



HAS Monograph Series A Model for Combining Personality Assessment and Structured Interviewing To Select and Retain Employees

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Introduction

The robust economy and competition for employee talent has made it difficult for employers to fill open positions, and caused the hiring process to suffer. Organizations are increasingly willing to compromise good hiring practices to bring people on board as expeditiously as possible. It is not uncommon to use a single employment interview to make a hiring decision even for professional positions. The consequences of a “bad hire” are often ignored in favor of simply filling a position.

Even when organizations are concerned about the quality and fit of a new hire, the need for efficiency in the hiring process often precludes using procedures other than a selection interview. However, a reasonable and efficient enhancement to the selection interview that improves accuracy would likely be well received.

This discussion outlines a method for combining the selection interview with a “fivefactor” personality assessment to improve selection decisions overall. The efficiency of a personality assessment fits well within the business requirements of our high velocity economy. It will never replace the hiring interview; however, integrating personality assessment with the hiring interview is typically well received. Campion, Palmer, and Campion (1997) suggest that structuring the interviewing process will produce a better result. Using “five-factor” personality data to structure the selection interview directly extends this perspective and provides a bridge between personality assessment and the traditional employment interview. Figure 1 provides a model for conceptualizing the integration of personality data with a structured interview.

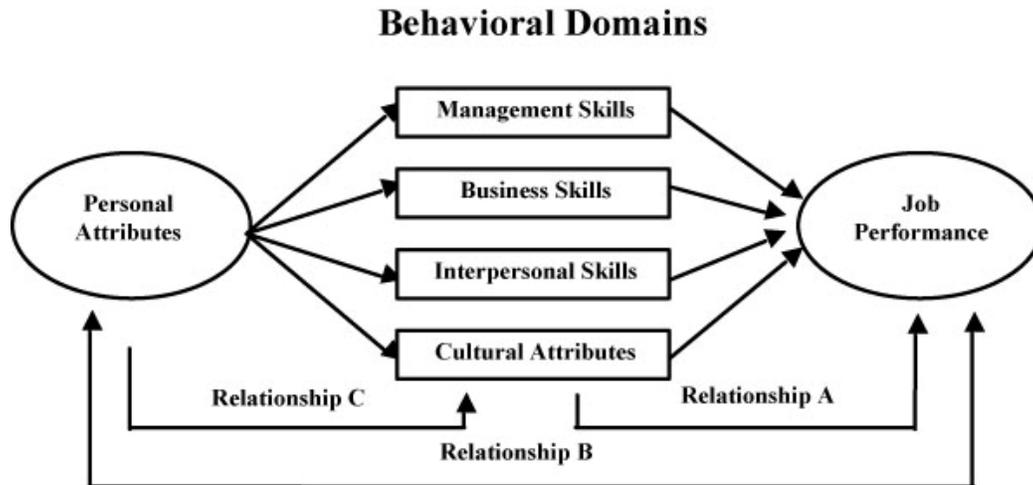
In this model, Personal Attributes refer to “five-factor” personality characteristics (e.g. adjustment, ambition, self-control, etc.) but can include such characteristics as cognitive abilities and motivational themes. Behavioral Domains refer to competency groups that generally cluster together. For example, leadership skills would include competencies such as team development, coaching, and delegation. This domain structure was originally formulated by Warrenfeltz, Morrison, Bernthal, and Smith (1995) based on work of Borman and Brush (1993). Job Performance refers to what people do on the job, and there will be substantial individual differences in the effectiveness of their performance.

The model illustrates three relationships that are important for understanding the integration of personality data with structured interviewing. Relationship A defines the typical links between Behavioral Domains and Job Performance. It is the

relationship that a structured interview evaluates. Relationship B defines the links between Personal Attributes and Job Performance and is evaluated using a personality assessment. Relationship C represents the links between Personal Attributes and Behavioral Domains. If Personal Attributes, as measured by a personality assessment, are logically associated with the Behavioral Domains, they could easily be incorporated into a structured interview. The interview could then serve to verify the results of a personality assessment and to determine the impact of personality data on Job Performance.



Figure 1 – Model for Integrating Personality Data With Structured Interviewing



Implementing this model for a particular job would require a job analysis to demonstrate the importance of Personal Attributes for Job Performance. Once this is done, the results of a personality assessment—e.g., the Hogan Personality Inventory—could be used to produce structured interview questions linked to the Behavioral Domains. This approach would lead to a two-by-two decision matrix in which the personality data indicate hire/don't hire and the interview would indicate hire/don't hire. We believe that, when the data from the personality assessment and the structured interview converge, the hit rate for the selection process will be maximized.

Two case studies support the utility of this selection model. The first discusses developing interview questions from Hogan Personality Inventory results and incorporating them into a structured interview. The second study reviews the results of implementing a hiring system built around the model illustrated in Figure 1. The results highlight the overall efficiency and accuracy of this approach in hiring talented employees.

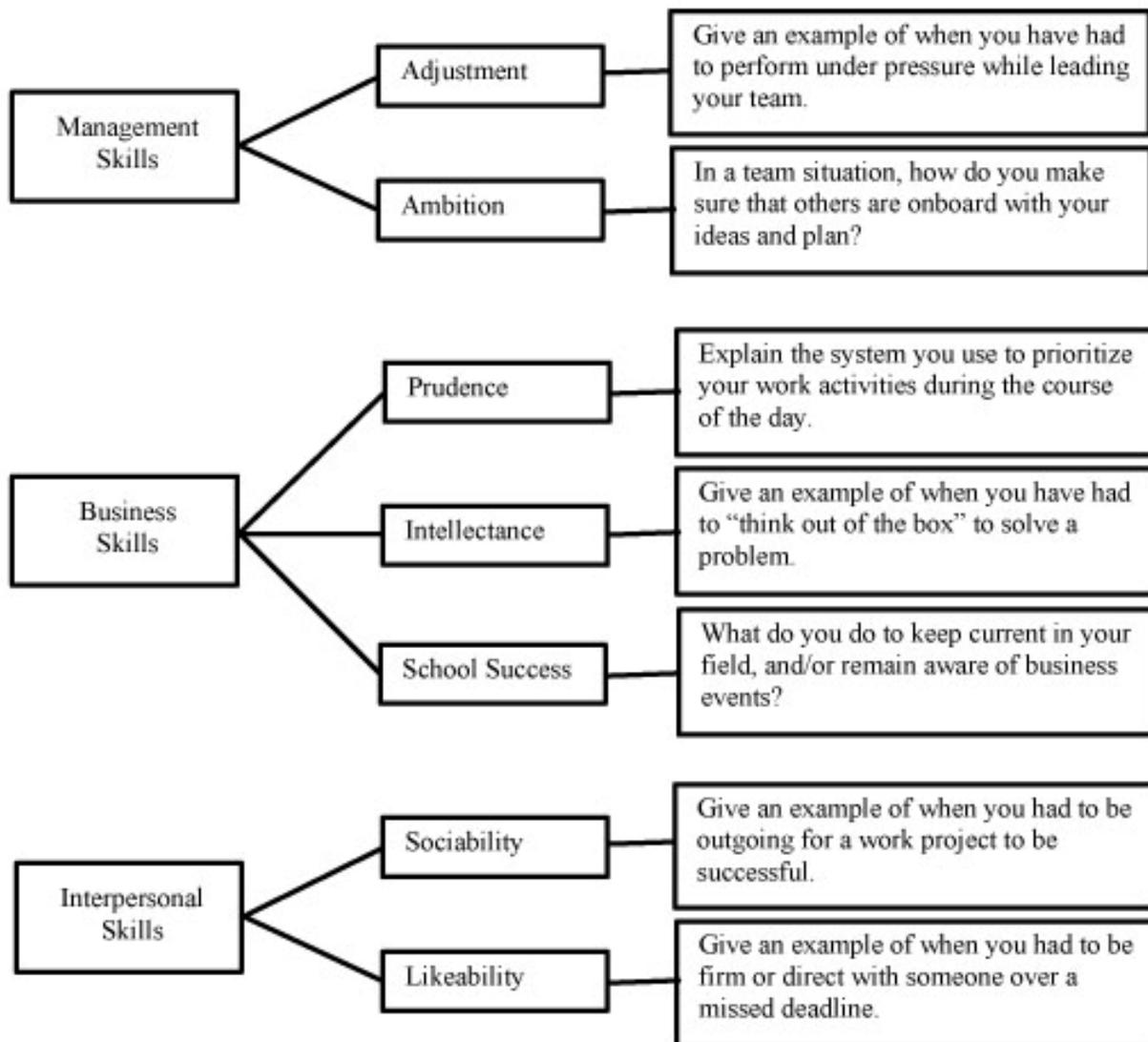
Case Study I – Transportation Industry

The structured interview was a standard component of the process used to select professionals at a major transportation company. In 1996, the organization began using a “five-factor” personality assessment as part of its process for selecting Train Engineers and Conductors. A primary driver for this decision was the fact that this personality assessment had little or no adverse impact and it improved selection decisions. For example, implementing the personality assessment lowered absenteeism and turnover, and improved overall job performance as rated by supervisors. Given the positive results at the Engineer and Conductor level, the organization considered using personality assessment at the professional level. The challenge was to determine a method to use this type of data to augment the decision-making process, rather than using simple cut off scores to screen applicants without involving the hiring manager.



The selection process was redesigned to incorporate two new components. First, a process was designed to generate interview questions from a personality assessment that could be incorporated into a structured interview. The interview questions were based on a model that included such behavioral competencies as leadership, business, and interpersonal skills. The scales associated with a “five-factor” personality inventory (Hogan Personality Inventory) were initially aligned with the competencies to determine how the interview questions might best be structured. Questions were then created to address the personality factors, while remaining aligned with the competencies. The following illustrates this alignment at the level of behavior domains with sample interview questions.

Behavioral Domains Personality Factors Sample Interview Questions





It is well documented in the professional literature that structured interviews improve employee selection. At one of the world's largest pharmaceutical companies, structured interviews are a standard component of a new manager's training, and it is considered important part of a manager's ability to build an effective team. Recent (anecdotal and quantitative) evidence suggested that structured interviews alone did not produce the results needed in a business environment characterized by intense competition for talent. An analysis of the situation identified four challenges facing the organization as it entered a period of rapid growth. These challenges included:

- *A large cadre of inexperienced managers who were the result of hiring and promotion practices used during the previous growth period.*
- *Considering the ability of new hires to move beyond the initial position for which they were hired.*
- *A tendency to compromise culture fit as talent became scarce in a robust economy.*
- *A rise in turnover that resulted from increased opportunities in a robust economy.*

Although no single intervention could successfully resolve all of these challenges, an improved selection system should have a significant positive impact on them. The approach selected combined a five-factor personality assessment (Hogan Personality Inventory) with an existing structured interview. This combination increased the candidate information available to hiring managers—including an indication of leadership potential and the culture fit of candidates—and increased retention through better organization-candidate fit.

The complexity of the delivery system was a key consideration in implementing this approach. Hiring managers were concerned that the system would significantly increase the length of the hiring cycle and reduce their decision-making autonomy. Furthermore, it was generally agreed that candidates, in a robust economy, would spend only a limited amount of time on the hiring process.

The final system involved administering the Hogan Personality Inventory after reviewing a candidate's basic qualifications. Data from the inventory were used to generate an assessment profile and interview questions for the hiring manager who could to further explore inventory results. The hiring manager made the final hiring decision. In essence, the hiring manager was given a two-by-two decision matrix (hire/don't hire based on inventory results and hire/don't hire based on their interview). The highest "hit rates" should occur when the results of the interview and the inventory converge. It was also expected that the interview and inventory results would sometimes not converge, and this would provide an opportunity to evaluate the impact of non-convergence.

Several features of this system enhance the overall hiring process. First, inventory administration was entirely online and the results were sent directly to the hiring manager immediately following completion of the inventory. This eliminated concerns regarding impact of time delays on the hiring cycle. Second, the system could be delivered using a computer equipped with wireless technology, eliminating any location dependent issues. Third, the structured interview questions derived from the inventory provided inexperienced hiring managers with important guidance during the interview process. Finally, the inventory results could be used to generate

"on boarding" information. The new hire received a career development report highlighting strengths and weaknesses with suggested areas for initial development. In addition, the hiring manager received a report outlining management practices that would be most effective with the new hire. It was anticipated that both of these reports would have a significant impact on retention by easing the challenges new hires encounter during the "on boarding" period.



A long-term evaluation of this system, using a group of approximately 200 sales representatives, is underway. It will examine validity and adverse impact, as well as the impact of the system on users. These results will form an overall evaluation of the effectiveness of the system in addressing the four business challenges facing the organization.

Preliminary data from the evaluation have been promising. Hiring managers' reactions have been very positive, particularly concerning the ease of using the system and the added information it provides for making hiring decisions. Correlations between the interview and job performance ratings have improved from an estimated .20 to .31. Correlations between the inventory and interview performance range from .18 to .40. Correlations between the inventory and job performance were as high as .40. The multiple R for the combined system is estimated to exceed .50. Data are still being collected and the results for the full sample of 200 sales representatives are expected at the end of 2001. These case studies indicate the selection decision power available by combining personality assessment with a structured interview. The remainder of this paper describes a full assessment system based on the model illustrated in Figure 1.

Behavioral Attribute and Skills Interviewing System (BASIS)

Hogan Assessment Systems created the Behavioral Attribute and Skills Interviewing System (BASIS) to fill a hole in the methodology organizations use to select new hires. The competing issues of accuracy, speed, and cost are largely responsible for this hole. In the past, accuracy was the major driver of selection decisions, but changing business conditions now require other factors to be considered when selecting employees. For example, many organizations find themselves in a situation where making a quick decision on a new hire could be the difference between hiring the person or losing the person to a competitor. Obviously, accuracy is still important, but a decision that is accurate but slow can be very costly. Organizations increasingly need methods that are accurate but also fast and cost effective. BASIS combines the efficiency and accuracy of personality assessment with the flexibility and cost effectiveness of structured interviewing.

The core of BASIS is the Hogan Personality Inventory (HPI). The HPI is the industry standard for assessing the "five-factor" model that is widely accepted in the business community. The inventory is based on more than 20 years of research and has demonstrated validity for more than 200 occupations. It contains 206 items and can be delivered via web-based technology in less than 20 minutes per candidate. The

inventory produces a series of scale scores that are used to determine the fit of a candidate to a particular job. Furthermore, when used within BASIS, the inventory drives an interview guide for hiring managers containing job-related questions regarding a candidate's strengths and weaknesses. The guide increases an interviewer's efficiency by targeting specific questions concerning a candidate's fit with a job. It also provides a direct link to inventory results that can be used to structure the decision making process. For example, candidates with the highest probability of success in a job would be the ones for whom the interview and the inventory results converge on those characteristics that are essential for successful performance.

Job fit as measured by the HPI is necessary, but sometimes not sufficient to predict long-term success in an organization. Culture fit can be equally important. For this reason, the Motive, Values, Preferences Inventory (MVPI) has also been incorporated into BASIS. The MVPI provides a direct measure of the degree to which a candidate will fit into the culture of an organization. The MVPI contains 200 items and is administered in conjunction with the HPI. The total administration time for the two inventories (HPI and MVPI) is less than 40 minutes. The MVPI, like the HPI, drives an interview protocol that addresses the degree of match between the candidate and culture of an organization.

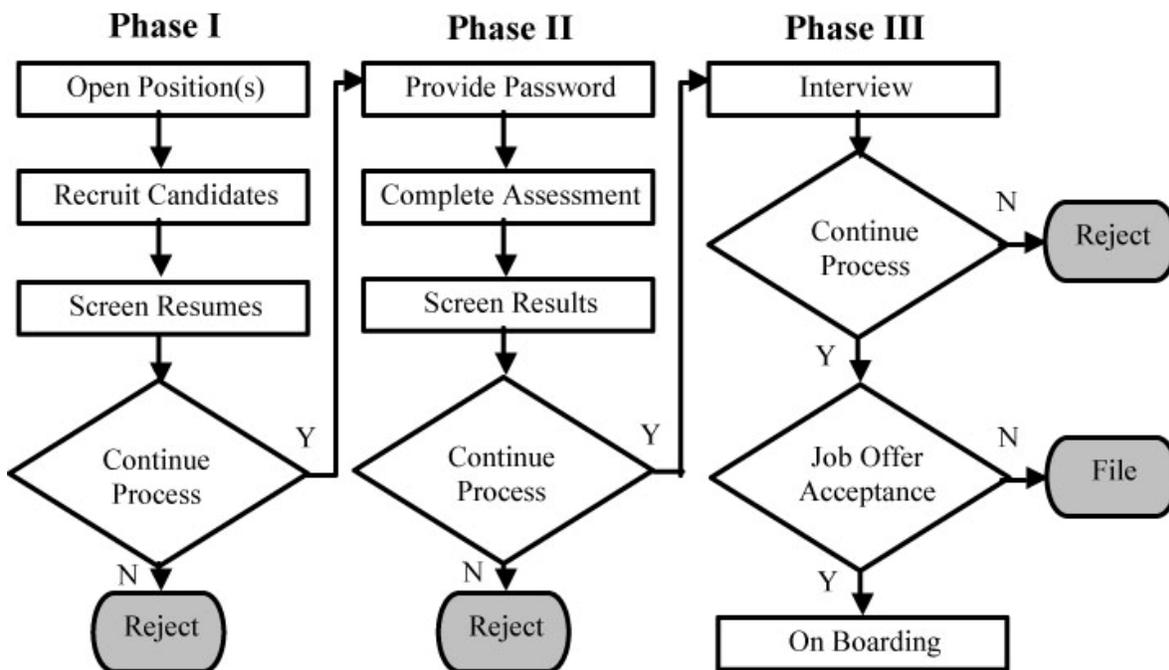
In summary, BASIS combines the HPI (a measure of job fit) and the MVPI (a measure of culture fit) with a structured interview to provide the hiring manager with an accurate, efficient, and cost effective



method for making hiring decisions. Because BASIS was designed to be delivered via the Internet and can take advantage of wireless technology, it can be easily implemented in virtually any location in the world. Figure 2 illustrates how BASIS could be implemented within an organization via the Internet.

Figure 2 outlines a three-phase process. Phase I represents the traditional recruitment steps. Candidates for a position are solicited and their resumes are screened to ensure they meet the minimum qualifications for a position. Qualified candidates move to Phase II where they begin BASIS. They are provided with a password and instructions for completing the HPI and MVPI via the Internet. Once they have done this, the results are immediately scored and e-mailed to the hiring manager. The time between completion of the inventories and the hiring manager receiving information is literally seconds. The hiring manager receives an assessment report and a structured interview guide. The assessment report describes the candidate's strengths and weaknesses with respect to job fit, a description of his/her organization fit, and a hiring recommendation. This report is customized and pertains only to the organization and position for which the candidate is being considered. The structured interview guide is also customized based on the candidate's HPI and MVPI scores. The guide contains questions targeting both the job and culture fit of the candidate.

Figure 2 – A process model for using BASIS



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At this point, the hiring manager can decide to reject the candidate or move into phase III. In phase III, the candidate is invited for an interview(s). The structured interview guide produced by BASIS can be used by itself or it can be combined with other interviewing protocols used by the organization. The final hiring decision involves combining the interview information with the results outlined in the assessment report.

If the decision is positive and a job offer is tendered and accepted by a candidate, then the process enters the final step of on boarding. BASIS provides two reports for new hires designed to aid the on



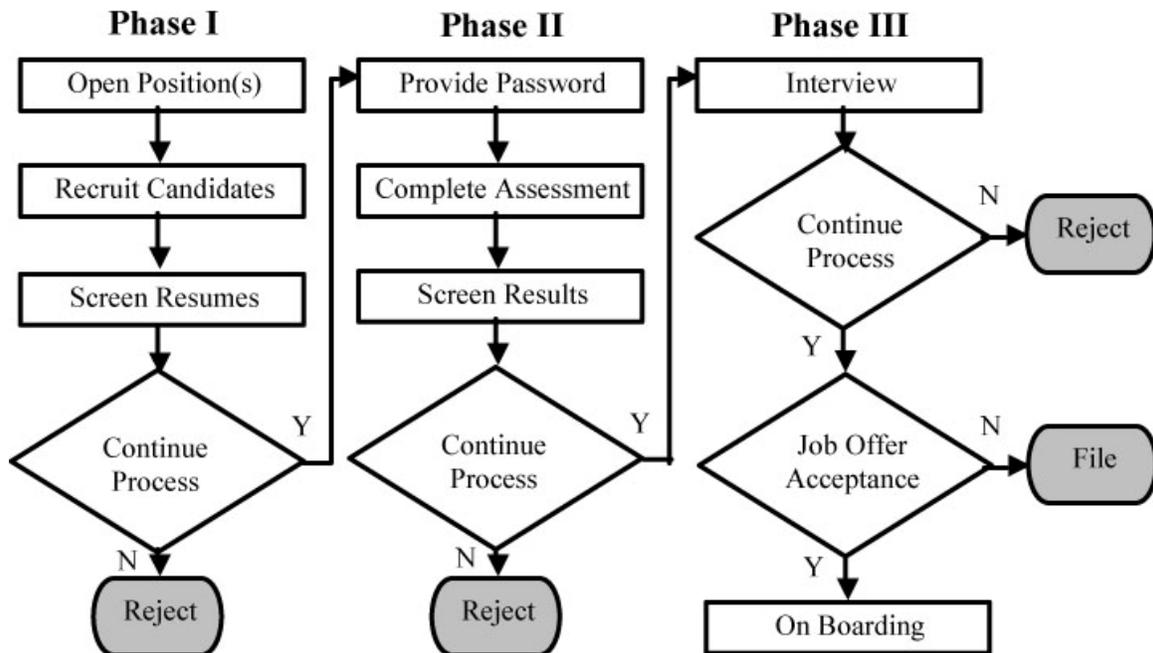
boarding process and enhance long-term retention. These include a Career Builder Report (designed to provide new hires with information on their strengths, weaknesses, and areas for career development) and a Management Builder Report (designed to provide the manager with information on how best to work with the new hire). The reports help a new hire get up to speed faster, avoid cultural “faux pas”, and work more effectively with a new manager. The effectiveness of the on boarding process is directly related to long-term retention and these reports facilitate successful on boarding.

Contribution Index

Competition among organizations for talented employees is more intense than at any other point in history. When they are hired they are asked to start producing almost immediately, they are asked to produce at a higher level, and it is becoming more difficult to retain the ones that are able to meet these demands. The BASIS model is designed to solve these problems. It combines well-validated inventories (HPI and MVPI) with structured interviewing in a system that offers significant advantages over interviewing alone as a method of selecting employees. More importantly, this system can directly impact an organization’s “contribution index”. The “contribution index” estimates the overall contribution an employee (or group of employees) makes to an organization. Figure 3 provides a graphic display of the contribution index for two newly hired employees.

The curve represented by the broken line represents an employee that begins producing at a proficient level in approximately six months. Production continues at or above this level for approximately 24-months and begins to drop off prior to the employee exiting the organization. The area under the curve that is above the proficient level essentially represents the employee’s contribution index score. The solid line represents an employee with a much higher contribution index score. That employee comes up to speed faster (3-months), produces at a higher level, and stays with the organization longer.

Figure 2 – A process model for using BASIS





BASIS helps organizations hire employees who will have a superior contribution index score. This is accomplished by:

- Identifying employees with outstanding performance potential.
- Shortening the time needed for an employee to become a proficient performer.
- Lengthening employee tenure by ensuring a good job and culture fit.

The systematic use of BASIS in the hiring process will enable an organization to raise its overall average contribution index score. The result will be a higher return on the investment made in human capital.

In summary, this paper outlines a model for combining personality assessment and structured interviewing. Two case studies show how personality assessment and structured interviewing were combined to improve hiring practices. We present the BASIS model as a systematic method for combining personality assessment and structured interviewing. Finally, we introduce the notion of a contribution index as a method for evaluating an organization's hiring practices; in this context, BASIS is a method for increasing an organization's return on its human capital investment.

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