

The Influence of Constructive Play to Entrepreneurship Skills for Early Childhood

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Abstract. This study investigates the influence of sand play and playdough on the entrepreneurship skills of children between the ages of 5-6 years at TK Aisyiyah group B in Kediri, East Java. The experimental method was used to carry out this research which comprises of 48 children selected through the simple random sampling technique. The result obtained shows that the entrepreneurial skill in sand playing groups is higher than the playdough groups, with a constructive play influence on the entrepreneurship skills. In summary, this study aims to improve the entrepreneurship skills of children between the ages of 5-6 years through constructive play.

Keywords: Constructive play, entrepreneurship skills

1 Introduction

One of the most common games played by children is "pasar-pasaran" (Javanese) which is similar to adult life. It is a game of trade where kids get to experience and recognize the concept of adding, and subtracting money [1]. Children indirectly recognize economic activities, where there are sellers, buyers, products to be sold, transaction activities, and payment instruments. At a constructive level, children manipulate objects and materials around them to produce a product [2]. Research has it that, elementary students in Portugal are exposed to the importance of entrepreneurship education at a very early age, owing to the crucial values in the development of one's character to become an entrepreneur [3]. These skills are more effective when introduced to children at a very young age, as it is a non-cognitive development skill [4]. Research carried out on women micro entrepreneurs in Tanzania, reveals a relationship between entrepreneurial knowledge and performance that affect entrepreneurial skills [5]. There is a high influence on the development of student thought when these skills are included in reading lessons in the basic

education on curriculum [6], and to the success of Independent Clothing Community Distro Member in Bandung [7]. There is also a significant relationship between entrepreneurial skills and the tendency of young people to become entrepreneurs [8]. This education programs in higher institutions, have a positive impact on students' skills [9]. It can be taught to young people as attitudes that are useful in all work activities and in creating an innovative culture of social and economic change [10]. Numerous studies on entrepreneurial skills have been conducted on basic, secondary, and university education, while research on entrepreneurial skills on children between the ages of 5-6 years has not been done by other researchers. These skills, is spontaneous, enjoyable, and satisfying,, thereby, giving experiences, knowledge, training and enhancing the ways of thinking and developing creativities.

This study is expected to give numerous benefits, to families and schools. Parents are no longer focused on cognitive demands only, but psychomotor and affection must be developed through creative and fun play.

2 Research Design

This research design uses an experimental method aimed at obtaining empirical data on the effect of constructive play on entrepreneurial skills for children in kindergarten group B. The dependent variables include: entrepreneurial skills (Y), and independent variables: constructive play (X) with the treatment of playing sand (X1) and play playdough (X2). The sample used is a simple random technique. The sampling study which comprises of 48 students was selected from TK ABA 6 in Mojoroto subdistrict and TK ABA 4 in city sub-district. The instrument uses rating scale of 1-3 [11]. The validity of the instrument utilizes correlations between the item and total scores. The instrument was declared valid if $r_{hit} > r_{tab}$ at a 0.8 significance level (α), and highAlpha cronbach reliability coefficient of 0.738. The data was analyzed using Anava and SPSS 23.

3 Fainding and Dicsussion

Constructive play activities for treatment and control groups (sand play and playdough) were adapted to learning activities, after which they were evaluated; assessed and carried out by observing changes in children's entrepreneurial skills.

Table 1. The Descriptive data analyst calculations

Deskripsi	N	Max	Min	Range	Mean	Median	Modus	Var	Std Dev
Y	48	43	26	17	34,98	35	35	18,66	4,32
A ₁	24	43	28	15	36,08	35,50	35	20,69	4,55
A ₂	24	42	26	16	33,88	34,50	35	14,90	3,86

Table 2. Normality Test

Group	Mean	Std dev	Var	L ₀	L _{tabel}	Note
A ₁	36,083	4,55	20,688	0,094	0,181	Normal
A ₂	33,875	3,86	14,896	0,084	0,181	Normal

Table 3. The result of Homogeneity

Group	Counting result	Note
A ₁ dan A ₂	F _{hitung} = 1,837	F _{tabel} = 2,014 Homogen

Hypothesis test results using anova shows $F_{hit} (15,252) > F_{tab} (4,047)$ at $\alpha = 0,05$, hence, H_0 is rejected, and H_1 is accepted. This means that there are differences in entrepreneurial skills between those using sand play (X_1) and those using playdough (X_2). Thus, the entrepreneurial skills in the sand played group were higher than the playdough group B for children in kindergarten aged 5-6 years. The test results of the influence of constructive play interaction on entrepreneurial skills indicate that $F_{hit} interaction (7,140) > F_{tab} (4,047)$ at $\alpha = 0.05$. H_0 is therefore rejected, with a very significant effect.

4 Conclusion and Discussion

According to Vygotsky socio-cultural theory and the *zone of proximal development* (ZPD) concept, entrepreneurial skills of kindergarten children are related to their cognitive, emotional and social development. Learning begins when a child is in the ZPD concept, which is a range of tasks too difficult for them to master independently, but can be learned with the aide of skilled adults or peers, a technique known as scaffolding [12]. Entrepreneurial skills require one to be skilled in: communication, creativity, thinking, leadership, negotiation, problem solving, social networking, and time management [13]. Its basic skills can be developed through training, such as problem solving, creativity, persuasiveness, planning, decision making, confidence, achievement oriented and dynamic situations [14]. Entrepreneurship skills include market awareness, creativity, flexibility [15]. Entrepreneurial skills include performance orientation, creativity, taking initiative, risk taking, perseverance, leadership, communication, problem solving, collaboration/teamwork [16]. Children's entrepreneurship skills are the ability to start something new, discovering opportunities, responsibility, trust, and creativity. Entrepreneurial skills on children between the ages of 5-6 years enables them to start something new, look for opportunities, be responsible, confident, and brave. [17]. Basic level of learning skills given in infancy and childhood will stimulate the development of children's intelligence and skills through their family, friends and environment [18].

Piaget stated that playing constructively, enable children to build and construct individually using various materials. Construction is a unique position between playing and working [19]. Santrock also stated that playing construction is a game that occurs when children involve in the

creation of constructive products or a problem solving [20]. It generally plays manipulation, construction, and motion of objects in space such as rotation [21]. According to Gura Broadhead, constructive play can assist kids in learning mathematics, science and technology, master three-dimensional spaces and develop an understanding of physical balance, structural integrity and visual harmony [22]. . Construction is a unique activity between playing and smart work [25]. Children manipulate objects and materials to produce a product. They are also skilled in expressing ideas and concepts [26]. Playing with sand helps children to be creative, imaginative, and able to achieve therapeutic goals. This process naturally leads to sense of positive control over their 'small world' and a sense of responsibility for actions and creations. The sandbox and its contents are metaphorical and reflects on the mirrors created by them in their 'own worlds' [28]. When children play with sand, they will be able to understand the concepts of life, which will be of great benefit to them [29]. Children can learn entrepreneurial skills through sand play, so children can learn independent life skills. According to Adams sand play is an activity that can encourage children to explore and imagine [30]. On the other hand, he defined Playdough as is a cheap educational game tool used for learning with value of flexibility in designing patterns formed according to plan and imagination. The ingredients made consist of flour, salt, water, and vegetable oil [31]. All ingredients are mixed to produce a soft, flexible and easily formed dough. Food coloring can be added to dough to produce colorful dough, which can be formed using mold or rolled on a flat place [32]. Playdough play is one of the activities which are beneficial for the development of the child's brain. It is not only used for pleasure, but also to enhance brain development. Children can make any shape with prints or with their own creativity. Learning using playdough will also increase a child's social development, language, emotional, psychomotor, and cognitive.

In summary, entrepreneurial skills in sand playing group were higher than the playdough group. There is the influence of constructive play interaction on these skills in children between the ages of 5-6 years.

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