

THE EFFECTS OF SELF-REGULATED LEARNING STRATEGIES ON PRESCHOOL CHILDREN'S SELF-EFFICACY AND PERFORMANCE IN EARLY WRITING

Siew Siew Kim¹, Mariani Md. Nor²

Faculty of Education of University of Malaya, Kuala Lumpur, Malaysia

siewsiewkim@yahoo.com¹; marianin@um.edu.my²

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Abstract

To enhance the will and the skills to express thoughts explicitly and effectively in early writing among preschool children, self-regulated learning (SRL) was suggested for preschool children as one of the effective learning approaches. This quasi-experimental study involved seventy-five preschool children (5-6 years old) from two public preschools in Selangor, Malaysia. This study investigated the effects of SRL strategies on early writing self-efficacy and early writing performance among preschool children. Interview data was engaged and supported the quantitative result to obtain a deep insight of the findings. Two-way Repeated Measure ANCOVA was employed and confirmed the effectiveness of self-regulated learning intervention with an interaction effect between the test and group for early writing self-efficacy being statistically significant ($F(1, 72) = 12.665$; $p = 0.001$, $\eta^2 = 0.150$), with Cohen's $d = 0.84$; and early writing performance statistically significant ($F(1, 72) = 110.801$; $p < 0.001$, $\eta^2 = 0.606$), with Cohen's $d = 2.84$. The result also confirmed that self-monitoring and controlling ($F(5, 69) = 17.934$, $p < 0.001$), with an adjusted $R^2 = 0.534$, was a strong predictor for early writing self-efficacy, and planning and goal setting ($F(5, 69) = 12.706$, $p < 0.001$), with an adjusted $R^2 = 0.442$, were a strong predictor for early writing performance. Eleven self-regulated learning strategies used emerged from the interviews' data pertaining to different contexts. According to the participant children, planning and goal setting, self-monitoring, and self-evaluation were the strategies that will assure their writing quality. These responses supported the results produced by the quantitative data. The findings of this research provide a useful insight into early writing and self-regulated learning instructions in the Malaysian preschool context.

Keywords: early writing; preschool; self-efficacy; self-regulated learning

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INTRODUCTION

Research in education indicates that self-regulated learning (SRL) is crucial for young learners' learning process; it enhances their academic performance and learning motivation (Anam & Stracke, 2016; Dent & Koenka, 2015; Mega, Ronconi, & Beni, 2014; Pino-Pasternak, Basilio, & Whitebread, 2014). Characteristics of SRL involve intrinsic motivation and autonomous learning to help learners to achieve their goals in any learning situation (Zimmerman, 2013; Panadero, 2017). In Malaysia, students are expected to learn how to learn and how to take responsibilities for making their learning more constructive and successful. Taking responsibility and controlling their learning has been highlighted in the Malaysian education system (MOE, 2015; MOE, 2017). Although early academic performance skills such as numeracy and literacy skills are essential for school success, children's self-regulation abilities, including the ability to follow instructions, focus on materials

presented to them, and demonstrate self-control, are important predictors of their later academic achievement (Diamond, 2016; McClelland, Acock, Piccinin, Rhea, & Stallings, 2013). Thus, aligned with the expectation of the Malaysian Education Blueprint (MOE, 2015), preschool education in Malaysia aims to prepare preschool children to proceed their formal education with various competencies and skills, including literacy skills, thinking skills, problem solving skills as well as self-regulating skills (MOE, 2017). By engaging SRL strategies, preschool children learn how to take initiative in monitoring their learning strategies and place, evaluate their learning, and progress to perform better. Although research suggests that children in their very young age can and do engage in activities to self-regulate their learning process (Pino-Pasternak, Basilio, & Whitebread, 2014; Whitebread & Basilio, 2012), most of the local research in Malaysia is still not enough to provide a better understanding about the principles of

self-regulation generalised across contexts like age group, subjects, and there is scarcity of evidence documenting the use of SRL strategies among younger children, aged from five to six years old in Malaysia (Ng & Yeo, 2014).

In Malaysia, early writing is part of literacy and language development. According to Malaysia's national preschool school curriculum, early writing emphasises not only mechanical or orthography skills; it also emphasises how preschool children learn how to express their message, how to form or make marks on the page, and how to represent sounds within this message (MOE, 2017). Therefore, self-efficacy and SRL strategies are considered key processes that will influence children's early writing process and performance (Bulut, 2017; Hutchinson, 2013). Unfortunately, preschool writing instruction including in Malaysia, is more focused on procedural knowledge than discursive processes (Bingham, Quinn, & Gerde, 2017; Hall, Simpson, Gerde, Bingham, & Pendergast, 2015; Hall, Simpson, Guo, & Wang, 2015; Ng & Yeo, 2014; Puranik, Al Otaiba, Sidler, & Greulich, 2014; Samah, Majzub, & Mahamod, 2015). Teachers place a great emphasis on teaching handwriting skills in class and they do not have a specific approach in teaching writing; instead, they often use copying and drilling as the main strategies in teaching writing. If children learnt and excelled in copying words and handwriting, but not sharing ideas in writing, it can cause an imbalance development of literacy for children. In addition, Ng & Yeo (2014) found that preschool teachers in Malaysia place very little focus on developing interest and self-efficacy in early writing. Lacking motivation in literacy will develop lower self-concept and efficacy beliefs in literacy (Anam & Stracke, 2016; Bulut, 2017). These imply that teaching writing for young children in Malaysia remained unclear. In echoing the above challenges, SRL which emphasises autonomy and own control is recommended to be integrated in early writing instruction.

Writing is a complex, demanding process for both novice and expert writers. Educational research identified key processes of SRL, including goal setting, self-efficacy, metacognitive monitoring, effort and resource management, which contributed to positive outcomes in academic achievement including writing (White & DiBenedetto, 2015; Zimmerman & Risemberg, 1997). For example, young children can use SRL strategies to help them in planning ideas, constructing phrases or sentences and revising ideas (Hayes & Olinghouse, 2015).

Employing SRL in early writing does not only support the writing skills, it also enhances motivational processes and supports long-term writing attitude. According to Bandura's social cognitive theory (Bandura, 2012), self-efficacy is defined as one's belief about one's capabilities to complete a specific task. The beliefs that individuals hold about their abilities influence the amount of effort put into a task, willingness to complete activities, and the ability to persist when facing difficulties. Through SRL, children learn how to plan,

seek information and social help, and monitor their writing process; these skills enhance their self-efficacy towards writing. When children positively perceive their writing abilities, they put more effort into their learning processes. Better performance resulting from greater effort will enhance children's self-efficacy. This reciprocal process is important in learning as it influences people's decisions, determining how far they are willing to go, and how hard they are willing or able to push themselves to optimise the chances of positive outcomes (Bandura, 2012).

METHOD

The current study employed a quasi-experimental design to examine the effectiveness of SRL strategies in improving 5-6 year-old children's self-efficacy and performance in early writing. The strong predictor of SRL strategies on early writing self-efficacy and performance were determined in this study. Participants for experimental and control groups were randomly assigned. The experimental group was instructed in early writing by integrating SRL intervention, which lasted approximately four months. A control group was instructed using the traditional approach.

Participants

The study sample consisted of seventy-five preschool children, enrolled in two public preschools of Selangor. There were 37 samples in the experimental group and 38 in the control group, respectively. All demographic variables were analysed and compared between experimental and control groups using independent *t*-test and chi square test. Results indicated that data was normally distributed and homogenous. Both groups had similar characteristics in terms of gender, schooling experiences, and language used at home. In addition, prior to data analysis, all scales and subscales in early writing performance and use of self-regulated strategies were tested between the two schools to identify the homogeneity of both schools. Results indicated that both schools were significantly different in all variables, with $p < 0.05$. Therefore, the factor of school was removed from the all the results performed in this study to reduce bias. Repeated Measure Analysis of Covariance was suggested for the analysis where the factor of "school" is considered a covariate through the study.

Instruments

In this study, the Self-Regulation Strategies for Early Writing-Observation Form (SRSEWOF) and the Self-Efficacy Scale of Early Writing (SESEW) were used as the data collection tools. SRSEWOF was adapted from the instrument developed by Demirtas (2013) and closely tied to early writing for preschool children. It was reorganised on the basis of the theories propounded by Zimmerman & Schunk (2012), with the conceptual framework of the current study and important literature review of SRL and early writing (Metallidou, 2010; Panadero, 2017; Teng & Zhang, 2016; Whitebread, et al., 2009). A pool of approximately twenty-six

statements across five dimensions representing various SRL strategies in early writing was finalised for this current study. Face and content validation of this instrument was done by related areas' experts and practitioners. The overall Cronbach's Reliability Co-Efficiency was found at 0.966. An instrument for early writing self-efficacy (SESEW) was developed. There were two constructs and eight items total in the instrument. This instrument was developed based on the ideas from Kim, & Lorschach's study (2005), where children's self-efficacy was assessed from the perspectives of teachers through observable behaviours statements. The internal consistency and reliability of SESEW was tested and was found at coefficient alpha=0.848.

To assess the early writing performance of preschool children, Early Writing Performance Scale (EWPS), was developed based on three aspects: (i) content, (ii) children's mechanical writing skills, and (iii) overall writing quality. This scale was developed according to the Learning Standards and Performance

Standards in the Malaysian National Preschool Standard-Based Curriculum and Assessment Document (MOE, 2017). This developed scale was validated by three experts in curriculum development and early literacy in early childhood education in Malaysia. Changes were made according to their comments and feedback.

SRL Intervention Programme

The transfer of SRL strategies to preschool children was adapted to the specific requirements of five- to six-year-old children's learning abilities. All the SRL strategies in the intervention were arranged into ten units and closely tied to the early writing process. During the intervention, children were provided with sufficient opportunities and a platform to exercise the strategies in every intervention session. Detailed lesson plans and supporting materials were used to train the children to use SRL strategies in early writing. The structure and content of the intervention for the children are shown in Table 1.

Table 1. Overview of the Self-Regulated Learning Intervention

Unit	SRL Content	Training Goals
Introduction	Knowledge and importance of SRL	Be aware of and understand SRL strategies
Goal setting	Goal Setting	Understand the importance of realistic goal-setting Learn how to set individual goals
Plan my writing	Planning (I)	Use drawing to generate ideas
Plan my writing	Planning (II)	Pick up the ideas from drawing Put ideas into text
Elaborate my ideas	Planning (III)	Use Bubble Map to generate ideas
I can write	Self-monitoring and controlling	Be aware of the importance of self-monitoring Follow the created Early Writing Rules
Work place	Environmental controlling	Choose and restructure own working place
I need help	Seeking social help and information	Be aware of social help: peer/ teacher/ adult Know how to use resources
I can do it	Managing Attention and effort	Control of distraction (negative thought, noise, temptation)
Checked!	Self-reflection	Encourage reflectivity Use self-checklist

RESULTS AND DISCUSSION

Results related to the level of early writing self-efficacy, early writing performance and the use of SRL strategies before and after intervention; and the effectiveness of SRL intervention are highlighted as below:

The level of early writing performance among preschool children before and after intervention

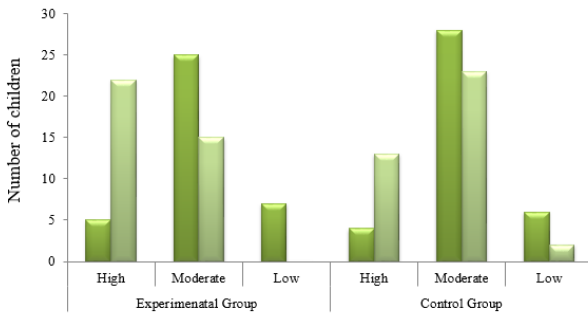
Early writing self-efficacy in this study refers to two main constructs, confidence and persistence in approaching tasks and beliefs. There were eight items in the instrument and the four point Likert Scale of SESEW ranged from: 1- not like the child, 2- not too much like the child, 3- somewhat like the child, 4- like the child. The level of early writing self-efficacy was categorised into low, moderate, and elevated levels based on results of total scores of the instrument.

Table 2 shows that early writing self-efficacy for both groups were at a moderate level before intervention. Generally, they had positive beliefs towards writing tasks. However, when they were faced with a new and challenging writing task, they lacked confidence and persistency in moving forward. This finding was consistent with some studies done in Malaysia in a different context (Jalaluddin, 2013; Ng & Yeo, 2014), showing that students in Malaysia always hesitate to write and do not finish their writing task because they think that writing is too difficult. Lacking persistency and effort in completing their writing task caused the low achievement in writing.

Table 2. Descriptive Statistics of Early Writing Self-Efficacy for Experimental (N=37) and Control (N=38) Groups

Constructs	Group	Pre-test			Post-test		
		M	SD	Mdn	M	SD	Mdn
Confidence & Persistence	Experimental	2.34	0.75	2.16	3.24	0.64	3.17
	Control	2.47	0.63	2.25	3.03	0.72	3.00
Beliefs	Experimental	2.92	0.51	3.00	3.35	0.59	3.50
	Control	2.50	0.75	2.50	2.38	0.93	2.25
Overall	Experimental	19.89	5.04	19.00	26.14	4.66	25.00
	Control	19.84	3.49	19.50	22.92	4.63	22.50

Three categories of early writing self-efficacy levels were decided, ranging from: Low (total score: 8-16), Moderate (total score: 17-24), and High (total score: 25-32). Figure 1 shows that after intervention, almost 60% of the experimental group students achieved an elevated level in early writing self-efficacy; they experienced vast improvement in early writing self-efficacy. The results showed the probability that children became more positive and believed in their writing ability, approached a writing task confidently, and persisted in completing the tasks given.



Test	Level	Percent	Level	Percent
Pre	Moderate	67.6	Moderate	73.7
Post	High	59.5	Moderate	60.5

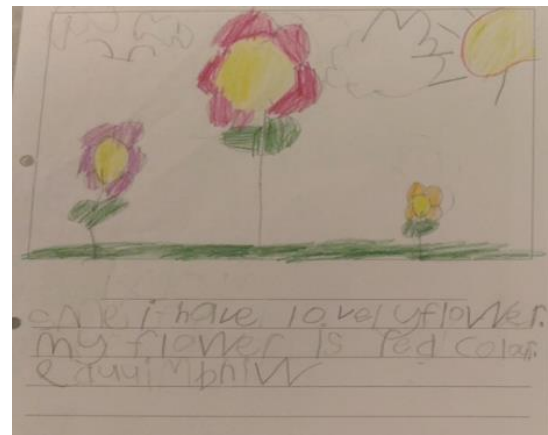
Figure 1 Level of early writing self-efficacy among preschool children in Malaysia

Past literature review pointed out that most of the teachers place very little focus on developing learners' self-efficacy in writing, including in the preschool classroom (Abbott, Berninger, & Fayol, 2010; Ng & Yeo, 2014). Overall, preschool teachers in Malaysia do not have a specific approach in teaching writing; instead, they often use copying and drilling as the main strategies in teaching writing (Samah, 2015; Ng & Yeo, 2014). The results found that early writing self-efficacy can be enhanced through SRL intervention and should be taken seriously in early writing instruction.

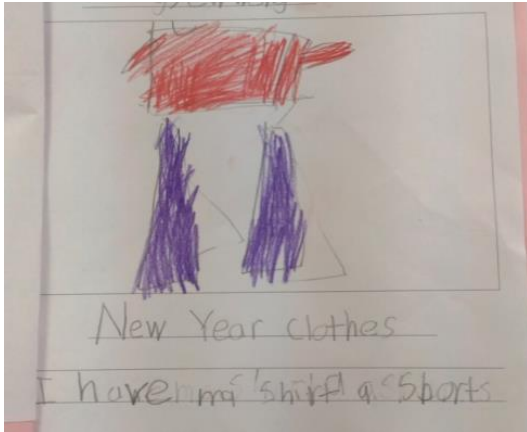
The level of early writing performance among preschool children before and after intervention

Generally, preschool children in this study acquired limited competencies in mechanical writing skills and performed less in conveying meaning before SRL intervention. The early writing performance levels for experimental and control groups were lower than average, including all the aspects tested for early writing performance. The mean scores of total early writing performance for the experimental group (M=9.76, SD=6.29) and the control group (M=11.21, SD=7.55) were lower than average, including all the aspects tested in early writing performance.

Before intervention, most of the preschool children performed less in mechanical writing skills and were unlikely to express their ideas explicitly and effectively. Some of them were only able to express one or two ideas, without elaboration. Figure 2 (i) and (ii) showed that the child wrote two ideas about "Lovely flower" and "New Year clothes". However, they were only able to narrate the ideas, not elaborately. The written texts also show that the preschool children in this study lacked mechanical writing skills, including capitalisation, formation of letters, etc.



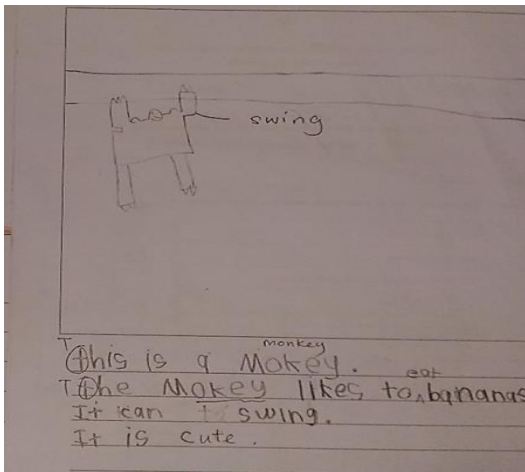
(i)



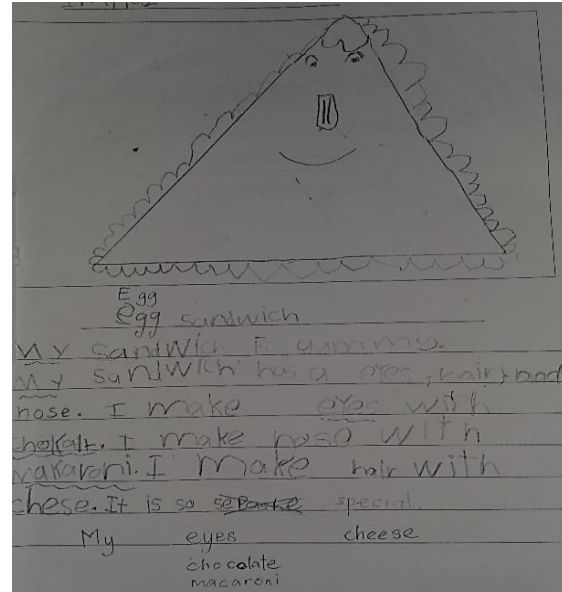
(ii)

Figure 2 Samples of written text among preschool children before intervention

After intervention, the experimental group increased their early writing performance to elevated levels during the post-test; this can be seen from Figure 3. The experimental group's children were able to express their ideas more effectively and creatively related to the topic chosen, with good mechanical writing skills. The text produced was longer and more complete.



Child A



Child B

Figure 3 Samples of written text among preschool children after intervention

Despite the spelling and grammatical errors, the written texts produced were more interesting and comprehensive in terms of expression of ideas. For example, in Figure 3, Child A was able to describe the features of the animal (monkey) that he loves, and related the distinctive feature of the animal (monkey) to the reason he loves it with his imagination. Child B wrote about his favourite food. He was able to tell the reason he loves a sandwich, and how and when he makes his own sandwich.

The use of SRL strategies among preschool children before and after intervention

This study found that overall use of SRL strategies among preschool children for both groups was low, only scoring 50-52 out of 104 (Table 3). The SRL strategies mostly employed were self-monitoring & controlling, environmental controlling, and planning & goal setting. However, after intervention, the experimental group was fond of engaging self-evaluation instead of environmental controlling. The experimental group children were able to self-evaluate their writing and their learning goals.

Table 3. Descriptive Statistics of the Use of Self-regulated Learning Strategies for Experimental (N=37) and Control Groups (N=38)

Domains	Group	Pre-test			Post-test		
		<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Planning & Goal setting	Experimental	1.89	0.81	1.60	3.17	0.68	3.20
	Control	2.13	0.80	2.00	2.62	0.57	2.60
Task Strategies	Experimental	1.66	0.79	1.30	1.66	0.79	1.30
	Control	1.64	0.52	1.70	1.64	0.52	1.67
Self-monitoring & controlling	Experimental	2.16	0.82	2.00	2.92	0.58	3.00
	Control	2.16	0.53	2.10	2.50	0.37	2.40
Environmental control	Experimental	1.94	0.56	2.00	1.91	0.61	2.00
	Control	2.09	0.56	2.00	2.35	0.43	2.30
Self-evaluation	Experimental	1.71	0.77	1.70	2.96	0.80	3.00
	Control	1.62	0.55	1.70	2.33	0.82	2.20
Total use of SRL	Experimental	50.27	17.66	43.00	73.92	14.09	75.00
	Control	52.47	14.52	49.50	64.18	11.95	59.00

This result confirmed that preschool children were able to learn and engage with self-regulated strategies, and the self-regulated learning skills can be enhanced with appropriate instruction, learning activities, pedagogical practices, and classroom environments (Pino-Pasternak, Basilio, & Whitebread, 2014; Whitebread & Basilio, 2012; Whitebread & Coltman, 2010). There were five domains of SRL taught and tested in this study, namely planning and goal setting, task strategies, self-monitoring and controlling, environmental controlling and self-evaluation. SRSREWOF generated a profile with the five domains' scores and an overall score for the use of self-regulated learning strategies in early writing for Malaysian preschoolers.

The Effects of Intervention on Preschool Children's Early writing Self-efficacy

To confirm the effectiveness of SRL intervention on early writing self-efficacy, Two-Way Repeated Measure ANCOVA was performed, and the results are in Table 4.

Table 4. Summary of Repeated Measure ANCOVA for Early Writing Self-Efficacy

Source of Variation	Df	MS	F	<i>p</i> -Value	η^2
Test	1	5.008	0.687	0.410	0.009
Test * Group	1	92.318	12.665	0.001	0.150

To prove the effectiveness of SRL intervention on early writing self-efficacy, a pre-test and post-test were conducted. As shown in Table 4, the interaction between the Test and Group for early writing self-efficacy was statistically significant ($F_{(1, 72)} = 12.665$; $p = 0.001$, $\eta^2 = 0.150$) for both groups across the times (pre- and post-test). The Cohen's effect size value ($d = 0.84$) suggested a high practical significance. In other words, preschool children from the experimental group showed a substantial increase in early writing self-efficacy after participating in a self-regulated learning intervention, and confirmed that by introducing the self-regulated learning strategies to the experimental group, the early writing self-efficacy was effectively enhanced in this current study (Anam & Stracke, 2017; Bulut, 2017).

Effects of Intervention on Preschool Children's Early writing Performance

To prove the effectiveness of SRL intervention on early writing performance, a pre-test and post-test were conducted. Both of the experimental and control groups' children were required to write about "Lovely flower" during the pre-test, and "A special day" during the post-test. The written texts were scored by the two independent raters by using Early Writing Performance Scale developed in this study.

Two-Way Repeated Measure ANCOVA was applied to assess all the scores for three aspects: content, mechanical writing skills, and overall quality, and included the total performance in early writing performance between the groups and tests. The results are summarized in Table 5.

Table 5. Summary of Repeated Measure ANCOVA for Early Writing Performance

Source of Variation		Df	MS	F	p-Value	η^2
Test	Content	1	0.343	1.197	0.278	0.016
	Mechanical writing skills	1	2.568	0.919	0.340	0.013
	Overall quality	1	1.969	5.613	0.020	0.072
	Total Performance	1	12.900	2.693	0.105	0.036
Test * Group	Content	1	12.355	43.063	<0.001*	0.374
	Mechanical writing skills	1	240.465	86.091	<0.001*	0.545
	Overall quality	1	16.123	45.973	<0.001*	0.390
	Total Performance	1	530.711	110.801	<0.001*	0.606

* Significant at $p < 0.005$

According to Table 5, the results for the interaction between the Test and Group for content were statistically significant ($F_{(1, 72)} = 43.063$; $p < 0.001$, $\eta^2 = 0.374$). In mechanical writing skills, a statistical significance for the interaction between the Test and Group ($F_{(1, 72)} = 86.091$; $p < 0.001$, $\eta^2 = 0.545$) was found. The results also indicated a statistical significance for the interaction between the Test and Group for Overall Quality ($F_{(1, 72)} = 45.973$; $p < 0.001$, $\eta^2 = 0.390$). The results indicated that the interaction between the Test and Group for total performance was statistically significant ($F_{(1, 72)} = 110.801$; $p < 0.001$, $\eta^2 = 0.606$). These results indicated that self-regulated learning intervention impacted all aspects in early writing performance and total performance among the preschool children in the experimental group. The effect size of the interaction effect in total early writing performance was considered high, with a Cohen's d value = 2.48 ($\eta^2 = 0.606$), suggesting a high practical significance.

These results were in line with the outcomes of the studies identifying the contribution of SRL strategies in writing performance (Bulut, 2017; Graham, Gillespie, & McKeown, 2013; Olinghouse & Graham, 2009; Zimmerman & Risemberg, 1997). Therefore, teaching SRL strategies to children can help them to be equipped with strategies to instil positive attitude and behaviours to perform better in their writing tasks.

Predictors for Early Writing Self-Efficacy and Early Writing Performance

To determine the predictors of SRL strategies for early writing self-efficacy and early writing performance, Standard Multiple Regression Analysis was performed. The results (presented in Table 6) suggested self-monitoring & controlling ($F_{(5, 69)} = 17.934$, $p < .001$), with an adjusted $R^2 = 0.534$, as a significant regression equation in predicting early writing self-efficacy. Planning and goal setting ($F_{(5, 69)} = 12.706$, $p < 0.001$), with an adjusted $R^2 = 0.442$, was significant in predicting early writing performance for preschool children.

The findings show that the more children engaged in self-monitoring & controlling strategies, including monitoring the writing process, managing effort and attention, seeking information, and seeking social help, the higher the early writing self-efficacy they achieved. This finding is aligned with the suggestion that writing requires elevated levels of cognitive engagement, intrinsic motivation, and self-monitoring activities (Schunk & Zimmerman, 2007; Zumbunn et al., 2010). When the children engage in self-monitoring and controlling behaviours, in terms of emotional and motivational beliefs, they will be able to manage their efforts by focussing or using a self-consequences strategy to motivate themselves for upcoming tasks.

Table 6. Standard Multiple Regression Analysis in Predicting Early Writing Self-Efficacy and Early Writing Performance

Predictors	Regression coefficients							
	Early Writing Self-efficacy				Early Writing Performance			
	B	SE _B	β	p-value	B	SE _B	β	p-value
Planning & goal setting	1.860	1.058	0.348	0.080	5.635	1.874	0.652*	<0.001
Task strategies	1.081	0.775	0.167	0.160	-0.573	1.373	-0.055	0.680
Self-monitoring & controlling	3.411	0.898	0.543*	<0.001	0.939	1.590	0.092	0.560
Environmental controlling	-1.405	0.817	-0.184	0.090	0.368	1.446	0.030	0.800
Self-evaluation	-0.987	0.983	-0.153	0.310	-0.221	1.741	-0.021	0.890
	Adjusted $R^2=0.534$ $F=17.934$, $p < 0.001$				Adjusted $R^2=0.442$ $F=12.706$, $p < 0.001$			

Planning and goal setting as strong predictors for early writing performance fit into the cognitive writing model, which stated that writing is a goal-directed activity (Costa et al., 2017; Hayes, 2012). According to the cognitive writing model, goals guide the writers throughout the writing process, where writers set and revise goals and sub-goals throughout the writing process, and finally enhance the writing performance. Self-regulated writers will assess or evaluate their personal achievements related to the expected goals or outcomes. If they failed to achieve their goals, they revised their goals and the strategies used in their writing task (Hayes, 2012). These findings paralleled some studies providing staunch support for the association between planning and early writing quality among the lower grade children (Graham et al., 2013; Olinghouse & Graham, 2009). When children engaged with planning and goal setting, they tended to be more conscious in understanding their task requirements and planning their learning outcomes. They created better learning habits in goal setting and planning their writing, thus enhancing their writing performance (Dent &

Koenka, 2015; Limpo & Alves, 2013; Limpo, Alves, & Fidalgo, 2014).

SRL strategies mostly employed by out-performing children pertaining to different contexts

Eight children from the experimental group were interviewed and observed in this study. The observation and interview data provided this study with rich information about how children used these strategies in their writing tasks within different contexts. Eleven strategies emerged from the data, including planning, goal setting, keeping records, self-monitoring writing process, seeking social help, seeking information, effort management, self-consequences, environmental controlling, memorising, and self-evaluation. The percentage of strategies suggested within different contexts was calculated and is shown in Table 7. The findings resulting from the interviews sessions showed that children use different strategies pertaining to different contexts in this study.

Table 7. Summary of the use Self-regulated learning Strategies during Early Writing

Context	Self-regulated learning strategies
Assume your teacher discussed about a topic about “sport day” with your class. You will have to write about it. Do you have a method to help you to remember what was discussed in class?	Keeping records (50%) Memorising (37.5%)
Your teacher asks you to write a short story about “My family” at home. How do you write? Do you have any particular method to help you plan and write at home?	Effort management (67.5%) Seeking information (50%) Seeking social help (50%) Planning (37.5%) Memorising (25%) Goal setting (12.5%)
Do you have any special method that you always use to complete your writing task in class?	Planning (87.5%) Self-monitoring writing process (50%) Goal setting (37.5%) Self-evaluation (37.5%) Seeking information (37.5%)
Sometimes our friends are playing, reading other books, talking or running around...Do you have any special method to motivate yourself to complete your work under these conditions?	Effort management (100%) Environmental controlling (50%) Self-consequences (37.5%)
How do you make sure your writing is always the best?	Self-evaluation (100%) Planning (62.5%) Goal setting (37.5%) Self-monitoring writing rules (25%) Seeking social help (25%)

There were two to six strategies suggested by the children for handling early writing pertaining to each context. In the interview, children revealed that they set goals and planned appropriately to attain their goals in their writing task. In addition, effort management and self-evaluation were mostly suggested by the children when pursuing writing. All children mentioned that they

engaged in controlling their effort, focus, and attention on their task, and it was important to make sure they could complete their work, especially in a poorly-motivated environment. All children also commented that self-evaluating is important for them to ensure skilful writing. These findings indicated that children applied certain strategies in certain contexts; for

example, seeking information and seeking social help were mostly suggested for completing tasks at home. Self-evaluation was mostly used to help them in completing tasks at school and assure the quality of writing.

SRL is a personal process and a passionate learning approach. It allows learners to learn according to their own ability and unique learning needs. When children planned their targeted goal according to their abilities and learning resources they have in hand, they feel more confident and willingly to write. Interview data revealed the reality that children experience and further explained the results produced by the quantitative data.

CONCLUSIONS AND RECOMMENDATIONS

Early writing is one of the important components in early literacy, and writing itself is a valuable tool for gathering and conveying information in the learning process (Graham, Gillespie, & MacKweon, 2013; Miller, McCardle, & Long, 2017; Puranik et al., 2014). Children use marks on paper and correspondence with meaning, and use writing when presenting their knowledge and understanding of the content they learned. Although preschool children in Malaysia lacked mechanical writing skills and presented their ideas less effectively, early writing performance of experimental group was increased to an elevated level after intervention. Previous studies suggested that prior to starting the writing process, good writers plan, set goals, and use knowledge specific to the writing task in hand to produce quality writing (Graham et al., 2013; Limpo, Alves, & Fidalgo, 2014). This suggestion was proven in this study, where SRL intervention's effect on early writing performance was double that of instruction without intervention. Therefore, improving instruction in early writing by incorporating SRL strategies can help children to be equipped with strategies while instilling a positive attitude and behaviours for better writing performance (Gerde et al., 2015; Miller, McCardle, & Long, 2017).

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