same training programs, hence there is no difference in the level of in-service training.

Implementation and Recommendations

This study provided a basis on which to build further studies on teachers' self-efficacy in promoting self-regulated learning (SRL). The results of this study presented clear evidence about self-efficacy of general and special education (Learning Disabilities) teachers at middle and primary schools in promoting SRL. Besides, this study revealed the effect of gender, specialization, and number of years of experience on teachers' self-efficacy in promoting SRL. Additionally, this study would attract teachers' attention to their role to promote SRL among their students and work to increase their self-efficacy in this regard, given the importance of SRL for students in general and those with learning disabilities (SLD).

For contribution of raising teachers' efficacy of in regarding to SRL, teachers' preparation programs in universities should focus on SRL skills to produce self-regulated teachers who are able to impart these skills to their students. Moreover, the Ministry of Education should support policies that help in the transition from teacher-centered to student-centered learning, as this has a significant impact on achieving student independence. Besides, it should develop in-service training programs to improve the self-efficacy of teachers to enhance the SRL among their students, both in general and special classes. Also, teachers' assessment criteria should include an assessment of their efficacy in implementing new approaches to teaching SLD, including SRL. Finally, the results of this study may constitute a baseline that would help decision makers in the Ministry of Education to know the extent of teachers'

efficiency to implement SRL. That can help creating development plans for promoting SRL in schools in general and learning disabilities programs.

References

- Alhumaid, M. M. (2021). Physical Education Teachers' Self-Efficacy toward Including Students with Autism in Saudi Arabia. *International Journal of Environmental Research and Public Health Article*, 18(24), 13197.
- Alhumaid, M. M., Khoo, S., & Bastos, T. (2020). Self-Efficacy of Pre-Service Physical Education Teachers Toward Inclusion in Saudi Arabia. *Sustainability*, 12(9), 1–13.
- Alnahdi, G. (2019). Are We Ready for Inclusion? Teachers' Perceived Self-Efficacy for Inclusive Education in Saudi Arabia. *International Journal of Disability, Development and Education*, 00(00), 1–12.
<https://doi.org/10.1080/1034912X.2019.1634795>
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom Management Self-Efficacy and Burnout: A Multivariate Meta-analysis. *Educational Psychology Review*, 26(1), 101–126.
<https://doi.org/10.1007/s10648-013-9244-0>
- Alquraini, T. (2011). *Teachers' Perspectives of Inclusion of the Students with Severe Disabilities in Elementary Schools in Saudi Arabia* (Issue June). Ohio University.
- Alwaleedi, M. A. (2017). Impact of Demographic Variables in the Development of Teachers' Self-Efficacy Beliefs in the Context of Saudi Arabia. *Asian Social Science*, 13(1), 1–10.
<https://doi.org/10.5539/ass.v13n1p1>
- Alzahrani, S. (2021). *Saudi Arabian Kindergarten Teachers' Self-Efficacy, Attitudes, and Perceptions of Barriers Towards Inclusive Education* (Issue April). Western Sydney University.
- Armor, D., Conroy-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascal, A., & Zellman, G. (1976). *Analysis of the school preferred reading programs in selected Los Angeles minority schools*.
- Aziz, F., & Quraishi, U. (2017). Influence of gender, professional qualification and job experience on secondary school teachers' self-efficacy. *FWU Journal of Social Sciences*, 11(2), 233–244.
- Bandura, A. (2000). Self-efficacy: The foundation of agency. In *Control of human behavior, mental processes, and consciousness: Essays in honor of the 60th birthday of August Flammer*. (p. 16).
- Bandura, Albert. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), 191–215.
- Bandura, Albert. (1982). Self-Efficacy Mechanism in Human Agency. *The American Psychological Association*, 37(2), 122–147.
- Bembenutty, H. (2011). *Self-Regulated Learning: New Directions for Teaching and Learning*, Number 126. 128, 1–181.
- Bouffard-Bouchard, T., Parent, S., & Larivee, S. (1991). Influence of Self-Efficacy on Self-Regulation and Performance among Junior and Senior High-School Age Students. *International Journal of Behavioral Development*, 14(2), 153–161.
- Btonutler, D. L., & Schnellert, L. (2015). Success for students with learning disabilities: What does self-regulation have to do with it? In *Self-regulated learning interventions with at-risk youth: Enhancing adaptability, performance, and well-being* (pp. 89–111).
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. (2006). Teachers' self-efficacy beliefs

- as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology* 44, 44, 473–490.
<https://doi.org/10.1016/j.jsp.2006.09.001>
- Cherian, J., & Jacob, J. (2013). Impact of Self Efficacy on Motivation and Performance of Employees. *International Journal of Business and Management*, 8(14), 80–88.
<https://doi.org/10.5539/ijbm.v8n14p80>
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School Climate and Social – Emotional Learning : Predicting Teacher Stress , Job Satisfaction , and Teaching Efficacy. *Journal of Educational Psychology*, 104(4), 1189–1204. <https://doi.org/10.1037/a0029356>
- Coutinho, S. (2008). Self-Efficacy, Metacognition, and Performance. *North American Journal of Psychology*, 10(1), 165–172.
- De Smul, M. De, Heirweg, S., Keer, H. Van, Devos, G., & Vandeveldel, S. (2018). How competent do teachers feel instructing self-regulated learning strategies ? Development and validation of the teacher self-efficacy scale to implement self-regulated learning. *Teaching and Teacher Education*, 71, 214–225.
- Dignath-van Ewijk, C., & Büttner, G. (2018). Teachers' direct and indirect promotion of self-regulated learning in primary and secondary school mathematics classes – insights from video-based classroom observations and teacher interviews. *Metacognition and Learning*, 13(2), 127–157.
- Ewijk, C. D. (2016). Which components of teacher competence determine whether teachers enhance self-regulated learning? Predicting teachers' self-reported promotion of self-regulated learning by means of teacher beliefs, knowledge, and self-efficacy. *Frontline Learning Research*, 4(5), 83–105.
- Ewijk, C. D., & Werf, G. Van Der. (2012). What Teachers Think about Self-Regulated Learning : Investigating Teacher Beliefs and Teacher Behavior of Enhancing Students' Self-Regulation. *Education Research International*, 1–10.
<https://doi.org/10.1155/2012/741713>
- Gan, Z., Liu, F., & Yang, C. (2020). Student-teachers' self-efficacy for instructing self-regulated learning in the classroom. *Journal of Education for Teaching*, 00(00), 1–4.
<https://doi.org/10.1080/02607476.2019.1708632>
- Harding, S., Nibali, N., English, N., Griffin, P., Graham, L., Alom, B., & Zhang, Z. (2018). *Self-regulated learning in the classroom. Self-regulated learning in the classroom: Realising the potential for Australia's high capacity students.* (Issue June).
- Hofman, R. H., & Kilimo, J. S. (2014). Teachers' Attitudes and Self-Efficacy Towards Inclusion of Pupils With Disabilities in Tanzanian Schools. *Journal of Education and Training*, 1(2), 177. <https://doi.org/10.5296/jet.v1i2.5760>
- Holzberger, D., Philipp, A., & Kunter, M. (2013). How teachers' self-efficacy is related to instructional quality: A longitudinal analysis. *Journal of Educational Psychology*, 105(3), 774–786. <https://doi.org/10.1037/a0032198>
- Jones, M., Estell, D. B., & Alexander, J. M. (2008). Friends , classmates , and self-regulated learning : Discussions with peers inside and outside the classroom. *Metacognition and Learning* , 3(1), 1–15. <https://doi.org/10.1007/s11409-007-9007-8>
- Jouhari, Z., Haghani, F., & Changiz, T. (2015). Factors affecting self-regulated learning in medical students: A qualitative study. *Medical Education Online*, November, 1–8.
<https://doi.org/10.3402/meo.v20.28694>
- Kistner, S., Rakoczy, K., Otto, B., Dignath-van Ewijk, C., Büttner, G., & Klieme, E. (2010). Promotion of self-regulated learning in classrooms : Investigating frequency , quality ,

- and consequences for student performance. *Metacognition and Learning*, 5(2), 157–171. <https://doi.org/10.1007/s11409-010-9055-3>
- Klassen, R. M., & Chiu, M. Mi. (2010). Effects on Teachers' Self-Efficacy and Job Satisfaction: Teacher Gender, Years of Experience, and Job Stress. *Journal of Educational Psychology*, 102(3), 741–756. <https://doi.org/10.1037/a0019237>
- Klassen, R. M., & Ming, M. (2011). The occupational commitment and intention to quit of practicing and pre-service teachers : Influence of self-efficacy , job stress , and teaching context. *Contemporary Educational Psychology*, 36(2), 114–129. <https://doi.org/10.1016/j.cedpsych.2011.01.002>
- Klassen, R. M., & Tze, V. M. C. (2014). Teachers ' self-efficacy , personality , and teaching effectiveness : A meta-analysis. *Educational Research Review*, 12, 59–76. <https://doi.org/10.1016/j.edurev.2014.06.001>
- Lawson, M. J., Vosniadou, S., Deur, P. Van, Wyra, M., & Jeffries, D. (2018). Teachers ' and Students ' Belief Systems About the Self-Regulation of Learning. *Educational Psychology Review*, 31(1), 223–251.
- Moos, D. C., & Ringdal, A. (2012). *Self-Regulated Learning in the Classroom : A Literature Review on the Teacher ' s Role*. 2012. <https://doi.org/10.1155/2012/423284>
- Oates, S. (2019). The Importance of Autonomous , Self-Regulated Learning in Primary Initial Teacher Training. *Frontiers in Education*, 4, 102. <https://doi.org/10.3389/educ.2019.00102>
- Özokcui, O. (2017). Investigating the relationship between teachers' self-efficacy beliefs and efficacy for inclusion. *European Journal of Special Education Research*, 2(6), 234–252. <https://doi.org/10.5281/zenodo.1133784>
- Paris, S. G., & Paris, A. H. (2001). Classroom Applications of Research on Self-Regulated Learning. *Educational Psychologist*, 36(2), 89–101.
- Peeters, J., De Backer, F., Reina, V. R., Kindekens, A., Buffel, T., & Lombaerts, K. (2014). The role of teachers self-regulatory capacities in the implementation of self-regulated learning practices. *Procedia - Social and Behavioral Sciences*, 116, 1963–1970. <https://doi.org/10.1016/j.sbspro.2014.01.504>
- Pressley, M., Harris, K. R., & Marks, M. B. (1992). But Good Strategy Instructors Are Constructivists ! *Educational Psychology Review*, 4(1), 3–31.
- Reid, R. R., Harris, K. R., Graham, S., & Rock, M. (2012). Self-Regulation among Students with LD and ADHD. In *Learning about Learning Disabilities* (Fourth Edi). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-388409-1.00005-9>
- Robbins, S. B., Lauver, K., Davis, H., Langley, R., & Carlstrom, A. (2004). Do Psychosocial and Study Skill Factors Predict College Outcomes ? A Meta-Analysis. *Psychological Bulletin*, 130(2), 261–288. <https://doi.org/10.1037/0033-2909.130.2.261>
- Ross, J. O. H. N. A., COUSINS, J. B., & Gadalla, T. (1996). Within-teacher predictors of teachers efficacy. *Teaching and Teacher Education*, 12(4), 385-400.
- Schunk, D. H. (1995). Self-Efficacy, Motivation, and Performance. *Journal of Applied Sport Psychology*, 7(2), 112–137.
- Sharma, U., Shaukat, S., & Furlonger, B. (2015). Attitudes and self-efficacy of pre-service teachers towards inclusion in Pakistan. *Journal of Research in Special Educational Needs*, 15(2), 97–105. <https://doi.org/10.1111/1471-3802.12071>
- 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/10.1037/0022-0663.99.3.611>

- Smul, M. De, Heirweg, S., Devos, G., & Keer, H. Van. (2019). School and teacher determinants underlying teachers' implementation of self-regulated learning in primary education. *Research Papers in Education, 34*(6), 701–724. <https://doi.org/10.1080/02671522.2018.1536888>
- Soliman, M. S. S., & Alenazi, M. M. (2017). Primary Teachers' Beliefs and Knowledge about Self-regulated Learning in the Kingdom of Saudi Arabia. *International Journal of Educational Sciences, 18*(1–3), 1–15. <https://doi.org/10.1080/09751122.2017.1346573>
- Spruce, R., & Bol, L. (2015). Teacher beliefs, knowledge, and practice of self-regulated learning. *Metacognition and Learning, 10*(2), 245–277. <https://doi.org/10.1007/s11409-014-9124-0>
- Thomas, V., Peeters, J., De Backer, F., & Lombaerts, K. (2020). Determinants of self-regulated learning practices in elementary education: a multilevel approach. *Educational Studies, 00*(00), 1–23. <https://doi.org/10.1080/03055698.2020.1745624>
- Tschannen-moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: capturing an elusive construct. *Teaching and Teacher Education, 17*, 783–805.
- Tsiakala, M. (2019). *Environmental factors that influence self-regulated learning: What are the patterns in school environment that emerge in life histories of professionals who are highly self-regulated?* University of Twente.
- Xia, M., Fosco, G. M., & Feinberg, M. E. (2016). Examining Reciprocal Influences Among Family Climate, School Attachment, and Academic Self-Regulation: Implications for School Success. *Journal of Family Psychology, 30*(4), 442–452.
- Xu, H., & Ko, P. Y. (2019). Enhancing teachers' knowledge of how to promote self-regulated learning in primary school students: A case study in Hong Kong. *Teaching and Teacher Education, 80*, 106–114. <https://doi.org/10.1016/j.tate.2019.01.002>
- Yan, Z. (2017). How teachers' beliefs and demographic variables impact on self-regulated learning instruction. *Educational Studies, 44*(5), 1–14. <https://doi.org/10.1080/03055698.2017.1382331>
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research, 86*(4), 981–1015. <https://doi.org/10.3102/0034654315626801>
- Zimmerman, B. (1990). Self-Regulated Learning and Academic Achievement: An Overview. *Educational Psychologist, 25*(1), 3–17. <https://doi.org/10.1207/s15326985ep2501>