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Further Consideration of the Role of the Environment on Stereotypic and Self-Injurious Behavior

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Gershon Berkson and Megan Tupa have provided a comprehensive review about the causes or functions of self-injurious and self-stimulatory behavior. Throughout the paper, the authors have offered an important perspective about the developmental sequences that these behaviors often follow in young children. Although the authors note the relation between aspects of the environment and the production of these challenging behaviors, they do not address specifically research that supports this notion. We agree that many children engage in SIB and self-stimulatory behaviors during their early years. We also believe, however, that the literature offers plausible reasons why some children continue to engage in these behaviors whereas others appear to outgrow them.

Berkson and Tupa devote one paragraph of their review to the importance of functional behavioral assessment (FBA; O'Neill, Horner, Albin, Storey, & Sprague, 1997). They call it a new and exciting approach, but in reality there is a fairly substantial and growing body of literature that indicates both the effectiveness and importance of FBA. Researchers and educators have used FBA not only to help determine the specific reinforcers of a particular behavior but to design interventions that address both the form and the function of the behavior. Using FBA procedures to assess SIB and self-stimulatory behaviors allows us better to identify the environmental factors that appear to influence the occurrence of these behaviors. It also allows the interventionist to look concurrently at differentiating controlling variables (i.e., do social or nonsocial forms of reinforcement, or both, maintain the behavior?). Clearly, some aspects of challenging behavior are influenced by biological or internal drives that emanate from within the individual.

Unfortunately, educators and parents tend to focus more on the possibility of internally driven stimuli than on the possibility that these behaviors are influenced by attention, escape, or access to tangible objects or activities. Even the authors seem to focus on internally motivating reinforcement as the primary cause of stereotypic and self-injurious behavior. They describe patterns of use that make an environmentally precipitated explanation difficult. It is plausible, however, that caregivers actually reinforce self-stimulatory behavior or SIB by failing to recognize other, less dangerous and previously occurring topographies of the behavior. For example, at several points in the article, the authors described social deprivation as being associated with emission of the challenging behaviors. This general point might suggest that the delivery of social stimulation at critical times would serve a preventative function. In other words, social stimuli delivered contingently on behavior other than challenging behavior might decelerate the challenging behavior. The caregiver in effect is shaping the topography of challenging behavior by reinforcing alternate forms.

In the infant literature, the term ''fake cry-

ing'' has been used to refer to infants who decrease the vehemence of their cry given the same antecedent condition (e.g., near feeding time). This provides the caregiver with natural opportunities to shape more socially acceptable behavior. It is possible that socially reinforced challenging behavior may operate similarly. For example, Derby et al. (1997) observed the emergence of topographically distinct collateral behavior during intervention when challenging behavior was replaced with a socially acceptable alternative. As we use FBA more effectively to identify precursors to self-stimulatory behaviors and SIB, it is possible that adults may provide more immediate or qualitatively better reinforcement for collateral positive behavior, thereby weakening the challenging behavior.

In another example of environmental influences on challenging behavior, Taylor and Carr (1993) suggest that caregivers often structure the environment to eliminate the need for the child to engage in challenging behavior in order to obtain a reinforcer. For example, placing a child who is motivated by adult attention near the teacher all day may eliminate the need for self-injury to get attention. This would explain why for some children challenging behavior decelerates even though it is still part of their repertoire. By manipulating the environment, problem behavior is decreased or eliminated in the short run. Once aspects of the environmental intervention change, however, the behavior may return to its original rate and intensity. To deal most effectively with socially motivated challenging behaviors, interventions should both eliminate the behavior of concern and teach an alternate, more socially appropriate, behavior that serves the same function.

Summary

Berkson and Tupa have provided a catalyst to inspire further consideration of social antecedents and consequences for self-stimulatory behavior and SIB. Clearly, some challenging behaviors are intrinsically motivated. We have, though, observed many instances where caregivers actually increase their occurrence by providing attention or negative reinforcement (allowing escape from ongoing activity contingent on self-injury) after a behavior occurs. What the field does not need is to debate whether challenging behavior is intrinsically or extrinsically motivated. What it does need is a continued emphasis on assessments that allow caregivers to analyze both the internal and external motivations of a challenging behavior. This, in turn, may help caregivers identify clearly the precursors to self-stimulatory behavior and SIB and, when appropriate, design interventions that address the social functions of these behaviors.

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