ORIGINAL ARTICLE

Intelligent Quotient of Schoolchildren at an Urban Community Kelurahan Utan Kayu, Jakarta*

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Abstract

The I.Q. measurements of a group of 103 schoolchildren of an urban community at Kelurahan Utan Kayu, Jakarta, have been evaluated.

The expected result of 92.4 as the mean I.Q. value is considered due to the not so favorable environmental conditions provided to meet the basic needs of children for their growth and development.

Therefore every effort must be made to improve the environment in all its aspects in order to improve the health of the children and to provide them with the right parental stimulation so that they will be able to take more advantages of the available educational opportunities.

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Introduction

In a previous report the heights and weights of elementary schoolchildren at Kelurahan Utan Kayu were evaluated. Those were children with low socio-economic backgrounds

Results revealed them to have lower height and weight values than those children with high and favorable socio-economic conditions. This study is dealing with a part of those same children mentioned above with regard to their intellectual development.

The purpose of this investigation is to find out, whether, like other authors assumed, socio-economic condition goes along with physical as well as intellectual development (Wall, 1973; Janes, 1973; Péchevis, 1974; Leung, 1976).

Material and Method

Sampling material was taken at random. It consisted of 103 children from 6 elementary schools in the urban community of Utan Kayu, Jakarta. Their ages ranged from 6 to 12½ years. Their socio-economic conditions were poor; most of their parents were government officials of the lower ranks. The heights and weights had been measured and reported in another paper (Sugiono et al., 1974).

Using the Wechsler Intelligence Scale for children (Wechsler, 1967), the kind of test currently used in the Department of Child Psychology, University of Indonesia, the children were tested upon their intellectual developments. The time of testing was 9.00 — 11.00 a.m.; each time 3 — 5 children were examined.

Results

Table 1 reveals the number of children as their I.Q. were grouped according to Wechsler classification, most of the children belonged to the average level and even a greater number of those children had their I.Q. distributed in the low average area (Figure 1).

The mean I.Q. was 92.4 with a Standard Deviation of 14.1. The average height of the larger group of school children, out of which this group was taken as random sample, revealed to fall below those of children of well-to-do families as studied by Djumadias et al. (1966). There is a difference of about 4.5 cm to 7.6 cm in their heights (Fig. 2).

Discussion

An urban community at Kelurahan Utan Kayu, Jakarta, with its characteristics of developing area such as low purchasing power; unhealthy housing and environmental conditions and large-sized & extended families, may not be capable of providing sufficiently the basic needs of children for their growth and development.

For optimal child development there are certain prerequisites such as phy-

sical needs (nutrition, etc.) emotional needs, and the need for sufficient stimulation especially in the social and intellectual fields.

Fulfilment of the emotional needs is a great deal determined by the quality of the mother-child relationship, especially that of the very young child. A satisfying mother-child relationship is one of the indispensible conditions of the harmonious development of the child.

Lack of affection during the child's first years of life may cause repercussion upon its emotional, psychomotor as well as physical development as it is called by the Anglo-Saxons "the deprivation syndrome" (Péchevis, 1974).

The child's eagerness to learn depends among others upon a deeplaid emotional security, arising very early in his life (Wall, 1973). The existing stimulations which the child receives from his environment play also an important role in the development of certain numbers of functions. Bloom (1964) pointed out that the first four years are the time when the child is particularly vulnerable to environmental enrichment or deprivation and that — on the average — the differences induced in children by abundant or impoverished environments may be as much

as ten I.Q. units with a further six between ages four and eight.

If due to hindrance, e.g. limited low income. the nutritional needs are not sufficiently fulfilled, it may lead to undernutrition or even malnutrition. which in turn will reduce the amount of energy which a normal growing child will put into the world around him and his concentration on school learning (Leung, 1976). Deviation of the intellectual development will thus be a repercussion of this condition. It will more easily be aggravated by deficient parental stimulation, as is again usually encountered in the low socio-economic homes, considering that all their energies and resources are engaged in merely keeping alive. From this it follows that they will be unable to provide the right environmental stimulation so essential for their child's cognitive growth.

So, 92.4 as the mean value of I.Q. of the schoolchildren under investigation will not surprise anybody due to such unfavorable conditions provided at Kelurahan Utan Kayu.

Beside the physical stunting, what concerns us most is what will happen in the future when the major portion of the present children may be functioning intellectually at the low average level.



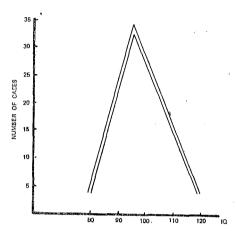


FIG. 1: Distribution of Children by their I.Q. level

STUNTING OF GROWTH

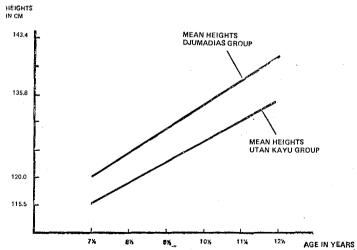


FIG. 2: Mean heights of Utan Kayu group as compared to Djumadias' group

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TABLE 1: Number of cases grouped by their I.Q. level.

| 1.Q. | Classification | No. of cases | Percentage |
|---------------|----------------|--------------|------------|
| 70 — 79 | Borderline | 5 | 4.85 |
| 80 — 89 | Dull Normal | 18 | 17.46 |
| 90 — 99 | Low Average | 33 | 32.01 |
| 100 — 109 | High Average | 29 | 28.13 |
| 110 — 119 | Bright Normal | 14 | 13.58 |
| 120 — 129 | Superior | 4 | 3.97 |
| 130 and above | Very Superior | _ | |
| | Total | 103 | 100 |

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