

The Relationship Between Kindergarten Teachers' Perceptions and Children's Readiness Skills in Selangor, Malaysia: A Survey Study

Azam Ghazali^{a*}, Zakiah Mohamad Ashari^a, Azlina Abu Bakar^b

^a*School of Education, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia*

^b*Department of Educational Studies, Faculty of Human Development, Universiti Pendidikan Sultan Idris, 35900 Tanjong Malim, Perak, Malaysia*

*Corresponding author: muhammad.nur.azam@graduate.utm.my

Article history: Received: 19 January 2023 Received in revised form 14 August 2023 Accepted: 15 August 2023 Published online: 31 August 2023

Abstract

The purpose of this study is to learn about teachers' perceptions of children's readiness skills by understanding the different types of skills and their importance to children who will enter primary school in the future. There are 4 main objectives in this study which are (i) to explore the types of children's readiness skills; (ii) to explore teachers' perceptions of children's readiness skills; (iii) to find out the relationship between teachers' perceptions and children's readiness skills; and (iv) to find out the difference between male and female teachers' perceptions towards children's readiness skills. This study is a quantitative study where it was only conducted using a survey method which is a set of questionnaires was distributed to 112 participants consisting of trainee teachers, young teachers, experienced teachers, and early childhood education practitioners in Selangor. The data were analyzed by using Statistical Software Package for Sciences (SPSS) version 25 to obtain percentage, standard deviation and mean. Findings show teachers understand the level of readiness skills required by children in kindergarten. Besides, their perceptions of the readiness skills needed by children is also at a good level. Several suggestions have been made to the Malaysian Ministry of Education to ensure that the emphasis on child well-being through positive learning is implemented in kindergarten so that children can improve their readiness skills when they are entering the primary school. Furthermore, researchers have stated the implications on children's readiness skills, specifically the role of the school and parents in providing opportunities for them to explore their surrounding so that they demonstrate a clear nature of readiness to learn.

Keywords: Readiness Skills, Perception, Early Childhood Educator, Kindergarten

Abstrak

Kajian ini bertujuan untuk mengenal pasti persepsi guru terhadap kemahiran kesediaan kanak-kanak dengan memahami pelbagai jenis kemahiran dan kepentingannya kepada kanak-kanak yang akan memasuki sekolah rendah pada masa hadapan. Terdapat 4 objektif utama dalam kajian ini iaitu (i) meneroka jenis kemahiran kesediaan kanak-kanak; (ii) meneroka persepsi guru tentang kemahiran kesediaan kanak-kanak; (iii) mengenalpasti hubungan antara persepsi guru dengan kemahiran kesediaan kanak-kanak; dan (iv) mengenalpasti perbezaan persepsi guru lelaki dan perempuan terhadap kemahiran kesediaan kanak-kanak. Kajian ini merupakan kajian kuantitatif di mana ia hanya dijalankan menggunakan kaedah tinjauan iaitu satu set soal selidik telah diedarkan kepada 112 orang peserta yang terdiri daripada guru pelatih, guru muda, guru berpengalaman, dan pengamal pendidikan awal kanak-kanak di Selangor. Data dianalisis menggunakan perisian Statistical Software Package for Sciences (SPSS) versi 25 untuk mendapatkan peratusan, sisihan piawai dan min. Dapatan menunjukkan guru memahami tahap kemahiran kesediaan yang diperlukan oleh kanak-kanak juga berada pada tahap yang baik. Beberapa cadangan telah dikemukakan kepada Kementerian Pendidikan Malaysia bagi memastikan penekanan terhadap kesejahteraan kanak-kanak melalui pembelajaran aktif dilaksanakan di tadika agar kanak-kanak dapat meningkatkan kemahiran kesediaan mereka apabila mereka memasuki sekolah rendah. Tambahan pula, pengkaji telah menyatakan implikasi terhadap kemahiran kesediaan kanak-kanak, khususnya peranan pihak sekolah dan ibu bapa dalam memberi peluang kepada mereka menerokai persekitaran mereka supaya mereka menunjukkan sifat kesediaan belajar yang jelas.

Kata kunci: Kemahiran-Kemahiran Kesediaan, Persepsi, Pendidik Awal Kanak-Kanak, Tadika

© 2023 Penerbit UTM Press. All rights reserved

1.0 INTRODUCTION

Every year, admissions are held for elementary schools. Parents commonly inquire about what abilities and skills their children need to possess in order to be deemed school-ready when children of kindergarten age start attending elementary school (Setiawati, Izzaty, & Triyanto, 2017). Therefore, the readiness of knowledge that is appropriate for children in kindergarten is very important to ensure that they are ready for the transition from early school to primary school. To guarantee that they are truly prepared for the transition from early school to primary school, it is crucial to prepare knowledge that is acceptable for kindergarten-age children. This is due to the fact that the early phase of transition is cause for concern because it allows for the establishment of educational foundations that will support children's

future academic lives. Children are having a difficult time because of numerous educational requirements and demands that they must meet (Rahmawati et al., 2018).

Early school education should be given to all communities whether they are in urban, rural, or remote areas. There are still many children out there who do not get early education due to some of the problems that they have been facing. Obviously, children who acquire their right to learn are able to demonstrate a positive willingness to participate in a variety of classroom activities. A child must be emotionally, socially, and developmentally ready to enter a new learning setting that is different from their social environment at home or preschool schooling in order to be ready in school (Umat et al., 2018). Hence, all children need to be given attention from various parties and this can be supported by a statement issued by the Ministry of Education Malaysian (MOE) about the Education Act 1996 (Act 550) where it is emphasizing that the National Education Policy related to preschool education is to ensure that children in Malaysia aged 4+ to 5+ receive preschool education whether provided by the MOE, government agencies, private parties and non-governmental organizations and it is also to ensure compliance with the use of Preschool Curriculum National (KPK) in all preschool institutions except in international preschools (MOE, 2019).

Providing children to acquire knowledge in school is a right that should be given to them by parents and teachers. According to a few well-known researchers, early childhood education, both pre-primary and primary is recognized as an important contributor to children's well-being and development, and the transition from early childhood settings to primary school is a significant milestone in the lives of children and their families (Ring et al., 2017). Readiness for children to learn something is not only with their motivation, but it needs to be done with the support of those around them to sharpen themselves to continue to grow in various aspects. Thus, the success of teachers in ensuring that children are ready to learn in school will encourage them to gain the right experience when they are in school or learning certain activities and subjects. This means that the teacher's involvement in strengthening readiness skills is critical for kindergarten children as well as the role of children in receiving those abilities. According to Khaerunnisa et al., (2018), in addition to teaching skills, students must be interested in learning. There are various aspects that influence learning; one of these factors is student motivation in studying.

Children that have readiness skills, on the other hand, will perform better in school. According to a study conducted by Ricciardi et al., (2021), these school readiness skills at the age of four have a long-term effect on academic achievement in elementary school and socioemotional skills are an important component of school readiness. Many countries have committed to the premise that children who attend Early Childhood Education and Care (ECEC) are more likely to succeed in school than those who do not, based on research (OECD, 2017). The diverse skills in children are important to influence them to prepare for school. These skills are not only self-skills, but they involve various skills. Academic skills, gathering and maintaining attention, social communication skills, and literacy skills, according to teachers, must be at a medium level for children to be school ready (Pekdoğan & Akgül, 2016).

Kindergarten children need readiness skills because they will attend primary school after finishing their primary school education. When children reach a new stage in their learning, they will face a variety of issues especially during the current Covid-19 pandemic. According to Majzud and Rashid (2018), the transition from preschool to Year One in Malaysia is a difficult time for them. These children must adjust to their new school environment. Research by Murphy, Giordano, and Deloach (2023) explained that it is not surprising that teachers believe children are less prepared for school than they were before COVID-19 when looking at their assessments of school readiness during the epidemic. Most teachers do note, however, that children's self-help abilities have improved. Additionally, they believe that most children will be prepared for the next grade and that they may assist their pupils in developing the abilities necessary for school preparedness. Thus, it is very important to reveal certain skills for children to face these challenges.

Theoretically, all children should enter school in order to be ready to learn. In the first place, all children should have access to high quality and developmentally appropriate school readiness programmes that help prepare children for school (Hongliang & Pattugalan, 2017). This statement can be supported by the findings of a study from Abdullah and Amran (2021) that revealed the effort of teachers in preparing various programs and activities is very important for attract students' interest and raise their motivation during teaching and learning. Therefore, to ensure that children acquire important skills in their developmental process, school readiness is very important for their future whether children in rural or urban areas. Because of its established associations with school readiness, childcare is used as an indicator of social and family resources, particularly for children from disadvantaged backgrounds (Ansari, 2018).

If discussing children's skills related to school readiness skills, there are various basic skills that they acquire through their participation to go to school. There is ample evidence that exposing children to content in a specific domain (e.g., math) is critical for fostering learning in that domain (Barnett et al., 2018). To ensure that children are able to plan for these skills while in school, teachers themselves need to play a key role in stimulating this development.

■ 2.0 LITERATURE REVIEW

2.1 The Readiness Skills of Children

Before children can successfully face various challenges as a child, they need to know about the basics of school readiness first. School readiness has been associated with increased academic success in primary and secondary school in terms of equity and performance, and it is expected to offer a foundation to enable continued engagement in learning throughout schooling (Darling-Hammond, et al., 2020). A child who starts their school session needs to be well prepared to accept a new atmosphere when they step into the classroom. School readiness can be used to highlight support for children's social, emotional, linguistic, and a wide range of communication abilities, especially to promote equity for children from "disadvantaged" backgrounds (Needam & Ülker, 2020). Having school readiness skills by the age of 4 affects academic achievement in primary school long-term, and social and emotional competence is a crucial factor of school readiness (Ricciardi et al., 2021). Basically, current school readiness practices seem to have a lot of intuitive appeal for determining who is ready for school and who is not and for giving those who need more time the chance to get it before starting formal schooling. As proof,

there are several tests conducted on children to determine whether they acquire the skills to be in school or not. According to the statement by Çökük and Kozikoglu (2021) in their research, a school readiness test should be used to establish the ideal age for youngsters to begin school while considering their individual differences.

Providing encouragement for children to be ready to face various challenges is not only the duty of teachers and parents, but it is also the duty of the people around them. The ability of the family and the community to promote the best possible early child development is a component of school readiness, along with the preparedness of each individual child and the school for children (2019). Children's social and emotional development, which are crucial to their schooling as well, must be encouraged by adults if we want to keep them in good health. Children who have strong social and emotional abilities lead safer and healthier lives. Early on, children must learn a variety of abilities, including how to interact with others, communicate with adults, interact with classmates in the classroom, create relationships, express emotions, self-regulate, demonstrate empathy, be motivated, and engage in social activities (Alzahrani *et al.*, 2019). The effect of a good teacher's relationship with children will bring many benefits to children to prepare for whatever will happen in their lives in the future. According to Lippard *et al.* (2018), numerous studies have demonstrated that the teacher-child interaction has an equal impact on each child in the classroom. Although children receive the same impact, they will show different ways of developing because each child has a different development and growth. This is further corroborated by Cadima *et al.* (2018), who found that each child's interaction with the teacher is unique, resulting in the children having unique classroom experiences.

Positive relationships between teachers and children can support better school readiness skills. This can be supported by the view of Wu (2018), which they argue that children's academic progress can be greatly improved by creating a cozy and supportive school atmosphere with strong teacher assistance; in these settings, children behave well in class and get along with others. Therefore, effective education in the classroom so that children can build positive relationships with those around them. In line with that, to ensure that teachers can see the development of children based on readiness skills, tests need to be done so that the development can be noted, recorded, and written. Based on the findings from Kingston *et al.*, (2018), which they stated that in order to select schools for the implementation of a comprehensive approach to school safety, readiness assessments and feasibility meetings can be combined. Additionally, addressing readiness barriers on purpose as part of a comprehensive approach may result in improvements in readiness (motivation and capacity). In the past, assessments for kindergarten readiness were created to identify the skill set a kid had prior to starting kindergarten. Consequently, that is the basis for examining whether a child is ready for kindergarten or not (Legate, 2022).

2.2 Related Theories That Influence Teachers' Perceptions about the Readiness Skills Needed by Children In School

On this topic, researchers only highlights two streams of theory that play an important role in supporting the development of children's readiness skills. These theories are John Piaget's theory of constructivism and Vygotsky's social theory of constructivism as highlighted in the figure 1 as following:

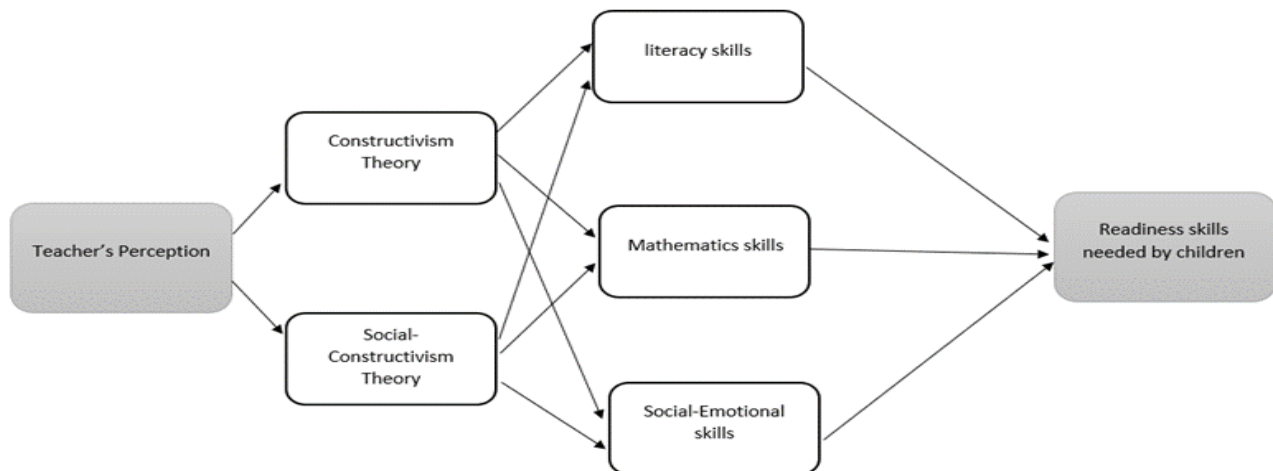


Figure 1 The application of 2 theories at school in determining the perception of children's readiness skills

2.2.1 Constructivism

Constructivist approaches provide new ideas about cognitive growth and learning. Constructivism is a learning process that describes how knowledge is organized in the human mind. Not all children's knowledge is acquired through sensory experience or existing knowledge in the mind of the child. Two theories that are closely related to children's readiness skills are the theories from the study of Jean Piaget and Lev Vygotsky. Both of these theories have emphasized the same variable which is the development of children occurs through the process of learning from the environment. If discussing further about Jean Piaget's views, according to Frey (2018), Piaget's theoretical perspective was "genetic epistemology," which focused on knowledge's growth, emergence and also evolution. Piaget's cognitive development theory

is based on the idea that thinking and learning are adaptive processes. In addition, Lourenço (2016), states there are four stages of cognitive development according to Piaget's research. And it can be seen as below:

- i. Sensorimotor stage (Infancy)
- ii. Pre-Operational stage (Toddler and Early Childhood)
- iii. Concrete Operational Stage (Elementary and Early Adolescence)
- iv. Formal Operational Stage (Adolescence and Adulthood)

Based on these stages, it is important for teachers to improve the development and school readiness skills of children because at the preoperational stage, they will learn through the guidance of their teachers. So here, it is important for teachers to guide them with proper skills in order to make them feel excited and great whenever they are at school. Outside of setting up the physical environment, planning children's learning experiences, and observing children to learn more about their individual developmental needs, the early childhood teacher's role also includes cultivating an understanding of what child-directed play is and the critical role adults play in supporting it (Fiechtner & Albrecht, 2019).

Sensory-motor, pre-operational, concrete, and formal are the four phases of cognitive development defined by Piaget. Children in the sensory-motor stage, also known as infancy, are more likely to learn using their five senses, object permanence, and goal-directed behavior. Children and infants do not think in the same way as adults do. Egocentrism occurs in young children when they are unable to comprehend how another person's point of view differs from their own—or when they are unable to coordinate their point of view with that of the other person (Campbell, 2006). Piaget believes that all learning, whether in simple organisms or in humans, is based on a set of processes. The two most important mechanisms are adaptation to the environment on the one hand, and experience organization by behavior, memory, perceptions, or other mental activities on the other (Beard, 2016). In addition, The United Nations Children's Fund (UNICEF, 2012) made three key points about the importance of children, schools, and families in terms of school readiness which are (i) children who are well-prepared for school are more focused on learning and growth; (ii) schools that are well prepared for children's school readiness have the best opportunities for their learning and growth; and (iii) children's early learning and growth are supported by a prepared family and the closest environment to their family.

2.2.2. Social-Constructivism

Moreover, if discussing about social constructivism theory, Lev Vygotsky is the pioneer. In this theory, it explains about the importance of children's thinking zone in affecting of their developments. According to Kurt (2020), Vygotsky's theory proposes that cognitive development proceeds through three main elements which are culture, language and social interaction. In addition, Vygotsky's theory emphasized about the importance of Zone of Proximal Development (ZPD) in children's developments. Vygotsky defined ZPD as the learner's current or actual level of development and the next level attainable through the use of mediating semiotic and environmental tools, as well as capable adult or peer facilitation. Basically, the level of aided performance in ZPD emphasizes the potential for emerging behavior and the "future of development," (Vygotsky, 1978).

Investigating more deeply about the readiness skills that children need in school based on past studies, there are many studies that have revealed what skills should be prioritized when children start to enter the world of school. According to Boz (2004), academic skills, attention gathering and maintenance, social communication skills, and literacy skills must be adapted for children while they are in school. On the other hand, preschool teachers' views on children's readiness for school are supported by research by Canbulat and Yıldızbaşı (2014). They stated that children should mature in all developmental domains. This means that other skills that are in the aspects of physical, emotional, spiritual, and intellectual development also need to be emphasized to children when they are in school. To ensure that children can develop well, it can be concluded that the role of teachers is very important in providing opportunities for children to strengthen their readiness skills. In children's readiness skills context, how Vygotsky's theory works is teacher needs to facilitate the children regarding to acquire information deeply through proper skills taught in the classroom (Vygotsky, 1978). There are many beneficial ways how to ensure that children can expend knowledge in understanding any topics or activities. Instead of remaining in the classroom, children are encouraged to participate in class discussions. The teacher employs a variety of learning resources, not just printed materials, and assesses children using a variety of appropriate methods. With these supports and methods, it can help the children to master something by using his own learning or scaffolding to be more precise. As a result, scaffolding is a good way to assist children learn new abilities and solve issues on their own.

Scaffolding is a temporary aid that will be removed once when the children have mastered the new skills (Ismail *et al*, 2015). Therefore, it is very important for teachers to improve children's readiness skills through scaffolding activities. Through the view of Wibkler (2019), there are several best ways to apply scaffolding activities. Firstly, a teacher must first determine what the pupil already understands. Means that the teacher can build on that competence while introducing new concepts by detecting this prior knowledge. Secondly, by using scaffolding, the instructor can build on this knowledge and assist children in transitioning from what they now know to what they should know by the conclusion of class. By including guided practise in their lesson plans, teachers can incorporate the scaffolding process into their lesson planning. Teachers can assist students in relating their new knowledge to what they already know. For instance, after teaching children how to divide decimals, a math instructor might then connect this idea to multiplying decimals.

Therefore, the promotion of learning through the ZPD application can support children to develop better and improve their readiness skills. This can be supported through the view of Ofori-Attah (2021), which he views that the majority of the key interview questions about the adoption and application of the ZPD in early childhood classrooms received positive responses from the respondents, which provided a strong indicator of their comprehension of the procedure. They all concurred that implementing ZPD in early childhood classrooms fosters

social interaction and productive learning. Last but not least, this study will test several hypotheses regarding teacher's perceptions of children's readiness skills in Malaysia based on two hypothesis as below:

- H1 There is significant relationship between teachers' perceptions and kindergarten children's readiness skills
 H2 There is no significant difference between female and male teachers' perceptions of children's readiness skills needed in kindergarten

3.0 METHODOLOGY

Study design is important for a study as a guide to ensure the objectives of the study are achieved next answer the research questions. This study was conducted to see the extent of kindergarten teachers' perceptions of children's readiness skills when they are in the early school stage. In this research, researchers have used a quantitative research method because the main purpose of researchers is to see the results of the respondents' response from the questionnaire designed. Basically, quantitative research is frequently distinguished by the investigation of commonalities in all aspects of science teaching and learning and to conduct quantitative studies, one must first develop a research question that includes operational definitions of variables as well as the study's purpose (Fischer, Boone, & Neumann, 2014). Moreover, the type of quantitative study chosen by the researchers in this study was non-intervention form. It is because, this study focused on survey data and information where researchers just look at teachers' perceptions of knowledge about the type of skills and sees the correlation between the perceptions of male teachers and female teachers.

The sample selected in this study was approximately 112 respondents. They are comprised of experienced teachers, new teachers, and practical teachers. The sampling selected in this study is cluster sampling. A sample size bigger than 30 and lower than 500, according to Roscoe, is appropriate for most behavioural investigations (Sekaran & Bougie, 2016). Clustered sampling is a sample approach in statistics in which the total population of a study is separated into clusters that are externally homogeneous but internally heterogeneous. Schools, general practises, and electoral wards are a few instances of naturally occurring groups of people. A random sample of clusters is taken from the population using cluster sampling, and all participants in each chosen cluster are invited (Sedgwick, 2014). The location of this study was conducted in Selangor. The main purpose why researchers Selangor state is because there are about 30 well-known private kindergartens in the area. Therefore, the researchers have focused the teachers who teach in these kindergartens to answer the survey form that will be given to them. researchers need their views how the readiness skills of children work while they are at kindergarten.

In general, there are various data collection procedures. In this study, the researchers had selected two questionnaires from two different sources to design a set of questionnaires. Firstly, the researchers used a survey using the contents and questions found in the study that was conducted by Soltero- Ruiz (2004). The contents of the questions are in line with the independent variables stated in chapter 1 of this study. His research is on "Kindergarten Teachers' Perceptions of Students' Readiness Skills", and it was conducted in the United States. This is the section B of the questionnaire where it just does emphasize about the general knowledge of the types of children's readiness skills. Secondly, researchers selected the contents and questionnaire's questions from a study entitled "School Readiness: Parent-Child Activities, Teachers' Perceptions, and Students' Skills. This study was conducted by Moore in 2002 in the United States of America. There are three sections in original questionnaire, but here researchers just chose the content of teachers' perceptions and ratings of children's readiness skills. This section is more to find out how teachers agree about the skills must be learnt from the children when they are at kindergarten.

Before the study was conducted, there are some steps taken by researchers to ensure that the questionnaire form was truly validated by the course lecturer. The first thing the researchers did is to discuss with the course lecturer about the constructs and sub-constructs written on the questionnaire form in order to ensure that the references of questionnaire are accurate and valid. Next, researchers did design a set of questionnaires by using Google Form website. After that, researchers released a finalized questionnaire to be given to the participant. Then, researchers sent it to first 30 respondents as a pilot test. It is essential to ensure that the questions, constructs, and sub-constructs are understood by the respondents, and they could answer wisely. Next, researchers needed to ask the permission from the school behalf in advance to instantly spread this questionnaire to their teachers. There were around 20 kindergartens chosen nearby Seri Kembangan district receiving this questionnaire. This spreading was done through an online platform. 2 weeks the time given to the respondents to answer questionnaire. Questionnaires and data from a pilot test were used to analyze data. This data was analyzed using the SPSS package. Descriptive statistics and inferential statistics are the two types of data analysis. Descriptive statistics were used to display the mean and percentage scores used to explain the respondents' backgrounds, the questionnaire's interests, problems, animation effects, and test results. Then, using t-distribution test analysis and Inferential Statistics were used to test the research hypothesis about differences in child achievement based on method. For clearer explanation, it can be referred in the table 1 as following:

Table 1 Data Analysis Process

RESEARCH QUESTION	FINDINGS
1) Identify the types of readiness skills of children.	Descriptive (%)
2) Identify the early childhood educators' perception of children's readiness skills.	Descriptive (%)
3) Identify how far the relationship between teachers' perceptions and children's readiness skills.	Correlation
4) Identify the difference between male and female teachers' perception towards children's readiness skills	T-Test

■4.0 RESULTS

To answer the four research questions, the researchers had used SPSS Version 26 (Statistical Package for Social Sciences). The findings were revealed in the form of percentages and frequencies, and it was recorded in the tables.

What are the Types of Children's Readiness Skills?

Table 2 Frequencies for the types of literacy skills of children (N = 112)

Language and Literacy Skills	No Important (n %)	Little Important (n %)	Moderate Important (n %)	Very Important (n %)	Essential (n %)
Identities letters	1 (0.9%)	0 (0%)	6 (5.4%)	26 (23.2%)	79 (70.5%)
Writes name	1 (0.9%)	0 (0%)	12 (10.7%)	35 (31.3%)	64 (57.1%)
Exhibits reading-like behavior (e.g., turns pages correctly, moving from front to back)	0 (0%)	4 (3.6%)	8 (7.1%)	27 (24.1%)	73 (65.2%)
Recognizes name	0 (0%)	2 (1.8%)	5 (4.5%)	21 (18.8%)	84 (75%)
Listen attentively to stories	0 (0%)	2 (1.8%)	15 (13.4%)	37 (33%)	58 (51.8%)
Uses appropriate expressive vocabulary	0 (0%)	3 (2.7%)	8 (7.1%)	45 (40.2%)	56 (50%)
Recognizes rhyming words	0 (0%)	1 (0.9%)	12 (10.7%)	40 (35.7%)	59 (52.7%)
Identifies syllables in words	0 (0%)	1 (0.9%)	11 (9.8%)	30 (26.8%)	70 (62.5%)
Blends sounds to form words	0 (0%)	0 (0%)	11 (9.8%)	30 (26.8%)	71 (63.4%)
Demonstrates letter-sound correspondence	0 (0%)	3 (2.7%)	15 (13.4%)	33 (29.5%)	61 (54.5%)
Writes left to right	0 (0%)	0 (0%)	10 (8.9%)	33 (29.5%)	69 (61.6%)
Uses phonetic spelling when writing	0 (0%)	6 (5.4%)	19 (17%)	36 (32.1%)	51 (45.5%)

Based on table 2 above, it shows the frequencies for the types of literacy skills. Most of respondents expressed that the skills associated with literacy development are essential. There are no skills that were rated lower than 40 % for essential rating. And there were just 2 respondents who responded for no important scale for overall questions. In addition, the highest frequency for this type of skill goes to recognize name where there were 84 respondents (75%) expressed essential scale to this item. The lowest frequency for essential scale goes to use phonetic spelling when writing where there were 51 respondents (45.5 %) and it does not even reach half of the respondents. Overall, for no importance scale, most of respondents did not express their agreement. However, there was just one respondent (0.9%) expressed it for the first and second item. It can be concluded that literacy skills are essential for the development of early children.

Table 3 Frequencies for the types of Mathematics skills of children (N = 112)

Mathematics Skills	No Important (n %)	Little Important (n %)	Moderate Important (n %)	Very Important (n %)	Essential (n %)
Identifies basic colors	0 (0%)	0 (0%)	3 (2.7%)	22 (19.6%)	87 (76.8%)
Identifies basic shapes	0 (0%)	0 (0%)	5 (4.5%)	25 (22.3%)	81 (72.3%)
Rote counts 1-20	0 (0%)	2 (1.8%)	11 (9.8%)	24 (21.4%)	75 (67%)
Identifies more or less objects in a group	0 (0%)	0 (0%)	10 (8.9%)	28 (25%)	74 (66.1%)
Writes numbers 1-10	0 (0%)	1 (0.9%)	7 (6.3%)	35 (31.3%)	69 (61.6%)
Sorts and classifies objects	0 (0%)	0 (0%)	7 (6.3%)	32 (28.6%)	73 (65.2%)
Reads numerals to 20	0 (0%)	1 (0.9%)	10 (8.9%)	24 (21.4%)	77 (68.8%)
Compare two sets using more or less	0 (0%)	1 (0.9%)	14 (12.5%)	30 (26.8%)	67 (59.8%)

Based on table 3, it shows the frequencies for the types of Mathematics skills of children. Most of respondents expressed their essential scale of agreements when it comes to Mathematics skills. The greatest part for this type of skills is when there were no respondents (0%) expressed no important for each item. And most of them expressed their agreement to essential scale which there is no less than half percentage of the respondents expressed to this scale. To look deeply, the highest frequency for these skills is 87 respondents (76.8%) expressed their essential scale to identify basic colors. And the second highest frequency goes to identify basic shapes which is 81 respondents (72.3%) expressed essential scale. In conclusion, it shows that Mathematics skills are important for the development of children. All the skills listed on the table above must be sharpened by the teachers.

Table 4 Frequencies for the types of Social-Emotional skills of children (N = 112)

Social-Emotional Skills	No Important (n %)	Little Important (n %)	Moderate Important (n %)	Very Important (n %)	Essential (n %)
Uses art materials (crayons, glue, paint, etc.)	0 (0%)	0 (0%)	10 (8.9%)	32 (28.6%)	70 (62.5%)
Appropriately Participates in group activities	0 (0%)	0 (0%)	8 (7.1%)	28 (25%)	76 (67.9%)
Uses restroom independently	2 (1.8%)	0 (0%)	5 (4.5%)	22 (19.6%)	83 (74.1%)

Communicates need to teachers verbally	0 (0%)	1 (0.9%)	4 (3.6%)	24 (21.4%)	83 (74.1%)
Communicates with peers effectively without teacher assistance	1 (0.9%)	0 (0%)	6 (5.4%)	28 (25%)	77 (68.8)
Follows directions	0 (0%)	0 (0%)	5 (4.5%)	26 (23.2%)	81 (72.3%)
Accepts consequences for broken rules without aggression or tantrum	2 (1.8%)	3 (2.7 %)	11 (9.8%)	30 (26.8%)	66 (58.9%)
Asks for help when needed					
Sits quietly during seatwork	0 (0%)	0 (0%)	3 (2.7 %)	29 (25.9%)	80 (71.4%)
Transitions between activities given only verbal directions	2 (1.8%)	1 (0.9%)	11 (9.8%)	29 (25.9%)	69 (61.6%)
Has ability to adjust to changes in routine necessary	1 (0.9%)	5 (4.5%)	13 (11.6%)	35 (31.3)	58 (51.8%)
Invites others to join in activities	0 (0%)	1 (0.9%)	8 (7.1%)	38 (33.9%)	65 (58%)
Joins ongoing activity or group without being told to do so	0 (0%)	2 (1.8%)	16 (14.3%)	43 (38.4%)	51 (45.5%)
Cooperates with peers without prompting	1 (0.9%)	1 (0.9%)	4 (3.6%)	33 (29.5%)	73 (65.2%)
Articulate intents, emotions, and desires	1 (0.9%)	0 (0%)	8 (7.1%)	33 (29.5%)	70 (62.5%)

Based on table 4, it shows the frequencies for types of social-emotional skills. For these types of skills, respondents expressed their positive agreement where most of them expressed essential scale for each item. The highest frequency for these types of skills is 83 respondents (74.1%) where respondents expressed essential scale for both using restroom independently and communicating to teachers verbally. Most of respondents did not express no important scale for each item. However just 1-3 of them reacted to this scale. But based on the table above, even the items seem the most among the rest of skills, but respondents still expressed their essential scale. In conclusion, it shows that social-emotional skills are important for children to ensure that they are ready to be in school. Lack of acquiring the right skills would probably be affecting them negatively. So, the skills listed above must be learned by children with the guidance of teachers.

Table 5 3 Main Types of Readiness Skills of Children.

Findings	(n)	Minimum	Maximum	Mean	SD
Language & Literacy	112	2.33	5.00	4.46	0.52
Mathematics	112	2.88	5.00	4.58	0.55
Social-Emotional	112	3.00	5.00	4.53	0.50

Based on table 5 above, it shows that Mathematics Skills recorded the highest mean (n=112, M=4.58, SD=0.55). Whereas Social-Emotional Skills recorded the second highest mean (n=112, M=4.53, SD=0.497), followed by Language and Literacy Skills (n=112, M=4.46, SD=0.520). For overall findings, it can be summarized that (n=112, M=4.52, and SD=0.466). From this finding, it shows that there is not significantly different between each mean score recorded.

Table 6 Measures of Central Tendency for Language and Literacy Skills

Language & Literacy Skill	Mean	Standard Deviation
Identities letters	4.63	0.673
Writes name	4.44	0.757
Exhibits reading-like behavior (e.g., turns pages correctly, moving from front to back)	4.51	0.783
Recognizes name	4.67	0.649
Listen attentively to stories	4.35	0.779
Uses appropriate expressive vocabulary	4.38	0.737
Recognizes rhyming words	4.40	0.716
Identifies syllables in words	4.51	0.710
Blends sounds to form words	4.54	0.760
Demonstrates letter-sound correspondence	4.36	0.815
Writes left to right	4.53	0.657
Uses phonetic spelling when writing	4.18	0.903

Based on the table 6, it shows that the highest mean score for Language and Literacy Skills is the recognition of name skill which it recorded M=4.67. Whereas the lowest mean score is the usage of phonetic spelling when writing skill which it recorded M=4.18. Overall, the difference between each skill is not very significant. Means that, each of item is important for children.

Table 7 Measures of Central Tendency for Mathematics Skills

Mathematics Skills	Mean	Standard Deviation
Identifies basic colors	4.73	0.520
Identifies basic shapes	4.66	0.609
Rote counts 1-20	4.54	0.747
Identifies more or less objects in a group	4.57	0.654
Writes numbers 1-10	4.54	0.659
Sorts and classifies objects	4.59	0.609
Reads numerals to 20	4.58	0.693
Compare two sets using more or less	4.46	0.746

Based on table 7, it shows that the highest mean score for Mathematics Skills is identify of basic colors skill which it recorded M=4.73. Whereas the lowest mean score is the comparison of two sets using more or less skill which it recorded M=4.46. Overall, the difference between each skill is not very significant. Means that, each of Mathematics skill is important for children.

Table 8 Measures of Central Tendency for Social-Emotional Skills

Social-Emotional Skills	Mean	Standard Deviation
Uses art materials (crayons, glue, paint, etc.) appropriately	4.54	0.657
Participates in group activities	4.61	0.620
Uses restroom independently	4.64	0.733
Communicates needs to teachers verbally	4.69	0.586
Communicates with peers effectively without teacher assistance	4.61	0.676
Follows directions	4.68	0.557
Accepts consequences for broken rules without aggression or tantrum	4.38	0.903
Asks for help when needed	4.69	0.520
Sits quietly during seatwork	4.45	0.847
Transitions between activities given only verbal directions	4.29	0.905
Has ability to adjust to changes in routine as necessary	4.47	0.710
Invites others to join in activities	4.49	0.671
Joins ongoing activity or group without being told to do so	4.28	0.774
Cooperates with peers without prompting	4.57	0.694
Articulate intents, emotions, and desires	4.53	0.710

Based on table 8.0 above, it shows that the highest mean score for Social-Emotional Skills is the communication needs of teacher verbally skill and asking for help when needed skill which it recorded M=4.69 respectively. Whereas the lowest mean score is the skill of joining ongoing activity or group without being told to do so which it recorded M=4.28. Overall, the difference between each skill is not very significant. Means that, each of Social-Emotional Skill is important for children.

What is the Teachers' Perceptions of Children's Readiness Skills?

Table 9 Frequencies for The Early Childhood Educators' Perception of Children Readiness Skills (N = 112)

Skills, Abilities, and Experiences	No Important (n %)	Little Important (n %)	Moderate Important (n %)	Very Important (n %)	Essential (n %)
Listen & pay attention	0 (0%)	0 (0%)	3 (2.7%)	28 (25%)	81 (72.3%)
Good language & communication skills	0 (0%)	0 (0%)	7 (6.3%)	29 (25.9%)	76 (67.9)
Positive prior reading experiences	0 (0%)	0 (0%)	13 (11.6%)	36 (32.1%)	63 (56.3%)
Toilet trained	0 (0%)	0 (0%)	2 (1.8%)	19 (17%)	91 (81.3%)
Follow directions and instructions	0 (0%)	0 (0%)	4 (3.6%)	21 (18.8%)	87 (77.7%)
Good social skills	0 (0%)	0 (0%)	1 (0.9%)	20 (17.9%)	91 (81.3%)
Sit still	0 (0%)	0 (0%)	4 (3.6%)	31 (27.7%)	77 (68.8%)
Possess basic knowledge	0 (0%)	0 (0%)	5 (4.5%)	24 (21.4%)	83 (74.1%)
Separate easily from parents or caregivers	0 (0%)	0 (0%)	6 (5.4%)	36 (32.1%)	70 (62.5%)
Exhibit fine motor skills	0 (0%)	0 (0%)	4 (3.6%)	30 (6.8%)	78 (69.6%)

Show curiosity and interest in learning	0 (0%)	0 (0%)	4 (3.6%)	32 (28.6%)	76 (67.9%)
Care for/assist in caring for self	0 (0%)	0 (0%)	4 (3.6%)	30 (6.8%)	78 (69.6%)
Physically healthy	0 (0%)	1 (0.9%)	6 (5.4%)	26 (23.2%)	79 (70.5%)
Developmentally mature	0 (0%)	0 (0%)	5 (4.5%)	27 (24.1%)	80 (71.4%)
Signs of previous experiences with other children	0 (0%)	1 (0.9%)	6 (5.4%)	34 (30.4%)	71 (63%)

Based on table 9 above, it shows frequencies for the early childhood educators' perception of children's readiness skills. Based on teachers' perceptions, all items or skills are important for the readiness of children when they are at school. There is no perception from teachers guessing that the skill is not important for children. Nevertheless, they gave their opinions that each of skills is essential for the readiness of children. The highest frequency for essential scale is 91 respondents (81.3%) where they thought that children need to learn about toiled-trained and listen and have good social skills respectively. In addition, there was only one respondent (0.9%) guessing that physically healthy and signs of previous experiences with other children is little important. In conclusion, based on early childhood educators' perceptions, three main developments of children are important which skills, abilities, and experiences. To acquire success in school, they need to learn these developments first regarding to enhance their readiness schools such as sitting still in the classroom can describe that they are ready to be in school.

Table 10 Measures of The Importance of Children's Readiness Skills

Skill	Mean	Standard Deviation
Listen & pay attention	4.70	0.517
Good language & communication skills	4.62	0.604
Positive prior reading experiences	4.45	0.695
Toilet trained	4.79	0.448
Follow directions and instructions	4.74	0.515
Good social skills	4.80	0.421
Sit still	4.65	0.549
Possess basic knowledge	4.70	0.551
Separate easily from parents or caregivers	4.57	0.596
Exhibit fine motor skills	4.66	0.546
Show curiosity and interest in learning	4.64	0.551
Care for/assist in caring for self	4.66	0.546
Physically healthy	4.63	0.630
Developmentally mature	4.67	0.560
Signs of previous experiences with other children	4.56	0.641

Based on table 10, it shows that the findings of the perceptions of early childhood educators regarding to the importance of children's readiness skills. The highest mean score is $M=4.80$ where good social skills had recorded it. Whereas the lowest mean score is $M=4.45$ where positive prior reading experiences had recorded it. Summarily, teachers' perceptions towards children's readiness skills are very positive. The difference between the item of each mean is not very significant. Means that teachers consider that all the skills are needed for children to ensure that they are ready to be in school.

How Far is the Relationship Between Teachers' Perceptions and Children's Readiness Skills?

Table 11 Correlation Result

	Children's Readiness Skills	Teacher's Perception
Children's Readiness Skills	Pearson Correlation	0.825
	Sig. (2-tailed)	0.000
Teacher's Perception	N	112
	Pearson Correlation	1
	Sig. (2-tailed)	0.000
	N	112

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

Ha1 – *There is significant relationship between teachers' perceptions and kindergarten children's readiness skills*

Based on table 11, the results of the overall hypothesis clearly show that there is a significant positive relationship between the variable of teacher perception and the variable of children's readiness skills. So, the hypothesis is accepted. The Pearson coefficient value, r is 0.825 while the p value is smaller than 0.001, which is smaller than 0.05 ($r=0.825$, $p<0.001$). This means that there is a correlation between the perception of kindergarten teachers and children's readiness skills. This means that kindergarten teachers consider the three skills of children's readiness which include literacy, socio-emotional and math skills are important to children's development.

What is The Difference Between Male And Female Teachers' Perceptions Towards Children's Readiness Skills?**Table 12** t-test Result

Gender	N	Mean	SD	t-value	Sig (2-tailed)
Male	15	4.49	0.427	0.286	0.776
Female	97	4.53	0.471	0.307	0.762

Ha2 - There is no significant difference between female and male teachers' perceptions of children's readiness skills needed in kindergarten

Based on the table 12 it shows that there is no significant difference between the perceptions between female and male teachers. It means that the significant value for males and females is 0.776 and 0.0762 respectively and it is greater than the alpha value which is 0.05. This shows that the p value is significant at the 95% level and then the null hypothesis is accepted. Looking deeper, the mean score difference between boys and girls is only 0.05. This shows that both groups of teachers have almost similar perceptions of each other. Therefore, it can be concluded that the perception of male and female teachers is almost the same regarding the children's readiness skills that are needed when their children are in kindergarten.

6.0 DISCUSSION

In general, the results of the study show that most respondents had a clear and positive understanding of children's skills namely language and literacy skills, mathematical skills, and socio-emotional skills. This is evidenced by the results of the analysis of a questionnaire showing the mean of the scale for all relevant items with children's readiness skills are high. It shows that teachers understand children's needs before they are ready to participate in school activities. Based on the analysis of the study on the understanding of the types of children's readiness skills, it was found that the highest mean from this construct is Mathematical Skills where it becomes the most important as the main readiness skills of children. It shows that about 87 out of 112 participants guessed that identifying basic colors is essential for children. It is undeniable that recognizing color at an early stage is important because children are accustomed to learning from the environment. Intimidation to color is one of the ways they learn about the world around them. According to QA Education (2021), having a thorough understanding of the various colors is beneficial in a variety of scenarios to which youngsters will be exposed. They will be able to recognize important visual hues such as red as a code for danger and the meaning of traffic signals after learning these colors. Therefore, teaching color skills to children is necessary because through understanding color, they may be able to avoid that risk or an accident that will befall them. Additionally, it was noted in another study that developing print awareness and visual symbol recognition should be an element of preparing children for reading and writing (McLachlan, Arrow, & Watson, 2013). This indicates that introducing colors to children can enhance not only their visual abilities but also their reading and writing abilities. Therefore, these two abilities are crucial for their schoolwork.

In addition, good social skills are important to children because in this way, they can communicate, play, participate in a variety of activities, and understand every instruction easily. Parents, teachers, and adults need to enhance and convince children to socialize because their weakness to socialize with their environment will make them more passive and their readiness to be in school will also be more disrupted. According to a previous study, the majority of children exhibited a moderate level of collaboration, assertiveness, self-control, and overall social skills, as judged by both teachers and parents. Children acquire their initial socialization encounters at home and at school when they are in preschool. As a result, their first impressions are described at a modest level (Maleki et al., 2019). Therefore, adults need to focus on the development and learning of children so that their social skills are at their best. Theoretically, teachers' perceptions play an important role in seeing the skills needed by children. Through teaching experience in school, teachers are an appropriate group in looking at what skills children need. According to Child Development (2021), the development of school readiness skills enables teachers to broaden and deepen a child's skills in specific areas such as social interaction, play, language, emotional development, physical skills, literacy, and fine motor skills. Without these fundamental skills in place at the start of school, children can quickly find themselves playing "catch up" to their peers who are making faster progress. According to Senol (2021) in his study, to ensure that children can improve their readiness skills, especially writing and reading skills, children were drawn in and prepared for their first year of elementary school by both the classroom setting and the activities. This means that the teacher's role is very important in exposing children to academic and extracurricular activities to ensure that they can learn something new while improving their preparedness skills.

The findings show that there is a significant positive correlation between the types of children's readiness skills with teachers' perceptions of children's readiness skills. This statement can be supported by previous study was conducted by Jone et al., (2020) where they revealed that school readiness construct by educators to describe a range of abilities that are beneficial for children transitioning to school. To support these findings, Gregory (2021) stated that it is also crucial to think about where schools, educators, and governments can make the most impact and obtain the highest returns on their investments. Based on the above discussion, it can be concluded that the correlation between types of children's readiness skills and the perceptions of early childhood educators can be seen and as in the figure 2 as below:

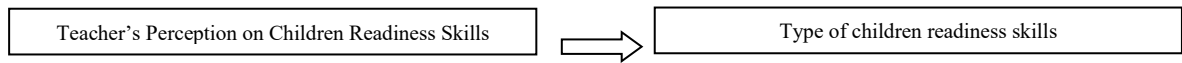


Figure 2: Correlatifigure 1on between Independent and Dependent Variable

This study also examines about the difference between male and female teachers' perceptions towards children's readiness skills. The findings show that there is no significant difference between both groups' perceptions. It means that the respondents had the same perception about the positivity of children's readiness skills. Thus, whether male teachers or female teachers, these two groups are the "evaluators" of the needs of children in school. According to studies, teachers' failure to trace children's problems when they started school had limit children's chance to get the most out of the teaching and learning process implemented at school (Offord & Liffiman, 1996).

7.0 CONCLUSION

The results of the study revealed that most respondents viewed that all items for each skill are important to children to ensure that they are ready for school. Through this evidence, it can be concluded that children not only need to learn through printed materials, but they need to learn through a variety of sources and experiences. National education policy makers need to take appropriate initiatives in ensuring that learning in kindergarten or preschool is holistic. Here, perhaps MOE can encourage every kindergarten and preschool in Malaysia in introducing holistic learning as this is important to their future. The world now needs more soft skills compared to academic success. So how the government is able to apply various soft skills to children is through various learning concepts. If children have fun going to school, then they can reinforce existing skills and learn new skills in the right way. This can be supported by the statement of The National Academic of Sciences, Engineering, and Medicine (2015) that stated educators who practice in a way that is conscious of children's cognitive progress at an early age might use the child's existing knowledge and abilities to intentionally enlist the child's existing information and skills in new learning opportunities.

Overall, the results of this study have successfully answered the research questions. Based on the findings of the study, some recommendations and implications have been discussed, formulated and finally presented. Researchers argue that children's readiness skills need to be nurtured from an early stage. Receiving information in school helps them to acquire actual knowledge as well as hands on experience will help them to develop their ability to survive in the future. Therefore, teachers' perceptions of children's readiness skills are important as a benchmark for the development of early childhood institutions in Malaysia. It is hoped that, through the findings of this study, it will be a reference and added value to kindergarten and preschool teachers, early childhood education practitioners, and educational institutions so that these readiness skills become a major topic in educating children. Last but not least, If teachers are very aware of these skills to the child's development, teachers need to take more serious steps in improving the ability to shape the child's personality as a whole.

Acknowledgments

We would like to thank private kindergarten teachers and practitioners in the state of Selangor for cooperating with us throughout the data collection process for this study. We also thank you to the University Pendidikan Sultan Idris on behalf for approving our application to conduct this study. In addition, we would also like to thank the Universiti Teknologi Malaysia for contributing in terms of writing expertise to complete this article. With the cooperation of all the mentioned behalf, we managed to complete this article.

Reference

- Abdullah N. A., Amran, M. S. (2021). Teacher perspective of student involment in online teaching and learning during the Covid-19 pandemic in Malaysia. *International Journal of Advanced Research in Islamic Studies and Education (ARISE)*, 1(4), 32-39. <https://myedujournal.com/index.php/arise/article/view/68/69>
- Alzahrani, M., Alharbi, M., & Alodwani, A. (2019). The Effect of Social-Emotional Competence on Children Academic Achievement and Behavioral Development. *International Education Studies*, 12(12), 141-149. <https://doi.org/10.5539/ies.v12n12p141>
- Ansari, A., Pianta, R. C., Whittaker, J. V., Vitiello, V. E., & Ruzek, E. A. (2019). Starting Early: The Benefits of Attending Early Childhood Education Programs at Age 3. *American Educational Research Journal*, 56(4), 1495–1523. <https://doi.org/10.3102/0002831218817737>
- Barnett, W. S., Jung, K., Friedman-Krauss, A., Frede, E. C., Nores, M., Hustedt, J. T., & Daniel-Echols, M. (2018). State Prekindergarten Effects on Early Learning at Kindergarten Entry: An Analysis of Eight State Programs. *AERA Open*, 4(2), 1–16. <https://doi.org/10.1177/2332858418766291>
- Beard, R. M. (2007). *An Outline of Piaget's Developmental Psychology*. England, Oxon: British Library
- Boz, M. (2004). Parent's and teacher's beliefs about school readiness in preschool children (Unpublished doctoral dissertation). Hacettepe University, Ankara, Turkey.
- Cadima, J., Verschuere, K., Leal, T., & Guedes, C. (2016). Classroom interactions, dyadic teacher-child relationships, and self-regulation in socially disadvantaged young children. *Journal of Abnormal Child Psychology*, 44(1), 7-17. <https://doi.org/10.1007/s10802-015-0060-5>
- Campbell, R. L. (2006). *Jean Piaget's Genetic Epistemology: Appreciation and Critique*. Retrieved on December 2nd, 2021 at <http://campber.people.clemson.edu/piaget.html>
- Canbulat, A. N. K., & Yıldızbaş, F. (2014). Preschool and classroom teachers' views on 62-72 months children's school readiness. *Abant İzzet Baysal University Journal of Education Faculty*, 14(1), 33-50. <https://doi.org/10.17240/aibuefd.2014.14.1-5000091501>
- Child Development. (2021). School Readiness. Retrieved on July 11th, 2021, from <https://childdevelopment.com.au/areas-of-concern/school-readiness/>
- Çökük, K., & Kozikoglu, I. (2021). School readiness of primary school students in mixed-age classrooms. *International Journal of Curriculum and Instruction*, 13(2), 1597-1619

- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B. & Osher, D., (2020). Implications for educational practice of the science of learning and development'. *Applied Developmental Science* 24(2), 97–140. <https://doi.org/10.1080/1088869.1.2018.1537791>
- Fiechter, F. C., & Albrecht, K. M. (2019). The teacher's role in supporting child-directed play. Retrieved on May 29, 2021 from <https://www.hekupu.ac.nz/article/teachers-roles-supporting-child-directed-play>
- Frey, B. (2018). *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation. 1-4*. Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781506326139
- Gregory, T., Dal Grande, E., Brushe, M., Engelhardt, D., Luddy, S., Guhn, M., Gadermann, A., Schonert-Reichl, K. A., & Brinkman, A. (2021). Associations between School Readiness and Student Wellbeing: A Six-Year Follow-Up Study. *Child Indicators Research*, 14, 369–390. <https://doi.org/10.1007/s12187-020-09760-6>
- Hongliang, H., & Pattugalan, M. (2017). Factors that impact children's school readiness: Comparing the perspectives of Charles Wright Mills and Bell Hooks. *Ryerson Journal of Policy Studies*, 1, 1-13.
- Ismali, N., Ismail, K., & Aun, N. S. M. (2015). The role of scaffolding in problem solving skills among children. *International Proceedings of Economics Development and Research IPEDR*, 85, 154 – 158.
- Legate, J. (2022). Pre-K Teachers' and Kindergarten Teachers' Perceptions of Kindergarten Readiness (Doctoral Dissertation, Baker University). Graduate Department and Faculty of the School of Education of Baker University.
- Lippard, C. N., La Paro, K. M., Rouse, H. L., & Crosby, D. A. (2018). A closer look at teacher-child relationships and classroom emotional context in preschool. *Child & Youth Care Forum*, 47(1), 1-21. <https://doi.org/10.1007/s10566-017-9414-1>
- Lourenço, O. M. (2016). Developmental stages, Piagetian stages in particular: A critical review. *New Ideas in Psychology*, 40, 123-137. <https://doi.org/10.1016/j.newideapsych.2015.08.002>
- Khaerunnisa, F., Sunarjan, Y., & Atmaja, H. T. (2018). Pengaruh Penggunaan Media Power Point Terhadap Minat Belajar Sejarah Siswa Kelas X SMA Negeri 1 Bumiayu Tahun Ajaran 2017/2018. *Indonesian Journal of History Education*, 6(1), 31–41. <https://doaj.org/article/6c39cc0aa5974cdfb76bb917f1f14a99>
- Kingston, B., Mattson, S.A., Dymnicki, A. et al. (2018). Building Schools' Readiness to Implement a Comprehensive Approach to School Safety. *Clin Child Fam Psychol Rev*, 21, 433–449. <https://doi-org.ezproxy.utm.my/10.1007/s10567-018-0264-7>
- Kurt, S. (2020). Lev Vygotsky – Theory Sociocultural Theory of Cognitive Development. Retrieved on February, 18, 2020 from <https://educationaltechnology.net/contact-us/>
- Maleki, M., Mardini, A., Chehrzad, M., Dianatinasab, M., & Vaismorodi, M. (2019). Social skills in children at home and in preschool. *Behavioral Sciences*, 9(74), 1-15. <https://doi.org/10.3390/bs9070074>
- Majzud, R. M., & Rahid, A. A. (2012). School readiness among preschool children. *Procedia - Social and Behavioral Sciences*, 46, 3524 – 3529. <https://doi.org/10.1016/j.sbspro.2012.06.098>
- McLachlan, C., Arrow, A., & Watson, J. (2013). Partnership in Promoting Literacy: An Exploration of Two Studies in Low-Decile Early Childhood Settings in New Zealand. In J. Duncan & L. Conner (Eds.), *Research Partnerships in Early Childhood Education*. First edit. 71–91. Palgrave Macmillan. <https://doi.org/10.1057/9781137346889>
- Ministry of Education Malaysia. (2019). *Malaysian Education Policy*. Retrieved on July 26th, 2021, from <https://www.moe.gov.my/pendidikan/pendidikan-prasekolah/dasar-pendidikan-prasekolah>
- Murphy, K., Giordano, K. & Deloach, T. Pre-K and Kindergarten Teacher Perception of School Readiness During the COVID-19 Pandemic. *Early Childhood Education Journal*, (under exclusive licence to Springer Nature B.V. part of Springer Nature), 1-11. <https://doi.org/10.1007/s10643-023-01462-2>
- National Academic of Sciences, Engineering, and Medicine. (2015). *Comprehensive Cancer Care for Children and Their Families: Summary of a Joint Workshop by the Institute of Medicine and the American Cancer Society*. Washington, DC: The National Academies Press.
- Needam, M., & Ülküer, N. (2020). A Growing Interest in Early Childhood's Contribution to School Readiness. *International Journal of Early Years Education*, 28(3), 209-217. <https://doi.org/10.1080/09669760.2020.1796416>
- Ofori-Attah, K. (2019). Early Childhood Education and Instructional Ecology: A Vygotskian Approach in Teaching Early Childhood Social Studies. *Athens Journal of Education*, 8(2), 140-159. <https://doi.org/10.30958/aje.8-2-2>
- Organization for Economic Co-operation and Development (OECD). (2011). Education at a glance 2011: OECD indicators, D3.2. Retrieved on May 20th from <http://www.oecd.org/>
- Pekdoğan, S., & Akgül, E. (2016). Preschool Children's School Readiness. *International Education Studies*, (10), 144-154.
- QA Education. (2021). Why is colour so important in early development? Retrieved on July 10th, 2021 from <https://www.qaeducation.co.uk/article/colour-important>
- Rahmawati, A., Tairas, M. M. W., & Nawangsari, N. A. F. (2018). Children's School Readiness Based on Teachers' and Parents' Perceptions. *International Journal of Pedagogy and Teacher Education (IJPTE)*, 2(1), 9-20. <https://doi.org/10.20961/ijpte.v%vi%i.14876>
- Ricciardi, C., Manfra, L., Hartman, S., Bleiker, C., Dineheart, L., & Winsler, A. (2021). School readiness skills at age four predict academic achievement through 5th grade. *Early Childhood Research Quarterly*, 57, 110–120. <https://doi.org/10.1016/j.ecresq.2021.05.006>
- Ring, E., Mhic Mhathúna, M., Moloney, M., Hayes, N., Breathnach, D., Stafford, P., Carswell, D., Keegan, S., McCafferty, D., O'Keeffe, A., Leavy, A., Madden, R. and Ozonyia, M. (2016). An examination of concepts of school readiness among parents and educators in Ireland. Dublin: Department of Children and Youth Affairs. Retrieved at 25th July, 2021 at: www.dcyia.ie
- Sedgwick, P. M. (2014). Cluster sampling. (Published article). Centre for Medical and Healthcare Education, St George's, University of London, London, UK. <https://doi.org/10.1136/bmj.g1215>
- Sekaran, U., & Bougie, R. (20106). *Research Method for Business: A Skills Building Approach (7th ed)*. United Kingdom; John Wiley and Sons Ltd.
- Şenol, F. B. (2021). Readiness for reading and writing in pre-school period: evaluation of classroom environment and practices with teachers' views. *International Online Journal of Education and Teaching (IOJET)*, 8(1), 432-453.
- Setiawati, F., Izzaty, R., & Triyanto, A. (2017). Exploring the construct of school readiness based on child development for kindergarten children. *Research and Evaluation in Education*, 3(1), 42-49. <http://dx.doi.org/10.21831/reid.v3i1.13663>
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Umat, C., Mukari, S.Z.-M.S., Nordin, N., Annamalay, T.A.L. & Othman, B.F. (2018). Mainstream school readiness skills of a group of young cochlear implant users'. *International Journal of Pediatric Otorhinolaryngology* 107, 69–74. <https://doi.org/10.1016/j.ijporl.2018.01.031>
- United Nations Children's Fund (UNICEF). (2012). School readiness: A conceptual framework. Retrieved on July 10th, 2021, [http://www.unicef.org/education/files/Child_ConceptualFramework_FINAL_\(1\).pdf](http://www.unicef.org/education/files/Child_ConceptualFramework_FINAL_(1).pdf). Retrieved date?
- Williams P. G., Lerner, M. A., AAP Council on Early Childhood, & AAP Council on School Health. (2019). *School Readiness. Pediatrics*, 144(2), 1-15.
- Winkler, S. (2019). *What is the zone of proximal development?* Retrieved on January 5th, 2022 from <https://bit.ly/39IZ9Mn>.
- Wu, Z., Hu, B. Y., Fan, X., Zhang, X., & Zhang, J. (2018). The associations between social skills and teacher-child relationships: A longitudinal study among Chinese preschool children. *Children and Youth Services Review*, 88, 582-590. <https://doi.org/10.1016/j.childyouth.2018.03.052>