

Recent Graduate Student Thesis Abstracts

Use of a Performance Feedback Package to Modify Behaviors of Certified Nursing Assistants in a Psychiatric Facility

Wendy M. Kale, University of the Pacific, 2007

Research shows the verbal and physical aggression committed against certified nursing assistants by clients in psychiatric settings is a problem in need of attention, and that often staff behavior may exacerbate these attacks. Additional research demonstrates performance feedback improves behavior in many settings. This study evaluated the efficacy of a performance feedback treatment package on altering behaviors of 12 certified nursing assistants and reducing violent interactions in a psychiatric facility using a multiple baseline across participants design. Data analysis revealed the treatment package caused clinically significant changes in behavior, and was associated with a decrease in incidents of violence.

Evaluation of Absolute and Relative Reinforcer Value Using Progressive Ratio Schedules

Monica T. Francisco, University of the Pacific, 2007

We evaluated behavior exhibited by individuals with developmental disabilities using progressive ratio (PR) schedules. High- and low-preferred stimuli were determined based on the results of a paired-stimulus preference assessment and were evaluated in subsequent reinforcer and PR assessments using concurrent- and single-schedules of presentation. Results showed that for two participants, stimuli determined to be low-preferred via a preference assessment functioned as reinforcers when evaluated independently of high-preferred stimuli. Further, results showed that low-preferred stimuli also functioned as reinforcers under gradually increasing (progressive) response requirements. Results suggest that for cases in which a high-preferred stimulus is unavailable or impractical, the contingent delivery of relatively less-preferred stimuli may maintain appropriate behavior, even as schedule requirements increase. These conclusions were uniquely informed by the use of PR schedules

Evaluation of Reinforcers: A Unit Price Analysis

Xeres Delmendo, University of the Pacific, 2007

The purpose of the present study was to develop an approach to determining relative reinforcer value for children, using unit price theory. A free operant preference assessment was conducted with four children, followed by a reinforcer assessment to determine reinforcer efficacy. Following the reinforcer assessment, the unit price evaluation was conducted. The number of reinforcers and number of responses required were manipulated by varying the number of reinforcers provided and the fixed-ratio (FR) requirement, respectively. Four or five different unit price values were compared for each child, and each child's performance was compared with two combinations of FR schedule and number of reinforcers earned for each unit price. The study tested a prediction of unit price theory that as unit price increases, number of responses will increase to an asymptote and decrease thereafter. Results showed that responding increased and then decreased as unit price increased for 2 of the 4 children for one of the two unit price series. Another unit price theory prediction tested was that the rate of

consumption of obtained reinforcers at a given price will be a constant regardless of the response requirement and magnitude of reinforcer that make up the unit price. Results showed that consumption was usually similar given equal unit price values but differing FR and amount of consumables received for all 4 participants. These data suggest that unit price theory may be a useful framework for assessing relative reinforcer value. From a clinical perspective, these results suggest that reinforcers may be potent in terms of work rate under one reinforcement schedule and number of reinforcer units combination but not another combination. In terms of consumption, reinforcers may be approximately equally potent under various reinforcement schedule and number of reinforcer units combinations.

The Effect of a Weighted Checklist and Weekly Feedback on University Housing Staff Performance

Erick K. Marmolejo, University of the Pacific, 2006

Aversive control measures in the form of punishment and negative reinforcement are widely used in business and other organizations. The purpose of the present study was to systematically evaluate an alternative to aversive control. The effect of a package intervention consisting of a weighted checklist, weekly graphic feedback, and contingent social positive reinforcement in the form of praise was used with a university housing staff to increase duty performance. Five undergraduate Resident Assistants served as participants. A multiple baseline across staff members was used to evaluate the effect of the intervention. Results indicate that the intervention increased performance by an average of 45% and decreased variability in performance. These results suggest that interventions based on feedback and positive reinforcement are effective, cost efficient, and represent a practical alternative to aversive control measures.

A Comparison of Assessment Procedures for Pica

Lauren C. Wasano, University of the Pacific, 2006

Pica is a potentially life-threatening behavior problem displayed by many individuals with developmental disabilities that can result in serious medical complications. The purpose of this study was to compare findings from a functional analysis (FA), which is the state of the art method of behavioral assessment, with two indirect assessment measures: the Motivational Assessment Scale (MAS) and the Questions About Behavioral Function (QABF). For three participants, results from the indirect measures paralleled those of the FA in identifying the function of pica. The indirect measures were more cost and time efficient. Use of these indirect methods of assessment not only identified the functional relations that served to maintain pica, but also served as a simpler, less time consuming and accurate alternative to an FA. When an FA is time or cost prohibitive, use of the MAS and QABF may be helpful in suggesting the function of pica.

Stimulus Preference Assessment Methods with Preschool Children: Computer Paired Stimulus vs. Traditional Paired Stimulus

Heidi Okamoto, University of the Pacific, 2005

Identifying potential reinforcers is an integral part to many behavior modification plans. The purpose of this study was to compare and contrast two methods of stimulus

preference assessment (paired stimulus computer and a traditional paired stimulus with tangible and symbolic items) using typically developing preschool children. The participants were four 3-5 year old children recruited from a childcare facility in Stockton, CA. Both methods of stimulus preference assessment were administered to them and reinforcer assessments were conducted. Kendall Rank Correlations between the two methods were low. Both methods produced hierarchies of preference. Both methods produced a reinforcement effect and the difference between the magnitude of reinforcement for the computer and the traditional method was only statistically significant with one child (favoring the computer). The computer method was significantly more time efficient than the traditional method.

Noncompliance in a Classroom Setting

Lucas A. Bradley, University of the Pacific, 2005

Noncompliance in children constitutes a major problem for educators and is often the precursor for several other common behavior problems (e.g., aggression and tantrums). Errorless compliance training, derived from the errorless learning model, uses positive methods of behavior change and may be an ideal intervention for classroom settings. The child is likely to make fewer errors (i.e., noncompliant responses) during training, because the child begins with easier requests and progresses to more difficult requests. Therefore, the need for punitive consequences for noncompliance is eliminated. Research has not been published on the use of errorless compliance training in any classroom setting. The present study examined the effectiveness of errorless compliance training on noncompliance of four preschool-aged children, in a daycare classroom setting. Two of the four children demonstrated significant gains in compliance. Results indicated that errorless compliance training may be an effective, nonpunitive method of increasing child compliance; however, further research is necessary to identify the variables that influence treatment efficacy.

Use of Contingent Monetary Reinforcement and Feedback to Reduce Smoking for Adults Diagnosed with Schizophrenia

Eric Sandquist, University of the Pacific, 2005

Adults diagnosed with schizophrenia smoke cigarettes at excessive rates. The goal of this study was harm reduction by reducing carbon monoxide (CO) levels for 9 adults diagnosed with schizophrenia living in a semi-independent apartment complex. The participants were randomly assigned to one of three groups: Contingent monetary reinforcement (CMR), feedback, and CMR used in combination with feedback. CMR and feedback group was hypothesized to exceed the results of CMR alone and of feedback alone. CO levels were collected once a day for 4 weeks. Individualized CO reduction criteria were developed based on baseline mean CO levels. It was also hypothesized the addition of feedback would lend itself to better maintenance and generalization. Data were analyzed through visual inspection. Results suggested that CMR plus feedback does not improve the effectiveness of CMR alone to maintain reductions in CO levels for adults diagnosed with schizophrenia. Important findings from this study can help alleviate problems for future smoking reduction programs that serve this population.

The Effects of Deprivation and Satiation on Preference Assessment Outcomes in Adults with Schizophrenia

Carrie Melissa Dempsey, University of the Pacific, 2004

In the current study, the utility of paired-stimulus preference assessment in identifying stimulus preferences was evaluated with adults with schizophrenia. In addition, the effects of two establishing operations (i.e., deprivation, satiation) on stimulus selection during paired-stimulus preference assessment were evaluated. Specifically, paired-stimulus preference assessments were conducted across conditions of (a) control, in which participants were given free access to premeasured portions of each of four stimuli prior to the preference assessment at five scheduled times; (b) deprivation, in which participants were given free access to premeasured portions of three of the four stimuli at five scheduled times and were deprived of one of the four stimuli for 48 hr prior to the preference assessment; and (c) satiation, in which participants were given no access to three of the four stimuli at five scheduled times and were free access to one of the four stimuli for 15 min prior to the preference assessment. The paired-stimulus preference assessment resulted in preference hierarchies for 3 of the 4 participants and identified two highly preferred stimuli for 1 of the 4 participants. Overall, across participants, deprivation resulted in increased selection of stimuli, and satiation resulted in decreased selection of stimuli, relative to control. However, some variation across stimuli and participants occurred in each condition. The implications of the current findings are discussed.

Comparing Precision Teaching and Direct Instruction in Teaching Courtroom Competency to Disabled Adults

Brehan F. Kuhn, University of the Pacific, 2004

Research shows that individuals who have been diagnosed with a major mental illness have an increased difficulty learning new information when compared to individuals with no diagnosed mental illness. There is little research on effective teaching methods for individuals with a mental illness; therefore, this study attempted to explore this neglected, yet very important area of research. In this study, two different teaching methods were compared: direct instruction and precision teaching. The results indicated that precision teaching was not only more effective in teaching courtroom competency to individuals with a mental illness, but participants in the precision teaching group retained the information longer than individuals in the direct instruction group.

The Effects of Performance Feedback on Job Performance and Attendance in a Volunteer Program for Adults with Mental Illness

Cynthia Joy Lopez, University of the Pacific, 2004

Previous research in the area of performance feedback has typically focused on normally functioning adults within an organizational setting. This study was designed to evaluate the effectiveness of performance feedback in a volunteer program for adults with mental illness. Graphic feedback and verbal feedback based on job performance was provided simultaneously to participants to improve volunteer performance. Results showed that feedback was effective in improving job performance.