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EFFECTS OF REACTIVITY TO OBSERVATIONS ON STAFF PERFORMANCE

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We examined reactivity of staff behavior to observations of their work performance. After training 2 job coaches to reduce completion of break activities for supported workers, we evaluated job-coach behavior using both conspicuous and inconspicuous observations. Results indicated that both coaches completed none of the activities when observations were conspicuous but most of the activities when observations were inconspicuous. Subsequently, job coaches were taught to self-record their performances, and their completion of activities remained low with inconspicuous observations. Implications of reactivity are discussed for investigations that target staff behavior.

DESCRIPTORS: reactivity, staff performance, self-recording

Reactivity, which refers to the influence that an observation procedure exerts on behavior (Kazdin, 1979), is a problematic and continuing concern in research on staff performance (Ivancic & Helsel, 1998). A number of authors have acknowledged possible limitations in studies on staff behavior due to the potential reactivity of observations (Fleming & Sulzer-Azaroff, 1992; Shore, Lerman, Smith, Iwata, & DeLeon, 1995).

Despite concerns over reactivity, as well as experimental evidence indicating that it can be an obstacle when evaluating staff behavior (Reid, Parsons, Green, & Schepis, 1991), little attention has been directed to reactivity as a dependent variable. Although some studies have attempted to include controls for reactivity (Fleming & Sulzer-Azaroff, 1992; Parsons, Rollyson, & Reid, 2004; Shore et al., 1995), the extent to which such procedures actually affect staff reactivity has not been examined experimentally in typical staff training and management research. The purpose of this study was to document and then decrease reactivity during observations of staff performance following completion of a staff-training program.

METHOD

Setting and Participants

The setting was a small publishing company that employed supported workers as part of its workforce. Each supported worker was assigned about 2 hr of work per day on varying days. Duties involved mailing tasks such as putting labels on fliers and placing books in envelopes. The participants were 2 job coaches: Tina, who was 33 years of age and had a high school education, and Rana, who was

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51 years of age and had an undergraduate degree. The job coaches worked individually with 3 supported workers (all adults) who had severe multiple disabilities (Tina assisted Wade and Rana assisted Rose and Ellen on different days and during different work periods on a given day). The supported workers were nonambulatory, had limited upper body movements, and communicated with idiosyncratic gestures and vocalizations.

Behavior Definitions and Observation System

The target behaviors involved tasks associated with the supported workers' daily breaks, during which they had a light snack or an opportunity to engage in a leisure activity (Wade only). Break activities that the workers were capable of performing consisted of four steps: (a) moving work materials on the work table to make room for the snack (or leisure item), (b) expressing a choice of snack or leisure item, (c) removing snack or leisure items from the work table after finishing the break, and (d) rearranging work materials on the table. The primary target behavior was completion of the four work-break steps by the job coach rather than by the supported worker (either independently or with job-coach prompting). *Job-coach completion* was defined as the job coach performing all actions involved in completing a step. Completion of Step 2 (choice of snack or leisure activity) by a job coach was recorded if the coach gave something to the worker without a worker making any indication of what was desired.

Observations were initiated by a job coordinator at the scheduled time for a work break. The job coordinator (observer) recorded whether or not each work-break step was completed by the job coach. Interobserver agreement was assessed during 21% of all observations, including each experimental condition, with no disagreements on the occurrence of break steps completed by job coaches.

Experimental Conditions

Baseline (conspicuous observations). This condition represented a maintenance phase following a staff-training program during which observations of job-coach performance were conducted. Using an outcome management approach (Parsons et al., 2004), we trained each coach to conduct work breaks by prompting the worker to complete the steps and refraining from completing steps for the worker. The observations conducted by the coordinator were conspicuous in that she made recordings on a sheet after each step in the break routine in close visual and physical proximity to the job coach who was being observed. Following data collection, the coordinator provided feedback to the coach regarding break steps completed by the coach or by the worker. This condition was also implemented a second time.

Inconspicuous observations. During this condition, observations were conducted in an inconspicuous manner. The coordinator's work routine allowed her to conduct observations in a way that was indistinguishable from her performance of other duties in the general work area. For example, the coordinator filled out forms and performed other paperwork and related duties during the work and break periods in the vicinity of the job coaches. Because the break routine consisted of only four steps, the coordinator was able to observe how each step was completed during a break while she performed other duties. She then recorded her observations out of view of the job coach after the end of the break. Interobserver agreement was assessed by the coordinator's supervisor who was present intermittently in the work area. The supervisor used the same inconspicuous observation process as the coordinator.

Self-recording and inconspicuous observations. During this condition, inconspicuous observations were conducted, and job coaches self-recorded (Carr, Taylor, & Austin, 1995) break-step completions. Self-recording was

implemented based on the hypothesis that, because the coaches' performance appeared to be reactive to conspicuous observations (see below), the reactive effects sometimes noted on the behavior that is self-recorded (Carr et al.) may function as a viable maintenance intervention in the absence of conspicuous observation.

At the beginning of this condition, the job coach was informed that records needed to be kept of the supported workers' involvement in the break activities (as had been explained during the previous staff training). The coach was shown how to record on a form whether the supported worker or the coach completed each step. The recording form was then left with the coach, with the instruction to record how each step of the break routine was completed. On subsequent days, the form was given to the coach at the beginning of each break and was collected by the coordinator after each break. No feedback was provided to the coach. This condition remained in place throughout follow-up observations.

Experimental Design

The experimental design was a combined multiple probe across coach–worker pairs and reversal.

RESULTS AND DISCUSSION

As indicated in Figure 1, neither job coach completed any work-break steps for her supported worker during baseline (conspicuous observations following the staff-training program). During the subsequent inconspicuous observations, however, both coaches completed most work-break steps for the workers. When conspicuous observations were reimplemented with Rana (working with Rose) and Tina (working with Wade), both coaches again completed none of the work-break steps. When the self-recording procedure was implemented in conjunction with inconspicuous observations, coach completion of work-break steps was similar to the previous conspicuous observations condition. Wade became ill and stopped coming to work during this condition, resulting in only two opportunities to observe his work breaks. Results obtained during the self-recording and inconspicuous observations were maintained during extended follow-up observations for Rana working with Rose (25 weeks) and Ellen (21 weeks). These results suggested that performance was likely reactive to conspicuous observations of their behavior and that self-recording may have influenced behavior in a similar way even when observations were inconspicuous.

In considering these results, several limitations should be noted. First, because feedback was delivered to coaches following conspicuous observations but not following inconspicuous observations, the absence of feedback may have contributed to performance decrements during inconspicuous observations. However, immediate change in the performance of both job coaches during the first session of the second conspicuous observation condition (i.e., prior to receiving any feedback) argues against the effects of feedback alone. An alternative explanation is that conspicuous observations exerted stimulus control over performance due to its previous pairing with feedback. The influence of stimulus control might be examined further by comparing conspicuous and inconspicuous observations in the absence of all consequences.

Another source of stimulus control, separate from the effects of self-recording per se, may have resulted from procedures used during the self-recording condition. For example, provision of the self-recording form at the beginning of work breaks and its subsequent retrieval by the coordinator, who previously had delivered feedback, may have influenced the self-recording process. It is unclear whether results obtained during self-recording would have occurred without this history.

Considerations just noted as well as the results in general suggest that more detailed

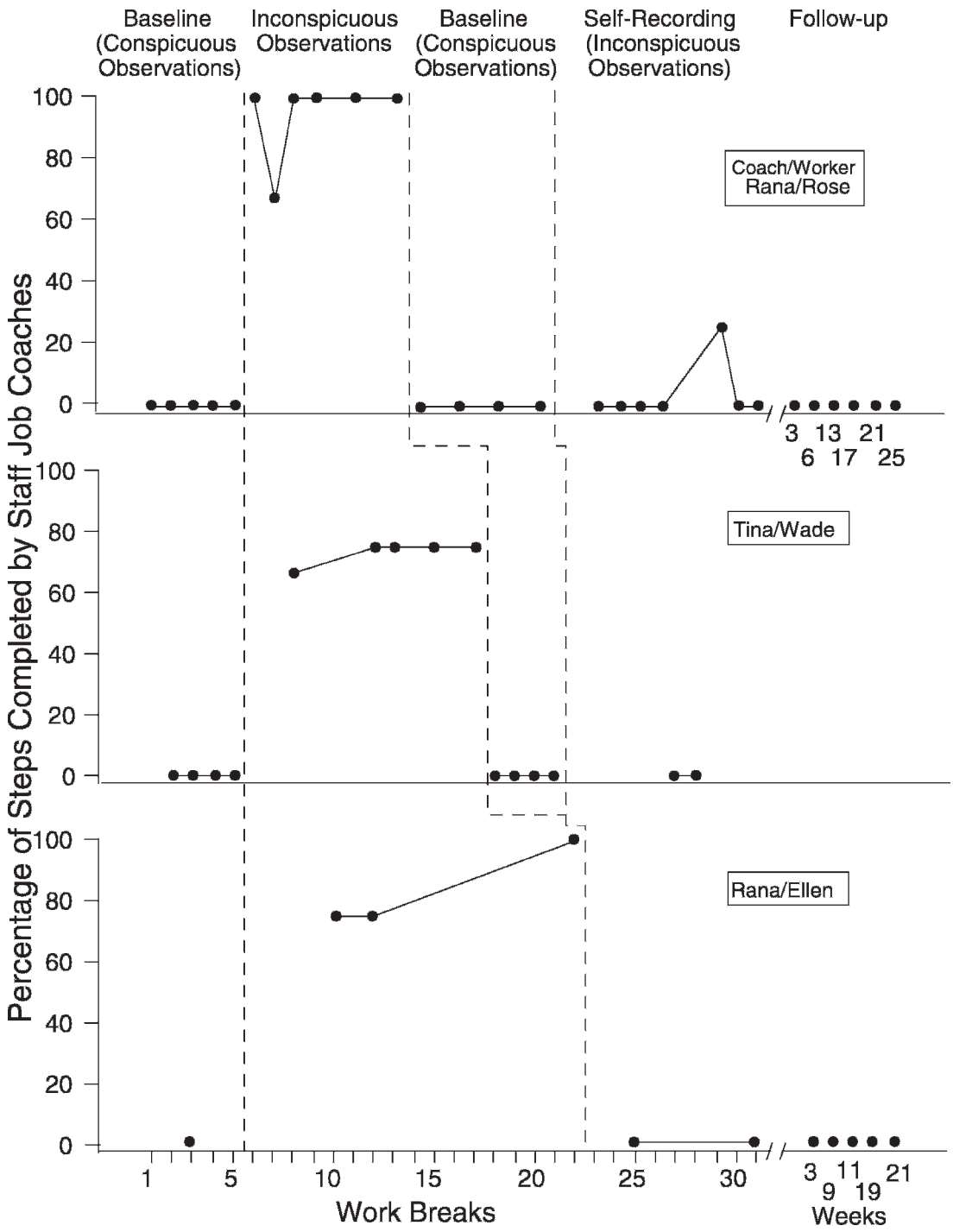

Figure 1. Percentage of work-break steps completed by job coaches for supported workers during each work break for each experimental condition. Work breaks are presented in consecutive order across workdays (data points for Rana and Rose and Rana and Ellen on the same work break represent breaks on the same day but at different times).

analysis of reactivity to observations of staff performance is warranted. We observed reactivity in the present study even though one of the standard controls for reactivity—frequent presence of the observer in the work area (Parsons et al., 2004)—was in place. The job coordinator who conducted observations spent time in the work-break areas every day. Hence, one determinant of reactivity, aside from the presence of the person who observes, may simply be the conspicuous act of observing. Continued research is needed to identify the conditions under which reactivity occurs, how it influences conclusions about controlling variables in studies on staff performance, and how it may be either minimized or used strategically as a maintenance procedure.

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