

Appreciating unusual responses in 16PF® questionnaire results

A quick reference guide to the 16PF response style indices

Introduction

For decades, psychometric tools have contributed to the selection and development process throughout the employee lifecycle. These tools provide deeper insight into personality and behaviours, helping to shape our final decision about a candidate or employee.

Contribution to the selection and development process is well and good, but how do we remain confident that the insight these tools bring is accurate and trustworthy? When it comes to interpreting results of psychometric tools, we often find ourselves asking:

- *Is the profile accurate?*
- *Is it safe to come to conclusions or make decisions on the basis of one's profile?*
- *How can I trust the score of this questionnaire?*
- *How can I appreciate unusual answers?*

Faith in personality questionnaires

Robust personality questionnaires have been effective at capturing human personality insofar as the respondent is willing to give honest answers and accurate reflections of his or her behaviour in various situations. Since the accuracy of the test relies on the respondent's honesty, several personality questionnaires have incorporated measures of a person's attempt to create a favourable impression, but few have been able to do more than that.

By including three scales, instead of only one like most other personality questionnaires, that are designed to highlight any concerns about the response behaviour of a respondent, the 16PF® instrument is well protected against conscious or unconscious distortion, random responding and indecisiveness. These three scales, namely Impression Management, Acquiescence and Infrequency, provide the practitioner with even more detailed guidance in how to interpret a candidate's scores accurately. The 16PF instrument is therefore, since it was first created in 1949, not only known as a reliable, valid and consequently well-respected tool but it is also exceptional in its approach to identifying different kinds of unusual response behaviour.

This white paper outlines the characteristics within each of the three scales and provides examples of how to avoid misinterpretation of 16PF results.

The unique aspects of the 16PF instrument

The three 16PF scales, formally referred to as Response Style Indices, enable the practitioner to come to safe conclusions about and interpretations of a candidate's personality profile. They act as red flags against faking and random responding, alerting the practitioner to exercise caution when interpreting the results of the 16PF questionnaire.

These scales are the products of extensive research and allow for a more accurate measurement of human personality. In addition

to being useful in the interpretation of the 16PF instrument, the Response Style Indices can alert the 16PF practitioner to possible distortion in other assessment outcomes, e.g., in interviews, biographical questionnaires and other personality tools. Thus the Response Style Indices operate on a multi-level basis.

As this is a quick reference and familiarisation guide about the three response style indices Impression Management, Acquiescence and Infrequency, the information in this paper is not meant to be exhaustive. The *16PF User's Manual* offers in-depth reading lists with additional information about 16PF instrument.

Impression Management

What is it about?

Impression Management (IM) is primarily a social-desirability scale. It assesses whether a client has responded to the questions in a generally socially desirable or undesirable way. An IM score below or above the acceptable levels calls for cautious use of the usual interpretation guidelines. In other words, a high score on the IM scale indicates a tendency to choose answers that describe positive or socially acceptable behaviours. Conversely, a low IM score means that the person who completed the questionnaire consistently chose more answers that describe negative or less socially desirable responses. *The IM scale, however, is not a lie detector. 16PF practitioners should bear in mind that socially desirable or undesirable responding may be either deliberate or unconscious.*

How is it scored?

The IM raw score is converted to a Sten or a Percentile score.

The IM scale is bipolar. In other words, the opposite poles of the same scale measure two aspects of Impression Management. In particular, it measures whether a client has responded in an overly favourable or unfavourable manner. A Sten score of 9 or 10 or, alternatively, a score at or above the 95th Percentile denotes socially desirable responding. A Sten score of 1 or 2 or, alternatively, a score at or below the 5th percentile means that the client has attempted to give a socially unfavourable image.

The scoring process is straightforward. When using the paper & pencil version of the 16PF instrument, it can be done manually by following the instructions in the self-scorable version of the questionnaire. The norm tables by which to convert a raw score to a Sten or a Percentile score can be found in the *16PF User's Manual*.

When administering the 16PF questionnaire electronically, the practitioner does not need to worry about scoring or cut-off points. The report generated by OPPAssessment contains a statement for the practitioner about whether the respondent is above or below the cut-off point on the scale Impression Management.

What does a high IM score mean?

A high IM score could mean that the client attempted to create a socially desirable impression. In other words, when the client was completing the questionnaire he or she consistently chose answers that describe socially desirable behaviours. Recruitment and selection contexts are most likely to increase the pressure to respond in a socially desirable way, although Impression Management does occasionally surface in development settings as well. *However, it is important to keep in mind that a high IM score does not necessarily mean that the person attempted to deliberately fake the questionnaire. Impression Management can take the form of either deliberate or unconscious distortion of one's responses.*

There are a number of possible reasons why a person achieved a high IM score:

- **Unconscious Impression Management or unintentional distortion:** A person may hold the belief that their behaviours are consistently positive. However, when their self-perception is not accompanied by equally positive behaviours, unconscious Impression Management may be in place. As a result, the person has responded honestly, but not accurately.
- **Conscious Impression Management or deliberate distortion (faking):** The client has attempted to manipulate his or her responses to give an overly positive impression. However, the 16PF practitioner should not perceive such responding as a malicious attempt to distort one's responses to the questionnaire. For example, in an attempt to please the administrator or assessor(s), a person may adopt only answers that describe positive behaviours or prevalent social stereotypes. In other instances, a high score may indicate an individual's attempt to put his or her best foot forward.
- **Genuine result:** The client may possess 'saint-like' attributes. The result does not reflect an attempt to distort one's responses to the questionnaire. On the contrary, the person has a positive perception of his or her personality and he or she behaves accordingly.

What do I do if I have a person with a high score on IM?

There are no hard and fast rules by which to decide whether a profile should be invalidated on the basis of a high IM score. In case of a high score on IM, the 16PF practitioner may:

- **Hypothesise** as to why such a high score has occurred and explore this during the feedback session. The context will determine which hypothesis is most likely to be true.
- **Ask** the individual for confirmatory as well as contradictory behavioural examples and explore negative self-statements. The candidate may be unable or unwilling to offer evidence of less desirable behaviours.
- **Ask** the individual to complete the 16PF questionnaire again or, if possible, review additional information concerning the respondent (background data, and other test or questionnaire results).
- **Interpret** data from other resources with caution. A high score on the 16PF instrument may mean that other assessments have also been influenced by Impression Management.
- **Take into consideration** the individual's background. A sales person may be more likely to put his or her best foot forward than a person with a technical background. This is due to the professional expectation that sales representatives always manage their outward impression.

Which 16PF primary scales and/or global scales might be affected by a high score on IM?

- Impression Management correlates with several 16PF primary personality scales. The 16PF practitioner can expect elevated scores on Emotional Stability, Warmth, Social Boldness, Rule-Consciousness and Perfectionism. Conversely, lower scores may be expected on Vigilance, Tension, Apprehension, Self-Reliance and Abstractedness.
- Impression Management is also related to two global factors. A higher score on Impression Management can be expected to elevate the score on Self-Control and to lower the score on Anxiety.

The above examples are not exhaustive and various combinations may emerge. The IM scale acts as a corrective lens which the practitioner can use to interpret distorted responses.

What does a low score on IM mean?

A low IM score indicates a conscious or unconscious tendency to give a generally unfavourable image of oneself. In other words, it denotes an individual's propensity to select those answers in

the questionnaire that describe undesirable personality characteristics. Possible reasons may include:

- **Conscious or deliberate distortion:** A low score on IM might be an indirect 'cry for help'.
- **Unconscious distortion:** Most individuals are aware of the positive as well as the negative aspects of their personality. However, a low IM score may mean that the person has unconsciously rejected, to a lesser or greater extent, positive personality attributes. This negative self-perception could be due to a low self-esteem.
- **Genuine result:** The person may be truthful in his or her answers and might not realise that his or her behaviours could be considered as undesirable or seen negatively. In these cases, the result does not reflect an attempt to distort one's responses to the questionnaire but rather reflects the person's true perception of himself or herself.

What do I do if I have a person with a low score on IM?

Again, there are no set rules by which to decide whether a profile should be invalidated on the basis of a low IM score. In case of a low score on IM, the 16PF practitioner may:

- **Construct a number of hypotheses** to explore during the feedback session.
- **Probe** the client's negative self-statements. A client who deliberately sets out to distort his or her responses is likely to reveal the reason if prompted.
- **Discuss** the low IM score with the client at the beginning of the feedback session. The outcome will determine whether it is best to ask the client to fill in the 16PF questionnaire again, should he or she have made a deliberate attempt to distort their responses, or disregard the actual scores and discuss the 16PF personality factors. The latter should be the case if the low IM does not resonate with the client.
- **Ask** the client to talk about his or her strengths and development areas. As a client with a high IM score may avoid discussing negative aspects of his or her personality, someone with a low IM score may not recognise or indeed be aware of his or her strengths.
- **Probe** for confirmatory as well as contradictory behavioural examples. Confirming the candidate's scores by asking them to provide behavioural examples is a first step. Probing them for examples of the opposite pole of the scale is equally important.

Other sources of information are likely to be influenced by a low IM score. These need to be interpreted with caution.

In addition, the practitioner may:

- **Be particularly alert to negative self-statements.** The client may give overly negative behavioural examples.

Which 16PF primary scales and/or global scales might be affected by a high score on IM?

- Impression Management correlates with several 16PF primary personality scales. The 16PF practitioner can expect lower scores on Emotional Stability, Warmth, Social Boldness, Rule-Consciousness and Perfectionism. Conversely, elevated scores may be expected on Vigilance, Tension, Apprehension, Self-Reliance and Abstractedness.
- Impression Management is also related to two global factors. A lower score on Impression Management can be expected to lower the score on Self-Control and to elevate the score on Anxiety.

Acquiescence

What is it about?

The 16PF questionnaire includes a relatively high number of True/False items. Despite the fact that, when it comes to personality, there are no right or wrong answers, a number of

respondents may generally select the 'True' alternative. The Acquiescence scale (ACQ) measures the respondent's tendency to agree positively to questions regardless of their content.

Acquiescence isn't as complex to interpret as Impression Management; however, it is still worth exploring with the candidate, as ACQ can expose unconscious distortion or random responding.

How is it scored?

The ACQ scale is scored by counting each 'True' response in the questionnaire. Scores at or above the 95th Percentile indicate an acquiescent response set.

Calculating the ACQ manually can take some time and care. Instructions can be found in the *16PF User's Manual*. However, expert reports automatically generated from OPPassessment include an interpretation of a respondent's ACQ score.

What does a high score on ACQ mean?

There are various possible reasons why a client has scored highly on the ACQ scale. He or she may have:

- **A tendency to choose the 'True' or 'Agree' alternative to please the administrator.**
- **A high need for approval:** The 'True' or 'Agree' alternative cannot be separated from the implied positive connotations. Thus, this alternative can be a highly desirable option, regardless of the question.
- **Been confused when completing the questionnaire:** The respondent may not have understood the content of the questions.
- **Differing cultural norms:** The respondent may come from a cultural background where agreeableness is rewarded.

What do I do if I have a person with a high score on ACQ?

The 16PF practitioner may:

- **Ask** the client whether they had any difficulties in completing the questionnaire. If the answer is yes, alternative routes of assessment are highly advisable.
- **Encounter** little or no resistance to his or her statements. The acquiescent individual is less likely to disagree or make comments during the discussion. In that case, the 16PF practitioner is advised to avoid feeding back the person's reported profile as this may be inaccurate. Instead, discussing the 16PF scales in general and probing for confirmatory and contradictory behavioural examples would be more appropriate.
- **Invalidate** the profile and ask the individual to complete the questionnaire again. However, if the client has learning disabilities or poor reading skills, the 16PF practitioner may want to make alternative arrangements for assessment.
- **Watch** for low scores on the following 16PF primary scales: Dominance, Social Boldness and Vigilance. If the person has achieved a high ACQ score and none of the above scales has been affected, random responding and/or poor understanding are the likely reasons.

Infrequency

What is it about?

The Infrequency scale can detect whether a person has given unusual responses, responded randomly or indecisively. There are some questions where very few people choose the middle ('b' or '?') option. If an individual has chosen option 'b' or '?' for this set of questions, they have in effect chosen a set of very unusual or infrequent responses. Subsequently, the INF scale will be elevated.

The Infrequency scale (INF) is another safeguard against random responding. Above all other indicators, INF is most likely to

explore confusion or difficulty experienced by the respondent. It can be an indication of indecisiveness.

How is it scored?

Scores at or above the 95th percentile indicate that the client has been indecisive where most individuals were able to choose the 'True/Agree' or 'False/Disagree' alternative. The 95th percentile is the recommended cut-off point, above which random responding may have occurred.

To calculate the INF score manually can take some time and care. Instructions on how to calculate the INF score can be found in the *16PF User's Manual*. However, expert reports generated automatically by OPPassessment include an interpretation of the respondent's INF score.

What does a high score on INF mean?

A high score on the INF scale may indicate:

- **Random or indecisive responses:** Likely reasons include poor comprehension, reading difficulties, hostility against the questionnaire or the purpose of the assessment, indifference, trying to avoid making a 'wrong impression', uncertainty about one's behaviours, and/or poor administration.

What do I do if I have a person with a high INF score?

The 16PF practitioner may:

- **Try** to determine why the individual has responded in such an unusual way and explore any hypotheses during the feedback session. It may be that poor understanding, reading difficulties or hostility against the questionnaire may call for alternative means of assessment.
- **Discuss** the 16PF profile, bypassing the actual scores, and ask the client for confirmatory as well as contradictory behavioural examples.
- **Ask** the client to complete the 16PF questionnaire again. In addition, the administrator should emphasize that the middle or '?' alternative is best to be avoided.
- **Encourage**, though not coerce, the indecisive client to think of specific examples of behaviours that relate to each of the 16PF personality factors.
- **Interpret** data from other resources with caution.

Interested in learning more?

For more information visit www.opp.eu.com or contact us on +44 (0)845 603 9958. For technical support for existing OPP products, contact Client Services on +44 (0)845 603 9958.

© Copyright 2009 OPP Ltd.

® OPP is a registered trade mark of OPP.

®16PF is a registered trade mark of the Institute of Personality and Ability Testing, Inc. (IPAT) in the USA, the European Community and other countries. IPAT is a wholly owned subsidiary of OPP Ltd.