Title: Comparative Analysis of Self-Injurious Behavior in Young Children

Authors: William E. MacLean, Jr., Adele F. Dimian, John Hoch, Raymond T. Tervo, Frank J. Symons

Introduction: There has been limited study of the emergence of self-injurious behavior (SIB) in pediatric samples. Recent studies report that self-injurious topographies are common among young children with developmental delay (Hoch et al., 2016; MacLean & Dornbush, 2012; MacLean et al., 2010) as well as children without developmental delay (Hoch et al., 2016). In the only comparative study of similarly aged young children conducted thus far, SIB was more frequent and considered a greater problem by parents of children with developmental delay (DD) in comparison with typically developing children (TD; Hoch et al., 2016). The purpose of this study was to extend those findings by comparing the self-injurious topographies exhibited by young children with and without DD.

Methods: Parents completed the Repetitive Behavior Scale-Revised (Bodfish et al., 2000) for children with DD (n=49, mean age = 37.5 months, sd = 13.2, male = 82%) and TD children (n=49, mean age = 36.6 months, sd = 14.7 months, male = 62%). The DD group had an average developmental quotient of .65. None of the children in the TD group was receiving services related to developmental delay or related risk factors. The samples were comparable in race and ethnicity - primarily White and Non-Hispanic.

Results: SIB was significantly more problematic for the DD group for every SIB topography and there were significant differences in prevalence between the groups for five of the RBS-R items (Hits Self against Surface or Object, Hits Self with Body Part, Bites Self, Inserts Finger or Object, and Skin Picking).

Within group comparisons based on chronological age (<36 vs >36) months revealed similar age-related differences for six topographies of SIB for both groups. Specifically, Hits Self against Surface or Object, Pulls Hair or Skin, Self-Biting and Inserts Finger or Object were significantly less frequent in the older subgroups while Hits Self with Body Parts and Skin Picking were significantly more frequent in the older subgroups.

Twenty-two of the children in the DD group and 5 of the children in the TD group engaged in multiple SIB topographies. The average number for the DD group was 1.46 (range 1-7) and 0.40 for the TD group (range 1-3). This difference was statistically significant. Within the DD group, all possible pairwise combinations of SIB topographies (28) were represented while only 7 occurred for the TD group.

Discussion: Inclusion of a group of typically developing children provided an important comparative context for the occurrence of SIB in children with developmental delay. With the TD group as a reference, the types of SIB exhibited by the DD group differed in prevalence, severity, and frequency of co-occurrence. On balance, the majority of SIB topographies were less prevalent in older children as compared with younger children regardless of developmental status. It was noteworthy that none of the children in the TD Group were reported to engage in Self-Biting.

References/Citations: