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DEVELOPMENT OF EMPLOYMENT INTERVIEW TECHNOLOGY: IMPLICATIONS FOR INNOVATIVE ORGANIZATIONS

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**DEVELOPMENT OF EMPLOYMENT INTERVIEW TECHNOLOGY:
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Introduction

The interview is one of the oldest and most widely used of all selection procedures (Guion, 1976). In fact, recent surveys reveal that upward of 99% of organizations use the interview as part of the selection process (Bureau of National Affairs, 1988; Kane, 1988; Karren & Nkomo, 1988; Robertson & Makin, 1986). Moreover, when making selection decisions, recruiters tend to have more confidence in the interview than in information provided in application blanks, references, test results, or any other source of information about the applicant (Kane, 1988).

Whereas the interview has remained popular among practitioners, reviews of employment interview research have been rather pessimistic, until recently, concerning the reliability and validity of the interview as a selection instrument (Mayfield, 1964; Milne, 1967; Rodger, 1952; Rowe, 1981; Schmitt, 1976; Ulrich & Trumbo, 1965; Wagner, 1949; Wright, 1969). However, in the last few years, reviewers who distinguished between traditional interviewing practices and recent innovations (which have become known as "structured interviews") have indicated that structuring an interview appears to contribute to increased interview reliability and validity (Arvey & Campion, 1982; Harris, 1989; Webster, 1982). In fact, a recent meta-analytic investigation of interview validity revealed that structured selection interviews have significantly greater predictive validity than the traditional, unstructured interview (Wiesner & Cronshaw, 1988). Moreover, among the variables investigated, interview structure was found to be, by far, the strongest moderator of interview validity.

Although there has been an apparently sudden "discovery" of structured employment interview techniques in recent years, their development is actually due to the contributions of numerous researchers over more than half a century. These researchers sought to address what were perceived as the shortcomings of the traditional, unstructured interview by applying psychometric principles to employment interview design. However, the development of modern structured interview techniques should not be viewed as a *fait accompli*. While researchers continue making improvements in interview technology in order to meet organizational needs, organizations are undergoing changes at an increasing rate (Daft, 1992). The escalating rate of technological innovation, the globalization of the marketplace, increasing government regulation,

and the changing demographics of the labour force require organizations to continually adapt and innovate if they are to survive (Porter, 1991). These organizational changes have important implications for employment interviewing practices and the development of interview technology in the future.

In order to have a meaningful perspective on possible future directions for interview research and practice it is informative to first review the historical and theoretical development of the present-day structured interview. Such a review will also provide a better understanding of the distinction between structured and unstructured interviews. The following section therefore provides a review of the development of structured interviews and how the changes in interview design were intended to address the shortcomings of unstructured interviews. The next section consists of an evaluation of the current state of structured interview research and practice. An outline of the directions interview research and practice might take in order to meet the changing needs of organizations in the future is presented in the final section of the paper.

The Development of the Structured Employment Interview:

A Review of the Literature

References to interview structure in selection interview literature tend to give the impression that structure is a dichotomous variable (i.e., that interviews are either "structured" or "unstructured"). However, interview structure can vary along a continuum, ranging from very unstructured to highly structured. It is useful to first consider one of the polar extremes, the very unstructured interview, and then to examine how attempts to address the interview's poor reliability and validity led to the development of highly structured interviews.

In interviews referred to as "unstructured", the interviewer typically engages in a "free-wheeling" conversation with the interviewee. There are no constraints on the kinds of questions that may be asked and, furthermore, many of the questions used in the interview may not occur to the interviewer until part way through the interview. In fact, a skilful interviewee can divert the conversation from relevant and important interview topics to topics which result in pleasant but uninformative conversations that cast him or her in a more favourable light. For

example, upon noticing the golf trophy in an interviewer's office, such an interviewee may engage the interviewer in an amiable conversation about the game of golf which lasts most of the interview. The interviewer, left with a "good feeling" about the applicant, is likely to hire him or her without actually having obtained any job-relevant information from the applicant during the interview.

Many interviewees are also skilled at picking up cues from the interviewer concerning what answers the interviewer wishes to hear in response to interview questions. They are able to monitor and change their own responses and behaviours in order to align them with those which they perceive to be desired by the interviewer. By artfully guiding the conversation and making effective use of nonverbal behaviours, the polished interviewee is able to impress the interviewer and obfuscate the true purpose of the interview (Webster, 1982). Instead of hiring the best candidate, then, the interviewer is likely to hire the most skilful interviewee.

Another characteristic typical of unstructured interviews is that no systematic rating procedure is used. The interviewer is free to interpret the interviewee's responses in any manner he or she chooses as there are no guidelines for evaluating the interviewee's responses. In fact, rather than evaluating responses or answers to interview questions, the interviewer uses the interview to get a "feeling" or a "hunch" about the applicant (Antia, 1969; Keenan, 1977; Fear, 1978). The interviewer emerges from the interview with a global, subjective evaluation of the applicant which is biased by his or her own personal views and preferences and, therefore, is likely to be inaccurate.

Webster (1964, 1982) and his colleagues at McGill University as well as Arvey (1979), Arvey and Campion (1982), Mayfield (1964), Wright (1969), and Schmitt (1976) have documented the numerous biases and perceptual and information processing errors that plague the unstructured employment interview. For example, interviewers weight unfavourable information more heavily than favourable information (Bolster & Springbett, 1961; Hollmann, 1972; Miller & Rowe, 1967; Rowe, 1963; Springbett, 1958); they tend to make a decision to hire or not hire the applicant early in the interview (Springbett, 1958; Webster, 1964); and they rate applicants more favourably if the applicants are perceived as being similar to themselves (Baskett, 1973; Campion, 1978; Hakel, Dobbmeyer, & Dunnette, 1970; Keenan, 1977; Rand & Wexley, 1973; Wexley & Nemeroff, 1974). In addition, interview ratings are susceptible to

contrast effects [i.e., evaluations of preceding interviewees affect the evaluations of subsequent interviewees] (Carlson, 1970; Hakel, Ohnesorge, & Dunnette, 1970; Rowe, 1967; Schuh, 1978a; Wexley, Yukl, Kovacs, & Sanders, 1972), halo effects [i.e., an interviewer's initial impression of an applicant, such as might be formed upon reading the resumé, affects his or her evaluation of the candidate's answers and the rating of the candidate] (Tucker & Rowe, 1979), and the effects of stereotypes held by the interviewer with respect to the "ideal" or acceptable candidate (Bolster & Springbett, 1961; Hakel, Hollmann, & Dunnette, 1970; London & Hakel, 1974; Mayfield & Carlson, 1966; Rowe, 1963; Webster, 1964) or with respect to particular target groups such as women or racial minorities (Arvey, 1979; Heneman, 1977; Rose & Andiappan, 1978; Shaw, 1972; Webster, 1982). These and other biases and errors have contributed to the poor reliability and validity of unstructured interviews.

The inadequacies of the traditional unstructured interview led to the development of what has become known as the structured employment interview. Initial versions of the modern structured interview were simply standardized interviews. They were initially referred to as "patterned", "guided", or "structured" interviews but, most recently, have become known as "semi-structured" interviews. In these interviews, the same questions were asked of all interviewees for a particular position. These questions were to be read from a list which had been prepared in advance but minor deviations from or additions to the list were permitted. In addition, the use of rating scales to rate the applicant on a number of dimensions during or shortly after the interview was advocated (Bass, 1951; Bingham & Moore, 1931; Fear, 1958; Fear & Jordan, 1943; Hovland & Wonderlic, 1939; Kenagy & Yoakum, 1925; McMurry, 1947; Rundquist, 1947; Viteles, 1932; Yonge, 1956).

Typically, interviewers using standardized interviews did not rate the interviewee's answers to individual questions. Rather, they rated a number of dimensions or traits such as appearance, work history, or motivation. Moreover, ratings were usually made using adjective anchors (e.g., "below average", "average", "above average"), simple numerically anchored scales (e.g., a scale from 1 to 5 with 1 representing "poor" and 5 representing "excellent"), or even simpler dichotomous scales (e.g., a (+) for "good" or "yes" and a (-) for "poor" or "no"). Generally, these ratings were then summed across the dimensions to arrive at an overall interview score. The standardization of interview questions was intended to increase interview

reliability and, therefore, validity.

A major disadvantage of the numerical or adjective rating scales is that raters using such scales often disagree on the meanings of different rating levels. One rater's rating of "4" might be equivalent to another rater's "2" or "3" on the same trait or dimension. Maas (1965) contributed to the development of the present-day structured interview by introducing the notion of using Smith and Kendall's (1963) Behaviour Expectation Scales, rather than numerical or adjective rating scales, to rate interviews. Behaviour expectation scales consist of benchmark answers for each scale value which are derived by using the critical incident technique (Flanagan, 1954). What is meant by a "1" or a "3" is defined for the interviewer in terms of differentially effective work behaviours, one of which the applicant would be expected to engage in if he or she were hired. These expectations are inferred from the applicant's answers to interview questions. Maas found significantly higher interrater reliability when the behaviour expectation rating method was used. However, Maas' interviewers still rated applicants in terms of trait dimensions rather than rating the answers which interviewees gave to interview questions.

Another important characteristic of the present-day structured interview is that attempts are made to make the interview questions as job-relevant as possible (Janz, 1982; Latham, Saari, Pursell, & Campion, 1980; Latham & Saari, 1984). More than forty years ago McMurry (1947) suggested that interviewers should be knowledgeable about the jobs for which they are interviewing. Langdale and Weitz (1973), Wiener and Schneiderman (1974), and Osburn, Timmreck, and Bigby (1981) tested the effects of job information on interviewers' ratings and found that the ratings of interviewers possessing more job-relevant information were more reliable and accurate and less influenced by irrelevant information and by interviewers' biases and stereotypes.

Rather than leaving the level of acquisition and utilization of job knowledge to the interviewer, Heneman, Schwab, Huett, and Ford (1975) and Landy (1976) developed structured interviews in which the questions themselves were based on a formal job analysis. That is, the questions were designed to tap constructs or dimensions which had been determined, in the job analysis, to be important to job performance. Although the results of either study were not particularly impressive, Landy did find that averaged interview factor or dimension scores

predicted job performance ratings reasonably well whereas interviewers' overall recommendations did not. It is worth noting that the interviewers in both studies made relatively subjective dimension or trait ratings rather than rating the answers to the individual interview questions which were based on the job analysis. The latter procedure would have resulted in more objective and, presumably, more valid interview ratings. Moreover, it appears that interviewers in both studies used numerically anchored rather than behaviourally anchored scales to rate the interviewees. Relatively lower reliability and, therefore, validity should have been expected when this approach was used (Maas, 1965).

Although it has been common practice for interviewers to wait until the end of the interview before making notes (Webster, 1982), a number of researchers who have been concerned with improving the employment interview have suggested that interview ratings should be made or interview notes should be taken during the interview (Carlson, Thayer, Mayfield, & Peterson, 1971; Maas, 1965; Mayfield, Brown, & Hamstra, 1980; Schuh, 1978b; Wiesner, 1989). They found that interviewers who made ratings or took notes during the interview were more accurate in their recall of what had transpired during the interview and that their ratings had greater reliability than interviewers who waited until the end of the interview to take notes.

In the last decade some of the researchers concerned with the structured interview have combined psychometric theory and previous research results to construct the most recent versions of the structured employment interview (e.g., Campion, Pursell, & Brown, 1988; Janz, 1982; Janz, 1989; Janz, Hellervik, & Gilmore, 1986; Latham, 1989; Latham & Saari, 1984; Latham, Saari, Pursell, & Campion, 1980). Although three distinct approaches have been used by these researchers in the construction of structured interviews, they share a common conception of the structured interview as a series of job-related questions which are consistently applied across all interviews for a particular job. Moreover, they all take a content validation approach to interview design in that attempts are made to keep job content as intact as possible when translating it into interview questions. In other words, the interviews serve as verbal work samples (Asher & Sciarrino, 1974).

One of the recent approaches to structured interviewing is the Situational Interview (SI) used by Latham et al. (1980). The interviewer describes to the applicant hypothetical situations that are likely to be encountered on the job and asks the applicant what he or she would do in

the situations. The interviewer then uses a scoring guide consisting of sample answers to each question to evaluate and score the applicant's answers. The scoring guide is designed using the Critical Incidents Technique (Flanagan, 1954) in which examples of actual job-related behaviours that varied in effectiveness in particular situations are collected and refined to serve as sample answers. Thus, numerical values on the scale are illustrated with examples of answers that would be worth a "1" or a "3" or a "5".

To illustrate, an SI question might take the following form: "You (a recent MBA graduate) have just been hired as the manager of our purchasing department and it's your first day on the job. After carefully reviewing product and price information you make a decision to purchase parts from a particular supplier. Your immediate subordinate, an experienced supervisor who is considerably older than you, questions your judgement in front of other employees and seems quite convinced that you are making a mistake. The employees look to you for a response, some of them smirking. What would you do?"

The assumption underlying the SI approach is that intentions are related to subsequent behaviours (Fishbein & Ajzen, 1975). A number of researchers (Latham & Saari, 1984; Latham et al., 1980; Weekley & Gier, 1987) have obtained significant criterion-related validity coefficients using the situational interview (Mean r across studies = .39).

Campion et al. (1988), in what has become known as the Comprehensive Structured Interview (CSI [Harris, 1989]), combine Situational Interview questions with questions assessing job knowledge, job simulation questions, and worker characteristic or willingness questions. The job knowledge questions assess the degree to which the applicant possesses relevant job knowledge (e.g., "When putting a piece of machinery back together after repairing it, why would you clean all the parts first?"). The job simulation questions assess job-relevant verbal skills (e.g., "Many jobs require the operation of a fork-lift. Please read this [90-word] fork-lift procedure aloud."). Finally, the worker willingness questions assess the applicant's willingness to engage in particular activities (e.g., "Some jobs require climbing ladders to a height of a five-story building and going out on a catwalk to work. Give us your feeling about performing a task such as this."). Campion et al. (1988) were able to predict job performance as well using this approach ($r = .34$).

Finally, Janz (1982), following up on a suggestion made by Latham et al. (1980) and based on Ghiselli's (1966) findings, used another approach which he refers to as the Patterned Behaviour Description Interview (PBDI). The interviewer is asked to predict the interviewee's behaviours in a given job situation based on the interviewee's descriptions of his or her behaviours in similar situations in the past. For example, the interviewer might say: "We all encounter situations when our judgement is challenged. Tell me about a time when you were not certain you had made the right decision and then someone challenged your decision". The candidate's answer would be clarified, if necessary, by asking follow-up questions or probes. The goal in designing PBDI questions is to make the questions apply to as wide a variety of previous experiences or situations as possible.

Like the SI and CSI, the PBDI is an attempt to apply Wernimont & Campbell's (1968) suggestion that the predictor should sample behaviours which are representative of criterion behaviours (i.e., be a work sample). However, in contrast to the SI, the PBDI approach is based on the premise that the best predictor of future behaviour is past behaviour. Janz (1982) and Orpen (1985) also obtained significant criterion-related validity coefficients using the PBDI (Mean r across studies = .55).

Evaluating the Structured Selection Interview

The Effects of Structuring

As noted above, one of the first hallmarks of structured interviews was the standardization of interview questions. When interviews are standardized applicants can be compared on the basis of the same criteria and the interviewer obtains a better picture of the merits of each applicant relative to other applicants. In fact, a number of researchers have suggested that standardization may contribute to increased interview reliability and validity (Bass, 1951; Fear, 1958; McMurry, 1947; Rundquist, 1947; Yonge, 1956).

Equally if not more important, the standardized treatment of applicants is perceived as being fairer than nonstandardized treatment in today's society. The likelihood of organizations that use standardized interview questions becoming embroiled in selection-related litigation is therefore reduced. Moreover, when such organizations do go to court, the courts tend to rule

in their favour (Cronshaw, 1989; Gatewood & Feild, 1990). Standardization therefore gives the interviewer and organization some measure of protection from discrimination suits.

Another aspect of structured interviews that appears to have a strong impact on the organization's ability to defend itself against litigation is the exclusive use of job-related questions (i.e., questions based on a formal job analysis). Questions which probe areas not directly relevant to the job run the risk of being interpreted as having discriminatory intent by the applicant and by the courts (Campion & Arvey, 1989; Cronshaw, 1989; Gatewood & Feild, 1990).

The job relevance of interview questions has a significant impact on interview validity as well (Wiesner, 1989). Structured interviews may have greater predictive validity, in part, because structuring an interview increases its reliability and accuracy in differentiating between applicant strengths and weaknesses on job-relevant dimensions (Mayfield, 1964). Moreover, the greater job-relevance of structured interview questions may direct the interviewer's attention away from irrelevant information and focus it on job-relevant information. This focusing of interviewer attention may reduce the potential effects of the biases and processing errors inherent in the unstructured interview. Therefore, the degree to which structured interview questions are job-relevant and interview ratings are reliable appears determine the validity of the interview.

The job-relevance of interview questions does not, by itself, guarantee the reliability of interview ratings however. Interviewers often disagree in their ratings of the same dimensions or characteristics for a given applicant and even give different ratings for the same answer to an interview question (Latham et al., 1980; Maas, 1965; Wiesner, 1989). Therefore, some kind of job-relevant rating or scoring guide is essential if high inter-rater reliability is to be achieved and if the interview ratings are to be based on job-relevant criteria. In fact such scoring guides appear to increase interview reliability and, therefore, validity particularly when they are used to assess the answers given by interviewees rather than trait dimensions (Latham et al., 1980; Latham & Saari, 1984; Wiesner, 1989). The use of a standardized, job-relevant scoring system for assessing and comparing candidates also appears to be an effective defense against litigation (Campion & Arvey, 1989; Cronshaw, 1989; Gatewood & Feild, 1990).

Latham et al.'s (1980) approach requires interviewers to sum across the scores given for each individual question to give an overall interview score, rather than permitting interviewers

to make global judgements. The final score can then be used to make the selection decision by ranking candidates or by determining cut scores which must be exceeded by candidates if they are to qualify for the job. In essence, this approach relieves the interviewer of the decision making function and isolates the selection decision from the interviewer's biases and stereotypes (Webster, 1982). The selection decision, then, is a "statistical" or "actuarial" process (Meehl, 1954) which has greater criterion-related validity than the faulty cognitive information processing or affective decision making processes typically engaged in by interviewers when they make overall ratings or recommendations (Dougherty, Ebert, & Callender, 1986; Landy, 1976; Meehl, 1954; Peterson & Pitz, 1986; Sawyer, 1966). This advantage for the statistical combination of scores does not appear to hold, however, when low job-relevance interview questions are used. Rather than evaluating behaviours, interviewers using such questions make "clinical" judgements with respect to each answer given (Wiesner, 1989). The total interview score for such questions therefore represents the sum of several clinical judgements which do not differ significantly from a single overall clinical rating.

It should be emphasized, with respect to the discussion above, that interview validity and reliability issues are very much related in that reliability can place an upper limit on validity (e.g., Nunnally, 1978). In fact, Wiesner and Cronshaw (1988) found that interview validity and reliability were correlated at .48 in the studies they examined. Conditions which serve to make interviews more reliable should therefore be the same as those which make them more valid.

In summary, the results of previous research which was concerned with aspects of interview structure suggest that interview validity can be optimized if four basic elements are included in the construction of the interview. First, interview questions should be job-relevant. As interview questions become more job-relevant, the impact of irrelevant information on the interview decision is reduced and the interview has greater reliability and validity (Heneman, Schwab, Huett, & Ford, 1975; Landy, 1976; Langdale & Weitz, 1973; Osburn, Timmreck, & Bigby, 1981; Wiener & Schneiderman, 1974). Job relevance can be optimized by basing the interview questions on a formal analysis of the task components of a job (i.e., a job analysis).

Secondly, interviewees' answers should be scored as soon as they are given. Delay in scoring the answers allows the scoring to be influenced by errors in the interviewer's retrieval of information from memory (Carlson, Thayer, Mayfield, & Peterson, 1971; Maas, 1965;

Mayfield, Brown, & Hamstra, 1980; Schuh, 1978b). Moreover, information retrieved from memory is more likely to be affected by stereotyping and the biases the interviewer holds with respect to the interviewee than information coded and scored immediately it is provided (Arvey, 1979; Webster, 1982).

Thirdly, scoring guides comprised of behavioural anchors or benchmark answers should be used to score the applicant. Behavioural anchors cue the interviewer as to the most appropriate score for a particular answer so that the interviewer encodes the information obtained in a predetermined manner rather than using his or her own encoding scheme. The use of scoring guides with behavioural anchors appears to increase inter-interviewer reliability as well as the validity of the interview (Latham et al., 1980; Maas, 1965; Wiesner, 1989).

Fourthly, the scores for answers to individual interview questions should be summed or averaged to provide a total score for the interview. Differential weights can be assigned to questions if particular questions are considered to be more important than others or, alternatively, more than one question can be asked to assess a particular job requirement if it is considered more important than other requirements (Pursell, Campion, & Gaylord, 1980). The summing or averaging of individual scores to yield a total score results in greater accuracy and higher predictive validity than when an overall rating of the candidate is made by interviewers at the end of the interview (Dougherty, Ebert, & Callender, 1986; Landy, 1976; Meehl, 1954; Peterson & Pitz, 1986; Sawyer, 1966; Wiesner, 1989)

Comparison of Recent Approaches

The Situational and Comprehensive Structured Interview approaches incorporate all four of the suggestions for interview design which were outlined above. Initial versions of the Patterned Behavior Description Interview incorporated all but the third recommendation. Interviewers using the PBDI did not use scoring guides with behavioural anchors to rate the answers. Rather, they rated interviewees on a number of behaviour dimensions based on their own (subjective) evaluations of the interviewees' answers. The individual behaviour dimension scores were then weighted and summed to give obtain the total interview score (Janz, Hellervik, & Gilmore, 1986). Recently, in response to the research findings of Wiesner (1989), the PBDI was revised to incorporate the use of scoring guides (T. Janz, personal communication, June 9,

1989).

Although the PBDI did not initially incorporate all four of the recommendations outlined above whereas the SI and the CSI did, research results suggest that the PBDI may have greater predictive validity than the SI and CSI (mean $r = .55$ for the PBDI vs. mean $r = .39$ for the SI and $r = .34$ for the CSI). However, there have only been two published validation studies of the PBDI, both with small sample sizes, so that the estimate of the validity of the PBDI may be somewhat inflated. Nevertheless, it is possible that, for the jobs investigated in the research to date, past work-related behaviour is a better predictor of subsequent job performance than behavioural intentions (Bagozzi, 1981). Moreover, Wiesner's (1989) findings suggest that the PBDI may have even higher predictive validity when scoring guides are used.

Predictive validity issues notwithstanding, the PBDI appears to be more appropriate in some selection situations whereas the SI and CSI appear to be more appropriate in other situations. In particular, the PBDI seems best suited to the selection of candidates who have had prior work experience (especially in related areas of work) or have been engaged in relevant volunteer activity or hobbies. The job knowledge questions, and possibly the job simulation and worker characteristics questions, of the CSI also appear better suited to applicants with related experience. However, the situational questions of the CSI and the SI are useful with both experienced and inexperienced applicants. Experienced applicants may still have some advantage over inexperienced applicants competing for the same job when situational questions are asked but the difference would likely be reduced.

The PBDI and SI approaches have not been competitively tested to date. As a result, the above discussion of the relative merits of the two approaches is somewhat speculative. A controlled study is therefore needed to investigate the relative merits of the PBDI and the SI. In addition to addressing the theoretical questions surrounding the relationships of past behaviour and behavioural intentions with subsequent behaviour, such a study would provide highly useful information for improving the design of structured interviews. It may well be that both SI and PBDI approaches could be used effectively in tandem within one interview session. Applicants who have difficulty answering a PBDI question because of a lack of relevant work experience could be asked a corresponding SI question. Alternatively, SI questions could be followed by corresponding PBDI questions in order to determine whether the behavioural intentions are

consistent with past behaviours.

Future Directions for Interview Research and Practice

As noted in the introduction, organizations are undergoing change at an accelerating rate (Daft, 1992). They must adapt to unanticipated innovations in technology, global competition, changing labour force demographics, and increasing government regulation and societal pressures for conformity to ethical, environmental, and human rights standards if they are to survive (Porter, 1991). The need for organizations to be responsive to such pressures for change will have a profound impact on the way jobs are defined. Until recently, job descriptions remained relatively static or evolved gradually over time as the need arose. In many occupations (e.g., secretary-typist) the kind of work an employee did at the beginning of his or her career was not substantially different from the work done prior to retirement. Jobs requirements are becoming much more dynamic, however, because of the increased need for organizations to change in order to remain competitive. In secretarial occupations, for example, typewriters have been replaced by word processors and word processors, in turn, are undergoing rapid evolution. It is not at all inconceivable that in the very near future the requirements for a given job may be very different from one year to the next.

The increasingly dynamic nature of most job requirements will have a number of important implications for future developments in the field of employee selection in general and for the employment interview in particular. The currently accepted approach to employee selection involves conducting a job analysis, determining employee specifications (knowledge, skills, abilities, and other qualifications [KSAOs] required to do the job as defined by the job analysis) using a panel of job experts, and developing or specifying selection instruments which are most appropriate for assessing the KSAOs (Gatewood & Feild, 1990). The job analysis typically involves using one or more methods to gather detailed information about worker activities or behaviours, what is produced or accomplished, the equipment used, the context and other factors of the work environment, and the personal characteristics which incumbents need to do the job. The most basic level of analysis is the individual tasks which are performed.

Such an approach provides a fairly accurate view of the job at the time the job analysis is conducted. However, given the increasing pressure for organizational change and innovation outlined above, the job might be substantially changed several months (or even weeks) later. Under such conditions the job analysis provides accurate and useful information for only a limited time. In fact, by the time the job analysis information has been used to develop selection instruments and these instruments are being used to select applicants, the job information and, therefore, the selection instrument may no longer be valid. Even if an applicant is appropriately selected, a year or two later the job may have changed sufficiently to require a different set of abilities or skills which the (now) employee may not possess. Moreover, many organizations are beginning to rotate employees through a number of positions in order to maintain flexibility and thus require these employees to be multi-skilled. The prospect of rapidly evolving jobs and the creation of new jobs obviously calls for a more effective approach to employee selection.

Basic knowledge or skills pertinent to the occupation will continue to be important. A secretary, for example, will generally need to know how to type (although there are indications that in the near future keyboards, as we know them, will disappear). However, specific knowledge or skills, such as knowledge of a particular word-processing software package, will diminish in importance. Specific or specialized skills and knowledge are the most susceptible to change. For example, word-processing software is constantly being revised and may well be replaced by different software from another company if that software better meets the needs of the organization. Rather than trying to keep pace with the specific skill requirements for a job, employers would be well advised to focus on more enduring abilities. Given the continual changes to be faced by employees in innovative organizations, some applicant characteristics that are likely to become vital are adaptability or flexibility, ability to handle ambiguity and stress, ability to learn (and relearn), creativity and problem-solving abilities, ability to work cooperatively with peers, ability to manage subordinates effectively, responsiveness to superiors' and customers' or clients' needs, and a high level of motivation to improve a product or service and to maintain high standards of performance.

Structured employment interviews, and particularly the PBDI and SI, are well suited to assessing most of the abilities or constructs listed above and have been successfully used for this purpose in the past. However, the more specific aspects of the CSI (e.g., "Why would you use

the 'F4' and 'Shift-Tab' keys to set up a reference list in Wordperfect rather than 'Return' and 'Tab' keys?") are likely to become less useful. What remains when the specific aspects of the CSI are removed is essentially an SI.

The PBDI and SI would be most effective if they were to focus on assessing the kinds of enduring abilities or constructs listed above. Adaptability or flexibility could be assessed by posing PBDI questions like "Tell me about a time when you were intensively involved in a project or activity and your boss told you to drop what you were doing to do something else. Describe what you did and what happened."; tolerance of ambiguity could be assessed with PBDI questions like "Tell me about a time you were working at a task where you were not certain of what was expected of you and no one else seemed to know either ..."; problem solving ability could be evaluated with PBDI questions like "Tell me about a time you were 'stuck' on a project because of an unanticipated problem or dilemma. How did you deal with the problem?"; etc. It would be possible to construct corresponding SI questions as well (e.g., for problem-solving, "You are the daytime supervisor of a large gas station which opens at 6 a.m. It is fifteen minutes prior to opening and the night shift has left the place in disarray. Two people who were to come in at 6 a.m. have just called in sick. One of the two employees who did show up informs you that the owner is on the phone. What would you do?"). Such questions would provide considerable insight into how an applicant would deal with the requirements of an innovative organization.

In conclusion, the job requirements of innovative organizations are likely to be increasingly dynamic and many jobs will disappear altogether and be replaced by new kinds of jobs. In such an environment, organizations will need to hire adaptable, creative, and highly motivated employees with good interpersonal skills. Structured employment interviews, and particularly innovative approaches to interviewing exemplified by the Situational Interview and the Patterned Behaviour Description Interview, are ideally suited for assessing such applicant characteristics. Future research on structured interviews like the PBDI and SI should therefore focus on developing questions to better assess these characteristics. Recruiters will undoubtedly find such interviews invaluable in trying to meet the needs of innovative organizations.

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