Biodata Measures

A Summary of Workforce Research Evidence Relevant to the Child Welfare Field

What are biodata measures?

Biodata measures are hiring tools that assess a variety of biographical or background data about job candidates. When they were first developed, biodata measures included objective and verifiable questions about a person's background and history (e.g., education level, number of siblings, job history), but over time they have come to include more subjective questions similar to those found on personality tests (e.g., attitudes, interests, recreational activities, education, and work experiences and preferences) (Schmitt & Golubovich, 2013). They are typically administered using a paper-and-pencil or online-survey format (Breaugh, 2009), and the response options can be yes-no, multiple choice, multiple response (i.e., more than one answer selected), or rating scales (e.g., how often, how much, how likely) (Owens, 1976). Example items include "When reading for pleasure, what type of literature do you read?" (Schmitt & Golubovich, 2013), "In the past year, how many hours of volunteer work did you perform?" (Schmitt & Golubovich, 2013), or "How often has making lists been a part of your regular routine?" (Mumford, Costanza, Connelly, & Johnson, 1996).

How are biodata measures developed and scored?

The first step for developing a biodata measure is to generate a pool of items that assess past behaviors or underlying constructs believed to be associated with job success for a given role. For example, if the job requires learning a lot of information and demonstrating critical thinking, questions about school performance may be relevant. If the goal is to predict tenure or turnover, questions about previous work history or perseverance may be relevant. The item pool is typically vetted by a group of experts familiar with the job within the organization. Using one of a variety of validation methods to establish the appropriateness and value of each item, weights are then assigned to certain responses to develop a scoring key (Schmitt & Golubovich, 2013; van Rijn, 1992). The development and validation process is fairly laborious and rigorous (e.g., Mumford et al., 1996) and generally requires data from a large number of either employees or applicants (Hunter & Hunter, 1984).

Why are biodata measures valuable?

Biodata measures are valuable because they are relatively strong predictors of job performance across a wide range of jobs and industries (Bliesener, 1996; Hunter & Hunter, 1984; Rothstein Schmidt, Owens, & Sparks, 1990). They are also relatively strong predictors of promotion status,

training success, and job tenure (Hunter & Hunter, 1984). Biodata measures are most effective when tailor-made for the organization and outcome measure at hand (Bliesener, 1996). Relative to other hiring assessments, job applicants tend to perceive biodata measures as moderately favorable (Anderson, Salgado, & Hülsheger, 2010; Hausknecht, Day, & Thomas, 2004). Though no meta-analyses have compared applicant reactions to different types of biodata questions, researchers advise that applicant reactions will likely be more positive when overly personal questions are avoided and when questions are verifiable and closely aligned with job-relevant knowledge and skills (Schmitt & Golubovich, 2013; van Rijn, 1992).

What are the critiques of biodata measures?

It should be noted that biodata measures have been subject to criticism over the decades. One objection is that they encompass a wide range of underlying psychological constructs, thus making it difficult to compare one biodata scale to another and to understand why a given biodata measure is predictive of an outcome (Bliesener, 1996; van Rijn, 1992). In addition, the most common method of developing biodata measures capitalizes on chance, which can result in users making decisions based on irrelevant factors (Bliesener, 1996; Hunter & Hunter, 1984). There is also evidence to suggest that some biodata items may be prone to applicant faking, particularly when the desirable answer is apparent (see Schmitt & Golubovich, 2013 for a review). Perhaps most importantly, there are legal implications to consider, as some biodata questions may constitute an invasion of privacy or be indicators of membership in a protected class (Hunter & Hunter, 1984; Schmitt & Golubovich, 2013). Despite the criticism, there are advocates who argue that the deficiencies can be avoided or minimized, particularly relative to other hiring tools, resulting in measures that are among the best predictors of job performance (Mumford, Barrett, & Hester, 2012).

QIC-WD Takeaways

► Biodata measures can be useful hiring tools that lead to higher job or training performance among new hires.

► There are no meta-analyses assessing the relationship between biodata and turnover. Because biodata has been predictive of performance, it is possible that the use of biodata measures in a hiring process may reduce involuntary turnover caused by poor performance, but research is needed to test that question. There is also reason to believe that they can be predictive of voluntary turnover.

► The development and validation process for biodata measures is extensive.

► Because biodata measures can assess many different constructs, it is unclear which specific biodata questions are the best predictors of job performance and why.

► Biodata measures tend to be relatively well received by job applicants.

► More research is needed to determine the value of biodata specifically for child welfare professionals.

► As with all strategies used to make hiring decisions, biodata measures are considered tests and are therefore subject to certain professional and legal guidelines. Due to the technical requirements involved in developing and validating biodata measures, it is recommended that agencies consult with an expert for assistance.

References

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