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A transformation of discriminative functions in accordance with equivalence relations

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In two experiments each consisting of six phases, two adults and six 5- to 6-year-old children were taught A-B and A-C conditional discriminations and were tested for the derivation of two combinatorially entailed equivalence relations (B1-C1 and B2-C2). Next, the behavioural function of clapping hands was reinforced in the presence of B1 and waving was reinforced in the presence of B2. Finally, subjects were tested for a transformation of functions where they were required to first clap or wave and were then presented with the C stimuli. It was predicted that subjects would select C1 having clapped, and C2 having waved on the preceding task (i.e., if clap, then pick C1/if wave, pick C2). All subjects demonstrated the predicted performance. Present findings are discussed from a relational frame perspective with an emphasis on the nature of derived transformation effects.

Key words: transformation of functions, equivalence relations, conditional discrimination, self-discrimination, relational frame theory, children, adults.

Acquisition of Fluent Listener Responses and the Educational Advancement of Young Children with Autism and Severe Language Delays

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We investigated the effects of a “listener emersion” procedure on pre and post numbers of weekly instructional trials (learn units) required to meet instructional objectives in all curricular programs for 8 children with autism (3 and 4 years old) using a multiple probe design across participants. The students had few or no functional verbal repertoires (speech or alternative forms) and their teachers were having difficulty achieving instructional objectives for matching, basic discriminations, and instructional control learning with the students. The dependent variable was the weekly numbers of learn units the students required to achieve instructional objectives in all curricular programs 1 week before, and 2 weeks after the listener emersion. All curricular programs were suspended during the implementation of listener emersion and the students were required to master several sets of listener responses such that the responses could only be controlled by the auditory components of teachers’ audio-taped speech, first to a mastery criterion without a rate requirement and then to mastery with rate of responding criterion. Following listener emersion the students required from one half to ten times fewer learn units to achieve objectives. The results are discussed in terms of the importance of a listener repertoire to children’s advancement and the identification of key developmental levels of verbal behavior.

An Evaluation of Choice Responding during Assessment and Treatment of Problem Behavior

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We used choice-making procedures during assessment and treatment with 2 preschool-aged children diagnosed with developmental disabilities who engaged in severe problem behavior in their homes. A functional analysis identified that the children’s problem behavior was maintained by both positive and negative reinforcement. A choice assessment was conducted to evaluate each child’s relative preference for positive reinforcement (attention, tangibles) or negative reinforcement within four choice conditions. Treatment for the children consisted of functional communication training (FCT) with and without an antecedent choice-making component (FCT + choice). Treatment results indicated that both children showed comparable reductions in problem behavior and increased compliance to parent instructions across treatment conditions. A component analysis of positive reinforcers was conducted to identify active treatment variables. Overall, the results of assessment showed that the choice procedures were useful for evaluating the relative influence of positive and negative reinforcement for children whose problem behavior was maintained by multiple sources of social reinforcement.

DESCRIPTORS: choice making, functional communication training, problem behavior, preschool children

Effects of contingent tone on concurrent schedule performance at different deprivation levels

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The effect of food deprivation on sensitivity to reinforcement and punishment was studied. Rats responded on either rich or lean concurrent variable interval (VI) VI schedules. The effects of a tone-punisher that was superimposed over these schedules was examined. The value of the schedule, the presence of punishment, and the deprivation level all influenced overall rates of responding. Response rates increased with the frequency of reinforcement. Tone-punishment had two effects; response suppression, and preference shift towards overmatching. The effects of deprivation level on choice behaviour were less clear. The tendencies observed were that the lower the deprivation, the greater the suppression, and the greater the preference shift towards overmatching obtained.

The Use of Computer Activity Schedules to Increase Initiation of and Engagement in Domestic and Leisure Activities in an Adult with Acquired Brain Injury

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The purpose of this case study was to highlight the use of Microsoft® PowerPoint® to construct a computerized activity schedule for an adult with acquired brain injury. We also questioned whether teaching the individual schedule following skills would increase his initiation of and engagement in leisure and domestic activities. Computer activity schedule teaching was shown to increase on-task and on-schedule behavior, both of which remained high when the schedule was resequenced. Schedule following skills were also shown to generalize to novel activities. Computer schedules might thus serve a supportive role in adult brain injury rehabilitation.

Key Words: activity schedules, Microsoft® PowerPoint®, acquired brain injury, domestic skills, leisure skills.
