

*DURATION-BASED MEASURES OF
PREFERENCE FOR VOCATIONAL TASKS*

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We compared results from two preference assessments with data on extended performance of vocational tasks by 4 participants with developmental disabilities. All participants engaged in one task exclusively when seven tasks were available concurrently during a 5-min multiple-stimulus assessment. By contrast, all participants exhibited high levels of engagement in most tasks when the tasks were presented singly for 5 min, and these data showed a high degree of correspondence with those obtained during extended (60-min) vocational assessments.

DESCRIPTORS: preference assessment, vocational task preference

One natural by-product of the growth in vocational training opportunities for persons with developmental disabilities has been increased emphasis on the identification of task preferences (Parsons, Reid, Reynolds, & Bumgarner, 1990). Mithaug and Hanawalt (1978) described one of the first systematic methods for assessing work preferences. They presented task materials in pairs and asked participants to indicate their preference by selecting one set of materials. Although results showed that the procedure yielded a hierarchy of task preference for each participant, it is unclear whether task selection would predict the extent to which an individual participates in a task for an extended length of time, as might be expected under typical work conditions.

Several authors have reported the use of *duration of engagement* as the index of preference for leisure activities; this measure also

seems to be well suited to the assessment of vocational preferences and was used in the present study. We assessed task preferences using two procedures: One involved presenting all tasks concurrently (Roane, Vollmer, Ringdahl, & Marcus, 1998); the other involved presenting tasks one at a time (DeLeon, Iwata, Conners, & Wallace, 1999). A potential limitation of the former procedure is exclusive engagement in one task, which would provide no information about engagement in other tasks when the most highly preferred task is unavailable. By contrast, a possible limitation of the latter procedure is that an individual may engage in any task when it is presented briefly as the only option but may not maintain engagement for a longer period. Thus, we wanted to determine whether results obtained from either of these brief assessments would be predictive of task engagement over a 60-min session.

METHOD

Participants and Setting

Four adults who had been diagnosed with mental retardation, Carly, Jake, Jasmine, and

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Mel, participated. All attended a sheltered workshop where they participated in various assembly tasks, and all participants could follow simple instructions. One to three sessions were conducted daily, 4 to 5 days per week, in an observation room, adjacent to the workshop, that contained a table, chairs, and materials required to complete various tasks.

Response Measurement and Reliability

Observers scored task engagement, defined as manipulating materials in a manner required to complete the task, on a 10-s partial-interval basis. Data were summarized as the percentage of intervals of task engagement. Two observers collected data simultaneously but independently during at least 15% of the sessions, and reliability (calculated on an interval-by-interval basis by dividing agreements by agreements plus disagreements and multiplying by 100%) always exceeded 85%.

Preference Assessments

Single-stimulus (SS) assessment. Seven assembly tasks commonly available at the workshop were presented singly for 5 min each (task definitions are available upon request). The therapist modeled the correct performance of each task and allowed the participant to manipulate each set of materials prior to the assessment to ensure familiarity with the tasks. During each 5-min trial, the participant was instructed to do whatever he or she wanted, and no consequences were provided for task engagement.

Multiple-stimulus (MS) assessment. The same seven tasks were presented in a concurrent arrangement during a 5-min assessment, during which all materials were available. Sets of task materials were placed on a table in an arc in front of the participant. The participant was instructed to do whatever he or she wanted, and no consequences were delivered for task engagement.

Extended Criterion Test

A series of 60-min test sessions was conducted to assess task performance under typical workshop conditions. During each session (only one was conducted on a given day), the therapist presented one of the seven tasks, asked the participant to “work please,” and then implemented a 15-min prompt-praise procedure as a “low-effort” intervention to maintain task engagement. At the end of each 15-min interval throughout the session, the therapist delivered praise if the participant was engaged in the task or delivered a verbal prompt to continue working if task engagement was not occurring.

RESULTS AND DISCUSSION

Figure 1 shows results obtained for all participants. When given the opportunity to engage in any of seven tasks during the 5-min MS assessment, all 4 participants engaged in one task exclusively. These results were similar to those reported when free-operant MS procedures were used to assess preference for potential reinforcers (Roane *et al.*, 1998). By contrast, all participants showed high levels of engagement in most tasks when the tasks were presented singly for 5 min (exceptions included pens for Carly, utensils for Jake, nuts and bolts for Jasmine, and laundry for Jasmine), and these results were similar to those obtained during the 60-min criterion tests. In 22 of the 28 task comparisons (4 participants \times 7 tasks), high levels of engagement during the 5-min SS assessment corresponded to high levels of engagement during the 60-min test. In two of the comparisons that were somewhat discrepant (nuts and bolts and sorting laundry for Jasmine), engagement was higher during the 60-min test than during the SS assessment, which may reflect the influence of the praise-prompt schedule. In the other four comparisons (pens and office supplies for Carly; utensils and hygiene kits for Jake), en-

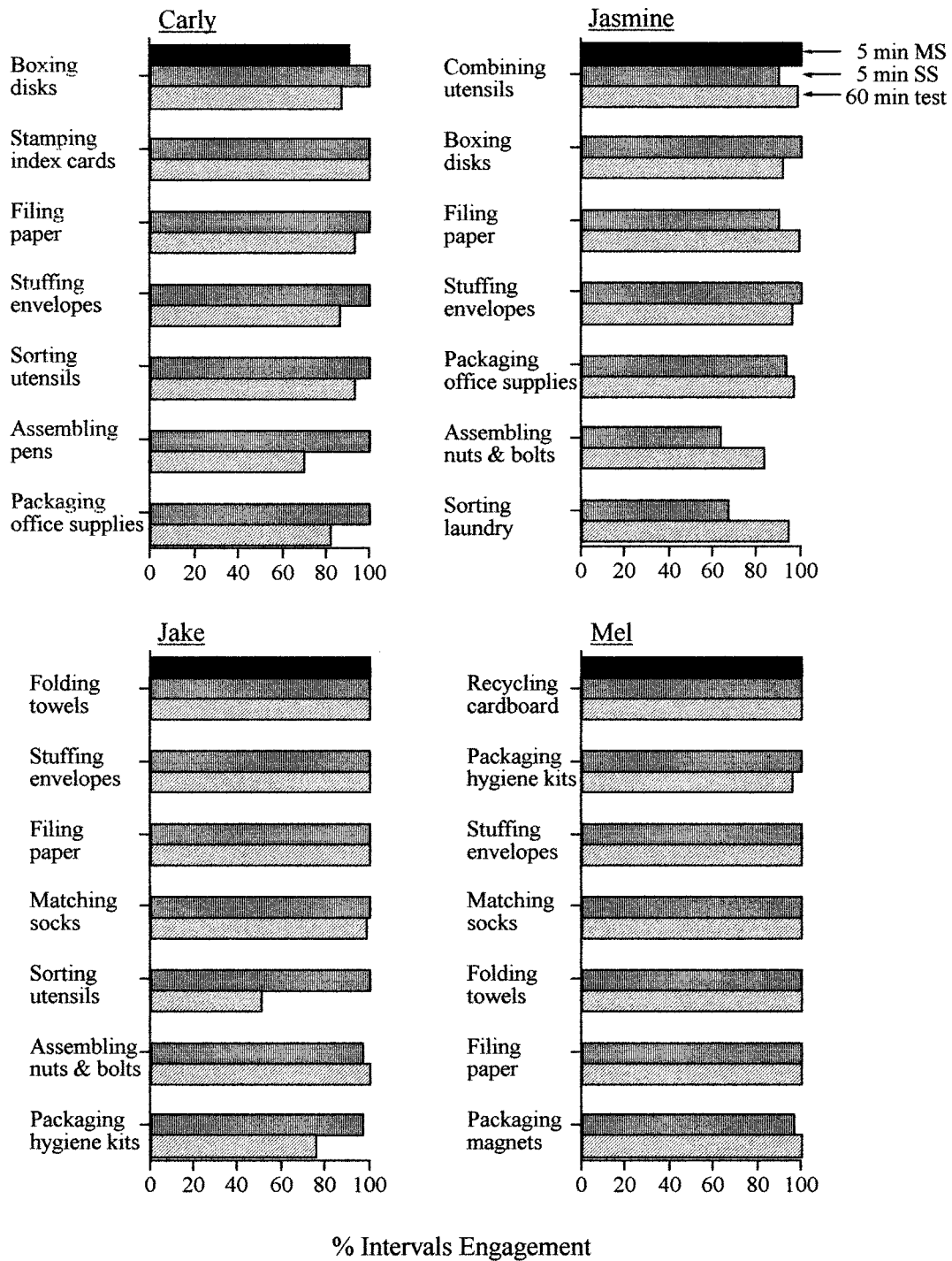


Figure 1. Percentage of intervals of task engagement during the brief multiple-stimulus (MS) and brief single-stimulus (SS) assessments, and during the 60-min criterion tests.

gagement decreased over the course of the 60-min test and was an outcome that was expected to some extent.

Exclusive engagement in one activity during the MS assessment no doubt reflected participants' preferences for a particular task, which would have been the task of choice given a variety of available options. In many vocational settings, however, task options change daily or even during the course of a day. Under such conditions, it would be helpful to determine whether an individual would be likely to engage in a number of tasks. Although the SS assessment required more time to complete (5 min \times 7 tasks = 35 min) than did the MS assessment (5 min total), results obtained from the SS assessment showed greater correspondence to participants' engagement in sustained activity under typical work conditions (60-min sessions).

An alternative to both assessment procedures used in this study would consist of a series of MS assessments that involve progressive removal of the most preferred activ-

ity. This procedure might yield a hierarchy of preference for all tasks by eliminating the opportunity to engage in one task exclusively, which may be helpful in maintaining high levels of engagement over time (by giving individuals the opportunity to switch among several highly preferred tasks).

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