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Biodata: A Tried and True Means of Predicting Success

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The use of biodata, information about one's life experiences, as a means of predicting future performance in corporate settings has been prevalent for over a hundred years. Using knowledge of someone's past behavior to predict their likely future behavior certainly predates that by a large margin. Indeed, the adage that "behavior predicts behavior" is one of the oldest and most strongly supported principles in the behavioral sciences. For better or worse, we are all likely to repeat our past behaviors. This is why insurance companies charge higher premiums to drivers with a history of accidents and traffic violations—they are more likely to have an accident in the future than someone with a spotless driving record.

The use of biodata in organizational settings got its start in the early 1900s in the insurance industry. It later saw widespread use during World War II as a means of predicting training success (purportedly the item "Have you ever built and flown a model airplane?" was one of the best predictors of success among pilot trainees). The use of biodata in corporate settings has expanded greatly since then as behavioral scientists have learned more about its uses, benefits and limitations.

The use of information about one's past to predict likely future behavior is implicit in many basic screening methods. In reviewing resumes, for instance, the decision maker is usually looking for a history of accomplishment in areas similar to those demanded by the open position. Most interviewers will at least ask some questions about one's past, be it work history, educational history, or general life history. Biodata differs from these approaches in that the questions are typically validated and data from these questions is systematically captured and scored.

To develop a valid biodata-based assessment, a concurrent validation study involving a large sample of incumbents is usually conducted. An experimental questionnaire of biodata items is administered to incumbents. At the same time, a measure of the criterion of interest (e.g., performance, retention, safety, counterproductive behavior, etc.) is gathered on these same individuals. Analyses are conducted to determine which responses are related to the criterion (there are a number of methods for "keying" biodata that we will not go into here). From this, a shorter measure is developed and it is cross-validated into a new sample. Cross-validation is important to ensure that the relationship between the shorter biodata measure and the criterion is not simply due to chance.

The use of biodata has continued to expand because it offers a number of advantages over other selection methods. Because they can be machine administered and scored, biodata questionnaires offer a great convenience to the organization, particularly in mass hiring situations. The validity, or predictive accuracy, of a well-developed biodata questionnaire is on par with the best predictors known to exist (e.g. cognitive ability). Furthermore, this validity can often be achieved with a small number of items, reducing test-taking time substantially. At the same time, biodata typically has much less potential for adverse impact than do measures of cognitive ability. Similarly, in contrast to personality measures, it is often less simple to fake biodata (if for no other reason than that questions about life events are more verifiable than are self-report measures of personality).

Biodata, like all assessment methods, has some disadvantages. For example, it often lacks "face validity." In other words, the relationship between the items and performance may not be apparent, making some applicants uncomfortable with the process. In one study, for example, the single best item predicting success in jewelry sales was "How many times have you purchased real estate?" The development of a really good biodata-based assessment requires

a relatively large sample. This may not be available in some organizations. Finally, biodata has been criticized as representing "dust bowl empiricism." This criticism is focused on the fact that significant relationships between items and the criterion are often identified statistically, with no understanding of the psychological processes underlying the relationship. In short, with biodata we often know that an item and performance are related without understanding why. Current best practices address this criticism by developing biodata-based measures around constructs identified from a job analysis as being job-related.

Despite these drawbacks, the advantages of biodata assure its place among pre-employment predictors. In fact, probably no other method offers the combined advantages of high validity, test brevity, low adverse impact potential, and faking resistance, all in a format that can be machine administered and scored. Because we are creatures of habit, we are prone to repeating our past behaviors. This is good news to organizations looking for a quick and accurate means of assessing applicants. ■

About the Author

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Jeff Weekley, Ph.D., serves as a Kenexa executive consultant. Before joining Kenexa, Dr. Weekley held senior human resource management positions with Zale Corporation, Southland Corporation and Greyhound Lines. Weekley has designed, validated and implemented numerous large-scale employee selection systems for retail store managers and associates, customer service employees, health care providers, hospitality guest-contact employees, drivers and mechanics. He has also created many organizational development programs including succession planning processes, performance management systems, leadership training and internal customer satisfaction surveys.

Dr. Weekley has authored numerous articles for the *Journal of Applied Psychology, Personnel Psychology, Academy of Management Journal, Human Performance and Journal of Management.* He is a member of the American Psychological Association, the Society for Industrial and Organizational Psychology and the Academy of Management. Weekley holds a Doctorate degree in organizational behavior from the University of Texas at Dallas, a Master of Science degree in industrial and organizational psychology and Bachelor of Science degree in psychology from Texas A&M University.

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