

*EMBEDDED EVALUATION OF PREFERENCES  
SAMPLED FROM PERSON-CENTERED PLANS FOR  
PEOPLE WITH PROFOUND MULTIPLE DISABILITIES*

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We investigated a brief, embedded assessment for evaluating preferences sampled from person-centered plans. After developing person-centered plans for individuals with multiple disabilities, systematic assessments were conducted with preferences sampled from the plans. An assessment of sampled preferences was then embedded within the participants' daily routines. The two assessments identified similar preferences based on participant approach responses. Both assessments also indicated inconsistencies with reported preferences in the person-centered plans. Overall, results suggested the embedded assessment may be an alternative means of evaluating some preferences reported through person-centered planning.

DESCRIPTORS: person-centered planning, preference assessments, profound disabilities

Person-centered planning has become increasingly popular for designing and providing support for people with disabilities. Because there has been very little research that has systematically evaluated the efficacy of person-centered practices, we recently attempted to validate personal preferences identified through person-centered planning for people with profound multiple disabilities (Reid, Everson, & Green, 1999). Our research suggested that although person-centered planning resulted in the identification of accurate preferences, the process also resulted in a number of inaccurate reports of preferences.

An initial purpose of this investigation was to replicate the results of Reid et al.

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(1999) by comparing preferences identified through person-centered planning with the results of more standard preference assessments involving individual responses when presented with items and activities. A second purpose was to assess the utility of a brief, embedded preference assessment for evaluating preferences identified through person-centered planning. The latter purpose involved attempting to demonstrate a means of evaluating preferences identified in person-centered plans when the reportedly preferred items and activities are embedded within an individual's daily routine during the implementation phase of person-centered planning.

## METHOD

### *Participants, Setting, and Procedure*

Three adults with multiple physical disabilities and profound mental retardation participated. The 2 men and 1 woman (ages 53, 45, and 35 years) were nonambulatory, did not communicate with understandable words, and required assistance to complete

all self-care. The procedures involved developing person-centered plans, conducting systematic preference assessments for a sample of preferences identified in the plans, and assessing a sample of preferences in a brief, embedded process during the participants' daily routine. All procedures were conducted in the participants' residential facility and adult education classrooms.

*Person-centered planning meetings.* A teacher and team leader experienced in person-centered planning facilitated the planning meetings, which involved people very familiar with the participants and family members. The meetings were conducted as described by Reid *et al.* (1999) and focused on developing a leisure preferences map for the designated participant using a three-step process: (a) each meeting representative was asked what he or she thought were the most desired leisure activities and items of the participant, (b) a group graphics process (Everson & Reid, 1999) was used for recording information, and (c) the facilitator asked 11 specific questions about perceived preferences. Reported preferences were written into each individual's person-centered plan. Each meeting lasted approximately 60 min.

*Systematic preference assessments.* Preference assessments were conducted as in Reid *et al.* (1999). Items and activities sampled for systematic assessment were those that most easily lent themselves to a single-item approach and avoidance assessment. Some preferences identified in the plans were not applicable to such a format, such as "sleeping in the nude," or were not sufficiently described to assess. A total of 18 items and activities reported as preferred in the plans were systematically assessed (representing 45% of reported preferences). For Pam and Joe, two and one additional items, respectively, that were reported to be disliked were also sampled for systematic assessment. *Approach* was defined as making an apparent voluntary body movement toward the stimulus, maintaining contact

with the stimulus for at least 3 s, exhibiting a positive facial expression, *or* making a positive vocalization within 5 s of the stimulus presentation (see Green *et al.*, 1988, for elaboration and examples). At least four assessment sessions with five trials per session were conducted for each stimulus. Interobserver agreement checks occurred during 44% of all trials with no disagreements on approach. Each assessed stimulus was categorized as highly preferred (approached on at least 80% of all assessment trials), moderately preferred (at least 50% and less than 80%), or nonpreferred (less than 50%).

*Embedded preference assessments.* For Joe and Pam, two highly preferred items and activities based on the standard preference assessment and one nonpreferred item were assessed with the embedded process; for Pete, one highly preferred, one moderately preferred, and two nonpreferred items were assessed. Stimuli sampled for the embedded assessment were selected in an attempt to assess a variety of stimuli (e.g., items and activities; see Figure 1). Embedded assessments occurred during the participants' daily routine at times when items and activities were expected to be available as part of the implementation phase of person-centered plans. Items and activities were presented by support staff who regularly worked with the participants at those times.

The embedded assessment entailed presenting first one trial in the same manner as with the systematic assessment. If the participant approached the item or activity, it was briefly provided; otherwise it was withdrawn. A second trial was then presented in the same manner, and if the participant approached the item or activity, it was presented to the participant in the manner it normally would be (e.g., a leisure item was given to the participant for the duration of the leisure period). If no approach was shown on the second trial, the item was removed or the activity was discontinued and the next routine daily ac-

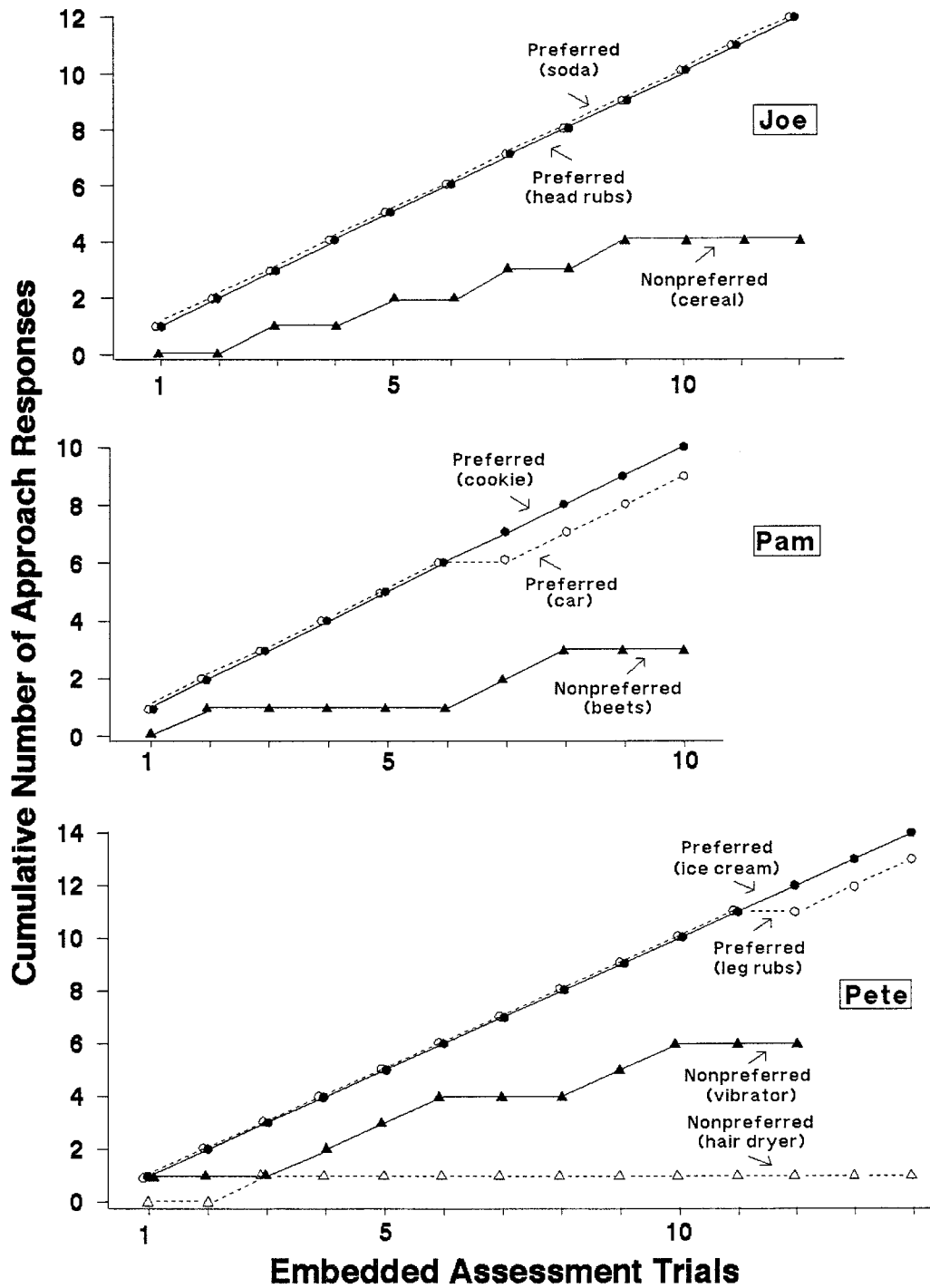


Figure 1. Cumulative number of approach responses across embedded assessment trials for each participant for each item and activity presented. Preferred items and activities refer to stimuli identified as preferred on the previously administered standard preference assessment, whereas nonpreferred items and activities refer to stimuli identified as nonpreferred on the standard assessment.

tivity was conducted. The two-trial process occurred once or twice per day. Responses to all trials across all presentations were recorded, which represented the dependent measures of concern. Reliability checks occurred during 79% of all embedded trials, with no disagreements on approach.

## RESULTS AND DISCUSSION

Across all participants, 67% of the sampled items and activities identified as preferred in the person-centered plans were highly preferred based on the standard systematic preference assessments, 11% were moderately preferred, and 22% were nonpreferred. For items identified as disliked in the plans, one was assessed as preferred and two as nonpreferred. Approach responses during the embedded preference assessment coincided with results of the more traditional standard assessment (see Figure 1). Joe approached both the item and activity previously assessed to be highly preferred on the standard assessment on 100% of the embedded trials, and approached the previously assessed nonpreferred item on only 33% of the trials (i.e., on 4 of 12 total trials as shown in Figure 1). Pam approached the two previously assessed highly preferred items on 100% and 90% of the embedded trials and the nonpreferred item on 30% of the trials. Pete approached the previously assessed highly preferred item on 100% of the embedded trials, the moderately preferred item on 93% of the trials, and the two nonpreferred items on 50% and 7% of the trials.

Results of the standard systematic assessment of preferences reported in person-centered plans appeared to coincide with the results of Reid *et al.* (1999). Seventy-eight percent of sampled items and activities reported as preferred in person-centered plans in this investigation and 75% in the previous investigation were moderately or highly preferred based on approach responses when

participants were actually presented with the items and activities during standard systematic preference assessments. In both investigations, though, some reported preferences in the plans did not represent preferred items or activities in that they were accompanied by low frequencies of approach responses. Specifically, 50% of sampled reported preferences for 1 of 3 participants in this study, and 25% and 40% of the sampled preferences for 2 participants in Reid *et al.*, were found to be nonpreferred. The latter results support the importance of empirically evaluating reported preferences in person-centered plans.

Results also suggested that the brief, embedded preference assessment might be a potentially useful means of evaluating preferences reported in person-centered plans. The embedded and standard preference assessments produced similar results for the sampled subset of three to four items and activities selected for comparison with each participant. However, additional research is needed involving more participants and larger pools of items and activities before more definitive conclusions can be made regarding the accuracy of the embedded preference assessment.

## REFERENCES

- Everson, J. M., & Reid, D. H. (1999). *Person-centered planning and outcome management: Maximizing quality lifestyles among people with disabilities*. Morganton, NC: Habilitative Management Consultants.
- Green, C. W., Reid, D. H., White, L. K., Halford, R. C., Brittain, D. P., & Gardner, S. M. (1988). Identifying reinforcers for persons with profound handicaps: Staff opinion versus systematic assessment of preferences. *Journal of Applied Behavior Analysis, 21*, 31–43.
- Reid, D. H., Everson, J. M., & Green, C. W. (1999). A systematic evaluation of preferences identified through person-centered planning for people with profound multiple disabilities. *Journal of Applied Behavior Analysis, 32*, 467–477.

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