DEFINING STABILITY AND ITS ROLE IN EARLY CHILDHOOD ASSESSMENT

Niek Frans, Wendy Post
University of Groningen

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According to Nagle (2000) preschool children comprise a qualitatively different population due to their rapid, diverse and discontinuous developmental change across various domains. The unique characteristics both in development and test-taking behaviour may lead to the characteristically low stability of test scores commonly observed in early childhood. As noted by Kagan (1971), knowledge of stability permits early diagnoses by facilitating the prediction of future behaviour and as such determines the significance that can be placed on responses. Similarly Cronbach (1971) explains that the capability of test results to improve inferences about future functioning validates their use in any decision-making process. He states that any decision is a choice between several courses of action and that the validity of a decision is '...based on the prediction that the outcome will be more satisfactory under one course of action than another' (p. 448). Both Kagan and Cronbach emphasize how knowledge on stability of scores is vital to the use of assessment outcomes in educational decisions. This knowledge becomes increasingly pressing in a population where scores are described as 'characteristically unstable'. Rather than a singular concept, stability can be defined as a collective term that describes any sort of coherence between responses to particular tasks over time. This study explores several theoretically and empirically distinct definitions of stability and examines the relation between each definition and the role of early childhood assessment in an educational decision making process. Four prominent distinct definitions that can be found throughout the literature are discussed, namely: 1) Absolute stability, which is defined as the absence of intra-individual change in response; 2) Stability of differences, defined as a constant rate of change in response over time; 3) Stability of rank order, defined as a consistent rank order in response over time; and 4) Stability of the process of change, which defines response as a consistent function of age. We show how each definition is linked to a unique model of change and can be placed on a hierarchy of stability. In addition, differences between these models are explored empirically, using multilevel models. Finally the relation between each definition and the inferences that can be made from assessment outcomes is discussed.

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