

*A LOW-TECH METHOD FOR CONDUCTING  
REAL-TIME RECORDING*

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In a recent issue of *JABA*, Kahng and Iwata (1998) reviewed the commercially available computerized systems for collecting real-time observational data. In discussing the value of computerized scoring, they suggested that these systems can improve reliability and accuracy of behavioral recording relative to more cumbersome paper-and-pencil methods. Their review of the computerized systems showed that, because the systems collect real-time data, they all had the flexibility to record a number of different dimensions of the target behavior, including frequency (rate), duration, interresponse time, and latency, and could accommodate interval and time-sample recording. Although computerized data collection is becoming more widespread in behavior-analytic research, with more companies developing computerized scoring systems, there is another method available that researchers or clinicians can use to conduct real-time recording. We have been using a low-tech method that does not rely on computer systems but produces most of the same real-time outcomes as the computerized systems described by Kahng and Iwata.

We use a real-time scoring system in our research on habit disorders in children and problem behaviors in individuals with mental retardation to record a variety of target behaviors. The system involves videotaping the subject in the observation session, typically in the home, school, or work setting,

and later scoring the tape for the occurrence of the target behaviors. To score the tape, the observer sets the timer on the VCR to zero at the start of the observation session and records the exact time (in seconds) of the onset and offset of the target behavior on a data sheet by noting the corresponding time on the VCR timer. Recording the exact time of the occurrences of the behavior is facilitated by having a data sheet that lists the 600 consecutive seconds in a 10-min observation period. When the onset of the behavior occurs, the observer marks the corresponding second on the data sheet, and when the offset of the behavior occurs, the observer again marks the corresponding second on the data sheet. Because the observation session is on videotape and the VCR timer is set at zero at the start of the session, the observer can pause the tape or rewind the tape and observe the same segment again at any time when scoring a session. Some videocameras display the running time of the tape on the tape itself so that the timer on the VCR does not have to be reset each time the tape is viewed.

With a recording of the exact time of the onset and offset of the target behavior in the observation session, we are able to report the frequency (or rate) or the duration of the behavior. We often report percentage duration, calculated by dividing the duration of the target behavior by the duration of the observation session (e.g., Rapp, Miltenberger, Long, Elliott, & Lumley, 1998). We are also able to report the temporal relationships among target behaviors (to document covariation) or between a target behavior and a change agent's behavior (to document

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treatment integrity). With the data sheet configured to show 10- or 6-s blocks, we can easily report the data in terms of interval recording or time-sample recording (e.g., Rapp & Miltenberger, 1998).

Although this method takes more time than computerized methods because the observation session is first recorded and then scored, it produces a visual display of the exact time of occurrence of the target behaviors on the data sheet for evaluation by the researchers and for use in calculating interobserver agreement. Using this method, the primary observer and reliability observer can conveniently score the tape at different times. One final benefit of this real-time VCR scoring method is that observer train-

ing is easier because all sessions are on videotape.

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