INTRODUCING PSYCHOMETRICS

And the United Kingdom Personality Questionnaire

Leading instrument in the Educational Sector

What are Psychometrics?

Basically, the word psychometrics means 'mental measurement' (psycho – metrics), and gives an insight into how rigorously these tests and questionnaires are designed for use. Questionnaires and tests within the field of psychometrics can include the measurement of knowledge, abilities, attitudes, personality traits, as well as educational measurement. Anyone administering them should hold appropriate qualifications in their use, usually from the British Psychological Society, who maintain a register of authorised test users.

The questionnaire we will mainly discuss is the UKPQ. UKPQ is a personality questionnaire, designed and normed within the UK during 2005, and one that is particularly used in the Education Sector.

What advantages do psychometric tests have over other forms of assessment?

The first advantage they have is that they add reliability and validity to any self-evaluation or assessment procedure that cannot be achieved without their use. Unlike other forms of evaluation, they have demonstrable statistical validity (it can be statistically shown that they accurately measure what they claim to measure and that they successfully predict a person's behavior with a known degree of accuracy) and reliability (the results are demonstrably repeatable – again with a known degree of accuracy).

Other forms of evaluation – surveys, focus groups, non-psychometric questionnaires, interviews, astrology, handwriting analysis etc. – are much more subjective and have either not been shown to have demonstrable validity or reliability, or have been shown to have little predictive validity (they don't actually seem to predict the behaviour that emerges).

Psychometric test results are usually represented numerically, making it easy both to compare the results with pre-defined groups (e.g. Senior Leadership Teams in the UK). In the case of personality questionnaires, the test addresses the issue of how the person who has completed it characteristically behaves in a wide range of different situations and with different people. Once again, the numeric comparison is statistically-based giving a reliable scale (with quantified accuracy).

Thus personality questionnaires provide information that is not easily or reliably assessed in other ways. As we have seen, they can fill gaps which have not been assessed by other recruitment mechanisms. They can also raise questions that can later be directly addressed in the interview. It is for this reason that personality tests are being used increasingly in recruitment and selection processes. Their use adds richness to assessment decisions which cannot be achieved in any other way.

So, what is in a personality test?

Personality tests are relatively straightforward, but capable of a great degree of subtlety in operation. A personality test such as UKPQ is simply a number of statements examining how the "test-taker" prefers to behave – or feel – in certain work-related situations. The questions have been tested many times to ensure that people who behave in a particular manner will respond to the questions in a consistent way. This is what gives the UKPQ its validity.

On a personality questionnaire, the questions are grouped into 'scales'. These are areas of a person's personality that have been shown to be of particular interest to prospective and existing employers alike. Each scale will consist of several questions that all examine a different facet of the same personality construct and thus similar behavioural characteristics. By looking at many different scales together, we can see many aspects of a person's character, and so get a good understanding of how the applicant is likely to behave. Because the questions are derived from workplace behaviours, the view obtained is likely to have enormous relevance to a person's behaviour in the working environment.

How was UKPQ created?

The UKPQ began with a search for personality constructs with practical importance to the UK educational workplace in the middle-to-late years of the first decade of the 21st century. This exercise involved many hundreds of interviews, in a variety of sectors (11-16; 11-19; General Further Education, Sixth Form Colleges, Primary Ed, Academies and the Independent Sector) in the UK. To these structured and repertory-grid interviews were added a number of 'focus group' meetings, and hundreds of adjectival checklists. The goal was to identify the behaviours that were actually 'making a difference' in the workplace and to link these to established personality constructs that had been shown to have stability over time.

This effectively defined the broad domains of the UKPQ questionnaire, and items were written to be 'content valid' within those domains. In other words, the items directly address attitudes or behaviour related to the construct under consideration.

A total of 525 items were written, and after internal analysis, a total of 368 were chosen for the initial statistical analysis exercise conducted within various schools and colleges within the UK. The 368 items were administered to around 1000 staff, together with other well-regarded instruments that, together (though not singly), covered the broad spectrum of items contained within the UKPQ.

From the analysis, each question was carefully correlated against its own scale, and also all other scales. No item was successful if it correlated more highly with another scale than its own, irrespective of the degree of correlation reported with its own scale. The question bank was reduced from 368 to 171. The UKPQ was then correlated with other well-known questionnaires, chosen because of the similarity between some of their constructs and those of the UKPQ, and the questionnaire was then formalized and a statistically valid norm group was established.

If I complete a questionnaire, how can I make sure my results are as accurate as possible?

Basically, don't 'ponder' each statement too much. Try to answer with your first, instinctive, view. Don't worry about consistency or about previous answers. Do read each statement carefully; answer it, and then move on to the next one. Try to finish the questionnaire in about 20 minutes.