

EFFECT OF PREMATUREITY, BIRTHWEIGHT, MATERNAL STRESS, SOCIO-ECONOMIC STATUS, AND MOTHER-CHILD INTIMACY ON THE DEVELOPMENT OF PRESCHOOL CHILDREN IN SURAKARTA

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ABSTRACT

Background: Monitoring child development is an important step to prepare healthy children from the earliest age, both physically, spiritually, and socially. Monitoring child development can be done in the kindergarten. Some kindergartens in Surakarta, however, have not implemented child development monitoring program. This study aims to determine the effect of prematurity, birthweight, maternal stress, socio-economic status, and mother-child intimacy, on the development of preschool children.

Subjects and Method: This was an analytical observational study using case control design. The study was carried out at 7 kindergartens (TK) in Surakarta, Central Java: TK Negeri Pembina, TK Gaya Baru III, TK Kristen Ngasinan, TK Islam Bakti 6, TK Advent, TK Warga and TK Kanisius Imakulata, from May to June 2017. A sample of 120 children aged 5-6 years old attending kindergartens were selected for this study by fixed exposure sampling, i.e. selection based on prematurity status. The dependent variable was child development. The independent variables were prematurity, birthweight, maternal stress, maternal employment status, maternal education, family income, parenting time, and mother-child intimacy. The data were collected by a set of pre-tested questionnaire. Child development was measured by development pre-screening questionnaire (KPSP). Nutritional status was obtained from maternal and child health recording book. Path analysis was employed for data analysis.

Results: Child development was directly affected by prematurity ($b = 0.29$; $SE = 0.07$; $p < 0.001$), birthweight ($b = 0.04$; $SE = 0.18$; $p = 0.007$), maternal employment ($b = 0.46$; $SE = 0.20$; $p = 0.020$), maternal education ($b = 0.65$; $SE = 0.21$; $p = 0.002$), family income ($b = 0.01$; $SE = 0.01$; $p = 0.015$), and mother-child intimacy ($b = 0.26$; $SE = 0.05$; $p < 0.001$). Family income was affected by maternal employment ($b = 23.37$; $SE = 5.52$; $p < 0.001$) and maternal education ($b = 23.50$; $SE = 5.79$; $p < 0.001$). Mother-child intimacy was affected by maternal stress ($b = 0.01$; $SE = 0.01$; $p = 0.052$) and parenting time ($b = 0.56$; $SE = 0.05$; $p < 0.001$).

Conclusion: Child development is directly affected by prematurity, birthweight, maternal employment, maternal education, family income, and mother-child intimacy.

Keywords: child development, prematurity, birthweight, socio-economic status, maternal stress, mother-child intimacy

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