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Section Topic: Correlation/Regression

Reference:

Malone, D. M. (2006). Contextually influenced patterns of play-developmental age associations for preschoolers with and without mental retardation. *Early Childhood Education Journal*, 34(3), 215-225.

Research Question:

What is the “differential pattern of association among play behaviors and developmental age for children with and without mental retardation across play situations” (Malone, 2006)?

Description of Results:

Malone (2006) used the Pearson-Product Moment Correlation to measure the correlation between children’s developmental age in terms of cognitive skills, expressive communication, and receptive communication, and play behaviors in two settings, home and classroom. For children with mental retardation in home-based settings, the correlation between cognitive developmental age and the play variables ranged from $-.59$ to $.75$. These results indicate that play variables range from having a moderate negative correlation to having a high positive correlation, including some variables with little-to-no correlation, with cognitive developmental age in children with mental retardation. Similar correlation patterns were found when analyzing the relationships between play variables and receptive and expressive communication developmental ages in home-based play of children with mental retardation. Analyzing the data from another perspective reveals that each play variable maintains a similar level of correlation to each aspect of developmental age measured. For example, proportion of play has a moderate positive correlation with cognitive developmental age, receptive communication developmental age, and expressive communication developmental age, whereas, frequency of play scheme has a low negative correlation with cognitive developmental age, receptive communication developmental age, and expressive communication developmental age.

Significance of Results:

Play-based assessment is commonly used in early childhood. This research provides guidance to assessors of young children by identifying strengths and weaknesses between observed play behaviors and developmental age of children as measured by a standardized assessment, the Battelle Developmental Inventory. It addresses the differences in those correlations between observed play behaviors in children with and without mental retardation. Additionally, it provides evidence of a discrepancy between children’s play behaviors in home-based settings versus classroom-based settings when correlated with developmental age.