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### **A study of Piaget's projection of shadows task in Sri Lankan Children**

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Jean Piaget is the most renowned developmental psychologist who studied children's cognitive development. Piaget's theory was focused on the problems he presented to children of different ages. Based on this theory he described how children develop cognitively through four different stages. His theory has influenced education throughout the world. Piaget developed his theory of cognitive development in a cultural context which is different to Sri Lanka. Nevertheless, the influence of Piaget's cognitive development theory in early childhood and Primary Education cannot be underestimated. Therefore, considering the impact of Piaget's Cognitive Development theory on the education of Sri Lankan children and conclusions of studies conducted on the applicability of his studies in different cultural contexts, the researcher feels that, the problem of children's conception of Piaget's Projection of shadows task in Sri Lankan children, is important to be investigated. The projection of shadows has plagued artists and art theorists of the Renaissance. This task is important to the learning geometry as well.

The objectives of the study were to examine the applicability of children's conception of Piaget's Projection of shadows to Sri Lankan children across the ages and the social sectors. An instrument similar to the Piaget's instrument was used. Various objects were mounted on a thin rigid support and placed between a lamp and vertical screen, where the three elements being separated by only a few centimeters. The child was asked to draw the shape he/she expects the shadow to assume, or choose a shape from a set of sample drawings. The following objects were presented in turn, A cone, upright or inverted, producing a shadow identical to its shape as perceived by child; a bobbin made by putting two cones point to point, was presented vertically; the simple cone, lying end-on the light source and the cone in the same position but with a hole through the vertical axis producing a ring a shadow. The sample was from Kalutara district. A total of 25 children, from urban, rural and estate sectors in the specific age groups were selected. The findings indicated that, there is no significant difference between the results of this study and the Piaget's study and also there is no significant difference across the social sectors. Therefore, it can be concluded that the outcomes of the Piaget's projection of shadows task are the same with Sri Lankan children.