Parents' Beliefs, Attitudes toward School, and School Readiness of Preschoolers after Social Restrictions during the COVID-19 Pandemic

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Abstract. The Covid-19 pandemic situation has made schools including kindergartens conduct online learning for more than three semesters. This leads to face-to-face teachers and preschoolers being limited. This research examined school readiness among the last second semester of second-year kindergarten children to enter formal school and children's attitudes to school. Furthermore, parents' beliefs about the attitudes, abilities, and activities of children that support children's school readiness were also investigated. A quantitative approach, especially a cross-sectional study was employed in this research to obtain an understanding of children's school readiness. A total of 81 kindergarten children from four kindergartens were involved in this survey. The data were collected through questionnaires distributed to parents to measure parental beliefs about school readiness and attitude to school. The data were also taken by administering N.S.T (Nijmeegse Schoolbekwaamheids Test) to these second-year preschoolers to obtain the data on children's school readiness. The survey of parents showed that they have strong beliefs in some aspects that support school readiness and the results of the school readiness test provide evidence that children who were categorized as ready to enter primary school did not reach 60%. Furthermore, age and attitude to school simultaneously have a significant correlation with school readiness (R= .316, F= 3.545 at p = .035 at l.o.s = .05)

Keywords: parents' beliefs, attitude to school, preschoolers, children's school readiness.

1 Introduction

Teachers have a responsibility to arrange learning materials and learning activities and also implement them in the classroom [1]. Therefore, teachers have a major role in preparing children to be ready for school. However, the Covid-19 pandemic has caused learning to change from face-to-face to distance learning enacting the problem of children's learning processes quite complicated. In addition, the understanding of

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school readiness is not appropriate for some parents, and the lack of teacher attendance for children is a challenge in itself.

Parents tend to associate school readiness with academic, social, and cognitive skills but they generally ignore the domain of physical development [2]. In a similar vein, another study found that most parents still emphasize academic skills such as reading, writing, and counting as a basis for considering children ready to enter elementary school [3]. Considering the concept of readiness to enter school, it is not only assessing cognitive abilities but is also concerned with physical and motoric readiness, emotional, social, language, and interest in learning. Elkind contend that young ages become "hurried children" when adults enforce their learning priorities on preschoolers, they interfere with young child's self-directed learning, create guilt and anxiety, and stifle the intrinsic motivation to explore[4].

1.1 Definition of School Readiness

School readiness is a term commonly used to describe the ability of children to start formal school. It is a multidimensional concept that includes children's physical health and well-being, social and emotional competence, language and cognitive development, and general knowledge [5], [6] as well as attitudes toward learning in the classroom such as interest and engagement in the classroom, and classroom skills and behaviors such as following instructions and cooperating in groups[7]. A broader definition of school readiness comprises five domains related to children's achievement and behavior in school namely physical health and motor development, emotional and social development, such as emotional regulation, following instructions, social relationships, and social cognition, attitudes towards learning such as task persistence, attention, creativity, initiative, and curiosity, language and literacy development, cognition and general knowledge including mathematics. Mathematical skills include an initial understanding of mathematical concepts, logical math skills, and pre-numeric skills [8].

1.2 Factors Influencing Children's School Readiness

Socio-emotional and physical strength, socio-emotional risk, and health risks influence academic and social adjustment in early elementary school [9]. Meanwhile, based on the psychosocial development of Erikson at the age of 3 to 6 years, children are in the third stage, namely initiative versus guilt. At this stage, children are continuously developing and maturing in motor and language skills, enabling them to explore both their physical and social environment [10].

Children level of school readiness varies according to experience in preschool and the social economic status of family [11]. School readiness in children aged 6 years showed that school readiness has a strong correlation with education level, occupation, and parents' age, moreover the level of children's school readiness of mothers who work is higher than that of those who do not work [12]. Supportiveness and early learning environment were associated with approaches toward learning and early

parenting stress was also linked with approaches toward learning and emotion regulation [13]. Furthermore, parents support for learning was positively associated with child shool readiness [14].

Parents may have some views on their children related to the ability needed for doing activities in kindergarten both associated with academic skills and socio-emotional skills. According to Bornstein et al., [15] parental beliefs are defined as a set of views about developmental achievements related to what is important for child-rearing and all of the aspect that influences child development. Parental beliefs about school readiness were significantly related to kindergarteners' reading skills [16]. In a similar vein, parental beliefs are a cognitive scaffold that underlies the way parents rear their children [15].

Regarding parents assisting their child's school activities, the Covid-19 pandemic which forces students to learn online has a major impact on the early childhood education process. The problems of teaching online to preschoolers also arise, including those related to internet connections during video calls, contacting parents via the WhatsApp application, and problems during online learning [17], teachers' preparedness in supporting digital learning [18] lack of technological devices, absence of adequate internet services, inability to obtain more data to send and receive educational material via telephone due to economic issues [19]. Furthermore, difficulties in delivering material interactively, parents who are busy working and have low educational competence, and children who have difficulty due to the lack of learning resources also have negative effects on early childhood learners [20].

1.3 School Closure During Covid-19 Pandemic and Learning Process

The effect of learning loss due to school closures during a pandemic period that is closed for 8 weeks is equivalent to a decrease of one-fifth of one year's learning performance and this loss reaches 60% in students of primary school from less educated families [21]. The failure of online learning during the pandemic has led to problems in some areas of child development such as cognitive, social, and emotional development. The decline of this area due to the limited time spent in implementing e-learning, the participation rate of children and parents in online learning decreased by up to 50% from the first semester to the following and learning hours were very limited [22].

Online learning may not give appropriate opportunities for involving tender age who need more interactions and hands-on activities to focus and learn compared to adult learners [23]. School readiness affects children's performance in early primary school and the quality of past learning experiences is very important. However, learning experience to cultivate school readiness is not easy to achieve in distance learning. In Indonesia, the Covid-19 pandemic condition has forced education providers to limit face-to-face meetings starting from March 14, 2020, or in the second semester of the 2019-2020 school year. Initially, schools were only closed for 14 days, but as Covid-19 cases grew, the government decided to extend both the period of widespread social restrictions and the policy of home-or distance-based learning. Most schools, especially those at the level of early childhood education, primary and sec-

ondary education, were in shock. Therefore, many schools have difficulty in delivering learning programs.

Responding to the pandemic conditions, the Minister of Education and Culture (https://www.kemdikbud.go.id/) stated that the Covid-19 pandemic condition did not allow teaching and learning activities to take place normally. There are hundreds of thousands of schools closed to prevent the spread, and around 68 million students study from home and about 4 million teachers conduct remote teaching activities. In addition, it is known that there are several obstacles that arise in the implementation of distance learning, such as teachers managing distance learning who are still focused on the curriculum in normal situations. While on the other hand, not all parents can optimally accompany their children to study at home because they have to work or obstacles in their ability to assist children in learning.

Distance learning process is quite difficult for pre-schoolers and teachers to teach based on their respective initiatives. The activities mostly carried out are play and art activities, and the selected activities are experiments and dramas related to hygiene. Most teachers think distance education is not appropriate for pre-schoolers and does not contribute to a child's development. However, distance learning causes an increase in parental participation in preschool education and has a positive influence on parent-child interaction [24].

The spread of Covid-19 causes disconnection of children from their peers at school, do informal activities, organized sports, and visit one another's homes [18]. In early year settings, curricular and pedagogical approaches are mostly play-based but the types of play appropriate to young age and typically found in early years settings did not translate into online or remote learning, such as children will play spontaneously in break times and going outside of school [25]. Parents believe that play has an important role in the progress of children being ready for school, both structured and unstructured play [26]. Children's play competencies have associated with prosocial behavior in the classroom, motivation to learn, task persistence, and autonomy. Furthermore, interactive peer play was linked to positive approaches to learning and other factors important during the transition into school [27]. Moreover, family activities were related to a child's attitude toward school. Besides, attitude is generally defined as tendencies or internal states of a person towards anything [16].

Previous studies aforementioned vividly showed that school closures have an impact on young children's learning experience both academic and non-academic. On one hand, protecting children from COVID-19 infection is an ultimate priority and this condition leads to parents having many opportunities with their children to do activities at home. On the other hand, children have limited chances to receive classroom experience both to learn academic skills such as general knowledge, letter recognition, reading simple word, and to engage in activities for enhancing socio-emotional skills such as class project peer cooperation-based completion, play and working with peers and teachers. Besides, parents who have much more time involved in children activities at home tend to busy with their own activities such as doing job and housework. Therefore, preschoolers did not meet sufficient stimulation in kindergarten and at home, hence we assume they have less ability or skills related to school readiness.

To our knowledge, clear evidence regarding children's school readiness after the social restriction and variables related to this issue in the local context is still limited. Moreover, measuring school readiness using psychological testing that focuses on cognitive skills (concept of numbers, critical perception, memory, assessing objects and situations, visual discrimination, comprehension of story), concentration, and fine motor is needed. The result of this study would be useful to figure out the abilities related to school readiness of preschoolers at the end semester in kindergarten.This research aims to determine children's school readiness in relation to age, attitude to school and parents' beliefs about school readiness. The first hypothesis proposed in this study is school readiness of preschoolers in the second semester of 2nd year is difficult to achieve; therefore, many young ages are not ready yet to engage in learning at primary school. The second hypothesis is age and attitude toward school have a relationship with children's school readiness.

2 Method

The design of this study is cross-sectional. As many as 81 of the total 125 preschoolers from two Raudhatul Athfal and two Islamic Kindergarten were involved in this study. There are two Raudhatul Athfal or abbreviated RA (Islamic kindergarten under the auspices of the Ministry of Religious Affairs of Indonesia) and two Islamic kindergartens (which under the auspices of the Ministry of Education and Culture of Indonesia) are located in Pati Regency (RA Miftahul Huda), Semarang Regency (RA Nurul Falah and Al Madinah Islamic Kindergarten), and in Semarang City (Teratai Islamic Kindergarten) Central Java Province, Indonesia.

In addition, parents and teachers are also involved to provide their perspectives on children's school readiness. Collecting data using questionnaires, psychological tests, and interviews. Data were obtained through parents' beliefs scale and attitude to school scale filled out by parents, a psychological test of children's school readiness using the Nijmeegse Schoolbekwaamheids Test (N.S.T), and interviews with parents and teachers.

First, the parents' beliefs scale consists of 37 items (reliability of $\alpha = .922$, the range of corrected item-total correlation between .251 and .717) used to obtain the beliefs of parents regarding the importance of attitudes, abilities, skills, and activities for children that can support children's readiness to enter school. The beliefs of these parents are related to areas including (1) academic knowledge, (2) basic thinking skills, (3) emotional maturity, (4) physical abilities and motor development (5) self-discipline and (6) communication skills. Second, attitude to school which consists of 11 items has a reliability coefficient of Cronbach alpha = .806.

Third, the school readiness test using N.S.T which consists of 10 subtests was administered to 81 preschoolers. This test consists of 10 subtests, namely perception of form, fine motor activity, concepts of number, visual discrimination, critical perception, concentration, memory, assessing objects and situations, retelling stories, and

human pictures. The total score was obtained by adding up the correct answer from 10 subtests. The results of the school readiness test are grouped into three categories, namely not ready, indecisive, and ready [28].

Nijmeegse Schoolbekwaamheids Test (N.S.T) was developed by Monks, Rost, and Coffie and this test has been widely used by psychologists in Indonesia to measure children's school readiness. Moreover, a huge number of researches on school readiness measurement on preschoolers and first graders used this test [29]. NST is an individual measurement that is administered and interpreted by a psychologist. The evaluation of the use of NST in the Indonesian context and the result showed that NST has a Cronbach's alpha of 0.851 and is classified as a consistent measurement tool [30]. Besides, conducting interviews with teachers and parents to complete the information about preschoolers in school and home settings. Data collected during May and June 2022 and were analyzed using descriptive statistics and multiple regression analysis.

3 Results and Discussion

In this research, children from four kindergartens from the different regions participated as many as 81 children, 40 boys, and 41 girls. The children's ages ranged from 5.1 years to 7.3 years and the average age was 6.4 years. In addition, there were 81 parents (fathers or mothers) who were involved in the data collection process through questionnaires regarding parents' beliefs about their children's abilities, attitudes, skills, and activities toward school which can support readiness to enter school. However, there were only 67 questionnaires that could be analyzed. The age range of parents varies from 24 to 42 years, the occupations include nurses, housewives, private employees, civil servants, factory employees, casual workers, and small traders. While the education of parents ranging from elementary school graduates to undergraduates and most of them graduated from high school.

Table 1. Categorization of school readiness test (n=81)

Category	Num.	%
Not Ready	10	12.35
Indecisive	23	28.40
Ready	48	59.25

Table 2. Results of descriptive analysis of parents' belief scale data on children's abilities, attitudes, and behaviors that support school readiness (n = 67)

Domain	Mean	Standard Dev	Variance	Min.	Max	Range
Academic knowledge (n item= 9)	40.22	3.817	14.570	27	45	18
Basic thinking skills (n item= 6)	25.15	3.299	10.886	18	35	17
Emotional maturity (n item = 4)	15.94	1.816	3.299	12	20	8
Physical ability and motor (n item = 7)	29	3.546	12.576	18	35	17
Self-discipline (n item = 6)	25.48	2.830	8.011	19	30	11
Communication (n item = 5)	21.03	2.263	5.120	16	25	9

Table 3. Percentage of parent's beliefs category (n= 67)

Domain	Low	Moderate	High
Academic knowledge	0%	6 %	94 %
Basic thinking skills	0%	16 %	84 %
Emotional maturity	0%	42 %	58 %
Physical ability and motor	0%	23.90 %	76.10 %
Self-discipline	0%	10.50 %	89.50 %
Communication	0%	12 %	88%

Based on the information in table 3, it is known that parents' beliefs about several abilities and attitudes of children that can support children's readiness to enter school are mostly in the high category and none are in a low category. This means that most parents believe that their children's abilities and attitudes, such as academic knowledge, basic thinking skills, emotional maturity, physical and motor skills, self-discipline, and communication will enhance children's school readiness and ability to involve in learning at elementary school. The existence of a strong enough belief in some of the above can lead parents to support developing the skills and attitudes needed to deal with formal school life later. Therefore, the knowledge and skills of parents to stimulate children's readiness to enter school is important, because considering the level of beliefs alone is not enough to realize the readiness of children to enter school.

In addition to the stimulation that needs to be given by parents and teachers, there is an understanding of the maturity of children in several areas related to readiness to enter school such as understanding the concept of form, numbers, fine motor skills, understanding the content of stories or narratives conveyed orally, concentration, and understanding.

Based on the test of normality of data through One-Sample Kolmogorov Smirnov it is known that K-ZS, $p = 0{,}171$ ($p > .05$). Multiple regression analysis was used to test age and attitude to school in predicting children's school readiness. The results of

the multiple regression analysis indicated the two predictors explained 10% of the variance (R= .316, F= 3,545 at p = .035 (p < .05). This means the older the children's age, the more they are ready to follow the learning process in elementary school and the more positive of attitude to school the more ready to engage school activity.

The interviews with teachers of RA Miftahul Huda in Pati Regency, Central Java it is known that starting the 3rd week of August 2021, full face-to-face learning has begun for one week after the government revoke large-scale social restriction regulation for a certain area. The children in the second year at RA are guided to be ready to enter elementary school. Meanwhile, at RA Nurul Falah, which is located in Semarang Regency and the Bunga Teratai Islamic Kindergarten in Semarang City Central Java, full face-to-face learning will only begin in July 2022. So that the second year of this RA children who take part in this research did not follow the lessons given by the teacher in class every day, but only 3 times a week for one semester, and before that, they mostly participated in online learning due to social restrictions.

Based on the results of observations from preschoolers at two Kindergartens and 2 RA, it is known that there are many preschoolers who are not ready in terms of attitude and behavior readiness, such as not being ready to be separated from their parental figures, which is an indicator that children can be in a new situation calmly. In addition, some children when asked to do simple tasks feel afraid, have difficulty in giving attention in class, and feel less confident, so they need continuous encouragement to do the given task. In addition, the limitation of the duration of learning in class which is shorter than during normal conditions makes it difficult for teachers to achieve the goals of class activities for children. So that teachers are less able to direct children, especially in developing effective aspects such as forming positive attitudes and motivation to be fully involved in school and activities in the classroom.

Furthermore, the interaction of children with teachers who are less intensive also makes it difficult for teachers to recognize children's characters and enhance children's knowledge and skills. In addition, not all parents have an understanding of the development of children who are busy which makes them less able to provide adequate stimulation.

The result of the study indicates in general parents have high beliefs in some aspects related to children's school readiness. However, these beliefs are difficult to be realized in parent-child-school at-home activities during the Covid-19 pandemic. Therefore, school attendance becomes problematic which leaves a problem regarding school readiness. This is shown by the finding of this study that children who are ready to enter formal school are below 60%. This finding is slight different from the study conducted in North Sulawesi during August and November 2018 found that more than 72% percent of participants (mean age of subjects was 6 years old) which measured school readiness status through N.S.T [31]. Moreover, the type of kinder-

garten attended has a significant influence on the child's level of school performance motivation, attitudes toward school as well as executive function [32].

The period of preschool education has a considerable impact on the development of children's personalities and on his/her future not only on school achievement [32]. School performance at the beginning of formal schooling is highly dependent on parental involvement such as communication, affective support, and to a large extent on the parenting style practiced [33]. Parents who limit their children's autonomy and lack effective support are more likely to underperform in school or be less prepared for school. Children who feel loved and feel that their parents are adequately involved are predicted to have academic success. In addition, previous study showed that parental involvement in children's activities is also related to adaptive characteristics in preschool children, and the relationship between families and professionals (teachers) is an important contributor to children's readiness to enter school [34].

The involvement of parents in preparing their children for primary school and in the transition from kindergarten to primary school is very important. Epstein [35] proposed a model of parental involvement that contains six dimensions: nurturing (supporting, nurturing, and raising children), school-to-home and home-to-school communication, volunteering (providing help in children's schools), learning at home (managing, acknowledging, respecting children), decision making and collaborating with the community. However, in some cases, many parents have limitations in assisting children with online schooling and this is the biggest problem in the time of Covid-19 [36], not ready to face learning activities caused of the insufficient facilities and limited in using learning application [37].

Regarding teachers' difficulties to recognize children's characters and enhance children's knowledge and skills due to face-to-face time limitation during Covid-19, this is similar to previous findings that they felt difficulty in assessing children's development because the assessment for early childhood is emphasized on process not only on the result as parents sent to teacher by videos, photos, and children's activity sheets. Moreover, parents' reports are not always based on children's skills [38]. Moreover, most parents considered that their children were not fully ready for school, especially in terms of academic skills, self-management, and mental preparation. Specifically, young age was rated most ready for school when parents perceived stronger social support, felt more competence, and spent more time with children [39].

Pertaining to the social restrictions during the pandemic covid-19 which led to school closure. Previous finding showed that early years settings and schools play a substantial role in supporting children's development, but they cannot be reliable for recovering what is lost during times of crisis. Therefore, children who are growing up in an ongoing crisis need considerable concerns regarding child and adolescent mental health [25]. Children are basically vulnerable and still a lot depend on adults to fulfill their most basic needs, if they do not meet the support system from adults, it can result in harmful situations at a young age [39].

It is generally known that the first five years of a child's life are a critical period or critical period to assist children to reach their potential development and face devel-

opmental difficulties through early intervention [40]. Teachers and school service staff are aware of the important role of parents in supporting their children during the transition to formal school (primary school) and then preparing parents to help behave according to their expectancies expected of them and their children at school. Good ways of behavior are also encouraged to be taught, courtesy, respect, and appropriate behavior in the classroom. In addition, there are assistance services for parents and preparing children to be ready for school [41].

4 Conclusion

Based on the results of the school readiness measurement for children to enter school, it is known that preschool children who are classified as ready to take part in the formal learning process in primary school during the COVID-19 pandemic do not reach two-thirds of the total children involved in this community service program. In addition, there are 12% who are still not ready and 28% are indecisive or do not fully have the ability that be categorized as ready to enter school. In addition, from the perspective of parents on academic knowledge, most of the basic thinking skills and communication skills are considered very important for children to master so that they are ready to enter elementary school. Furthermore, children's age and attitude to school have a significant correlation with school readiness in times of pandemic through social restriction.

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