

The Role of Personality Testing in Managerial Selection

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Introduction

The late 1980s and early 1990s has witnessed an upsurge in the use of testing in occupational selection and, more especially, the use of personality tests. In this article we document something of the level of the use of personality tests in managerial selection, speculate on some of the reasons for their popularity, and then place personality testing within the context of a theory of performance in organizations. In this we argue that personality is only a relatively minor determinant of managerial performance; that, even if we can successfully overcome the measurement problems in personality testing, our ability to predict future performance from the results of personality tests will be marginal at best. Finally, we make some suggestions for ways in which personality testing can be more effectively used in selection.

Changing Patterns in the Use of Personality Testing

The available evidence suggests that occupational testing, in general, and personality testing, in particular, are increasing in popularity[1,2]. In this article, we focus on the use of personality testing in managerial selection. A study by Robertson and Makin[3] presented survey findings of the techniques used for managerial selection in 108 organizations in Great Britain. The results showed that, while large organizations were increasingly using assessment centre-type exercises and biodata, very few were using psychological assessment. In particular, nearly

two-thirds (64.4 per cent) of organizations surveyed never used personality tests, while only 4 per cent claimed to use personality tests for *all* managerial appointments. Overall, 36 per cent of organizations used personality tests only for managerial selection, and 12 per cent of the organizations used them with half or more of the applicants assessed.

By contrast, five years later, Shackleton and Newell[1] found a sharp increase in the use of personality testing as they compared the managerial selection patterns of British and French firms. In 1989, only 36 per cent of firms claimed never to use personality tests, compared with 64 per cent of non-users in 1984. Further, 37 per cent used personality tests to assess half or more candidates in 1989, compared with 12 per cent in 1984.

Both in 1984 and 1989 the use of personality tests was more prevalent among larger firms. Companies recruiting over 100 managers per annum used personality tests over 70 per cent of the time, while smaller firms (recruiting under ten managers per annum) used such tests only 35 per cent of the time[1].

Of interest in Shackleton and Newell's study are the comparisons between British and French practices. For managerial recruitment, 86 per cent of major French recruiters used personality testing at some stage, and 29 per cent *always* used these tests.

In Australia, Vaughan and McLean's[4] survey of managerial selection practices in Victoria revealed little use of testing. However, Hicks[2] is of the opinion that Australian practice has followed that of the UK with the commercialization of testing and that, while no statistics are currently available, he believes that

testing is now widespread and increasing in its use.

Personality Testing in New Zealand

At present, there is little evidence for New Zealand regarding the use of personality testing in managerial selection. In the 1970s, Hesketh[5] reported widespread use of the 16PF (16 Personality Factor) by management consultants and government agencies and, a year later, Bull[6] cautioned against the use of the 16PF in selection.

In a small-scale survey conducted in 1986, Dakin and Armstrong[7] observed only limited use of testing in New Zealand for personnel selection. Since then, however, informal observation suggests that the use of testing has increased dramatically, both for selection of new employees, for purposes of promotion, and, sadly, for retrenchment. The reasons for this growth are much the same in New Zealand as those noted by Hicks[2] for Australia:

- legislative changes requiring justifiable selection practices;
- growing commercialization of test provision;
- increasing awareness of the true validities and benefits of tests among users.

In order to explore the use of personality testing in managerial selection, a small-scale interview study was conducted in Christchurch during August 1991. Our aim was not so much to identify if the same usage trends exist in New Zealand as elsewhere, as to examine the reasons for, and mode of, usage. The survey restricted itself to consulting firms engaging in managerial selection. New Zealand is somewhat unusual in the Western world for the proportion of managerial positions filled through search firms. Although many firms undertake their own managerial selection, by concentrating on search firms we are capturing a sizeable proportion of all managerial appointments made.

Of the 29 personnel or management consulting firms listed in the Christchurch *Yellow Pages*, initial enquiries revealed that 12 undertook significant management recruiting. Eleven of the 12 firms reported that they employed qualified (but not necessarily registered) psychologists. Accordingly, interviews were arranged with practising psychologists or consultants in each firm.

Respondents were first asked if they used testing in selection and, if so, the frequency with which different types of tests were used. Table I shows the types of tests used.

| Type of test | Frequently | | Quite often | Never | |
|------------------|------------|---|-------------|-------|---|
| | 1 | 2 | 3 | 4 | 5 |
| Cognitive verbal | 8 | 1 | 1 | 1 | 1 |
| non-verbal | 3 | 0 | 0 | 3 | 6 |
| Personality | 9 | 1 | 1 | 0 | 1 |
| Special aptitude | 1 | 1 | 4 | 2 | 4 |
| Work sample | 2 | 0 | 0 | 4 | 6 |
| Interest | 1 | 0 | 2 | 3 | 6 |

Table I.
Type of Tests Used

Clearly, cognitive and personality tests are the most frequently used. The one firm which did not use personality tests cited cost as the main reason. Because they were selecting only a few managers each year, they felt that the costs of using a psychologist and test purchase could not be justified.

A further question probed the particular types of cognitive and personality tests currently employed. Table II shows the results.

In use by 50 per cent of the recruitment consultants, the ACER's BL/BQ was the single most frequently used cognitive test. Of the personality inventories, usage is spread evenly across the 16PF, the OPQ and the CPI. We are aware of the occasional use of other cognitive, special aptitude and interest tests by a number of consultants, but the focus of our attention lay with personality testing.

Respondents were then asked about the approximate numbers of people tested by them during the preceding year using personality tests. Table III presents the results.

| Type of test | No. of firms using |
|--|--------------------|
| 16 Personality Factor (16PF) | 4 |
| Occupational Personality Questionnaire (OPQ) | 4 |
| California Personality Inventory (CPI) | 3 |
| Sales Performance Questionnaire (SPQ) | 2 |
| PRF (Jackson) | 1 |
| ACER BL/BQ | 6 |
| Raven's Matrices | 4 |
| Watson Glaser | 2 |
| Wonderlic | 3 |

Table II.
Specific Tests Used

| Firm | Number of people tested | Type of personality test used |
|------|-------------------------|-------------------------------|
| A | 500+ | 16PF |
| B | 500+ | 16PF |
| C | 500 | OPQ |
| D | 150 | OPQ, CPI |
| E | 120 | 16PF |
| F | 100+ | OPQ |
| G | 100+ | 16PF |
| H | 30 | OPQ |
| I | 15 | CPI |
| J | 15 | SPQ |
| K | 13 | CPI |
| L | 0 | |

Table III.
Extent of Testing and Personality Test Used

Of interest in these results is the extent of testing in a relatively small urban centre; conservatively some 2,000 incidents in 1991 with over 1,200 using the 16PF. Further, respondents reported that nine (75 per cent) of the 12 firms used personality tests for all short-listed candidates.

Further questioning demonstrated that the use of these tests is partly client-driven. Ten of the firms reported that clients sometimes requested the use of particular tests.

Validity of Personality Tests

This growing usage requires explanation. One reason is that such tests are now marketed in a much more active fashion by commercial test producers. The tests are treated as another consumable, attractively presented and subjected to the same marketing ingenuity as other items of mass consumption. In this we concur with Hicks's observations of Australian trends. Of lesser importance in New Zealand is the impact of fair employment legislation. But, most importantly, one would like to believe that the growing popularity of personality testing is predicated on new insights about validity and predictive power. Have we, in the past decade, experienced a sudden jump in the validity of these tests which would account for their popularity?

Disappointingly, the published research on the validity of personality testing for personnel decision making gives little confidence about their predictive validity. The early reviews of Ghiselli and Barthol[8] and Guion and Gottier[9] indicated that the validities of personality tests were relatively low. Ghiselli and Barthol[8] reviewed 153 studies yielding a mean coefficient

of only 0.14, a result replicated by Guion and Gottier[9], although Ghiselli[10] found an average correlation of 0.21 between personality measures and ratings of managerial performance. Ghiselli's conclusion was that personality tests are of only moderate value in predicting the level of proficiency likely to be attained by professional managers.

A meta analysis of validity studies published between 1964 and 1982[11] showed continuing low validities of personality measures with average validities of 0.206.

However, more recent research has examined the validity of personality tests more closely. Barrick and Mount[12] suggest that, at the time of the earlier studies, no well-accepted taxonomy existed for classifying personality traits. Consequently, they argue, it was not possible to determine whether there were consistent, meaningful relationships between particular traits and performance criteria in different occupations. By using an accepted taxonomy (the "big five" personality dimensions – extroversion, emotional stability, agreeableness, conscientiousness and openness to experience), they were able to show that there are differential relationships between personality dimensions and performance criteria.

This finding was more important than the overall validity of personality measures which was found to be relatively low. The result highlighted the limitations of trying to determine the overall validity of personality tests as predictors. Furthermore, these results indicate that, given the need to align personality traits with different occupational requirements, a likely reason for the low validity of personality tests is that current test batteries measure the wrong things. Nevertheless, even in Barrick and Mount's research, validities rarely rise above 0.20. For managers, as expected, scales testing for overall sociability (extroversion) yielded the highest validities.

Similar conclusions were reached by Day and Silverman[13]. They suggest that personality variables are useful predictors of job performance when carefully matched with occupation and organization. They conclude that specific, job-relevant aspects of personality are significantly related to ratings of job performance beyond levels which can be predicted by cognitive ability alone. Through their incremental validity, personality tests can improve on the base rates of cognitive selection strategies. To some extent, these results provide confirmation of Guion and Gottier's claim that "in some situations, for some purposes, some personality measures can offer helpful predictions"[9, p. 159].

Overall, this literature would exhort us that, if personality testing is to be helpful, it is incumbent on the employer to identify first characteristics of the job which are important, then identify personality traits which are relevant to those characteristics, and, finally, place greatest weight on those scales (discounting others) when interpreting test results. Our experience is that this is rarely done in practice, with personality profiles being interpreted as a whole, after the fact, and with extreme results (on any scales) becoming the focus of attention in interpretation.

Further, there have been some developments in exploring the “fakeability” of personality tests, with Furnham[14] reporting that standard personality profiles are not so susceptible to faking as was previously thought.

Although some steps have been taken in personality assessment as a discipline – in differential test use, rather than improvement of the instruments themselves – it seems to us that these improvements are hardly sufficient to warrant such a dramatic upsurge in their use. At best, even with differential analysis of test results, validities are rarely obtained which exceed 0.25, accounting for about 6 per cent of variance in job performance. Nevertheless, if this 6 per cent is incremental in nature (adding to the validity of other selection practices), then it provides justification for personality testing. However, given these levels of validity, one would be surprised if the weight assigned to personality test results was equivalent to the weight assigned to other more valid predictors (cognitive testing, for example).

One of the central points made by defenders of personality testing[15] and by respondents to our survey is that personality tests are used only as one of a number of selection devices. Consequently, in the survey we attempted to discover the weight placed on personality testing relative to other selection criteria. Respondents were asked whether personality tests were (1) “much more important than”; (2) “more important than”; (3) “equal in importance to”; (4) “less important than”; or (5) “much less important than” the criteria in Table IV.

A rating of 1 indicates that personality tests are much more important; a rating of 3 indicates equal importance, and a rating of 5 indicates that personality tests are much less important. In general, personality tests are seen as less important than all other criteria with the exception of age.

Debate in the Literature

Concomitant with the growth in the use of personality tests has been a growing and

| | Mean rating |
|----------------------|-------------|
| Intelligence tests | 3.50 |
| Probationary period | 4.42 |
| Curriculum vitae | 3.58 |
| Reference checking | 3.92 |
| Work experience | 3.92 |
| Interviewing | 3.67 |
| Academic achievement | 3.83 |
| Age | 1.83 |

Table IV.
Relative Importance of Personality Testing

sometimes acrimonious debate about the merits of these tests, mainly between those with vested commercial interests in personality testing. Blinkhorn and Johnson[16,17] have argued that the evidence for the predictive validity of personality tests is frequently overstated and incorrectly assessed. Further, their research indicates little evidence of enduring relationships between personality test scores and measures of success at work – even for the best personality tests. They propose that the correlations offered by various researchers and publishers of tests are “well within the bounds of what chance might throw up”[16, p. 672].

Central to this debate is concern about the relative merits of ipsative and normative measurement. Because of faking problems, ipsative measurement has become increasingly popular in personality testing. Critics of ipsative measurement argue that, although psychological benefits are to be reaped from the use of ipsative questionnaires, they cannot be used for comparing individuals across scales[18,19], and therefore they are inappropriate in selection[20].

Advocates of ipsative measurement suggest that this criticism lacks a degree of both balance and realism[21]. They argue that ipsative questionnaires provide a useful alternative to norm-referenced questionnaires and their inherent fakeability, and suggest that *any* scaling technique has some inherent bias.

Other research comparing the reliability and validity of normative and ipsative approaches indicates that there is little difference between the two[22].

To us, however, this debate rather misses two central points:

- (1) At best, the validities of personality assessment are much lower than for other forms of objective assessment (although, if they are uncorrelated with other more valid predictors, their use may still be justified).

- (2) A significant weight placed on personality testing misses the extent to which personality can contribute to performance.

A Model of Performance

Personnel selection is primarily concerned with the prediction of performance at work. Implicit in the use of personality testing is the assumption that personality traits are important determinants of performance; that variations in performance are related to variations in personality. Further, the linkage between personality and performance is based on the premiss that there are relatively stable differences in personality and that these differences determine how individuals will perform in different situations. Referred to as the “trait position” in the personality psychology literature, this view draws on the work of Bowers[23], Epstein[24], Hogan *et al.*[25] and Stagner[26]. However, the trait position has been questioned by other personality psychologists. A contrary view, referred to as the “situationist position”, contends that the situation and its stimulus characteristics largely dictate behaviour. Mischel[27], for instance, notes that behaviour related to a trait in one situation rarely correlates highly with other behaviour related to the same trait in other settings, and that scores on trait measures correlate minimally with behaviour in specific situations. An interactionist perspective which views behaviour as a joint function of the person and the situation has attempted to resolve the trait-situation controversy[28] but, as Fiske[29] and Schweder and D’Andrade[30] contend, even cross-situational consistency in behaviour is not sufficient to warrant the use of broad trait measures in personality psychology.

While personality psychologists rooted in the trait position have overstated the importance of personality as a determinant of performance, others outside the personality psychology literature have adopted a distinctly interactionist perspective. Reviewing the literature on personnel selection and placement, Hakel[31] notes that models of performance have moved beyond simple assertions such as $\text{behaviour} = f(\text{person, environment})$ and $\text{performance} = \text{motivation} \times \text{ability}$ to incorporate individual, organizational, and environmental factors.

Mitchell[32], for instance, presents a performance-model sequence describing links between arousal, motivation, behaviour, performance, and the evaluation situation, and the role of task, social, and organizational factors in determining these relationships. In this model,

Mitchell notes that performance in organizations depends on a number of things:

- *The person.* Whether a person performs in a manner which is consistent with organizational expectations depends on:
 - arousal: the extent to which, physiologically, people are “primed” to behave;
 - motivation: equivalent to ideas about personality traits, motivation refers to the extent to which people prefer to engage in certain kinds of behaviour rather than others;
 - behaviour: the extent to which people have the capacity (ability) to engage in the expected behaviour.

In general then, at the individual level, performance may be driven by preferences for behaving in particular ways and by the individual’s ability to perform. Personality tests measure (like interest tests) the individual’s preferences. Existing results suggest that ability is a much better predictor of performance than preference. Not surprisingly, one’s preference for behaving in a particular way does not necessarily predict one’s eventual performance. Simply because I prefer to be sociable does not necessarily mean that I will be able to act in a sociable fashion. Conversely, people with high levels of social skill may prefer not to exercise their ability. On logical grounds it is not surprising that personal style and preference are a less effective predictor than ability.

- *Context.* The resultant execution of some task is, in turn, constrained by:
 - the nature of the task;
 - social factors;
 - organizational factors;
 - evaluation: the way in which significant others evaluate and reward or punish the resultant behaviour.

Quite clearly, performance is determined by a range of factors, some individual, others contextual. Equally clearly, of the individual factors, personality (the motivation to behave consistently in particular ways) is only one of several, and quite possibly a minor factor. Significantly, Mitchell argues that it is difficult to determine whether behaviour is caused primarily by motivation or ability without considering social, task, and situational factors. More

significantly, Mitchell argues that the interdependence of tasks in organizational settings reduces the importance of individual factors such as motivation and ability in determining performance. This is because in such situations it may be difficult to specify and ascertain individual contributions to the joint performance of interdependent people.

We sought to explore perceptions of this issue among the responding consultants by asking them to estimate the extent to which, in their view, individual and contextual factors contributed to performance. The question was posed as follows.

In your experience to what extent does work performance depend on context, and to what extent on the person? Would you please allocate 100 points between:

- personal style (personality) as a determinant of performance;
- ability as a determinant of performance;
- organizational context as a determinant of performance.

The results are shown in Table V.

While there is some variability between responses, the responses are remarkably consistent. The consultants appeared to identify readily with the question, which sparked considerable discussion. The interesting result here is that personal characteristics (personal style and ability) were considered much more important than the influence of context. A person's performance was thought to be approximately 70 per cent determined by their own characteristics, and only 30 per cent by contextual factors.

This result contrasts with the growing consensus in the literature that contextual factors

| Firm | Personal style | Ability | Context |
|------|----------------|---------|---------|
| A | 50 | 25 | 25 |
| B | 40 | 30 | 30 |
| C | 30 | 30 | 40 |
| D | 40 | 20 | 40 |
| E | 20 | 60 | 20 |
| F | 25 | 60 | 15 |
| G | 35 | 25 | 40 |
| H | 30 | 40 | 30 |
| I | 40 | 50 | 10 |
| J | 40 | 20 | 40 |
| K | 25 | 35 | 40 |
| L | 45 | 25 | 30 |
| Mean | 35 | 35 | 30 |

Table V.
Perceptions of Determinants of Performance

are as important as, if not more important than, personal factors, as determinants of performance. This is neatly summarized in the interactionist view of personality traits as conditional probabilities that a particular action will be evoked by a particular environmental state[33]. The implication of this for selection is that any selection procedure must specify contextual features of a job before specifying individual traits and abilities for selection. In other words, personality-testing procedures must be able to specify situational conditions of a job before choosing a set of desirable personality traits.

This view has two implications for personality testing in managerial selection:

- (1) Personality tests should be grounded in context. Rather than asking people how they prefer to behave in general, they should be asked how they prefer to behave in specific contexts. A useful personality test may vary the nature of the contexts.
- (2) While it may be feasible to specify contexts for routine, non-managerial jobs, for most managerial jobs, it is almost impossible to specify exactly the situational factors which a potential incumbent is likely to encounter. A review of the managerial work literature supports our view.

Hales[34] identified four themes which characterize managerial work: variation and contingency; choice and negotiation; pressure and conflict; and reaction and non-reflection[35]. Research on managerial work supports the view that managerial jobs are characterized by brevity and fragmentation[36,37]. While much of the managerial work literature is based on the activities of general managers[38] and chief executives[37], it has been argued that middle managerial work roles may differ from these only in terms of emphasis given to selected activities. Mintzberg[37] has argued that, at lower levels of the organization, work is more focused, more short-term in outlook, and the characteristics of brevity and fragmentation are more pronounced. A study by Martinko and Gardner[39] investigated the relationship between managerial behaviour, performance, and environmental and demographic variables. Although their study supported earlier conclusions regarding the brief, varied, fragmented and interpersonal nature of managerial work, there was little support for the proposition that managerial behaviour is related to performance. On the other hand, environmental and demographic variables were found to be related to managerial behaviour.

There are two significant implications of the managerial work literature for managerial selection practices. First, given that managerial work is brief, varied, fragmented and interpersonal in nature, contextual features of a specific managerial job can be specified only in very general terms. Second, since managerial jobs provide considerable choice to the role incumbent in terms of managerial behaviour, detailed specification of the context has limited value. Taken together, these imply that it is difficult to specify a set of desirable personality traits for managerial jobs except in very general terms. Consequently, the role of personality in managerial selection is open to question. Selection procedures using personality testing tend to overstate the importance of personality as a key determinant of performance.

Steps in Improving the Use of Such Tests in Managerial Selection

We hesitate to argue that personality tests have no place in managerial selection. However, given the present state of the technology, it is advisable that they be accorded less weight than they currently enjoy. The challenge for selection researchers is to seek to improve the validity of such instruments by some of the following means:

- Seeking to measure the probability of success, given the environment or context. That is, some contexts are probably more conducive to success than others. In order to understand the true validities of particular selection methods, we need to have a better understanding of the base rate of success. For example, one Christchurch firm went through three highly-qualified general managers in one year, apparently because of the inability of the owner to trust them. In that firm, the probability of a successful appointment was low.

In this context it may also be wise to change our ideas about reliability in personality measurement. Instead of assuming that personality is a fixed quantity which never changes (a requirement of reliability measures), we should be more interested in “style flex and flux”. Many people’s personal style is variable from context to context – it is not a given.

- Measure person-context fit. Most personality tests take no account of organizational context (although test interpreters may), assuming that

the context is a constant. Much more effective selection practices could be achieved by evaluating the individual’s preference for and capacity to perform in different situations.

- Develop better theories of personality. It is still the case that most personality tests (certainly the most frequently used) are empirically rather than theoretically derived. In this we need to move away from the large and complex factor solutions towards simpler solutions that are more defensible both empirically and theoretically. There is little evidence that the complex multivariate personality structures built out of factor analysis have much in the way of construct validity.
- Use tests in an action research mode. Finally, personality tests may be much more effectively used as a means of structuring a conversation with the candidate, rather than as a single predictor. Indeed, several of our survey respondents reported that they used the tests in just this way; they provided the results to the candidate, explaining what the company was looking for. The results were then discussed and a careful exploration made of variances between the individual’s results and the employing organization’s expectations. To us, this is a valid and helpful way of employing these tests.

Summary and Conclusions

This article began with the observation that the use of personality testing in managerial selection has grown over the last ten years. An informal survey of recruitment consultants in Christchurch attests to this widespread usage of personality tests. It was argued that the users of these tests overstate the importance of personality as a determinant of performance. We have drawn from the personality, managerial work and performance literatures to argue that:

- unless contexts of behaviour are specified in advance, personality tests have limited relevance in selection; and
- for most managerial jobs, contexts cannot be accurately predicted or specified.

Taken together, the implication for managerial selection is clear. Selection of people for managerial jobs cannot be based largely on personality test results. The article concludes with some ways in which personality testing can complement other selection procedures.

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Further Reading

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