
Abstract: Tongue protrusion of a 24-year-old moderately retarded woman with Down syndrome was reduced through self-monitoring. A series of six, 30-minute audio cassette tapes, with decreasing numbers of beep tones, served as cues to self-monitor. This reduction of tongue protrusion was maintained when the self-monitoring procedures were gradually faded and withdrawn.


Abstract: In a study of behavior modification two Down's syndrome preschool children, the first a 5-year-old boy with autistic behavior patterns and the second a 4-year-old girl whose behavior problem was to reject other children, were examined. The first S was engaged in ball catching activities with a teacher with positive reinforcement (playing the S's favorite music) for returning the ball to the space between the teacher's legs. The activities lasted for a 1-year period, at which time the S was actively playing catch with his teacher. Among conclusions were that the S's autistic behavior patterns were remarkably modified and the reinforcement function was verified. The second S was engaged in trampoline play with a teacher and the first S. Positive reinforcement (praise, physical contact) was given for target behaviors (such as laughing, giving the first S a toy, or touching him). Results after 20 sessions showed that the second S's approach behavior had changed considerably.


Abstract: We experimentally assessed the functions of hair pulling and hair manipulation of a 19-year-old woman (Kris) with moderate mental retardation and cerebral palsy. In Phase 1 a functional analysis revealed that Kris pulled and manipulated hair for the greatest amount of time in the alone condition, suggesting that the behaviors were maintained by some form of automatic reinforcement (Vaughan & Michael, 1982). In Phase 2 we assessed the nature of the sensory stimulation that maintained hair pulling by providing continuous access to previously pulled or cut hair and, thereafter, by having Kris wear a rubber glove. The results suggested that hair pulling was maintained by digital-tactile stimulation (automatic positive reinforcement). These findings are discussed, and recommendations for further analyses of automatically reinforced habit behaviors are provided.


Abstract: Recent research findings suggest that idiosyncratic variables can influence the outcomes of functional analyses (E. G. Carr, Yarbrough, & Langdon, 1997). In the present study, we examined idiosyncratic environment–behavior relations more precisely after identifying
stimuli (i.e., a particular toy and social interaction) associated with increased levels of problem behavior. Two children, an 8-year-old boy with moderate mental retardation and a 5-year-old boy with no developmental delays, participated. Results of functional analyses for both children indicated that idiosyncratic antecedent stimuli set the occasion for occurrences of problem behavior (hand biting or hand flapping) and that problem persisted in the absence of social contingencies. Further analyses were conducted to identify specific components of the stimuli that occasioned problem behavior. Treatments based on results of the analyses successfully reduced self-injury and hand flapping.


Abstract: It is generally agreed that serious misbehavior in children should be replaced with socially appropriate behaviors, but few guidelines exist with respect to choosing replacement behaviors. We address this issue in two experiments. In Experiment 1, we developed an assessment method for identifying situations in which behavior problems, including aggression, tantrums, and self-injury, were most likely to occur. Results demonstrated that both low level of adult attention and high level of task difficulty were discriminative for misbehavior. In Experiment 2, the assessment data were used to select replacements for misbehavior. Specifically, children were taught to solicit attention or assistance or both verbally from adults. This treatment, which involved the differential reinforcement of functional communication, produced replicable suppression of behavior problems across four developmentally disabled children. The results were consistent with an hypothesis stating that some child behavior problems may be viewed as a nonverbal means of communication. According to this hypothesis, behavior problems and verbal communicative acts, though differing in form, may be equivalent in function. Therefore, strengthening the latter should weaken the former.


Abstract: Down syndrome is the most common genetic cause of mental retardation and one of the most frequently occurring neurodevelopmental genetic disorders in children. Children with Down syndrome typically experience a constellation of symptomology that includes developmental motor and language delay, specific deficits in verbal memory, and broad cognitive deficits. Children with Down syndrome are also at increased risk of medical problems, which can exacerbate their cognitive deficits. Although the diagnosis of Down syndrome is facilitated by cytogenetic testing and the unique physical phenotype, the development of proper interventions for this group of children is less obvious. Despite their functional deficits, children with Down syndrome possess relative strengths, which can be the focus of interventions. This article reviews the etiology and developmental course of Down syndrome, appraises examples of empirically validated interventions, and discusses neurocognitive processing issues that should be considered during a psychoeducational evaluation for intervention.

Abstract: Findings from two studies of 42 children with profound developmental delays (26 males and 15 females) using systematic and intense response-contingent learning opportunities interventions are reported. Response-contingent learning games were used to promote the participants' use of behavior that either produced environmental consequences or elicited reinforcing stimuli. The focus of analysis was the social--emotional benefits of the learning opportunities on both the children and adults (parents and teachers). Results showed that child production of behavior producing reinforcing consequences was associated with heightened positive social--emotional benefits in both the children and adults.


Abstract: Many commonly employed strategies used by teachers to manage noncompliance and problem behavior in the classroom focus on suppression of problem responses through reductive consequences. Errorless compliance training was developed to provide a nonaversive alternative to reducing child noncompliance and has been demonstrated effective as a home-based intervention approach for parents. In the present study, the effectiveness of errorless compliance training as a classroom approach in a special education setting was investigated. A graduate student implemented the intervention with two 5-year-old girls with Down syndrome, who demonstrated severe noncompliance to teacher requests. The intervention was associated with substantial increases in child compliance in the classroom.


Abstract: Previous studies have reported a specific behavioral phenotype, or a distinct profile of behavioral outcomes, associated with Down syndrome. Until recently, however, there has been little attention given to how this behavioral profile emerges and develops over time. It is argued here that some aspects of the Down syndrome behavioral phenotype are already emerging in infants and toddlers, including emerging relative strengths in some aspects of visual processing, receptive language and nonverbal social functioning, and relative weaknesses in gross motor skills and expressive language skills. Research on the early developmental trajectory associated with Down syndrome (and other genetic disorders) is important because it can help researchers and practitioners formulate interventions that are time-sensitive, and that prevent or offset potential future negative outcomes. This article reviews evidence for the emerging Down syndrome behavioral phenotype in infants, toddlers, and preschoolers. This is followed by a discussion of intervention approaches that specifically target this developing profile, with a focus on language, preliteracy skills, and personality motivation.


Abstract: This article reviews studies evaluating the effectiveness of early intervention for children with Down syndrome. Evaluation of early intervention programs is difficult and challenging, given the wide variety of experimental designs and the limitations of research
studies. Overall, however, positive changes were seen in the development of children who were exposed to early intervention programs. Children with Down syndrome and their families are likely to benefit from early intervention.


Abstract: A functional analysis for a boy with Down syndrome and autism suggested that vocal stereotypy was maintained by automatic reinforcement. The analysis also showed that instructions and noncontingent attention suppressed vocal stereotypy. A treatment package consisting of noncontingent attention, contingent demands, and response cost effectively reduced vocal stereotypy. The treatment package remained effective even when noncontingent attention was removed, making the procedure easier to implement. Also, the presence of the therapist in the room with the participant was faded systematically. After completion of fading, vocal stereotypy remained low during conditions similar to the no-consequence phase of the functional analysis.