

Selection Interview: A Review of Validity Evidence, Adverse Impact and Applicant Reactions

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This article is focused on the evidence related to the criterion and construct validity of interview, its adverse impact on minority groups and the applicant reactions. Based on the content of the questions included in personnel interview, two types of interview made by found: conventional structured interview and behavioural structured interview. With regard to criterion validity, evidence shows that, in general, interviews may be used to predict job performance and, specifically, behavioural structured interviews show the highest validity coefficients. Although construct validity was less well investigated, there is currently a number of studies carried out in order to clarify what constructs are assessed by interviews. It was shown that conventional structured interviews and behavioural structured interviews clearly measure different constructs. With regard to group differences, interviews show only a small adverse impact, but this impact decreases if behavioural structured interviews are used. In connection with applicant reactions, more negative applicant reactions appear with behavioural structured interviews than conventional structured interviews. Practical implications and future lines of research are suggested.

Introduction

The employment interview has probably been the instrument most often used to make hiring decisions in the past 90 years in the majority of countries (Dipboye 1997; Rynes, Barber and Varma 2000; Schneider and Schmitt 1986). Old and recent surveys have shown that interviews are carried out in practically all personnel selection processes (ASPA 1983; Robertson and Makin 1986; Shackleton and Newell 1997; Ulrich and Trumbo 1965). Parallel to this extensive use, a lot of research has been conducted with regard to this selection device, especially in order to know its reliability and criterion validity. Several reviews on selection interviews have been carried out by different authors in different decades (e.g., Arvey and Campion 1982; McDaniel, Whetzel, Schmidt and Maurer 1994; Reilly and Chao 1982; Salgado and Moscoso 1995; Schmitt 1976; Wiesner and Cronshaw 1988). Until the 1980s the results of these reviews were quite pessimistic. However, since this decade this view has started to change principally due to the use of methodological advances such as psychometric meta-analysis (e.g., Hunter and Schmidt 1990; Schmidt 1994; Schmidt, Law, Hunter, Rothstein, Pearlman and McDaniel 1993). Also, in the last few decades researchers have been interested in other topics related to selection interviews, such as construct

validity (e.g., Huffcutt, Roth and McDaniel 1996; Salgado and Moscoso, 2000), and the number of studies with regard to, for example, adverse impact or applicant reactions have also increased in this period. Therefore, at the beginning of the Twenty-first century, it seems interesting to review the research on selection interview in order to organize existing knowledge and clarify which areas require future research.

Consequently, this article summarizes the evidence of the criterion validity of interview. Currently there is little doubt that selection interviews predict job performance, but different types of interviews exist and these have different criterion validity coefficients. The research on construct validity is also summarized. Although it is a topic which has been less well studied, currently there is evidence supporting which constructs are measured by different types of interviews. In this review comment is made on the adverse impact of interviews. The studies on this topic have been carried out mainly in the USA, because many different racial and cultural groups work together. However, from now on and, increasingly in the future, group differences in selection processes in general, and in interviews specifically, will be an important matter in the European Community too because of market globalization. The last section will refer to applicant reactions to interviews, and especially applicant reactions to different types

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of interviews. During the interview, applicants obtain impressions about the organization and their desire to belong to it. Consequently, not only is it necessary to use valid instruments in selection processes, but also to ensure positive applicant reactions to these instruments.

Criterion Validity

Criterion validity has probably been the most widely studied topic in selection interview research. However, the results obtained prior to the 1980s had been very pessimistic. Reviews of interview literature carried out between 1949 and 1984 unanimously concluded that the personnel interview had very low reliability and had practically no criterion validity. These were the conclusions drawn by Wagner (1949), Mayfield (1964), Ulrich and Trumbo (1965), Wright (1969), Schmitt (1976), Arvey and Campion (1982), and Hunter and Hunter (1984). All these revisions are narrative ones, except Reilly and Chao (1982) and Hunter and Hunter's (1984) meta-analyses. Reilly and Chao using a small sample ($N = 987$), found a validity correlation of .19 for selection interview. Hunter and Hunter found that the interview observed validity was .14. The conclusions of these revisions showed a contradiction between the extended use and popularity of the interview and its psychometric properties. From a psychometric point of view, there was no justification for the wide use of personnel interview because the ultimate objective of a hiring process (i.e., a good prediction of future job performance) could not be guaranteed.

However, this pessimistic view of selection interviews has changed since 1988. Between 1988 and 1999 several meta-analyses were carried out on the criterion validity of selection interview. Meta-analyses were conducted by Wiesner and Cronshaw (1988), Marchese and Muchinsky (1993), Huffcutt and Arthur (1994), McDaniel *et al.* (1994), Salgado and Moscoso (1995), Huffcutt and Woehr (1999), and Schmidt and Rader (1999).

Wiesner and Cronshaw (1988) using 150 validity coefficients and a total sample size of 51,459 individuals, found a validity of .47 corrected by criterion unreliability and range restriction in the predictor. However, this value cannot be generalized because the credibility interval includes zero. When the interviews were classified according to the structure, Wiesner and Cronshaw found that the corrected validity of unstructured interviews was .31, whereas the value of structured ones was .62. Wiesner and Cronshaw did not find effects of interview format (individual or panel) on criterion validity. In a small study, Marchese and Muchinsky

(1993) found an average observed validity of .27, a value similar to the one found by Wiesner and Cronshaw when they used the whole sample. Marchese and Muchinsky also found that interview validity correlated with some study characteristics. For example, validity correlated with structure ($r = .45$), length of the interview ($r = -.29$) and applicant gender ($r = -.27$). Huffcutt and Arthur (1994) carried out a meta-analysis in order to exceed several limitations present in Hunter and Hunter's (1984) meta-analysis. Huffcutt and Arthur used 114 studies and a total sample size of 18,652 individuals and found an average corrected validity of .37. Huffcutt and Arthur related criterion validity to four levels of structured interview and found that this variable was a powerful moderator. The corrected coefficients were .20 and .56 respectively at the lowest and highest structure levels.

McDaniel *et al.* (1994) carried out one of the most comprehensive meta-analyses of the criterion validity of interview. Using job performance ratings as criterion, they found a validity of .37 ($n = 25,444$) when validity was corrected for criterion reliability and range restriction in predictor. For training performance the corrected coefficient was .36 ($n = 59,844$). In the case of job tenure the corrected value was .20 ($n = 1123$), but the credibility interval included zero. Furthermore, these values were moderated by several characteristics: content, structure and criterion purpose. For interview content, three types of interviews were considered: situational, job related (e.g., behaviour description, job-analysis based), and psychological. The validities were .50, .39 and .29 respectively when corrected for criterion unreliability and range restriction. For interview structure, structured interviews showed an average validity of .44 when corrected for unreliability and range restriction compared to .33 for unstructured interviews. If the criterion purpose was administrative, average validity was .33 and if it was for research purpose, the average validity reached .47. Salgado and Moscoso (1995) carried out a meta-analysis of criterion validity of behavioural structured interviews (e.g., situational, behaviour description, multi-modal, job-analysis based). Using a sample size of 2121 and 25 studies, they found a validity of .32 when corrected for criterion unreliability but no range restriction. Comparing validities from studies using concurrent versus predictive designs, they found corrected validities of .41 and .33 respectively. These results showed that the design type was a relevant moderator. Subsequently, in a meta-analysis of 120 studies ($n = 18158$), Huffcutt and Woehr (1999) checked the relationship between criterion-validity and interview factors and

found that: (1) training should be provided to interviewers independently of interview type; (2) all interviewees should be interviewed by the same individual or the same interview panel, especially in the case of less structured interviews; and (3) using a panel of interviewers did not improve validity.

More recently, a meta-analysis using a database consisting of predictive studies which were not included in any other meta-analysis, was conducted by Schmidt and Rader (1999). In this case, the interview used in all studies was a structured telephone interview. Besides this characteristic, this interview showed other differences with regard to structured interviews used in previous meta-analyses. Specifically, it differed in its construction and in its scoring method. Results showed a corrected validity coefficient of .40 using performance ratings as criterion. This value was similar to the one found by McDaniel *et al.* (1994) for structured interviews ($r = .44$). Schmidt and Rader suggested that both results are similar because different structured interviews are all measuring, to different degrees, constructs with generalizable validity (e.g., conscientiousness and general mental ability). Besides job performance ratings, other criteria were analysed in this research (the major part of them never has been examined separately in criterion validity studies). Corrected

coefficients ranging between .19 and .40 were found for absenteeism, job tenure, sales performance and production records.

Table 1 presents a summary of the findings of the meta-analyses commented on above. All this research makes it reasonable to conclude that selection interviews, both conventional and behavioural structured interviews, show evidence of criterion validity and validity generalization. Furthermore, Schmidt and Hunter (1998) in their review of 85 years of personnel selection research, reached the conclusion that the interview is one of the best predictors of job performance and training proficiency, and it generalizes validity across jobs, criteria, and organizations. Therefore, currently there is little room to speculate on the criterion validity of personnel interviews. The main conclusion is that interview is a useful tool to predict work performance.

Construct Validity

Although there is currently little doubt about the criterion validity of selection interviews, the reasons why personnel interviews predict job performance remains to be explained. In this sense, Landy, Shansker and Kohler (1994), in their chapter on personnel selection in the

Table 1. Summary of research on the criterion validity of interview

	Interview Type	r_c	N
Reilly & Chao (1982)	All interviews	.19	987
Hunter & Hunter (1984)	All interviews	.14	2694
Wiesner & Cronshaw (1988)	All interviews	.47	51459
	No structured	.31	5518
	Structured	.62	10080
Marchese & Muchinsky (1993)	All interviews	.38	3960
Huffcutt & Arthur (1994)	All interviews	.37	18652
	Structured L ¹	.20	7308
	Structured L ²	.35	4621
	Structured L ³	.56	4358
	Structured L ⁴	.57	2365
Mc Daniel <i>et al.</i> (1994)	All interviews	.37	25244
	No structured	.33	12847
	Structured	.44	9330
Salgado & Moscoso (1995)	Structured	.32	2121
Schmidt and Rader (1999)	Structured ^a	.40	2539
	Structured ^b	.40	424
	Structured ^c	.24	6535
	Structured ^d	.19	660
	Structured ^e	.39	1755

Note: L¹: level 1 question standardization was no constraints; L²: level 2 was limited constraints, typically on the topical areas; L³: level 3 was precise specification of questions from which interviewers could choose or follow-up; L⁴: level 4 was asking the exact same questions with no choice or follow-up.

Structured^a: the criterion was supervisory ratings; structured^b: the criterion was productions records; structured^c: the criterion was sales performance; structured^d: the criterion was absenteeism (reversed); structured^e: job tenure.

r_c : corrected coefficients.

Annual Review, posed some very relevant questions: What exactly is being measured in the interview? Are we measuring general intelligence, motivation, personality, individual skills and abilities, knowledge or experience? In other words, Landy and his colleagues inquired as to which constructs are assessed in the selection interview.

In the 1990s, both single studies as well as meta-analyses directed at investigating this matter have appeared. Previously, some authors had made some suggestions and had advanced several hypotheses about the construct validity of interview. For example, Hunter and Hirsh (1987) and previously Schmitt (1976) suggested that conventional structured interviews correlated highly with social skills while structured interviews correlated highly with General Mental Ability. More recently, Harris (1998) reviewed the evidence regarding the construct validity of the structured interview and he suggested that the structured interview may be measuring tacit knowledge, job knowledge, skills and abilities (KSAs) or person-organization fit. On the other hand, Schmidt and Hunter (1998) and Schmidt and Rader (1999) suggested that employment interviews assess previous experience, GMA and some personality dimensions as conscientiousness and specific abilities necessary for the job.

Huffcutt, Roth, and McDaniel (1996) in a meta-analytic investigation, found a corrected average correlation of .40 between interview and cognitive ability (i.e., General Mental Ability). However, this value was moderated by the degree to which the interview was structured. The correlation decreased as the structure degree increased. The results showed a corrected average correlation of .50 for low structure interviews and .35 for highly structure degree. Subsequently, Sue-Chan, Latham, Evans and Rotman (1997) tested the hypothesis that the Situational Interview (SI, Latham, Saari, Pursell and Campion 1980) as well as the Patterned Behavioural Description Interview (PBDI, Janz 1982) were correlated with GMA and Tacit knowledge (Sternberg 1997; Sternberg, Wagner, Williams and Horvath 1995), but their results did not support the hypothesis for both interview types. However, the small sample size of the study ($n = 28$) precludes a negative conclusion regarding the relationship between GMA and SI and PBDI. The results found by Schüler, Moser, Diemand, and Funke (1995) showed that the situational questions for the multi-modal interview (Schüler and Funke 1989) correlated .19 with GMA ($n = 307$).

A few studies have concentrated on the correlation between interview and personality dimensions. For example, Schüler (1989) developed a multi-modal interview divided into

four parts: self-presentation, vocational questions, biographical questions, and situational questions. In a sample of 306 individuals he found small correlations with the personality dimensions of extraversion, neuroticism and achievement motivation. Schüler and Funke (1989) found a correlation of .60 between the same multi-modal interview and social skills. The correlation between each part of the interview and social skills was .63 for self-presentation, .24 for vocational questions, .40 for biographical questions, and .52 for situational questions. These results contradict the suggestions by Hunter and Hirsh (1987) and Schmidt and Hunter (1998). More recently, Caldwell and Burger (1998) carried out a study where they correlated the personality factors of Five Factor Model (Costa and McCrae 1985; 1992; Fiske 1949; Norman 1963; Tuppes and Christal 1963) with interviewing success (measured by success in generating follow-up interviews and job offers). The correlation coefficients of interview and the personality dimensions ranged from .18 to .30. Cook, Vance and Spector (1998) found that interview correlated with anxiety, achievement motivation and locus of control.

Construct validity was also investigated by Conway and Peneno (1999) in a single study. They used a structured interview with general questions and another interview which combined situational (SI) and behaviour description (BDI) questions. Their results showed that the general question interview appeared to reflect personality to a limited extent. Specifically, neuroticism and agreeableness (.16 and .17 respectively, $N = 172$) were the variables with largest correlation. Relation with cognitive ability and leadership experience was not detected in this type of interview. On the other hand, SI and BDI questions were largely interrelated, and both showed a moderate correlation with experience (.29 and .43 respectively to SI and BDI question). This type of question scarcely correlated with personality dimensions and they were negatively correlated with cognitive ability.

In connection with job knowledge, an unpublished report of the US Office of Personnel Management (1987) showed a correlation of .23 between a job knowledge test and a behavioural description interview ($N = 409$). Borroughs and White (1996) found a correlation of .39 between a behavioural description interview and a job knowledge test. More recently, Maurer, Solamon and Troxtel (1998), using four different samples, found correlations ranging from .29 to .37 between a situational interview and a job knowledge test.

In a recent integrative research to assess constructs measured by the employment interview, Huffcutt, Roth and Conway (1999)

identified different dimensions which appeared usually in the interviews. These dimensions were mental capability (general intelligence and applied mental skills), personality tendencies (basically Big Five Factors), social skills (communication skills, interpersonal skills), interests and preferences (company, type of work); organizational fit (values), background credentials (education, experience, job knowledge), and other characteristics (creativity, physical attributes). The authors meta-analytically correlated some of these dimensions with job performance and cognitive ability. They found that the majority of dimensions correlated with job performance. For example, social skills, organizational fit, or certain personality tendencies such as emotional stability, had the highest correlations (.40, .53 and .47 respectively). The authors also found that these dimensions had low correlations with cognitive ability.

Salgado and Moscoso (2000) carried out a comprehensive meta-analytic research in order to determine the construct validity of interview. In this research the structured interviews were classified according to the content of the questions. In order to apply this strategy, the authors used Janz's taxonomy of interview content (Janz 1982; Janz, Hellervick and Gilmore 1986). According to this taxonomy, interview questions may be classified in five content categories: (1) credentials, achievements and biographical facts; (2) technical knowledge; (3) description of experience and activity; (4) self-evaluative information (e.g., likes and dislikes; strengths and weaknesses); and (5) behaviour description. Applying this taxonomy to the questions included in interviews, Salgado and Moscoso identified two different types of structured interviews: conventional structured interviews (CSI) and behavioural interviews (BI). CSI are basically composed of type 1, 3 and 4 questions (Janz and Mooney 1993). The second kind of interviews basically contains type 2 and 5 questions. The conventional structured interview group would include among other interviews, the one developed by Fear (1984), Ghiselli (1966), Morgan and Cogger (1973) or Stanton (1981). The behavioural structured category would include the interviews developed by Campion *et al.* (1988), Janz (1982), Latham, Saari, Pursell and Campion (1980), Schuler and Funke (1989), among others. Salgado and Moscoso studied whether or not the following constructs could be related to interviews: General Mental Ability (GMA), Job Knowledge (JK), experience (E), academic performance, assessed as the Grade Point Average (GPA), social skills (SS) and personality (specifically the personality factors measured by Five Factor Model: Emotional stability (EE), extraversion (EX),

openness to experience (O), agreeableness (A) and Conscientiousness (C).

With regard to conventional structured interviews, Salgado and Moscoso (2000) carried out meta-analyses for GMA, GPA, social skills, emotional stability (reversed neuroticism), extraversion, openness, agreeableness, conscientiousness, and job experience. No meta-analysis was conducted on the relation between conventional structured interview and job knowledge as no relevant studies were found. Their results showed a correlation between GMA and CSI of .43 after correcting for errors (unreliability in CSI and GMA, and range restriction in CSI). The relationship between CSI and experience was .26 (corrected value). The corrected correlation between CSI and GPA was very low ($r = .15$). With regard to CSI and personality, the results showed corrected correlations of .54, .56, .26, .21, and .25, respectively for emotional stability, extraversion, openness to experience, agreeableness, and conscientiousness. The corrected correlation between CSI and social skills was .38. Salgado and Moscoso concluded that conventional structured interviews are related, to different degrees, to all constructs considered except GPA. Thus, CSI basically assess emotional stability, extraversion, GMA and social skills. CSI also assess job experience, openness, agreeableness and conscientiousness, but to a lower degree.

In connection with the behavioural structured interview (BSI), Salgado and Moscoso carried out meta-analyses on the relations with GMA, job experience, job knowledge, GPA, social skills, emotional stability, extraversion, openness to experience, agreeableness and conscientiousness. Their hypotheses suggested that BSI would correlate with GMA, job experience, job knowledge, emotional stability, conscientiousness and social skills. The results partially supported their hypotheses. Thus, the correlation coefficient between GMA and BSI was .26. A large correlation between job knowledge and BSI was found, as the corrected value was .50. With regard to job experience and BSI, the corrected correlation coefficient was .54. The relationship between GPA and BSI was negligible, as the corrected correlation coefficient was .14. BSI showed a corrected correlation coefficient of .54 with social skills. Their results showed corrected correlation coefficients of .09, .15, .04, .20, and .13, for emotional stability, extraversion, openness, agreeableness, and conscientiousness respectively. According to these results, the behavioural structured interview would measure GMA, job knowledge, job experience and social skills.

The findings of this meta-analytic research and other contributions to the study of construct

validity of structured selection interview suggest that conventional structured interviews and behavioural interviews are two different types of interviews. They are assessing diverse constructs. If they measure different constructs, consequently they are can be able to predict different facets of job performance. Therefore, the use at both types of interviews in the same selection process could be interesting. However, more empirical and single studies should be carried out, because only a small number of studies exists about the relation between CSI and BSI with social skills, job knowledge or job experience.

Adverse Impact

Group differences in scores using different selection tools are still a controversial issue. For example, a lot of evidence seems to indicate adverse impact in the case of Blacks and Hispanics in the case of mental ability. In several investigations, Whites tend to score about one standard deviation higher than Blacks and about two-thirds of a standard deviation higher than Hispanics (Hunter and Hunter 1984; Sackett and Wilk 1994, Schmitt *et al.* 1996). However, there is comparatively little investigation of its adverse impact in different groups in the case of the interview. Arvey (1979), Arvey and Faley (1988) and Harris (1989) summarized the literature with regard to fairness in interviews (e.g., race, sex or age) and concluded that there was little empirical evidence to suggest that interview discrimination existed. More recently, Roehling, Campion and Arvey (1999) reviewed unfair discrimination issues in interviews and concluded that there was a little research indicating whether the structure of interview can reduce subjectivity and improve job relatedness. However, more research into this aspect is necessary as it is to understand the process and contextual factors that produce unfair bias and to determine how these biases may be diminished. In another study, Prewett-Livingston and Feild (1999) carried out a review on the relationship between the employment interview and the race of the interviewee. These authors pointed out that there were a small and inconsistent differences among racial groups in interview ratings, but these differences exist and may have a substantial practical impact. Therefore, this review is focused on different means of incorporating structure in employment interviews (i.e., basing interview questions and scoring standards on job requirements; implementing standardized questions with detailed anchors; using multiple interviewers and providing training). Prewett-Livingston and Feild (1999) concluded that, although more

research is necessary on the employment interview and its effects on the race of candidates and interviewers, if behavioural structured interviews with their characteristics are used, this fact may reduce the potential for racial bias in ratings.

A recent investigation line has been centred on ascertaining whether or not structure level have effects on different groups. For example, Huffcutt and Roth (1998), conducted a meta-analysis of 31 interview studies with a total sample size of 3,685 individuals and found that the interview did not appear to have much negative impact on minorities ($d = .25$) and highly structured interviews (behavioural description and situational) had a lower impact than lower structured interviews. The difference found means that Black and Hispanic scored about a quarter of a standard deviation below scores for whites. These results were supported by the findings of a study conducted by Lin, Dobbins and Farh (1992), who examined the effects of similarity in race and age of the applicant and the interviewer race and age similarity on outcomes in a conventional structured interview and a situational interview. The results indicate of some race bias in Hispanics and black interviewers and this bias was greater in conventional structured interviews than in situational interviews. The authors concluded that the format (more or less structure) may reduce same-race bias. Latham and Skarlicki (1996) found that the SI and the PBDI were resistant to interviewer bias in minimizing in-group favouritism while the conventional structured interview showed an in-group favouritism. According to Latham and Skarlicki, an explanation for these results could be the fact that the SI and the PBDI focus explicitly on the applicant's behaviour while conventional structured interview does not always do so. Furthermore, conventional structured interview may have elicited less information than the SI and the PBDI. Pulakos and Schmitt (1995) found practically no differences in performance with regard to race and gender in an experience-based interview. More recently, in a meta-analytic research, Huffcutt, Roth and Conway (1999) divided interviews according to interview content in several characteristics (e.g. personality tendencies, background credentials, organizational fit). Their results suggested that, in general, these characteristics did not have extensive group differences. Solely background credentials showed high racial and gender group differences.

Williamson, Campion, Malos, Roehling and Campion (1997) used both legal and psychological literature to link interview structure and litigation outcomes in federal courts. Seventeen aspects of interview structure were scored in

these cases and classified in three categories: objective/job related, standardized administration, and multiple interviewers. Job-related or objective questions were the composite best related to favourable verdicts for defendants in both treatment cases and disparate impact cases. This category was followed by standardized administration and finally multiple interviewers.

In summary, although the body of research into group differences in selection interviews is not very extensive, the existing studies seem to show that this procedure presents less adverse impact than other selection instruments (e.g. cognitive ability tests) and this small adverse effect may be reduced if behavioural structured interviews are used. In this sense, Williamson *et al.* (1997) concluded that interview structure not only increases interview reliability and validity, but it may also be for the outcome of litigation and to protect against unlawful employment discrimination.

Applicant Reactions

Applicant reactions to interviews can refer to different topics. For example, applicant reactions have been related to their perceptions of the attractiveness of the organization and to job choice intentions as much as to their intentions to recommend a job to others (Smither, Reilly, Millsap, Pearlman and Stoffey 1993). A few authors have examined the bases of selection reactions using organizational justice theories as a framework. For example, Gilliland (1993) suggested four procedural justice dimensions that were applicable to selection procedures: job relatedness, opportunity to demonstrate one's abilities, interpersonal treatment and propriety of questions.

Steiner and Gilliland (1996) carried out a study in which they compared applicant reactions to different selection procedures in an American sample and a French one. In both samples, the interview was considered one of the fairest and most appropriate selection procedures. Similar results were found by Salgado and Moscoso (2000) using a Spanish and a Portuguese sample.

Rynes, Barber and Varma (2000) carried out a review of selection interviews and dedicated a section to applicant reactions. The authors summarized the evidence on applicant reactions to interviewers and to interview process and concluded that with regard to the first currently there is a considerable amount of research, however there is less knowledge on applicant reactions to interview process and it is necessary to carry out more research on interview structure and content. With regard to interview structure and applicant reactions there are a few studies

and, in this respect, Campion, Palmer and Campion (1997) have identified fifteen structural interview components which are grouped into two categories: content and process. Campion *et al.* have suggested that the interview structure is more complex than was previously thought and any interview could be enhanced by using at least some of the 15 components. They also concluded that there is no good reason for using completely unstructured interviews and suggested that more research be carried out by studying the relationship between structure and user reactions.

Taylor and Bergmann (1987) found that applicants who passed highly structured interviews were more inclined to accept job offers than applicants who were interviewed with less structured interviews. However, the results of other studies were different. Recently, Kohn and Dipboye (1998) conducted two laboratory experiments in which they studied the effects of structure degree on the applicant reactions to interviews. In the first experiment, participants were shown transcripts of interviews and they reacted more favourably to unstructured interviews. In the second experiment, participants were presented with profiles of interviews that varied with regard to different characteristics associated with structure. The results showed that participants perceived the interview and organization more positively when the profile corresponded to unstructured interviews. In another study Hysong and Dipboye (1999) found that semi-structured interviews are perceived to be fairer than highly structured or unstructured interviews, particularly by women, and marginally so by people who have worked full time. Previously, Latham and Finnegan (1993) using transcripts of different types of interviews, found that a student sample preferred conventional structured interviews to behavioural description or situational interviews. Janz and Mooney (1993) conducted a study in which they compared interviewer and applicant reactions in a patterned behaviour description interview and a conventional structured interview. They found that PBDI was rated as more difficult and stressful, although this difference was quite small. PBDI was also rated as more complete, thorough and fairer than conventional structured interview. Previously, Gilmore (1989) had manipulated positive and negative affect (through eye contact, smiling, and other non verbal communication) in simulated behaviour description and standard recruitment interviews to ascertain whether positive affect in a recruiting interview could reduce the hypothetical stress induced by behaviour description interviews. The results showed that although behaviour description interviews were perceived as more difficult, applicants felt that

these interviews were more likely to result in offers of further interviews. With regard to interviewer affect, this had a strong impact on applicant perceptions and they perceived the same questions as less difficult if the interviewer presented positive non-verbal cues. Recently, Conway and Peneno (1999) compared the applicant reactions in three types of interview questions: situational interview (SI) and patterned behaviour description interview (PBDI) and general interview questions. Their results showed that applicants had more favourable affective reactions to general than to SI or PBDI interviews.

In summary, the results of these studies suggest that behavioural structured interviews have some negative effects on applicant reactions. However, the research is insufficient to have a clear view and, moreover, some of these studies are laboratory experiments or use student samples, which makes it more difficult to be conclusive.

Conclusion

The employment interview is the most widely used tool in selection processes and extensive research has been done on it. This research has shown that it is a useful instrument to predict job performance. Although, it seems clear that there are different types of interviews and if we classify them according to the content of questions – conventional structured interviews versus behavioural structured interviews (e.g., situational interview, behaviour description interview) – they have different criterion validities. BSI have higher validity coefficients than conventional structured interviews. The evidence on construct validity shows that both types of interviews are measuring different constructs. Behavioural structured interviews seem to measure a mixture of general mental ability, job knowledge, job experience and social skills, while conventional structured interviews seem to measure personality dimensions (especially emotional stability and extraversion), general mental ability and social skills. In spite of this considerable evidence on employment interview, additional research is needed in several areas.

There is no doubt that the selection interview is a useful procedure to predict general job performance, but do interview generalize validity for different occupations? As a function of interview type, are conventional structured interviews or behavioural structured interviews better predictors for different occupations? At present these questions have not been answered. It may also be interesting to analyse criterion validity through different criteria. Currently,

only the meta-analysis carried out by Schmidt and Rader (1999) analysed validity across different criteria, but these interviews were conducted by telephone.

With regard to construct validity, more single studies of the relationship between both types of interviews (BSI and CSI) and the constructs of social skills, job knowledge and job experience are necessary, because at present there are very few studies. Another line of research might be focused on testing whether conventional structured interviews measure integrity. Salgado and Moscoso (2000) found that CSI correlated largely with the Big Five personality dimensions. Integrity may be measured through these dimensions, especially as integrity is composed of conscientiousness, neuroticism, agreeableness and extroversion (Hogan and Brikmeyer 1997; Ones 1993). Consequently, the correlation between CSI and integrity tests should be researched.

In connection with the adverse impact of selection interview in minority groups, the number of studies published is not is not very large. Although the results seem to show very small group differences, these may be reduced using behavioural structured interviews. However, more single studies are necessary in order to present a definitive conclusion on this topic. The same occurs in the case of applicant reactions. The body of research is small and does not permit drawing any definitive conclusions. However, in this case, and contrary to the adverse impact, highly structured interviews seem less favourable than low structured interviews. This might also be an interesting line of research. Behavioural structured interviews have higher validity coefficients than conventional structured interviews and they have less adverse impact too. However, applicants seem to have negative reactions to this type of interview. Job knowledge and job experience may be possible moderator variables. Candidates with extensive knowledge or remarkably experience within a specific job will react more favourably to behavioural structured interviews because they are better equipped to answer this type of questions than candidates with less or no experience and knowledge.

As a general conclusion on selection interview may be asserted that it is a powerful instrument to select personnel and, although it is necessary to continue researching several topics, at the beginning of this new century, a comprehensive view of the majority of related topics exists.

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