

Examining Reliability & Validity of the Executive Function & Occupational Routines

Scale (EFORTS) among ultra- orthodox and secular children

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ABSTRACT

Daily routines are defined as a sequence of occupations throughout a typical day. During childhood, children acquire their routines and habits through their parents' support and supervision, thus becoming involved in daily family life. There are very few studies surveying daily routine functioning especially amongst typical families and children.

Executive functions are a set of higher cognitive skills and procedures that enable flexible and goal-oriented behavior. These skills develop rapidly in early childhood and are reflected in the execution of basic daily routines. Nowadays, it is known that gaps in executive functions have a profound and significant effect on the ability of children to participate effectively in various areas of life during childhood and also later on in adulthood. Nevertheless, literature dealing with the link between executive functions and daily routines is sparse.

Occupational therapists appreciate the importance of culture in the context of occupation. Environment and culture have a direct influence on people's functioning in daily routines through which they express their culture identity. Israeli society is comprised of various cultures, and a population that is unique in its culture is the ultra-orthodox community. According to evidence concerning the differences in the daily lifestyle of secular society as compared with the ultra-orthodox society, it is assumed that some differences can be found in their function in daily routines. It is paramount to fully understand the influence of culture on how the family and the child manage their daily routines and thereby give rise to a better participation for the child, according to the family values. Among children, parental reporting is one of the main tools by means of which the therapist can obtain clear and accurate function profile of the child as to his or her culture.

Executive Functions & Occupational Routines Scale (EFORTS) is a new assessment tool for parents developed to evaluate executive functions and how they predetermine participation in daily routines among 4-9 year old children. It is important to establish the reliability and validity of this tool and to check its suitability to for other cultures including the ultra-orthodox culture.

The objectives of the current study were to examine the reliability of the tool and to establish concurrent validity and discriminant structural validity (discriminant).

There were four hypotheses in this study:

1. Internal consistency will be higher than Cronbach α , $\alpha > 0.70$ in each part of the EFORTS.
2. Significant correlation will be found between the level of performance in daily routines (EFORTS) and function ability, which will be assessed by the Behavior Rating Inventory of Executive Function (BRIEF) (establishing concurrent validity).
3. Significant correlation will be found between the level of performance in daily routines (EFORTS) and the level of daily function, which will be assessed by the Child Evaluation Checklist (CHECK) (establishing concurrent validity).
4. Significant differences will be found in the function in daily routines of ultra-orthodox children as compared to secular children according to their mothers' report (establishing discriminant validity).

Procedure: In the current study the participants were 60 mothers (30 ultra-orthodox and 30 secular) of healthy children between the ages of 5 and 9. Mothers were identified through a convenience sample and asked to complete a demographic questionnaire and the CHECK, EFORTS and BRIEF questionnaires – the latter evaluating executive function.

Data analysis: SPSS software was used to analyze the data. Descriptive statistics was used to describe the participants' criteria. In order to examine the correlations between performance in daily routines and executive function ability, and between performance in daily routines and level of daily functioning, and after distribution was found to be normal, Pearson correlation tests were

used. The results provided information regarding the concurrent validity of the EFORTS.

To examine the study hypothesis concerning differences in the performance in daily routine of ultra-orthodox children versus secular children, MANOVA multi-variable analysis was used. The results provided information regarding the structural validity of the EFORTS questionnaire. The significance level for acceptance or rejection of the study hypothesis was set at $p \leq 0.05$.

Results: The internal consistency of all parts of the EFORTS questionnaire including the final score was high. Likewise, significant correlations between the routines scores, the final score of the EFORTS and the final scores of the BRIEF were found. Additionally, significant correlation between the routine scores, the final score of the EFORTS and the two final scores of the CHECK were found. The significance was higher in the first part of the questionnaire, which refers to the child's daily functioning. The results provided information regarding the concurrent validity of the EFORTS. Additionally, no significant differences were found in the report of the ultra-orthodox mothers compared with the secular mothers, regarding the function of their children in daily routines.

Conclusions: The findings indicate that the EFORTS is unique in its ability to apply to executive functions referring to daily routines. Additionally, the information about daily routines reflects the reality in the function of daily routines, and thus the importance for occupational therapists is meaningful. Further, the findings show that the EFORTS can be also used with typical children from the ultra-orthodox society, despite the differential culture, in view of the fact that no differences were found between both study groups. It seems that the dissimilarity is not reflected in the way the ultra-orthodox child functions in basic daily routines.