DIFFERENCE OF ROUGH MOTORIC, LANGUAGE, AND PROSOCIAL BEHAVIOR DEVELOPMENT IN CHILDREN UNDERGOING FULL DAY PROGRAM AND REGULAR PROGRAM AT KINDERGARTEN IN DEPOK SLEMAN DISTRICT-INDONESIA

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OBJECTIVES: Targeted Sustainable Development Goals (SDGs) of quality education by 2030 ensure that all children have access to quality early development, care, and pre-primary education. Proportion of working mother in Depok District is highest in Sleman that is 52.9%. During preschool, the kindergarten is the most important socialization agency for the child that requires care and education as it relates to the substitute role of the parents. To know the differences of rough motoric, language, and prosocial behavior development in children undergoing full-day program and regular program at kindergartens.

METHOD: Comparative analytics and a cross-sectional approach. The population of children is aged 4-6 years. The sample of each group is 34 respondents. The sampling technique is proportional simple random sampling. The examination uses KPSP and pro-social behavior observation sheet. Data analysis uses using Mann Whitney and Ordinal Logistic Regression.

RESULTS: Bivariate analysis showed that there was a significant difference between children who underwent full-day and regular program at kindergartens. For motor development p-value was 0.027 (p <0.05) and p-value for prosocial was 0.015 (p <0.00). Multivariate analysis indicated that there was no influence of external variables on rough motoric, language, and prosocial behavior development.

CONCLUSION: Rough motoric, language, and prosocial behavior development in children who undergo full-day kindergarten program is better than regular program kindergarten. External variables such as age, gender, birth order, parental education, and maternal employment status do not affect rough motoric, language, and prosocial behavior development.

Keywords: Language development, rough motor development, prosocial behavior, kindergarten

INTRODUCTION

Children, as the next generation and future managers of the nation, should be prepared as early as possible and should have their rights, including the rights to live, grow, develop, participate reasonably according to human dignity and receive protection against violence and discrimination, in accordance with their age. As mandated by the Law No. 23 of 2002 on Child Protection, the guarantee and fulfillment of children’s rights become shared obligation of parents, family, society and the State. One of Sustainable Development Goals (SDGs) targets—to provide quality education by 2030—refers to the effort to ensure that all female and male children have the access to quality development, care and pre-primary education for them to be prepared to receive primary education. Children grow and develop at a rapid rate in their first five years of life (0–5 years of age). This period is also known as the “Golden Age”. The Golden Age is a critical period in which children’s growth and development must be watched carefully to allow for early detection of any possible disorders [1]. Failure in learning motor skills that are important for children or their peers will upset their social and personal adaptation. Likewise, in the endeavour to be accepted as members of peer group, failure to learn game and self-help skills that are highly helpful in gaining social acceptance will result in poor social and personal adaptation. As children are unable to do what their peers do, they will feel inferior, and as they are not accepted by their peers, they will become troublemakers. Children’s development is highly influenced by their social environments, such as family and peers. If children face failure in the socialisation process, they will turn into non-social people. They will be rejected by their peers and will tend to be loners. They will also grow as anti-social children if they are unable to socialise well. Today, many mothers work outside of the home for the purpose of increasing family’s income and helping with family’s economy, but according to Hurlock [2], during the preschool period, family are the most important socialisation agents for children. Children of single parents or of mothers who work outside the home lack of opportunities and motivation to partake in family conversations. In children with delayed speech development, lack of practice and motivation have things to do with their ease of speech. This will hinder their social and academic adaptation. Delay in dominant area at a certain age tends to disturb the development of related areas. The District of Depok has the highest growth rate in the Special Region of Yogyakarta Province, home to 23 higher education institutions; this impacts on the economic growth of adjacent areas, and indirectly affect the number of working women. According to the 2016 Office of Population and Civil Registry of Sleman Regency data, 53.1 per cent women were working women, with the District of Depok having the highest percentage of working women (52.9 per cent). The research and recording conducted by Febrianita and Pratama [3] revealed a significant correlation women’s statuses as working mothers and housewives and child development. For this reason, it is necessary to make an effort to minimize non-fulfilment of early-childhood needs. Appropriate parenting and education is needed during early childhood. This is related to temporary parental substitution role played by service institutions existing in the society. Many a time, parents neglect education and parenting that should be given to children [4]. As parents have become increasingly busy with work, well-off parents will be inclined to sending their children to full-day kindergarten programme. With this full-day
kindergarten programme, children will engage in more intensive relationships with their teachers at school for a longer period of time. Teachers will have an immensely strategic task as during this period, children are experiencing the most rapid development. Proper stimulation is necessary for children to have optimum abilities and development.

RESERCH METHODS
This research was quantitative research with comparative analytic design and cross-sectional approach. The population of this research consisted of kindergarteners aged 4–5, including 36 students taking full-day kindergarten programme and 78 students taking regular kindergarten programme. This research used a minimum of 30 subjects per group. But to anticipate the possibility of dropouts, 34 subjects per group were used. Sample was taken using the proportional simple random sampling technique. Research instruments comprised child development pre-screening questionnaire (KPSP) and prosocial behaviour observation sheet. Analysis employed SPSS in three stages. The first stage involved a univariate analysis to figure out the characteristic frequency, gross motor development, language development and prosocial behaviours. The second stage involved a bivariate analysis using the Mann–Whitney test to figure out the difference of gross motor development, language development and prosocial behaviours between children taking the full-day kindergarten programme and children taking the regular kindergarten programme. The third stage involves the Ordinal Logistic Regression test to look into the influence of external variables on the gross motor development, language development and prosocial behaviours in children.

RESULTS AND DISCUSSION
Gross Motor and Language Development
The gross motor development of children taking the full-day kindergarten programme was better than that of children taking the regular kindergarten programme. The majority of full-day group children (22 children or 64.7 per cent) exhibited high development (higher than children at their age). On the other hand, the majority of regular group children (16 children or 47.1 per cent) had normal development (appropriate for their age). The Mann–Whitney analysis yielded a p-value of 0.027 (p < 0.05). H0 was, therefore, rejected, which means that the gross motor development of the full-day group was better than that of the regular group. The gross motor development of children taking the full-day kindergarten programme was better than that of children taking the regular kindergarten programme. The majority of full-day group children (22 children or 64.7 per cent) exhibited high development (higher than children at their age). n the other hand, the majority of regular group children (16 children or 47.1 per cent) had normal development (appropriate for their age). Other than family, kindergarten teachers also have a role in building children’s characters and helping stimulate children’s growth and development. On that account, kindergarten teachers are ideal role models for kindergarteners. A kindergarten teacher is an idol and the second closest person after their parents for children [5]. Children taking the full-day kindergarten programme perform their everyday activities in the presence of their teachers. Kindergarten teachers have pedagogic competences marked with the ability to understand the concept of early childhood education, the concept of early childhood development and growth, the concept of child multi-potentiality, the concept of child needs and individuality, the concept of playing and games presented, creativity to design various child activities and the concept of learning by playing [5]. With the pedagogic competences they possess, kindergarten teachers are excellent stimulants who help with children’s development. With the understanding of the concept of early childhood education, kindergarten teachers will be able to apply the democratic parenting style and have good communication with every child. Democratic parenting style and good communication will help with children’s language and gross motor development. Every child is given the opportunity to express his/her opinions, has his/her interest prioritized and is given the flexibility to make choices, but is still controlled in a rational way. This parenting style has a considerable part in the language and gross motor development. The research conducted by Restiyan [6] reveals a significant relationship between parenting style and child speech development, and the research conducted by Israfil [7] reveals a relationship between parenting style and motor development in children. The research carried out by Sari, Pohan and Shoibirun [8] shows a relationship between communication within the family and speech development of preschool-aged children. In the full-day kindergarten programme in which children do their daily activities at school, family role is played by teachers and peers. Thus, the parenting and communication performed by teachers have a significant role in children’s language and motor development. Not only do full-day group children do most of their everyday activities with, communicate with and receive education from their teachers, they also gain much opportunity to socialize and do activities with their peers at school. They can do numerous activities with their peers, including role-playing. Therefore, children of full-day group have better speech ability than other children at their age. The results of the present research are supported by the research by Agam [9], which found that role-play at kindergarten can improve child language development, and the research by Mike and Permila [10], which concluded that conversation activity can improve child language development. Motor development can be delayed by a number of causes, some are controllable but some others are not. These causes may include brain damage during childbirth, unfavourable prenatal conditions or undesirable environment early in the postpartum period. Lack of opportunity to learn motor skills, parent overprotection or lack of child motivation to learn may cause delay, too [2]. Full-day group displayed better gross motor skills than regular group because they were more motivated to learn the skills. Children in the full-day group interacted with their peers all day long, so they would imitate and compete with them in performing gross motor movements, such as jumping on one foot and throwing and catching a ball, to keep up with them. The research undertaken by S. M. Sari [11] reveals factors supporting child development at kindergarten, including teacher quality, activity programmes and physical environment, with classroom being part of it. Despite being not dominant, the role of colours is of much importance as they can create particular nuances, which psychologically can give children the sense of comfort, motivate children to perform activities, encourage children’s creativity and help children to concentrate on their learning.
making their development optimum. As such, children in the full-day group were exposed to the physical environment that could optimally support their development for a longer period of time.

Prosocial Behaviours

The prosocial behaviours of children in the full-day group were better than those of children in the regular group, with the majority of the full-day group children (17 respondents or 50 per cent) having high scores and the majority of the regular group children (20 respondents or 58.8 per cent) having moderate scores. The results of the prosocial behaviours analysis using the Mann-Whitney test yielded a p-value of 0.015 (p < 0.05). H0 was, therefore, rejected, which means that the prosocial behaviours of the full-day group were better than those of the regular group. According to Hurlock [2], one of some advantages of preschool education is that this education centre provides children with social experiences under the guidance of trained teachers who help develop pleasing relationships and seek to prevent children from receiving treatments that possibly cause them to avoid social relationships. Based on the research conducted by Susanti, Siswati and Astuti [12], factors influencing preschool children’s prosocial behaviours include the prosocial behaviours learning strategy exercised by teachers and parents as well as the environmental situations affecting the amount of opportunity children have to develop prosocial behaviours. Children of the full-day group spent much of their time at school under the guidance and oversight of teachers competent in guiding and educating children, with an environment, most part of which supported prosocial behaviours they displayed to their peers and shared roles among them, encouraging them to cooperate, compete (with children at their age), care, share, sympathise, empathise and develop closeness with each other. By contrast, children taking the regular learning programme spent less time at school and returned home while the parents of most of them were working, so the learning of prosocial behaviours supposed to be assisted by parents, especially mothers, was reduced. This is in line with the research carried out by Nanik and Masruroh [13], which shows a difference in social maturity between children taking full-day preschool programme and children taking regular preschool programme. In the research undertaken by Ćryan et al. (1992) in Rothenberg [14], it was found that children taking the full-day kindergarten programme were more independent in learning, more engaged in classroom activities, more productive together with their peers, less intellectually dependent, less vulnerable to fear of failure, less reproachful of others and more willing to approach their teachers than those taking the half-day (regular) kindergarten programme. In other words, the prosocial behaviours of children taking the full-day kindergarten programme were better than those of children taking the regular kindergarten programme. According to the research conducted by Astuti [15], parents with limited time to spend at home due to high occupational demand will engage their children in many activities after school with guaranteed higher security and more benefits. But if parents pay little attention to their children’s interest, children will engage in negative activities without control, and children might even be trapped in harmful associations.

Moreover, supervision on all needs and safety of children, especially those in their early childhood, is need-
ed when parents are working. It is vital for parents to select the right schools that can meet their children’s needs, as some children adapt more out of needs rather than preference. Children long for popularity and affection from their peers, notably when they feel the lack of affection at home.

Relationship between External Variables and Gross Motor Development, Language Development and Prosocial Behaviours. Before proceeding to a multivariate analysis to figure out the effect of external variables on gross motor development, language development and prosocial behaviour, the characteristics of external variables, including age, gender, birth order, father’s education, mother’s education and mother’s occupation were subjected to bivariate tests, namely chi-square tests, first. According to the results of bivariate test on the effect on gross motor development, age had a p-value of 0.597 (p > 0.25), gender had a p-value of 0.875 (p > 0.25), father’s education had a p-value of 0.632 (p > 0.25), mother’s education had a p-value of 0.992 (p > 0.25) and mother’s occupation had a p-value of 0.731 (p > 0.25). Hence, age, gender, parents’ education and mother’s occupation did not meet the criteria for the multivariate test on gross motor development. However, birth order met the criteria for the multivariate test with a p-value of 0.062 (p < 0.25). According to the results of bivariate test on the effect on language development, age had a p-value of 0.717 (p > 0.25), gender had a p-value of 0.590 (p > 0.25), birth order had a p-value of 0.879 (p > 0.25), father’s education had a p-value of 0.903 (p > 0.25) and mother’s occupation had a p-value of 0.708 (p > 0.25). Hence, age, gender, birth order, father’s education and mother’s occupation did not meet the criteria for the multivariate test on language development. However, mother’s education met the criteria for the multivariate test with a p-value of 0.241 (p < 0.25). According to the results of bivariate test on the effect on prosocial behaviours, age had a p-value of 0.750 (p > 0.25), gender had a p-value of 0.995 (p > 0.25), birth order had a p-value of 0.891 (p > 0.25), father’s education had a p-value of 0.314 (p > 0.25), mother’s education had a p-value of 0.408 (p > 0.25) and mother’s occupation had a p-value of 0.731 (p > 0.25). Hence, age, gender, birth order, parents’ education and mother’s occupation did not meet the criteria for the multivariate test on prosocial development. The multivariate analysis in the present research used the Ordinal Logistic Regression test. This analysis was intended to figure out the influence of external variables of the respondents on the gross motor development, language development and prosocial behaviours in children. According to the measurement of the effect of external variables in the bivariate tests, only the effect of birth order on the gross motor development and the effect of mother’s education on language development met the criteria for the multivariate analysis. Birth order did not affect the gross motor development in children with a p-value of 0.321 (p > 0.05), and mother’s education did not affect the language development in children with a p-value of 0.469 (p > 0.05). According to the analysis of the data of the external variables age, gender, birth order, parents’ education and mother’s occupation, it was found that none of them had an effect on gross motor development, language development and prosocial development in children. This is in line with the research conducted by Zaim, Mahfuddin and Rahmadi [16], which reveals that there is no significant relationship between gender and language competences in children with a p-value.
of 0.580. In the present research, gender did not affect children’s development as there was no difference in the stimuli provided for males and females, and the roles of both genders in their environment were the same, leading to no difference in their development. Ashi and Pratiwi [17] state that the difference between males and females in their prosocial behaviours is not proven. The absence of difference was caused by the lack of different treatments and education provided by teachers for males and females at school. Scientific research on birth order reveals that the environment has a greater thing to do than line in children born in different orders in a family. Culture is associated with birth order. A culture in which first children are considered to be the inheritors of authority, power and wealth will influence the way parents who are raised in it treat their children [2]. In the present study, however, birth order had nothing to do with children’s development as the sample of this research lived in an urban area. Parents of the majority of the respondents had education of higher education institutions, voiding any influence of culture on birth order and parenting style. The research of Sodikin, Mustiah and Asiani [18] shows that birth order does not have any effect on social, emotional and moral development of school-aged children. Since every child is different and has different social needs, there is no measure whether social participation is too high or too low [2]. Wilar and Lestari [19] state that parents’ education does not affect child development delay with a $p$-value of 0.124. In the present research, parents’ education had no effect on child development delay with a $p$-value of 0.468. Because the education of respondents’ parents were homogenous, namely senior high school and higher education institution, education made no difference to the respondents’ development. Mother’s occupation in this research did not influence children’s gross motor and language development. It was assumed that children’s gross motor development and language development are influenced by other factors, namely the length of time children spend at school and in their environment and children’s interaction with parents, especially mothers, which is not only about the quantity but also the quality of the interaction. This is in line with the research conducted by Taju and Babakal [20], which shows no significant relationship between mothers’ occupation and gross motor development with a $p$-value of 0.634, and the research conducted by Utina, Palamani and Tamunu [21], which found no relationship between mothers’ occupation on child development with a $p$-value of 0.317.

**Conclusion**

Statistically, there was a significant difference of the gross motor development, language development and prosocial behaviours between children taking the full-day kindergarten programme and children taking the regular kindergarten programme. External variables age, gender, birth order, parents’ education and mother’s occupation did not affect the gross motor development, language development and prosocial behaviours.

**References**

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