wave

Flexible Online Learning:
Wave Occupational Personality

training

Introduction

This guide covers the content included in the Saville Assessment Wave Occupational Personality Flexible Online Learning course and can be used as reference material during and after the training.

Contents

What is Personality?

Implicit vs. Explicit Approaches to Personality

Everyday, we think about how people differ from one another. For example, we may think about others' behavior or their emotions, or something that is very individual to them. To this extent, we are thinking about others' personalities. Most people feel they have an understanding of human nature: why we do things, what motivates us and how we behave.

Some people feel they have a natural intuition about what makes people tick, and they may or may not be right. Such an understanding is described as implicit; this understanding is generally not formally stated, written down or researched. By contract, explicit approaches to personality are typically formally defined and described, and therefore open to scientific research and challenge.

Important Figures in Personality Theory

Psychoanalytic

Sigmund Freud's theory of personality, known as the Psychoanalytic approach, focused on the subconscious and childhood experiences. Freud believed that, to a great degree, adult personality was shaped by childhood experiences at various key stages of development. Freud identified three main components of the personality; the Id, the Ego and the Superego. The Id is the source of subconscious, primal urges in the individual and is the only aspect of personality present from birth. The Ego is what stands between these urges and reality, seeking to please the Id in realistic ways. Conscious awareness is part of the Ego. The Superego provides us with a moral compass that holds us back from acting on our primal urges. The Superego internalizes cultural rules and poses feelings of guilt to punish misbehavior. Whilst many other theorists have advanced Freud's thinking, the psychoanalytic approach has drawn a degree of scepticism because of its lack of scientific rigor. Many have argued that it is difficult to prove or disprove Freud's and others' theories. The psychoanalytic approach has had relatively little impact on workplace psychology but is still the foundation for some clinical therapies used today.

Sigmund Freud identified **three** main components of personality.

- Id - source of subconscious primal urges
- Ego - is what stands between subconscious urges and reality. Conscious awareness is part of the ego
- Superego - provides us with a moral compass that holds us back from acting upon our primal urges

Social Learning

Albert Bandura conceptualized personality from a social perspective; he was the leading figure in Social Learning Theory, which proposes that the observation of others and imitation of their behavior has an important influence on adult personality. Therefore, role models; be those friends, parents, authority figures or actors we observe on TV and the internet, become vital in shaping behavior. Clearly this has implications for the effect of company culture and the value of role models within a company. Bandura noted four conditions that are necessary for social learning. Attention; the learner must first pay attention to certain behaviors. Retention; the learner must be able to remember the observed behavior, mental rehearsal facilitates this. Reproduction; replicating the behavior physically. Motivation; the learner must want to demonstrate what they have learnt. Bandura famously conducted the Bobo Doll experiment in the 1960s. During the experiment, he recorded children's behavior after they had observed an adult role-model interacting with the doll. Some adults were instructed to show aggression to the Bobo Doll. Children who observed this display of aggression were likely to later exhibit aggression towards the Bobo Doll themselves. It has been suggested that Social Learning could lead to displays of stereotypically male and female behavior.

Albert Bandura was the leading proponent of Social Learning Theory which proposes that the observation and imitation of others and their behavior has an important influence on adult personality.

Conditions necessary for social learning:

- Attention
- Retention

- Reproduction
- Motivation

Behavior Analytic

The behavior analytic approach is a theory of reinforced learning that primarily focuses on observable behaviors, often involving responses given to various stimuli. Modern applications of the behavior analytic approach include helping children and adults with autism to learn new skills. One of the most famous researchers in this area was BF Skinner whose experimental work included studies on rats and pigeons in 'Skinner boxes'. The animals were rewarded with food in these boxes when certain behaviors were displayed, for example pressing a lever, thereby reinforcing the behavior. This was known as positive reinforcement, and over time the animals learnt to perform these behaviors more frequently to obtain the reward. In the same vein, certain behaviors were punished, and their frequency was reduced. It is noted that the leaders of oranizations can shape the behavior and culture of their oranization's people with the strategic placement of rewards and punishments such as bonuses and disciplinary actions.

A theory of **reinforced learning** that primarily focuses on observable behaviors.

- **B F Skinner** - 'Skinner Boxes' - animals had certain behaviors rewarded with food, thereby reinforcing the behavior known as 'Positive Reinforcement'

Humanistic

The humanistic perspective focuses on the self; 'you' and 'your' perspective of your own experiences. One of the key figures was Carl Rogers, his work as a clinical psychologist is known as person-centred therapy. His position was that human behavior is rational and human nature is essentially positive. Rogers proposed that our self-concept is formed out of our own experiences and perceptions of the world and is developed through our interaction with others. Abraham Maslow, another key figure, stated that adult personality is based on the satisfaction of various needs. After one level of need is met, they progress to the next and some people progress further than others. For example, when basic physiological needs such as warmth and food are met, we move to focusing on safety and shelter, the next level of needs is love and belonging, which when satisfied lead to a focus on esteem and finally, self-actualization. This has implications in wellbeing and motivation of staff, understanding that there is a need to help staff fulfil their needs. These needs can vary, from the most basic provision of a safe, comfortable working environment through to providing a positive, nurturing cultural environment that supports individuals with opportunities to grow.

Focuses on the **self**: 'you' and 'your' perception of **your experiences**.

- **Carl Rogers** - our self-concept is formed out of our own experiences and perceptions of the world and is developed through our interactions with others
- **Abraham Maslow** - adult personality depends on the satisfaction of various needs. After one level of need is satisfied people progress to the next

Psychometric

The psychometric approach involves individuals being measured on a psychological attribute typically using questionnaires or tests that are scored using a numerical scale or category system. In the 1940s, a number of competing personality models emerged that lead to the generation of the first personality questionnaires for occupational and/or clinical use. For example, Hans Eysenck measured personality as distinct factors. Using statistical methods, Eysenck initially proposed two main personality factors; Neuroticism, related to being emotional in a number of respects, and Extraversion related to being outgoing and sociable. A third dimension, Psychoticism, related to being more, 'tough-minded' and in some respects, aggressive, was later added. These three factors are measured in the Eysenck Personality Inventory (EPI). Raymond Cattel also used statistical methods in the research of human personality. Cattel developed an alternative model of adult personality consisting of 16 factors, measured through the 16 PF questionnaire. Following the standardization of the 16 PF for the UK market, Professor Peter Saville and his team developed one of the first occupationally-specific personality questionnaires, the OPQ®, available in paper and pencil and later, online. The Saville Assessment Wave® personality questionnaire was launched in 2006 as a questionnaire dedicated and designed from first principles for online administration.

Involves individuals being measured typically using **questionnaires** or **tests** that are **scored** using a numerical scale or category system. Psychometric approaches are typically related to the Big Five personality theory, a largely accepted personality model, which is covered in detail in the next module.

- Hans Eysenck - Measured personality as three distinct factors: Neuroticism, Extraversion and Psychoticism. **Eysenck Personality Inventory (EPI)**

- Raymond Cattell - model of adult personality consisting of 16 factors measured through the **16PF® questionnaire**.

- Professor Peter Saville - developed one of the first **occupationally-specific personality questionnaire (OPQ®)**

- The Saville Assessment **Wave® personality questionnaire** was launched in 2006 as a questionnaire dedicated and designed from first principles for online administration
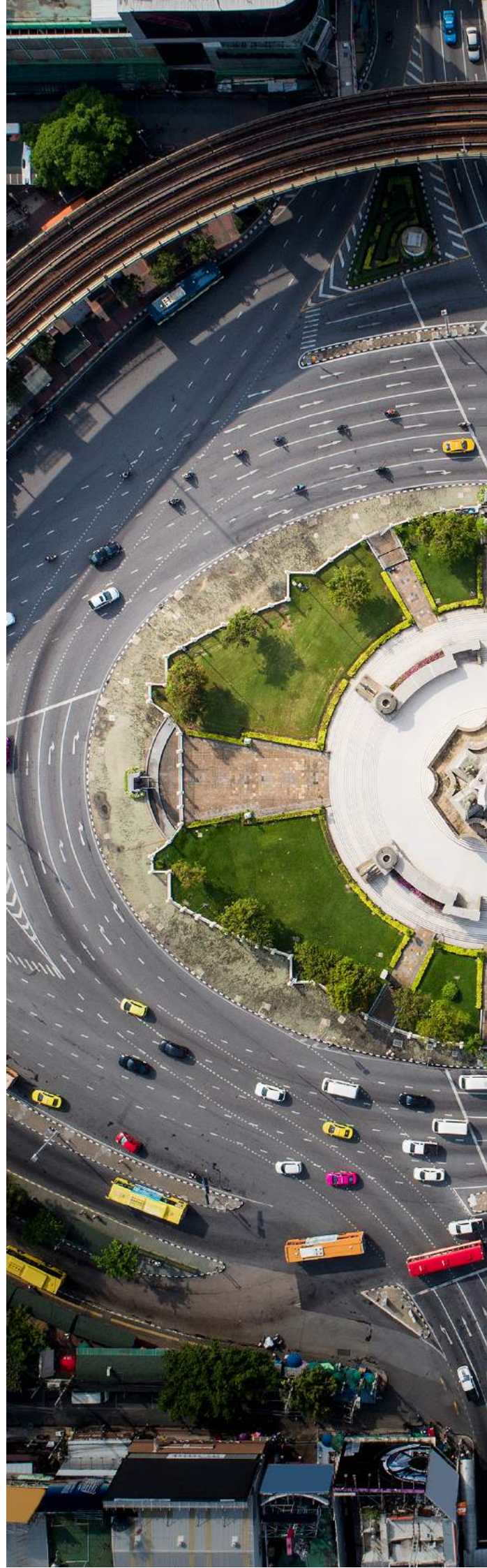
Applying Personality to the Workplace
Trait vs. Type

Personality can be described as a combination of **traits** or as a set of categories or **types**

Trait Approach

- Assigns an individual a score on one or more personality scales which typically measure a group of attributes
- Traits carry the advantage that they can profile many different attributes of individuals. However, interpretation of trait outputs can be difficult.

The Trait approach assigns an individual a score on one or more personality scales which typically measure a group of attributes. Traits have the advantage that they can profile many different attributes of individuals. However, trait outputs may be complex to interpret.

Type Approach

Divides people into distinct groups or categories.

The Myers Briggs Type Indicator (**MBTI**) is an example of a type-based tool and consists of four type scales:

- Introversion vs. Extraversion
- Intuition vs. Sensing
- Feeling vs. Thinking
- Perceiving vs. Judging

Type approaches divide people into distinct groups or categories. For example, Katherine Cook-Briggs and Isabel Briggs-Myers developed the Myers Briggs Type Indicator, MBTI in 1980. The tool consists of four type scales; Introversion vs. Extroversion, Intuition vs. Sensing, Feeling vs. Thinking and Perceiving vs. Judging.

Following completion of the MBTI, the individual is categorized on the four different type scales, for example, an individual would be characterized as either an Introvert or Extrovert. Type approaches often provide simplicity, however, as most people are moderate on any given attribute they may oversimplify individuals by forcing them into one category or another.

Trait and State Measurement

More stable aspects of personality are termed **traits**, whilst those which fluctuate more with mood are referred to as **states**.

Most scales in personality questionnaires are **trait-based**, for example **extraversion**, **conscientiousness** or **optimism**. Tools such as OPQ®, 16PF® and Wave® are designed to measure traits.

However, there are aspects of individual personality that are related to the specific situation or context within which an individual finds themselves. While you may generally find yourself to be **resilient (a trait)**, you may feel more **nervous (a state)** before attending a job interview. Tools which measure states are often used in clinical settings, such as the Spielberger State Anxiety Inventory or the General Health Questionnaire.

Trait and State Measurement

> In practice, personality may be measured with questions that focus on different traits and, sometimes, states. For example, personality questionnaires often ask individuals the degree to which they agree with certain statements.

- Questionnaire statements typically cover a wide array of attributes
- Statements can seek to gain understanding of an individual's values, attitudes, personal needs, motivation and/or preferences
- Personality questionnaire scales often include questions that cover more than one of these areas

Motivation

Motivation can be defined as that which 'energizes, directs, sustains and maintains behavior'. Theories of motivation are often based on the concept of internal states or needs that guide behavior.

- Motivation is used to describe what energizes and maintains individual behavior in work over time
- Motivation is different from attitudes and values
- Wave Styles assessments measure an individual's motives and talents

The Big Five

The Big Five is a highly accepted model of personality that covers five broad areas. which can be remembered using the word 'OCEAN'.

O: Openness to experience

C: Conscientiousness

E: Extraversion

A: Agreeableness

N: Neuroticism

Openness to experience covers how curious, imaginative and open to novel things and change you are. Those lower on openness are more likely to be conventional and conforming.

- Curiosity, imagination and openness to novel things
- Lower openness to experience could be related to being more conforming

Conscientiousness explores how organized, dependable and self-disciplined you are. Lower scores relate to being less organized, less reliable and more impulsive.

- Organization, dependability and self-discipline
- Lower conscientiousness could be related to being more impulsive

Extraversion examines how outgoing, assertive and sociable you are. Intraverted individuals are more likely to be quiet and reserved.

- Assertiveness, sociability and tendency towards being outgoing
- Lower extraversion could be related to being more reserved

Agreeableness covers how compassionate and cooperative you are. Lower scores relate to being less supportive and tolerant.

- Compassion and cooperation
- Lower agreeableness could be related to being less supportive

Neuroticism is concerned with how easily one experiences unpleasant emotions such as anger, anxiety and sadness. The neuroticism factor is commonly reversed and referred to as emotional stability. Those lower on neuroticism – or higher on emotional stability – are more likely to be calm and able to cope with stressful situations.

- Propensity towards experiencing anger, anxiety or sadness
- Lower neuroticism, or higher emotional stability, could be related to being calmer and more resilient under stress

The Big Five has been hugely influential as an organizing framework in personality research and still serves as a useful benchmark for personality models today. This model highlights the need for any supposedly complete assessment of workplace personality to measure a minimum of five scales covering these five factors. Some critics of the Big Five would argue that it is too broad and lacks detail and subtlety. Despite this criticism, it has provided theorists and practitioners with a simple model which can be applied to a range of contexts and cultures. In the past there was scepticism as to how much personality could predict performance. However, research has shown that personality predicts workplace performance better than many other assessment methods.

- The Big 5 is a largely accepted framework for personality
- To extensively measure personality in work, an assessment should as a minimum cover these five areas
- This model can be applied across cultures and contexts
- Personality has been found to predict workplace performance better than many other assessment methods

Competencies

Personality assessment can add great value to workplace assessment and development because it enables us to predict an individual's performance. Personality is relatively stable and therefore provides a stable prediction of performance.

- Underlying personality traits influence behavior
- These behavioral differences lead to different individuals being more effective at different aspects of work
- Social norms and oranizational culture also affect workplace behavior
- To measure workplace performance we need to identify performance criteria; behavioral competencies are one way of doing this

Kurz and Bartram (2002) defined competencies as a 'set of behaviors that are instrumental in the delivery of desired results or outcomes'. Competencies enable us to identify, define and measure individual differences which are relevant to work performance. Traits then lead to behaviors and where these sets of behaviors are appropriate this will lead to enhanced performance in a particular area in work, i.e. competency. For example, someone's personality, or style, may be described as 'meticulous'. This trait makes them more likely to check things carefully. 'Checking things' is therefore the competency and what we use to measure relevant performance. Saville Assessment has developed a hierarchical model of competencies that align to specific personality and styles. We cover competencies in more detail further into the course.

The Influence of Nature and Nurture

There is a debate over the relative importance of genetic and environmental influences on personality.

Nature

Most psychologists believe that personality is a manifest of both genetic and environmental differences. For example, we find that people who are more open to experience are more likely to open themselves up to new experiences and environments. This helps to explain why successful entrepreneurs are often described as having, 'made their own luck'.

- Stable underlying personality traits can guide individuals to new experiences that in turn shape their lives

Nurture

How we behave is often determined by social norms. In any given culture, we may be inclined to behave in line with the social group to which we belong. For example, research has shown that from a relatively young age, boys and girls understand how boys and girls are expected to behave.

- Social norms relating to culture, age and gender can also affect our behavior

Researching Nature and Nurture

One way of attempting to study the effects of Nature and Nurture in isolation has been to study identical twins who have been separated at birth and raised in different households. However, samples of twins like this are rare and their upbringings are unlikely to have been that different from one another.

- Studies on identical twins separated at birth and raised in different homes have tried to tease apart the effects of nature and nurture on personality and behavior
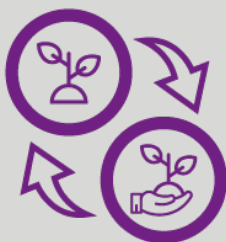
Interaction between Nature and Nurture

We may be genetically predisposed to behave in a certain way but there is evidence that factors such as culture, age, ethnicity and gender interact with our genes to produce our personality and characteristic ways of behaving.

- Genetic predispositions can affect personality but there is evidence that nurture can also interact with genes to influence personality. Nature and nurture influence personality around 50:50

Personality Assessment and Fairness

Assessment Methods

We can assess personality in a number of different ways.

Self-report

How do self-report measures work?

Self-report questionnaires such as Wave have candidates respond to a series of statements about themselves, with each of these statements relating to a specific work behavior. The responses an individual provides to these statements are scored and grouped to give a profile of scores on different personality dimensions that are typically compared to other people.

- Candidates respond to a series of statements about their own work-relevant behavior
- Statements are typically grouped together to form personality scale dimensions
- Responses are scored to produce an individual profile and are typically compared to an external benchmark group

Advantages of self-report measures

It is easy to write a set of questions and create a personality questionnaire, and many people have created personality questionnaires of varying quality. However, to create a highly-valid, reliable, fair and work-relevant personality assessment requires extensive expertise and research.

Questionnaires provide a standardized approach to personality assessment where every individual is asked the same question and compared against the same external benchmark group. Self-report personality questionnaires typically offer a cost- and time-efficient method of predicting workplace behavior. Individuals completing personality questionnaires typically provide an accurate description of themselves.

- Self-report measures can be fairly easy to write
- Questionnaires are a standardized way of assessing all candidates on the same behaviors and comparing them against the same benchmark group
- Typically, they are time and cost effective and gain an accurate description of the individual

Disadvantages of self-report measures

Self descriptions can be distorted. For example, some individuals are less self-aware; some individuals have a higher or lower opinion of themselves; and some individuals try to present a more positive image of themselves. This is more likely to occur in high-stakes situations such as applying for a highly desirable job.

- Candidates may 'distort' their profiles
- Distortion can over or under – rate areas on a profile
- Distortion can come about when candidates are less self-aware or when they intentionally attempt to portray themselves in a more positive light in a selection process

Observations

How is observation used to measure personality?

Observing how individuals behave in specific situations can provide useful information as to how one individual's behavior differs from another. This can allow the observer to infer differences in personality between individuals.

- Assessors observe and rate individuals in different settings to infer understanding of their behavior

Advantages of observation

A key advantage of observation is that the observer sees 'real' examples of not only a behavior but exactly how a behavior is displayed by a particular individual.

- Assessors see 'real' examples of behavior and how it is displayed by a particular individual

Disadvantages of observation

Observation in assessment is typically used in a simulation exercise or activity, for example, a group exercise, presentation or role play, which may not be representative of real behavior. Observation is open to bias as different assessors may be inconsistent in their ratings of candidates. Additionally, candidates may behave differently as they know that they are being observed. Observing individuals in different situations or assessment exercises can give a fuller picture which is less distorted.

- Observing individuals in simulated settings can give unrealistic views of behavior
- Raters can be inconsistent with ratings and can be affected by their own biases
- Individuals may act differently when they know they are being observed

Ratings by Others

How are ratings by others used to measure personality?

Ratings by others, such as on performance 360 assessments, provide a view of an individual by stakeholders such as managers, peers and direct reports.

- Multi-rater tools like 360s can provide stakeholder views of an individual

Advantages of ratings by others

By aggregating perceptions from managers, peers, reports and other colleagues, we can build a picture of an individual's behavior and performance from raters who know and have seen the individual in their daily work.

- Multi-rater tools can provide an aggregated view of an individual's behavior and performance in their daily work

Disadvantages of ratings by others

Getting multiple ratings of one individual can be time consuming. Additionally, while those around an individual can give an accurate picture of their behavior or performance at work, they may not always choose to do so. Raters may give inaccurate ratings for many reasons including simply because they dislike their colleague. To minimize such risks, it is important to select raters who know the individual well and are in an appropriate position to provide accurate feedback.

- Ratings can be time-consuming
- Raters may not always give accurate impressions of an individual, intentionally or unintentionally
- Selecting raters who know the individual well and are in appropriate positions to provide feedback can help to minimize rater distortion

Interviews

How are interviews used to measure personality?

Interviews allow us to assess certain aspects of an individual's personality in a structured and standardized way.

- Structured interviews assist in assessing certain aspects of individuals' personalities

Advantages of interviews

One of the key advantages of an interview is that an interviewer can ask in-depth questions, and the interviewee can also interact and ask questions.

- Interviews can gain in-depth information from a candidate
- Interviews facilitate two-way conversation allowing candidates to find out more about roles and companies during selection processes

Disadvantages of interviews

There is a huge amount of research demonstrating bias in interviews. For example, interviewers preferring interviewees that went to the same university as them. It is important to understand these biases and ensure that the interview is as fair, accurate and robust as possible. Highly-structured interviews help by focusing interviewers on relevant questions and criteria.

- Interviews can be subject to bias which impedes the fairness, accuracy and robustness of their use in selection or development
- Structuring an interview to focus on only relevant questions and criteria can help to mitigate the risk of bias

Projective Techniques

How are projective techniques used to measure personality?

Projective techniques attempt to uncover aspects of an individual's subconscious. Often, individuals are asked to respond to stimuli which are ambiguous in nature.

- Individuals are asked to respond to ambiguous stimuli to attempt to uncover aspects of their subconscious

Advantages of projective tests

Projective test may help assessors to understand aspects of individuals that cannot be gained from other assessment methods.

- Projective tests can give insight into otherwise unapparent aspects of individuals' personalities

Disadvantages of projective tests

An image of an inkblot can be interpreted in many ways. Somebody who says they see something positive will be interpreted differently to someone who sees something more sinister. Individuals may not be honest about what the stimuli appears to be to them. Projective tests have little validity in the workplace.

- Assessors may be biased about what more positive or negative interpretations mean about individuals
- Individuals may be dishonest about what they think of the stimuli
- Projective tests have very little workplace validity

Pseudo-scientific Methods

How are pseudo-scientific methods used to measure personality?

Some techniques used to assess personality have pseudo-scientific credibility and are presented as having some value, when in reality they offer very little. Research which has included comparisons of the validity of different workplace assessment methods has frequently shown that handwriting analysis (graphology) and astrology have little or no value in forecasting workplace performance and should therefore be avoided in occupational settings.

- Pseudo-scientific methods are those that claim credibility but offer little value in the workplace
- Pseudo-scientific methods include graphology, the study of handwriting, and astrology, the study of horoscopes

Candidate experience

It is important to consider the work-relevance of any assessment, as well as how the assessment appears to assessees. Would you feel comfortable if a decision about your suitability for a role was being made on the basis of your handwriting?

- Do candidates feel that they have been fairly assessed for roles given less relevant testing methods?

Disadvantages of pseudo-scientific methods

One risk of giving feedback which is not accurate is that it becomes a self-fulfilling prophecy where the individual starts to act in line with the spurious feedback. If, for example, a horoscope suggests that as a Taurus, you're not likely to be good at compromising with others, what might you do the next time you're asked to accept a compromise?

- Being given inaccurate feedback can risk an individual experiencing a self-fulfilling prophecy which could be detrimental
- Pseudo-scientific methods lack validity in the workplace

Bias and Fair Assessment

When assessing personality, it is important to be as fair as possible and minimize the effects of bias.

Types of Bias

There are several recognized social biases, which can compromise the fairness of assessment processes. For example, many people are likely to hold stereotypical or subjective views about others. The halo and horns effect is another bias in which an interview is swayed positively (Halo) or negatively (Horns) based on one attribute of the candidate, where an interviewer is biased in one direction. First impression bias consists of an interviewer making a snap judgment about a candidate without taking into account all of the necessary assessment information.

- Many people hold conscious and unconscious stereotypes about groups of people that can affect their judgments about individuals

- The Halo and Horns Effect can lead to an interviewer being swayed positively or negatively on a candidate based on one attribute

- First impression bias means that interviewers form snap judgments on candidates based only on their initial perception of a candidate

Fair Assessment

Careful attention has been paid when constructing Saville assessments to avoid any content which could favor one group over another, e.g. a language or ethnic group. An example of language biased content could be using the colloquialism 'gut feel'. Whilst suitable for a British audience, this term is problematic to translate into a number of languages because there is no literal equivalent term in some cases.

- Avoid colloquialisms in test construction that could be biased towards a particular language or culture. For example, 'gut feel' does not translate well into a number of languages

- Interviewers should receive assessor training to control their own biases and take account of all the important information from a selection process

Introducing Wave Styles

Professional Styles

The Professional Styles questionnaire is the most in-depth Wave Styles questionnaire. Professional Styles takes approximately 40 minutes for candidates to complete. At the most detailed level, the Wave Professional Styles questionnaire measures 108 different workplace behaviors predictive of performance.

- In-depth
- 40 minutes to complete
- 108 different workplace behaviors

Focus Styles

The Focus Styles questionnaire is a shorter, less extensive questionnaire. Focus Styles focuses on measuring the 36 most predictive behaviors. Focus Styles takes approximately 13 minutes to complete.

- Shorter and less extensive
- 13 minutes to complete
- 36 most predictive behaviors

Why Wave Styles?

The Wave Styles questionnaires demonstrate exceptional validity in forecasting workplace effectiveness, enabling users to more accurately predict competency potential and cultural fit.

Our reports have been designed to give more information in less time, providing insightful and rich information and feedback for every individual assessed.

An important new development in occupational testing has been the understanding of the relationship between motivational drivers and talents. Within Wave Styles it is possible to see how aligned these are across different behaviors.

The interactive online rate-rank format integrates both rating and ranking responses resulting in a combined profile that highlights the differences between the resulting scores. This allows users to pinpoint potential areas of distortion rather than relying on broad overall distortion measures.

The detail and clarity in our assessments also allows for precise mapping to our clients' own frameworks and our assessment reports can be tailored allowing the power of our tools to be reflected in an organization's own language.

- Valid indicator of competency potential and cultural fit
- Identifies work motives and talents
- Dual dynamic response formats
- Multiple language availability
- User- and administrator-friendly reporting

Personality Assessment Construction

Personality questionnaires can be constructed in different ways

Inductive Approach

An inductive approach to questionnaire development involves generating a lot of questions and exploring how they relate to one another and cluster together as a basis for building an overall model of personality. This technique was used by Raymond Cattell to create the 16PF® and is achieved by means of statistical analysis. The issue with such an approach is that its focus lies on developing a neat and tidy factor structure – an example of this being the Big Five.

- Inductive development focuses on writing a large number of items.
- This forms the basis of an overall personality model by using statistical analysis to cluster related items together into a neat structure
- This technique was used by Raymond Cattell to create the 16PF®

Deductive Approach

By contrast, a deductive approach involves devising a model and seeing whether the individual questions or statements within the questionnaire relate to each other as expected. Questionnaires developed in this manner often have questions within the questionnaire that are closely related but are often very repetitive. This method was used in the development of the Occupational Personality Questionnaire (OPQ®).

- Deductive development focuses on aligning questions or items to a pre-defined model
- This can lead to closely related but repetitive scales
- This method was used in the development of the Occupational Personality Questionnaire (OPQ®)

Performance-driven Approach

A performance driven approach looks for questions or groupings of questions which best predict critical workplace behavior. The underlying premise of this approach is that validity is the most important characteristic of any workplace personality questionnaire. Other major workplace personality questionnaires did not include this approach to construction.

The Wave Styles questionnaires were developed by harnessing inductive, deductive and performance-driven approaches. Critically, the core development of Wave included a performance driven approach, selecting those questions most effective in predicting work performance.

- Performance-driven approaches focus on using questions or groups of questions which best predict critical workplace behavior
- This method focuses on validity being the most important characteristic of any workplace personality questionnaire
- **Wave Styles questionnaires were developed using a combination of inductive, deductive and performance-driven techniques**

Extensive Coverage of Work Behaviors

Wave Styles questionnaires are built on carefully crafted, high-quality questions to identify precise workplace behaviors. The questions have been designed to be simple, work-relevant and unambiguous. The Saville Assessment Wave model measures many aspects of workplace behavior that reflect the needs of the modern workplace which may not be included in other models. For example, there are measures that give insight into individual learning orientation (seeking opportunities to learn, speed of learning, preference for learning by doing or reading), comfort working with IT, and engaging with others through networking activities. All 108 facets feature on the Wave Professional Styles Expert Report.

- Wave was carefully designed to clearly and unambiguously measure work-relevant behaviors
- Wave addresses many behaviors related to the modern workplace that other models may not address; for example learning orientation and engaging in networking activities
- Wave Professional Styles covers 108 facets of work-based behavior

Wave Professional Styles Model

The Wave Professional Styles model is organized hierarchically. At the top level are four overarching Clusters. The four Clusters are Thought, Influence, Adaptability and Delivery. Each Cluster is composed of three Sections giving 12 sections in total. Within each Section there are then three Dimensions giving 36 Dimensions. This is the level of fidelity that would be expected from other trait instruments that typically take 40 minutes to complete. Finally, each Dimension comprises three Facets (making 108 in total for the Wave Professional Styles model), which in turn feature one motive and one talent item each. The Facet level allows for narrow, clearly-defined specific behaviors to be assessed.

4 Clusters	THOUGHT
	Evaluative
	Investigative
	Imaginative
12 Sections	INFLUENCE
	Sociable
	Impactful
	Assertive
36 Dimensions	ADAPTABILITY
	Resilient
	Flexible
	Supportive
108 Facets	DELIVERY
	Conscientious
	Structured
	Driven
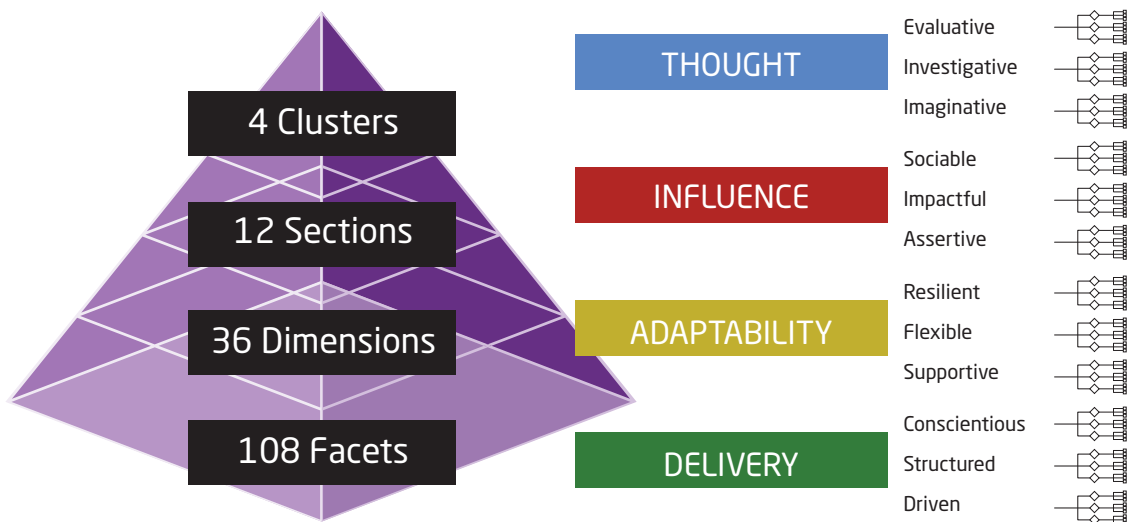
Thought

The Thought Cluster is focused on developing ideas, from analyzing problems and showing interest in underlying principles through to being more expansive and divergent in thought by being creative and strategic.

Influence

Influence relates to communication and working with others. It is concerned with establishing positive relationships with people and demonstrating positive leadership behaviors.

Adaptability

Adaptability covers areas of emotional, behavioral and social adaptability. This Cluster is about working with others, how you adapt to others and offer support.

Delivery

Delivery is focused on implementation and delivery of results, from ensuring high standards of delivery through to proactively making things happen.

Wave Professional Styles Hierarchy

An example of one 'branch' of the model is the Influence Cluster. This Cluster is about influencing and working with others. Influence encompasses the Sections Sociable, Impactful and Assertive. The Impactful section is made up of three Dimensions: Convincing, Articulate and Challenging. The Articulate Dimension is made up of three Facets: Presentation Oriented, Eloquent and Socially Confident. These Facets relate to giving presentations, explaining things effectively and confidence with new people.
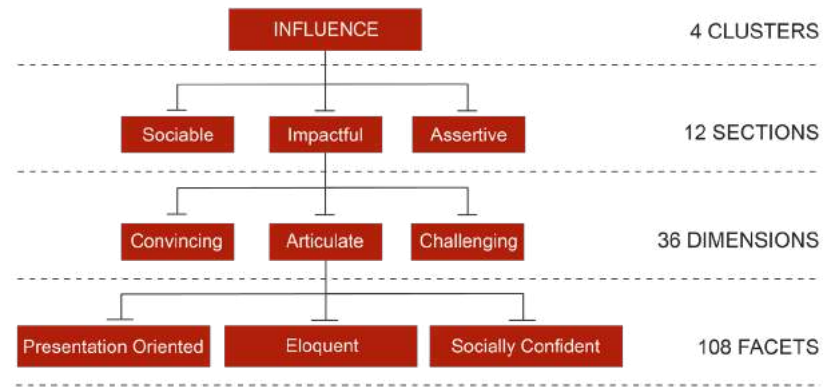
## Wave and the Big Five Model of Personality

The Big Five Model of personality is widely recognized as a useful taxonomy or organizing framework for personality traits. The five factors are Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Emotional Stability.

It is useful to understand how the Saville Assessment Wave Model relates to The Big Five. The Cluster labelled Thought can be aligned to Openness to Experience, Influence to Extraversion, The Adaptability cluster covers Agreeableness and Emotional Stability and Delivery to Conscientiousness.

- The Big Five Model is a well known and widely accepted model of personality
- Wave maps onto this model
- Thought can be aligned to Openness to Experience, Influence to Extraversion; the Adaptability Cluster covers Agreeableness and Emotional Stability as it captures both individuals deal with their own emotions and those of others, finally Delivery links to Conscientiousness

The Wave model covers all of the ground of the Big Five and places two of the Big Five (Agreeableness and Emotional Stability) in one Cluster which reflects the relative importance of the five factors to work performance. Drilling down into Adaptability lets users understand where individuals are on these two Big Five factors with the Supportive Section relating to Agreeableness and the Resilient Section relating to Emotional Stability.

Questionnaires can have different structures with many scales and still measure all of the Big Five factors in great detail. For example, Wave Professional Styles measures 108 Facets of workplace behavior. This is in stark contrast to questionnaires which only have four scales; therefore, these other inventories are clearly missing at least one major component of human personality.
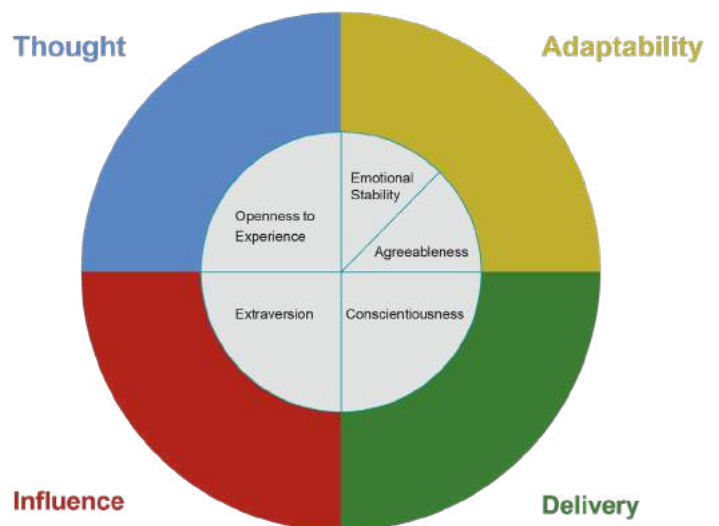
Dimensions and Deep Dives
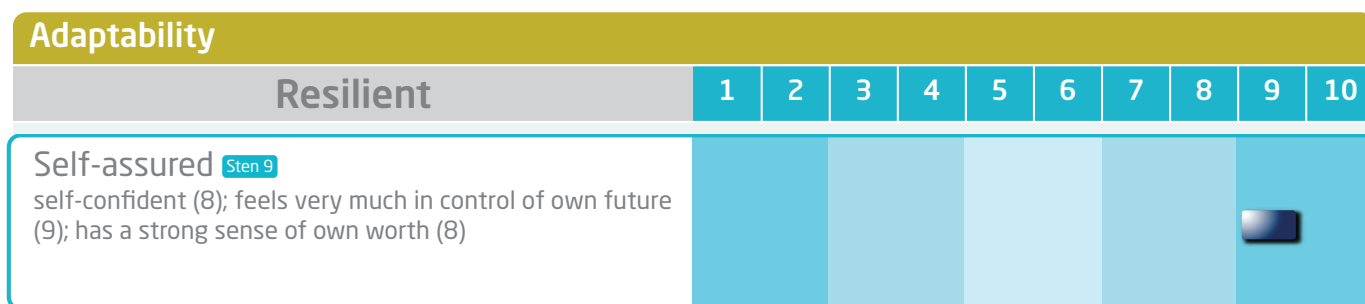
The Executive Summary Profile

- The Wave Styles profile reports use a one-to-ten scale (Sten scale). This is a standardized scale used in many personality profiles to compare an individual's score against a wider comparison group
- This section of the report is a high level overview of a person's profile
- Please continue to learn more about the structure of the psychometric profile

The Psychometric Profile

The Psychometric Profile goes into more detail about the individual.

Clusters, Sections and Dimensions

The Psychometric Profile of the Wave Expert report is designed to aid a user's interpretation by providing a narrative description of each of the 108 Facets. The description provided varies according to the individual's Sten score on the Facet. There are five categories which give different statements based on the Stens: 1-2, 3-4 and so on.

Adaptability											
Resilient		1	2	3	4	5	6	7	8	9	10
Self-assured `Sten 9` self-confident (8); feels very much in control of own future (9); has a strong sense of own worth (8)										◼	

- Adaptability is one of the four Wave Clusters
- Resilient is one of the three Sections in the Adaptability Cluster
- Self-assured is a Dimension under Resilient that outlines an individual's orientation showing self-confidence, being in control of their own future and having a sense of self-worth
- Underneath the Self-assured Dimension sit three Facets. The Facet description provided for the individual's behavior changes depending upon the Sten score

Dynamic Facets

Facet descriptions dynamically vary according to the Sten score the individual received on each Facet.

Thought											
Evaluative		1	2	3	4	5	6	7	8	9	10
Analytical `Sten 6` moderately interested in analyzing information (6); asks probing questions fairly frequently (5); inclined to seek solutions to problems (7)							◼				
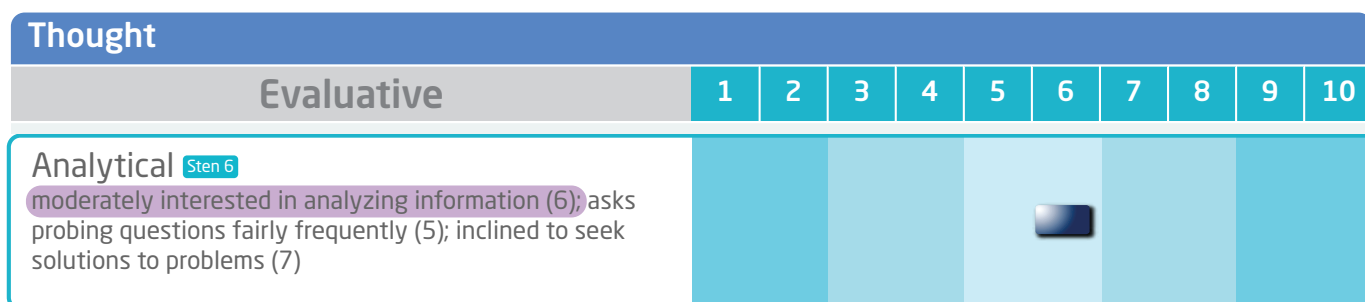
- A well below average score will be described as 'has very little interest in analyzing information'

- A slightly below average score will be described as 'has little interest in analyzing information'.

- Here the individual has a Sten score of 6, and therefore is described in the extract as 'moderately interested in analyzing information'

- A slightly above average score will be described as 'likes to analyze information'

- A well above average score will be described as 'really likes to analyze information'

A Note on Wave Scoring

An important note is that Dimension scores are not straight-forward averages of their three Facets. For example, if someone got 8 across all three Facets in a Dimension, they may have an overall Dimension at Sten 10 as it is very unusual in the comparison group to have Sten 8 across all three of the Facets. The same is true of combinations of low scores, for example three Facet Sten scores of four could result in a Dimension Sten score of three.
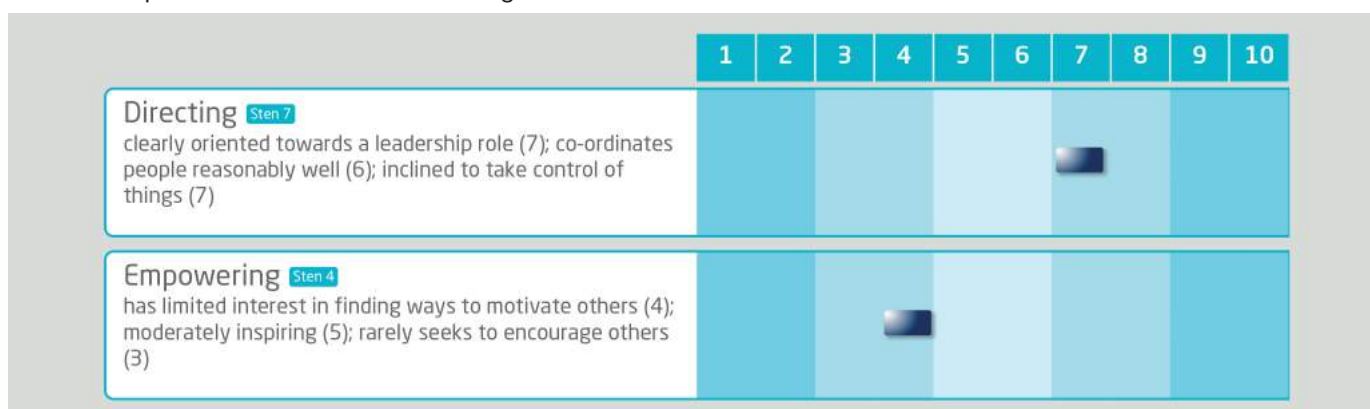
Articulate		36 DIMENSIONS
Presentation Oriented	Eloquent	Socially Confident
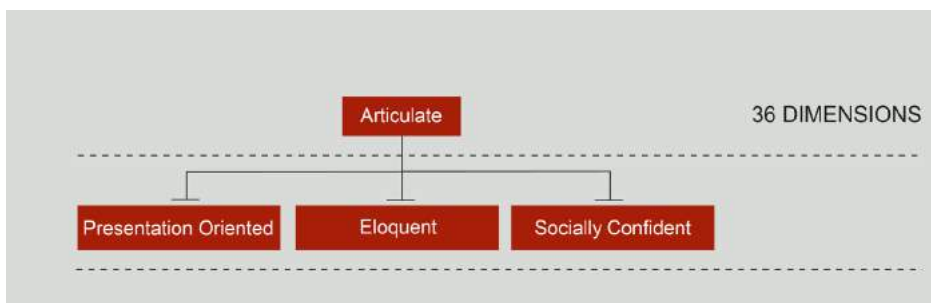
- Each Facet is made up of two questions: one motive and one talent. Each Facet score is based on a sum of these two questions

- Each Dimension is made up of three Facets (six questions) which are summed to create Dimension scores

- Dimension Scores are not just averages of the facets that make them up

- Each Section is made up of three Dimensions (18 questions). Dimension scores are summed to create Section scores

- Each Cluster is made up of three Sections (54 questions).

Example Dimensions

How to interpret dimensions and start making links between different areas.

	1	2	3	4	5	6	7	8	9	10
Directing Sten 7 — clearly oriented towards a leadership role (7); co-ordinates people reasonably well (6); inclined to take control of things (7)							■			
Empowering Sten 4 — has limited interest in finding ways to motivate others (4); moderately inspiring (5); rarely seeks to encourage others (3)				■						

- Overall, this individual has indicated that they are slightly more inclined to be Directing than others in the comparison group; clearly oriented towards a leadership role, they co-ordinate people reasonably well and they are inclined to take control of things

- Overall, they see themselves as slightly less Empowering than others in the comparison group; they have responded that they have a limited interest in finding ways to motivate others, they see themselves as moderately inspiring and rarely seek to encourage others

- Consider how the combination of different dimensions could play out in behavior at work. How do you think this person would behave in a team setting? What might be the strengths and potential drawbacks of a style like this? With this combination in mind, you may also want to consider this person's responses to the Attentive and Involving Dimensions

Deep Dives

Facet Ranges

Facet ranges on any Dimension provide useful information to the user about an individual's spread of behavior within that Dimension. These will appear on a profile when there is a marked difference of three or more Stens between the Facets within a Dimension.

- Facet ranges indicate the extent of the spread between the Facet Sten scores within a Dimension
- Facet Ranges are shown with hatching lines on the profile and are displayed when there is a spread of three or more Stens between the Facets in a Dimension
- Facet ranges highlight individual points of uniqueness

Example Facet Range

Overall, this individual has described themselves as being slightly more Insightful than others in the comparison group. On the one hand they have said they very much trust intuition to guide judgment, however, they have also indicated that they are moderately focused on constantly improving things and reasonably quick at getting to the core of a problem. This may need probing in a selection or development context.

- Overall, slightly more Insightful than others in the comparison group
- On one hand, 'very much trusts intuition to guide judgment'
- On the other hand, 'moderately focused on constantly improving things' and 'reasonably quick at getting to the core of a problem'

	1	2	3	4	5	6	7	8	9	10
Insightful Sten 7 moderately focused on constantly improving things (6); reasonably quick at getting to the core of a problem (5); very much trusts intuition to guide judgment (10)										
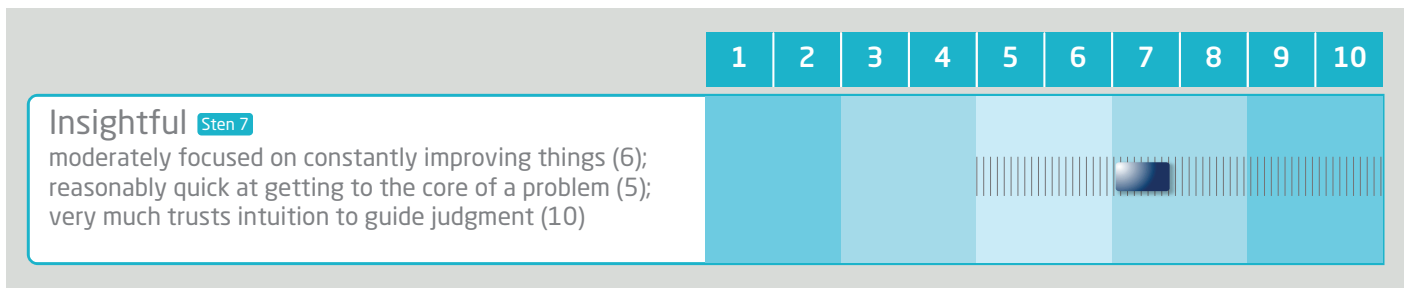
Linking Example: Facet Range

- Overall, this person has demonstrated that they see themselves as being as Learning Oriented as others in the comparison group. On one hand they have said that they are inclined to learn through reading, but on the other hand they have said that they are moderately focused on learning about new things and that they strongly dislike having to learn things quickly.

- Their responses shows that they see themselves as being as Practically Minded as others in the comparison group. Whilst they show a great deal of common sense and are oriented towards practical work, they have also said that they have very little interest in learning by doing.

- Consider the interplay of these areas and spread of responses; how might the individual respond when having to learn something in their role at short notice without any written guidance?

	1	2	3	4	5	6	7	8	9	10

Learning Oriented `Sten 5`
moderately focused on learning about new things (5); strongly dislikes having to learn things quickly (2); inclined to learn through reading (8)

Practically Minded `Sten 5`
oriented toward practical work (7); very little interest in learning by doing (1); shows a great deal of commo sense (9)
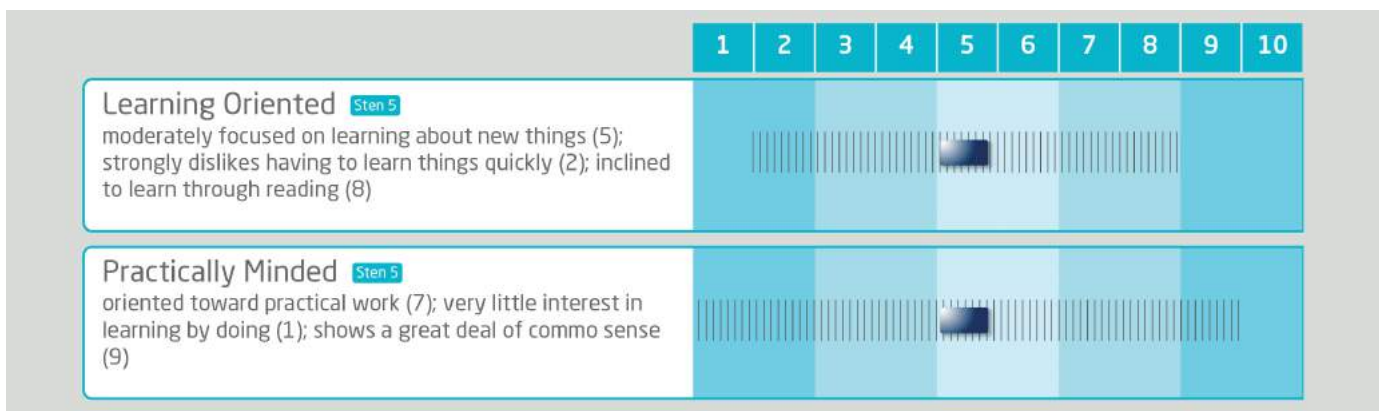
Styles, Motives and Talents

The Saville Assessment Styles questionnaires measure individual working styles. So, what do we mean when we refer to styles? The following quote comes from Professor Peter Saville.

'Styles are a combination of motives and talents of individuals. What individuals want, and what individuals see themselves as good at, are both critical to predicting the culture in which people prefer to work, and their performance at work.'

Motives

- Saville Assessment Wave Styles questionnaires have been developed to separate out talents from underlying predispositions or motives

- At the lowest level of the hierarchy, each Facet is composed of one motive item and one talent item

- Motives look at the need items of the questionnaire, the 'will do'. They measure an individual's wants, desires, preferences and drivers

- Each Facet directly measures the individual's motives by using items such as: 'I really want to be successful;' 'I am really interested in why people behave as they do;' 'I enjoy working under pressure;' and 'Receiving praise really motivates me'

Talents

- Talents are the effectiveness items of the questionnaire, the 'can do'

- They measure an individual's self-perception of what they see themselves to be good or effective at

- Some example items include: 'I am very ambitious;' 'I am good at understanding why people do things;' 'I work well when under pressure;' and 'I seek praise when I have done well'

Motive – Talent Splits

We will consider how to explain these in a feedback session during the practical part of the course.

Measuring both motives and talents provides additional information which has important implications for selection, development and talent management.
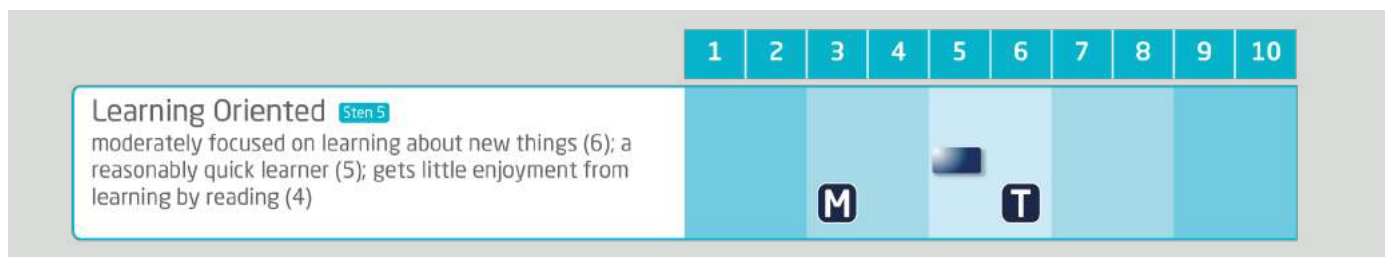
In practice, we generally tend to be good at the things we enjoy and enjoy the things we are good at, but this isn't always the case. Where there is a difference of three Stens or more between the motive and talent scores for a dimension, this is shown by M and T symbols appearing on the profile. The presence of many Motive-Talent splits may indicate that there is a mismatch between the individual's motives, talents and the demands of the work environment.

- Wave measures both Motives and Talents
- Generally we enjoy what we are good at and vice-versa
- Where there is a difference of three or more Stens a Motive – Talent split is shown on the profile
- Motive-Talent splits can indicate mismatches between an individuals work preferences and self-perceived strengths

Motive lower than Talent

If Motive is lower than self-perceived Talent, this may indicate that individuals feel that they have less interest than self-perceived effectiveness in this area.

- It is possible that the behavior is not driven by an internal motivation or preference but they act in a particular way as their role requires them to do so
- In such cases, rewards and encouragement could help to maintain performance
- Continuing to sustain performance which isn't underpinned by internal motivation could be challenging to the individual

		1	2	3	4	5	6	7	8	9	10
Learning Oriented Sten 5 — moderately focused on learning about new things (6); a reasonably quick learner (5); gets little enjoyment from learning by reading (4)				M			T				

Overall, this individual has lower Motive than Talent on the Learning Oriented Dimension.

Explore during feedback:

- How important is learning in their current role (or future career progression)?
- How does lower motivation impact their job performance in this area?

Talent lower than Motive

If self-perceived Talent is lower than Motive in a particular Dimension, this demonstrates that the individual has more interest and motivation than they perceive to have talent in this area.

- It is possible the individual is highlighting a development need that they are motivated to do something about
- The individual may feel they are 'falling short' as their perceived effectiveness does not reflect their motive or need
- The individual may not have yet developed the appropriate skills or talents in this area

	1	2	3	4	5	6	7	8	9	10
Reliable Sten 4 places less emphasis on meeting deadlines than many people (3); less punctual than many people (4); reasonably focused on finishing tasks (5)			T			M				

Explore during feedback:

- How important is it in their role to be reliable?
- How easy is it for this individual to demonstrate that they are reliable?
- What barriers are there that prevent this person from showing their reliability?
- What is the oranization's culture around meeting deadlines?

Response Bias

Distorted Results?

An issue that is often raised as a concern when using personality measures, particularly for assessment, is that of 'distortion'. Whilst most people give an accurate self-description on self-report questionnaires, some candidates may have a false impression of themselves or may attempt to 'fake' their results by second-guessing what a desirable profile would be for a particular job and therefore try to complete the questionnaire in a way that may achieve the desired result. This is known as distortion. Saville Assessment Wave uses a variety of techniques to help reduce and identify candidate attempts at distortion, both in terms of prevention and detection.

- One concern of self-report measures is the possibility of 'distortion'
- Candidates may unwittingly distort their profiles if they are not very self-aware
- Some candidates may attempt to 'fake' the profile they think is desired by the hiring company in a selection situation

Preventing Distortion

1. Inform candidates – making candidate aware of how their responses will be used and verified can help to prevent intentional distortion. For example, results could be discussed during a feedback conversation or interview. In addition, you can let candidates know that there are inbuilt response checks to detect possible distortions.
2. Questionnaire format - use a questionnaire with a format designed to control for response bias
3. Ipsative scoring – derived from candidates being forced to make choices between blocks of statements in terms of their relative importance. This can be described to candidates as response checks which are built into the questionnaire.

How Saville Assessment Detects Distortion

- Rather than using a social desirability scale which only gives one dimension and doesn't distinguish between 'faking good' and those who genuinely see themselves as 'nice' Saville Assessment uses a Rate-Rank format
- This uses a nine-point Likert scale for free ratings and then re-presents candidates with tied items in a forced choice ranking format. This approach helps to detect areas of distortion throughout a person's profile. It also gives an overall indication of how positive/lenient or negative/self-critical someone has been in their responses.

Response Formats

Different response formats can be used to help control for response distortion.

Normative Scores from Ratings

People are free to rate themselves as they like on each individual statement and the resulting normative profile could reflect a highly positive or negative self-perception. Profiles can be high across most scores for people who are positive responders and vice versa for those who are very self-critical.

Statement	1	2	3	4	5	6	7	8	9	Response
I really **want** to be successful	1	2	3	4	5	6	7	8	9	Very Strongly Agree
Receiving praise really **motivates** me	1	2	3	4	5	6	7	8	9	Very Strongly Agree
I am really **interested** in why peple behave as they do	1	2	3	4	5	6	7	8	9	Disagree
Having all the relevant information is **important** to me	1	2	3	4	5	6	7	8	9	Unsure
It is **essential** to me that I meet my deadlines	1	2	3	4	5	6	7	8	9	Strongly Agree
I **want** to receive feedback on my performance	1	2	3	4	5	6	7	8	9	Strongly Agree

Ipsative Scores from Rankings

The individual is forced to choose between different statements and the resulting ipsative profile always provides a mix of high and low scores. Individuals sometimes find ipsative tasks more difficult because they are always forced to prioritize one thing over another.

Statement		
I really **want** to be successful	Most	Least
Receiving praise really **motivates** me	Most	Least
It is **essential** to me that I meet my deadlines	Most	Least
I **want** to receive feedback on my performance	Most	Least

Combined Rate-Rank Format

Wave questionnaires use both rating and ranking formats because this:

- increases candidate acceptability
- creates more varied profiles
- enables reporting at facet level

- enhances reliability and validity
- makes faking more complex
- makes distortion easier to detect

Normative-Ipsative Split

When there is a difference of three or more Sten scores between an individual's normative and ipsative Sten score on a Dimension, this will be shown on the profile. The 'N' represents their normative score and the 'I' represents their ipsative score.

- Where there are differences of three or more Stens between Normative and Ipsative responses on a dimension, the split is shown with N and I markers on the profile
- Users can explore the split to see which score is most representative of their style in work, whether any self-lenience or self-criticism is apparent and the different working situations which could affect their behavior. You may find it helpful to also consider the individual's overall Ratings Acquiesence (ratings agreement) to interpret their tendency towards being more self-critical or more lenient. This will be explored more in the practical part of the course.
- You may form different hypotheses on a dimension when the Normative or Ipsative is higher
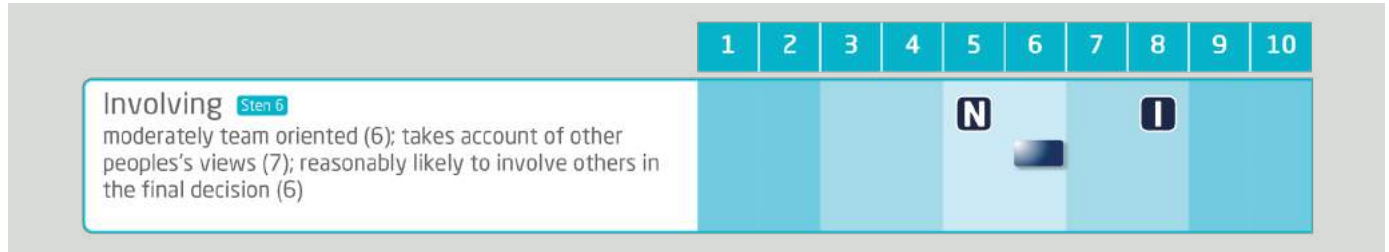
Explore any likely impact of splits in recruitment or development, consider these hypotheses for yourself. Probe these areas with your feedback recipient to understand why the splits have come about on their profile.

- N – Is this how they are when things are free and easy?
- N – Is this how they prefer to see themselves?

- I – Is this how they are when there is more pressure?
- I – Is this the uncomfortable/unrecognized truth?

- 'In which situations are they more likely to be like this?'
- 'In which situations are they less likely to be like this?'

Normative lower than Ipsative

Where ipsative scores are higher than normative ones, the person may have been overly self-critical in their normative self descriptions. In this case, individuals have not rated themselves as being particularly inclined towards the behavior. However, when required, they may choose this behavior over another and 'rise to the challenge'.

- In this example, the individual's overall score for Involving is 6; their normative score is five and their ipsative score is 8
- We would need to explore the split with the individual in order to understand the reason for it

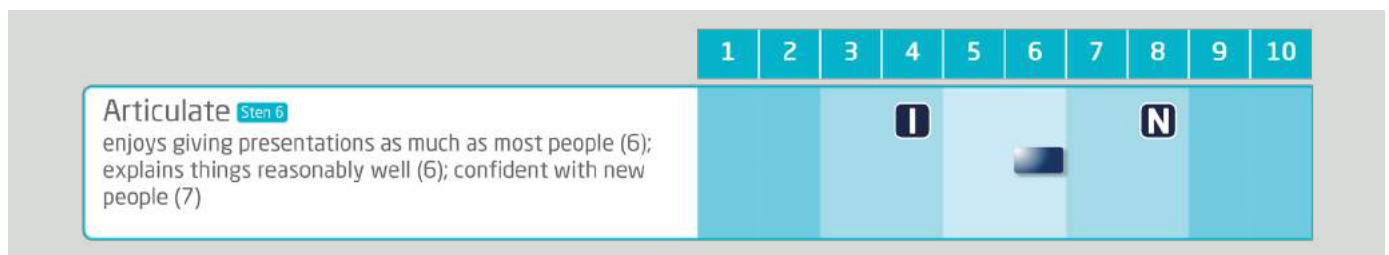|	1	2	3	4	5	6	7	8	9	10
Involving Sten 6 moderately team oriented (6); takes account of other peoples's views (7); reasonably likely to involve others in the final decision (6)					N			I		

- One hypothesis is that they were initially more critical of themselves and may 'rise to the challenge' of involving others when required to at work
- It is worth remembering that the best predictor of an individual's behavior across situations is still the overall Dimension score 6
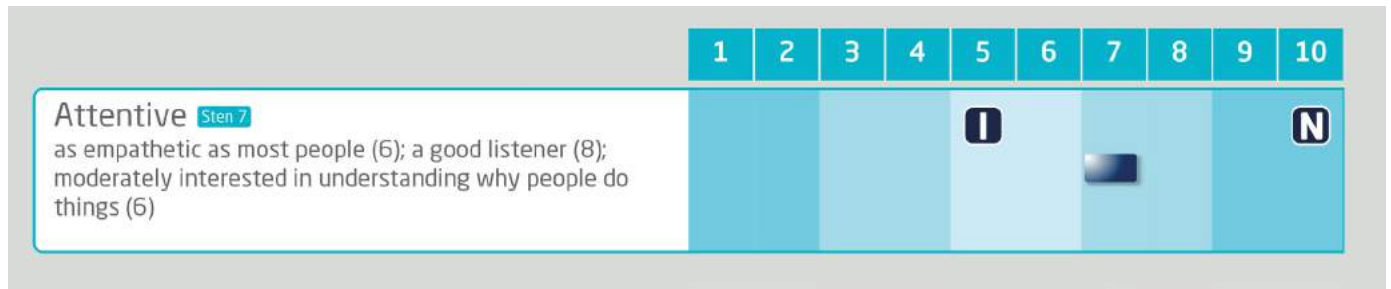
Ipsative lower than Normative

If a normative score is higher than an ipsative score, it may mean that the person has been less self-critical and has possibly exaggerated their normative description in a socially desirable way. This provides specific areas for further verification. In practice, the behaviors in this dimension may not be such a high priority, relative to other behaviors which are more important to the individual.

- In this example, the individual has an overall Sten score of 6 on the Articulate dimension, but their normative score is 8 and their ipsative score is 4
- One hypothesis is that the normative score is more a reflection of how they like to present themselves and the ipsative is more a reflection of their behavior when they have to choose between competing commitments at work or when under pressure
- The overall Dimension marker provides the best overall predictor of how 'Articulate' an individual is likely to be across situations

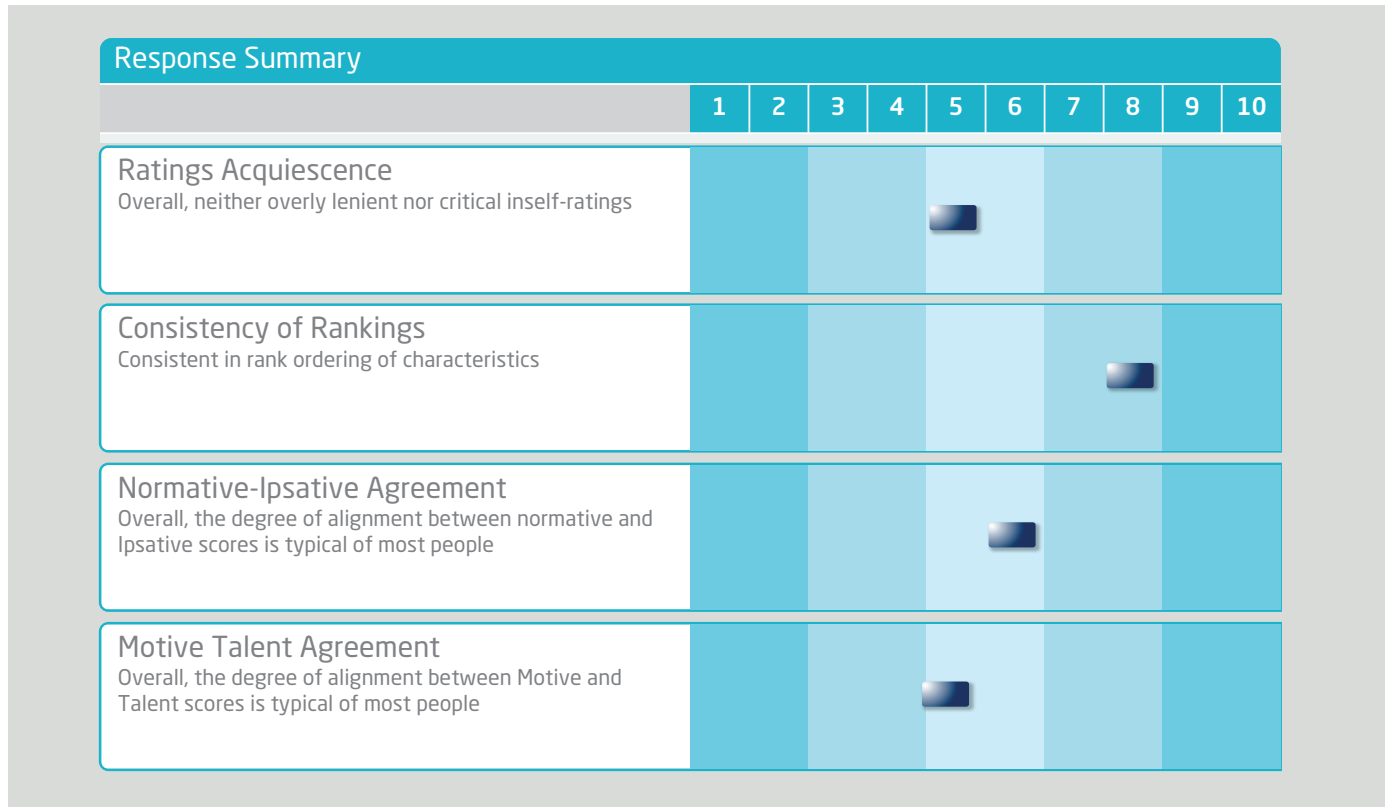|	1	2	3	4	5	6	7	8	9	10
Articulate Sten 6 enjoys giving presentations as much as most people (6); explains things reasonably well (6); confident with new people (7)				I				N		

Example Normative-Ipsative Split

	1	2	3	4	5	6	7	8	9	10
Attentive Sten 7 as empathetic as most people (6); a good listener (8); moderately interested in understanding why people do things (6)					I		▬			N

- Overall, this individual has indicated that they see themselves as being slightly more Attentive than others in the comparison group

- When they responded in the free ranking, normative response, they have described themselves as much more Attentive than others. When they needed to prioritize this area against others they have described themselves as being as Attentive as others in the comparison.

- Questions you might want to ask include: 'In what situations is it really critical for you to show empathy towards others? When are you less likely to be attentive to others? Can you describe a time when you have been exceptionally attentive towards colleagues? What specific feedback did you receive?'

Response Summary

The Response Summary presents four response summary scores. Saville Assessment Wave uses these four cross-checks to detect potential candidate distortion.

Response Summary	1	2	3	4	5	6	7	8	9	10
Ratings Acquiescence Overall, neither overly lenient nor critical inself-ratings					▪					
Consistency of Rankings Consistent in rank ordering of characteristics								▪		
Normative-Ipsative Agreement Overall, the degree of alignment between normative and Ipsative scores is typical of most people						▪				
Motive Talent Agreement Overall, the degree of alignment between Motive and Talent scores is typical of most people					▪					

Ratings Acquiescence

The first measure we look at is called Ratings Acquiescence. This is a measure of how positive or self-critical a person has been when rating themselves. A high score suggests that the individual has been more positive in their self-assessments on the rating scale. A low score suggests a degree of self-criticism when rating. Ratings Acquiescence will have an impact on the psychometric profile, to an extent; i.e. if someone has been very self-critical, you will likely see more lower sten scores on the psychometric profile.

By itself Ratings Acquiescence is not a measure of faking and there could be several possibilities for the score. Those with higher Ratings Acquiescence may have high self-esteem, have a strong need to please, lack of self-criticism or the individual may be a high performer who accurately and genuinely agrees with many of the questions.

▪ Ratings Acquiescence is a measure of how positive or self-critical a person has been when rating themselves
▪ A high score suggests that an individual has been more positive in their self-assessment while a low score indicates a degree of self-criticism

Consistency of Rankings

Consistency of Rankings is a measure of how consistently a person has ranked characteristics across the 36 Dimensions. High scores suggest that the respondent has been more consistent in their rankings, i.e. they have ranked similar behaviors in a similar way. Low scores, on the other hand, suggest that they have been less consistent when ranking. Low consistency isn't necessarily a problem and may simply highlight that the individual is less aware of where their strengths and challenge areas lie. Low scores may also be attributable to the individual having had difficulty rank ordering items, the individual being very 'situational' and viewing themselves as displaying behaviors differently depending on the situation, and it could even indicate low motivation towards the task.

Sometimes, when combined with very high Ratings Acquiescence, very low consistency might be indicative of someone trying to 'fake good'. Whilst this is not always the case, in these instances you should seek to validate the profile in a feedback or interview setting.

- Consistency of Ranking is a measure of how consistently a person has ranked characteristics across the 36 Dimensions
- Low consistency could come about when the individual is less sure of their strengths and challenge areas, has had difficulty rank ordering items, has a situational style, or has low motivation towards the task
- Where very low consistency is combined with very high acquiescence, it is useful to validate the profile in a feedback or interview setting

Motive-Talent Agreement

The last measure looks at the degree of alignment between an individual's responses to the motive and talent items. Higher Motive-Talent agreement suggests that they have aligned talents and motives. In other words, they are good at the things that they enjoy doing. Lower alignment between motives and talents may be representative of someone who finds little enjoyment in areas where they are talented. It could be that their immediate work environment is not well aligned to their motives and/or talents, or that they have a number of specific development needs in relation to the role they are in or the role which they aspire to do. A low motive-talent agreement indicates that there are likely to be more motive-talent splits within the profile but does not indicate whether the splits are in a particular direction.

- High Motive-Talent agreement indicates that the individual's talents and motives are aligned while lower agreement suggests a low degree of alignment

A low Motive-Talent agreement indicates that the profile is likely to have more M-T splits but does not indicate the direction of the splits; that is whether a person will have greater Motive or self-perceived Talent in a given area

Normative – Ipsative Agreement

The third area in the Response Summary looks at the degree of alignment between an individual's normative scores and ipsative scores. High scores demonstrate a high degree of alignment between the normative an ipsative scores.   Lower scores suggest less agreement between normative and ipsative scores.

The lower the normative-ipsative agreement, the more N-I splits you can expect to see in a profile.

- High Normative-Ipsative agreement indicates a high degree of correspondence between the rating and ranking responses while lower scores suggest a lower agreement
- Normative-Ipsative Agreement gives an indication of how likely you are to find N-I splits on the profile, where low N-I Agreement would result in more N-I splits
- Normative-Ipsative agreement is often interpreted along with other response style indicators like Ratings Acquiescence

The Expert Report, Focus Styles and Feedback

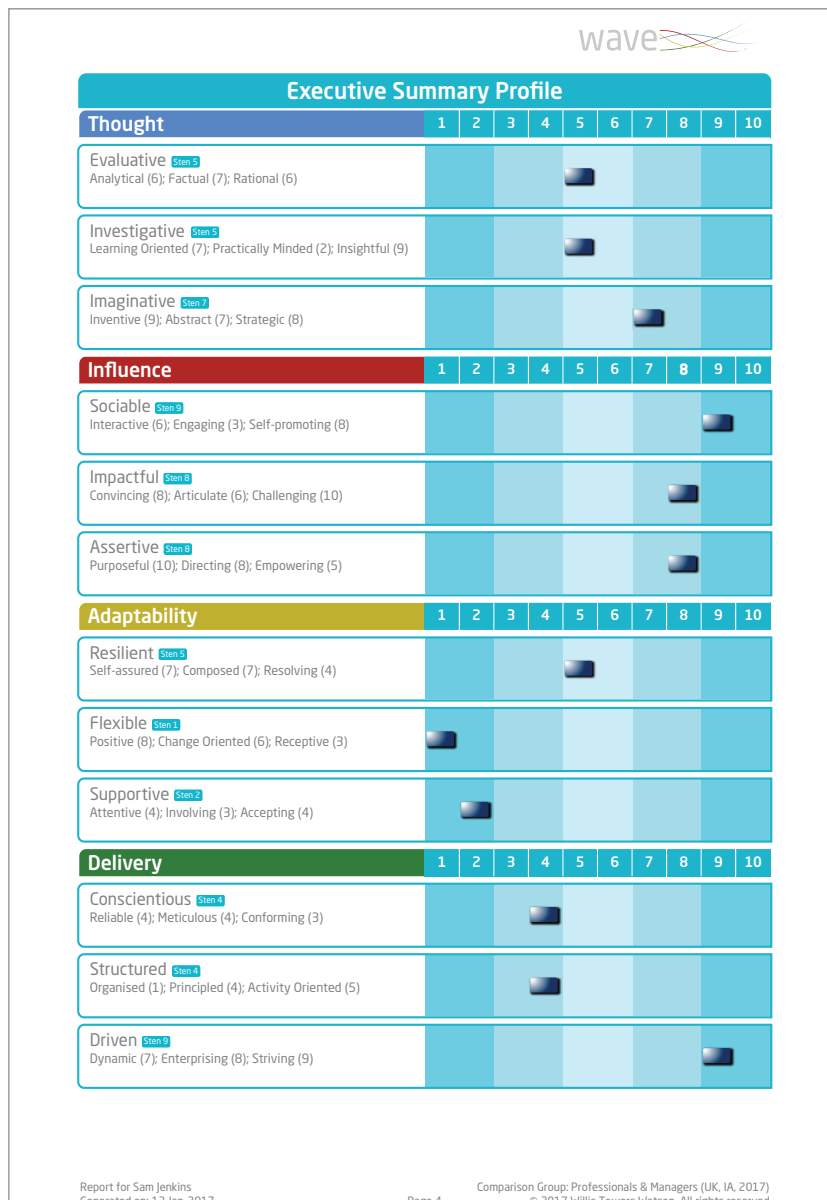## Wave Professional Styles Expert Report

The Expert Report is the most in-depth report available from the Wave Professional Styles and Focus Styles questionnaires. This report can support selection and development situations. We'll go through the Professional Styles version here in more depth and then compare to the Focus Styles Expert Report.

Executive Summary Profile

The Executive Summary Profile page gives an overview of your responses across the whole Wave model. Wave is a hierarchical model based around four broad clusters; Thought, Influence, Adaptability and Delivery.

In Professional Styles, these four clusters break down into 12 sections, 36 dimensions and 108 facets which gives a great level of granular detail.

- The Executive Summary provides an overview of the section and dimension responses
- Professional Styles has four clusters, 12 sections, 36 dimensions and 108 facets

Executive Summary Profile

Thought	1	2	3	4	5	6	7	8	9	10
Evaluative Sten 5 — Analytical (6); Factual (7); Rational (6)					■					
Investigative Sten 5 — Learning Oriented (7); Practically Minded (2); Insightful (9)					■					
Imaginative Sten 7 — Inventive (9); Abstract (7); Strategic (8)							■			

Influence	1	2	3	4	5	6	7	8	9	10
Sociable Sten 9 — Interactive (6); Engaging (3); Self-promoting (8)									■	
Impactful Sten 8 — Convincing (8); Articulate (6); Challenging (10)								■		
Assertive Sten 8 — Purposeful (10); Directing (8); Empowering (5)								■		

Adaptability	1	2	3	4	5	6	7	8	9	10
Resilient Sten 5 — Self-assured (7); Composed (7); Resolving (4)					■					
Flexible Sten 1 — Positive (8); Change Oriented (6); Receptive (3)	■									
Supportive Sten 2 — Attentive (4); Involving (3); Accepting (4)		■								

Delivery	1	2	3	4	5	6	7	8	9	10
Conscientious Sten 4 — Reliable (4); Meticulous (4); Conforming (3)				■						
Structured Sten 4 — Organised (1); Principled (4); Activity Oriented (5)				■						
Driven Sten 9 — Dynamic (7); Enterprising (8); Striving (9)									■	

Psychometric Profile - Response Summary

The Full Psychometric Profile – Overview page outlines your overall response summary.

- The response summary provides insight into how the individual has completed the questionnaire
- It can highlight where you may expect to find deep dives in the profile

wave

Full Psychometric Profile - Overview

This full psychometric profile provides a detailed assessment of Chris Park's responses to the Professional Styles questionnaire.

It begins with a summary of response patterns followed by an explanation of the profile structure. The next few pages report on the results of the four major clusters.

Response Summary

	1	2	3	4	5	6	7	8	9	10
Ratings Acquiescence Overall, more positive in self-ratings than many people						◼				
Consistency of Rankings Highly consistent in rank ordering of characteristics									◼	
Normative-Ipsative Agreement Overall, the degree of alignment between normative and ipsative scores is typical of most people							◼			
Motive-Talent Agreement Overall, the degree of alignment between Motive and Talent scores is typical of most people						◼				

Profile Breakdown

Saville Assessment's extensive research indicates the best predictor of performance at work is generally the score indicated by the sten marker (combined normative-ipsative). Information is also provided on subtle differences highlighted by the profile:-

‖‖‖**Facet Range.** Where the range of facet scores within any dimension is of three stens or more, this is indicated both by hatching on the dimension scale and the provision of individual facet scores in brackets alongside each verbal facet description.

N - **I** **Normative-Ipsative Split.** Differences between normative (rating) and ipsative (ranking) scores of three stens or more are indicated by the markers **N** and **I**, respectively. Where ipsative scores are higher than normative ones, the person may have been overly self critical in their normative self descriptions. If normative scores are higher than ipsative, it may mean that the person has been less self critical and has possibly exaggerated their normative description. This provides specific areas for further verification, rather than one unspecified measure of social desirability.

M - **T** **Motive-Talent Split.** Differences between motive and talent scores of three stens or more on a given dimension are indicated by the markers **M** and **T**, respectively. Such differences may suggest an incentive to develop in given areas, or indicate areas where environmental influences are having a strong impact.
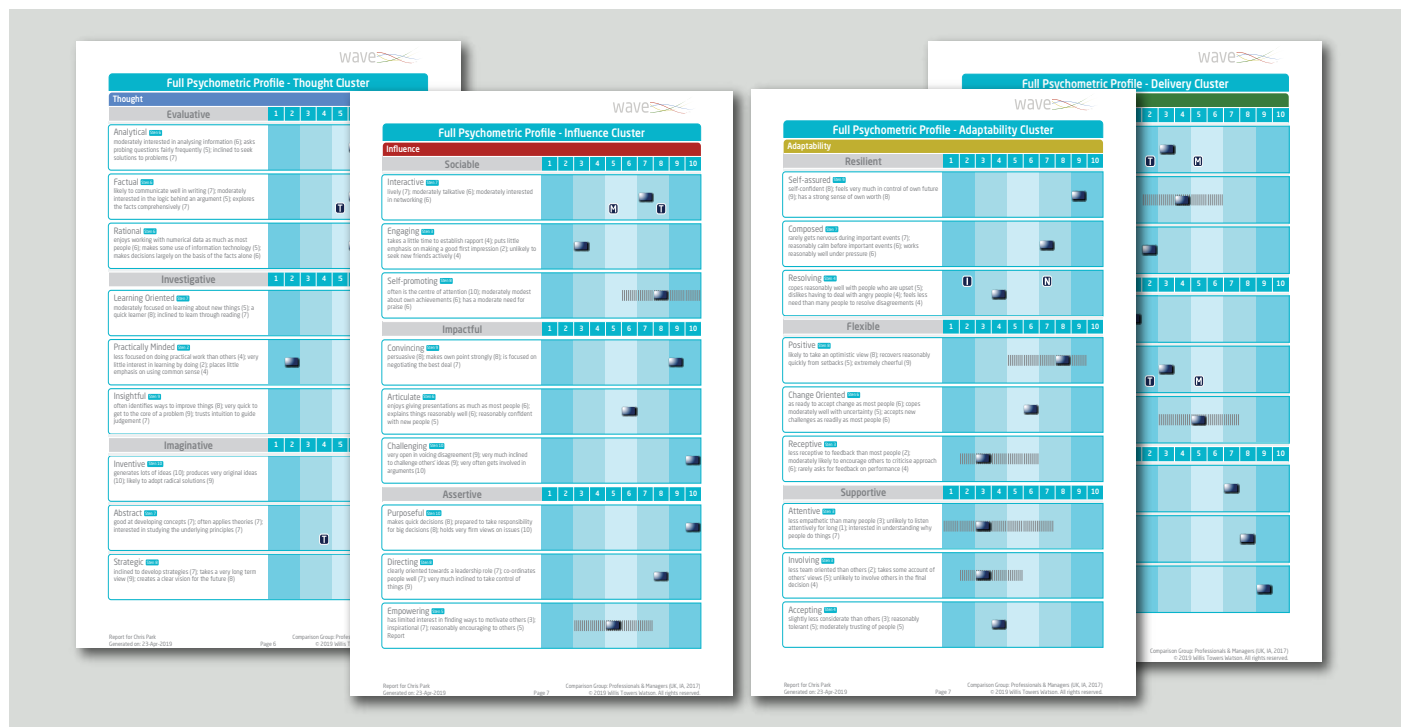
Full Psychometric Profile

In Professional Styles, the Full Psychometric Profile is split across four pages, with one page each for Thought, Influence, Adaptability and Delivery. Looking at the Thought Cluster as an example, it breaks down into three Sections: Evaluative, Investigative and Imaginative. Each of those Sections breaks down into a further three Dimensions. Evaluative breaks down in Analytical, Factual and Rational. These then break down into a further three Facets which we can see on this page.

- The full psychometric profile is split over four pages, one for each Wave Cluster
- It breaks down into the Cluster, Section, Dimension and Facets
- Dimensions that may need some more exploration are ones that have deep dives on them

Summary Psychometric Profile

The Summary Psychometric Profile lays out all of your 36 Dimensions, in the Professional Styles Expert Report. It gives a snapshot of your overall sten markers and also any splits; the right hand column will display which split is the highest on the Dimension. Your feedback provider is unlikely to spend much time on this page with you but it might be helpful for you to revisit when going over your profile again at a later date.

- The Summary psychometric profile gives an overview of all Dimensions on one page alongside the deep dives
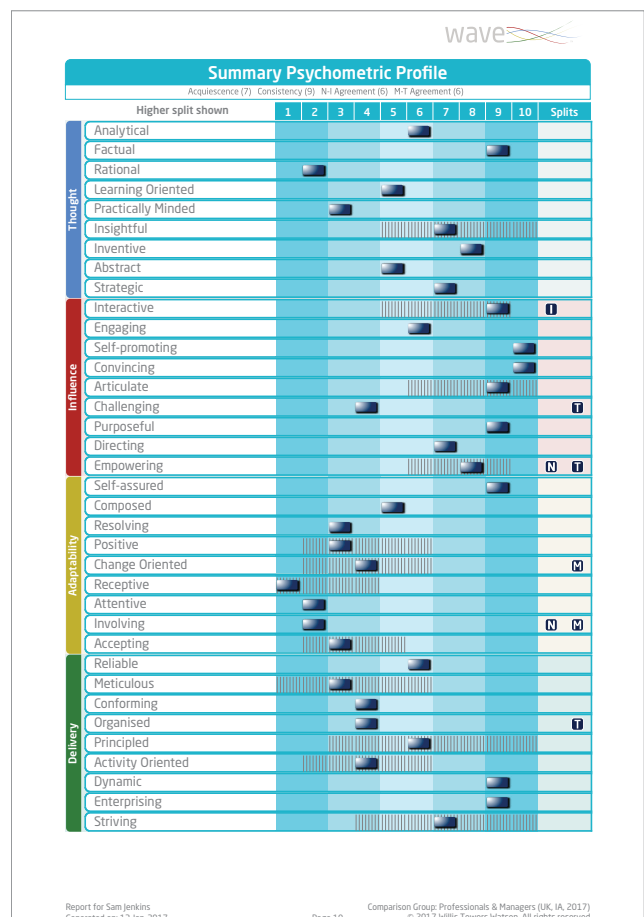
Competency Potential Profile

The Competency Potential Profile shows the 12 Section Styles as Competencies. This explains an individual's likely capability in this area in the workplace. This can be a useful page to use when reflecting on strengths to leverage or any potential challenge areas to develop. Everyone will have some higher and lower areas to explore. This page is typically less used in feedback discussions as valuable detail tends to be pulled out from the styles discussion. The Competency Potential Profile is often used in selection settings but can also be used in development contexts.

- The Wave styles all have aligned Wave Competencies that predict potential performance

- The CP Profile allows for easy identification of an inidvidual's relative areas of greater and less potential

- In selection, following role profiling or job analysis, hiring managers can use this page of the report to focus on the areas of greatest importance or relevance

- In development, coaches, mentors and line managers can help individuals to review their relatives strengths and potential challenge areas

- We will look at competency potential in more detail later into this module
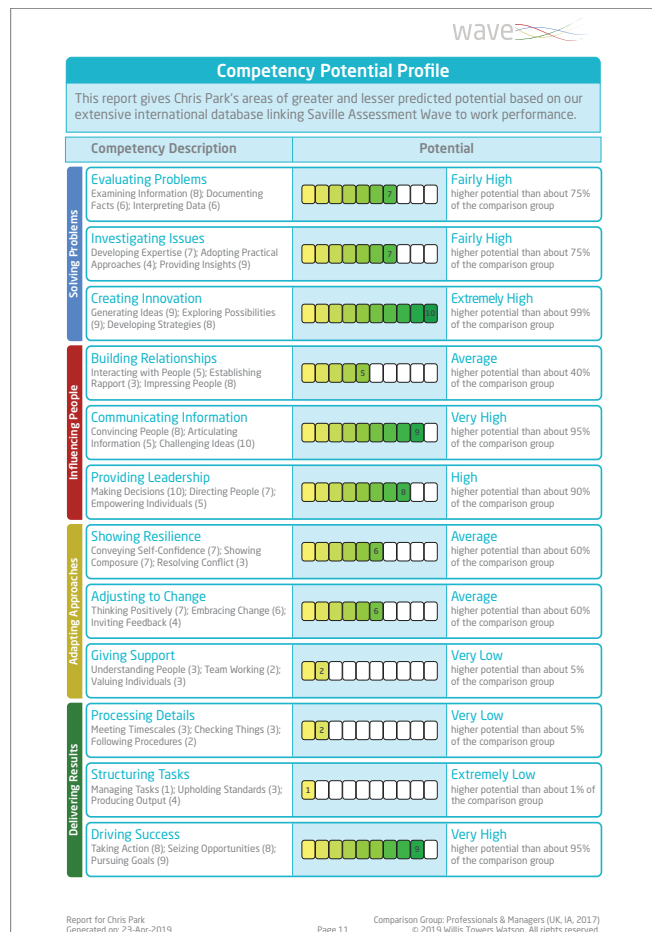
Predicted Culture/ Environment Fit

According to Positive Psychology it is easier to change the job than the person, that is job-crafting to play to your strengths. This profile can be shared with applicants and job incumbents to explore the fit between individual and the work environment – highlighting areas of alignment and areas of difference.

- This page outlines the individual's top eight Performance Enhancers and top eight Performance Inhibitors, which are the opposite of the enhancers

- These give insight into the kind of working activities and practices that compliment a person's working style and also those which may be less complimentary to their style
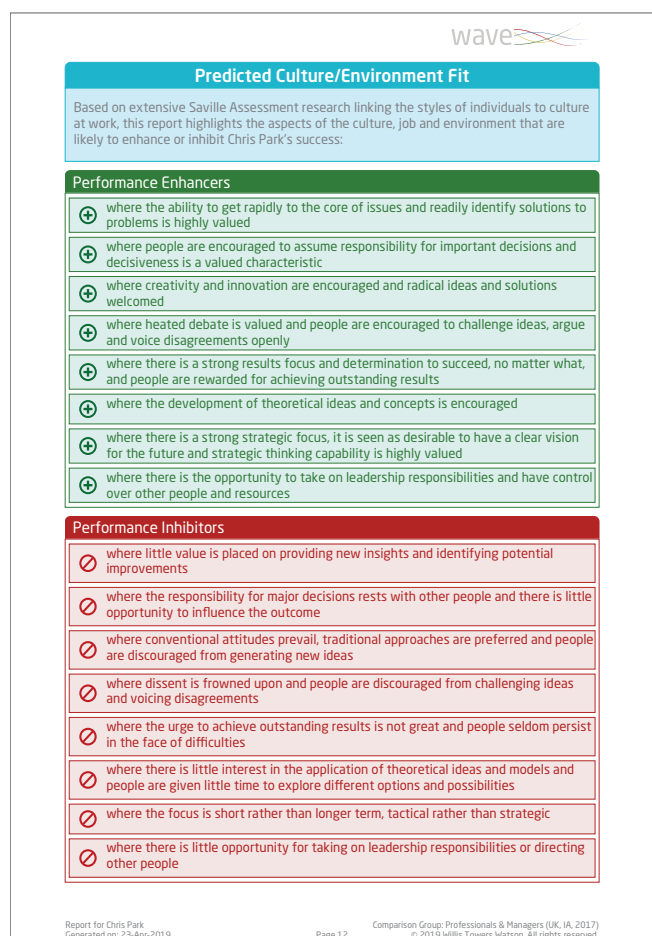
Sten Scale

We use a Sten, standardized one – ten scale across the profile. This allows us to use an external benchmark and make sense of your responses against a comparison group.

- The boldest blue on the left, around Stens 1 and 2, conveys where the individual's response is much less than that of the comparison group

- The mid-blue on the left, around Stens 3 and 4, conveys where a person's response is slightly less than that of others in the external benchmark

- The palest blue shade, around Stens 5 and 6, indicates the typical range of responses in the comparison group

- The mid-blue on the right, around Stens 7 and 8, is where the response is slightly more than that of others in the comparison

- The bold blue furthest to the right, Stens 9 and 10, indicates where an individual has indicated a much greater preference for a given area than others in the benchmark group
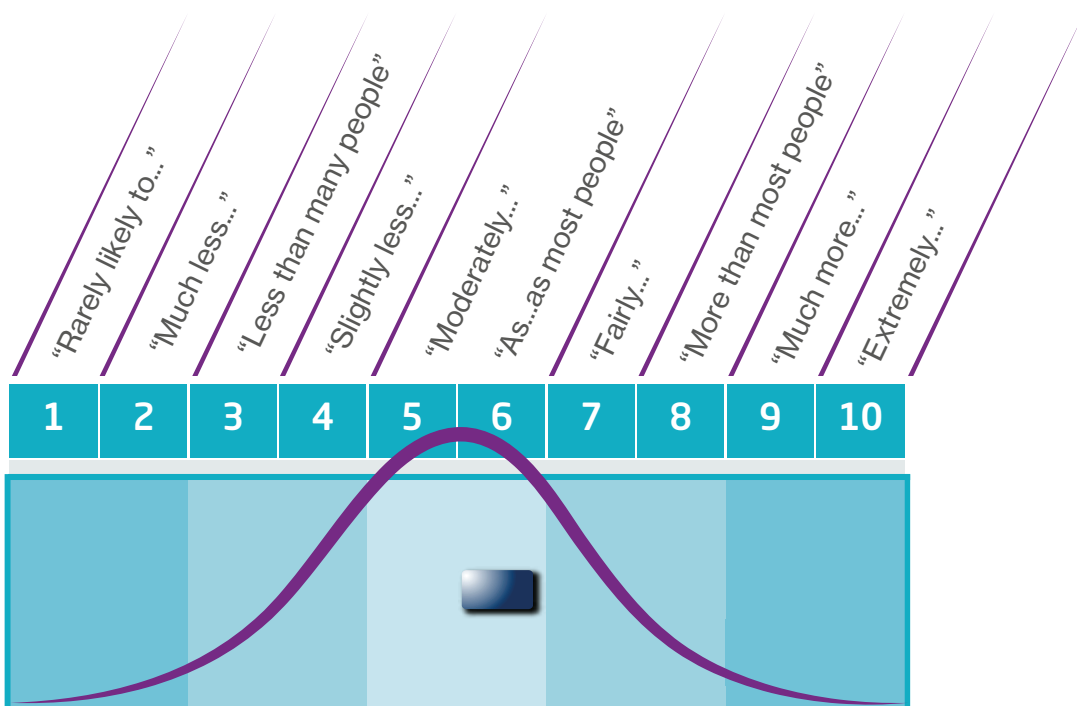
Aligned Competencies and Styles

Primarily, each competency Dimension has underlying, aligned styles Dimensions, however, we found that to best predict performance, it helps to include facets from additional parts of the model. The equations that drive our competency scores are built on this unique combination of aligned styles and additional facets.

Example

Identifying Business Opportunities =

Business Opportunity Oriented facet x 21

+ Leadership Oriented facet x 4   **+ Action Oriented facet x 2**

+ Deciding on Action facet x 3   **+ Visionary facet x 1**

The greatest weighting is given to the aligned styles dimension, e.g. The Business Opportunity Oriented styles would be most weighted to the Identifying Business Opportunities competency.

Focus Styles – A need to focus

Alongside Wave Professional Styles, there is also the Wave Focus Styles questionnaire. Wave Focus Styles is a third of the length of Professional Styles. It takes approximately 13 minutes to complete and includes all the unique features of Saville Assessment Wave Professional Styles. The ultra-compact Wave Focus Styles questionnaire is based on the most valid facets of the Wave Model to create a questionnaire that is both short and a strong indicator of performance and potential at work.

As with Professional Styles, Wave Focus Styles is based on a hierarchical model. The model incorporates four Clusters, 12 Sections and 36 Facets of style at work; there are no Dimensions in the Focus Styles model.
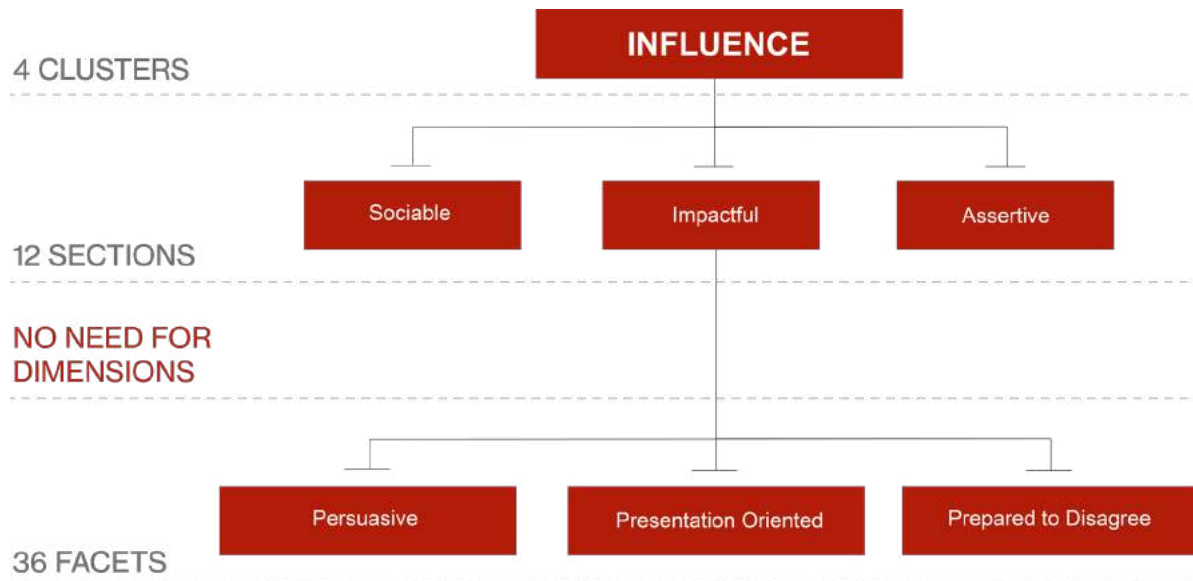
Focus Styles and Professional Styles Comparison

	Professional Styles	Focus Styles
Validity	.54	.44
Deep dives	✓	✓
Use for selection	✓	✓
Use for development	✓	✓
Completion time	40 minutes	15 minutes
Depth of output	In-depth	Concise
Number of Facets	108	36

Focus Styles Expert Report

The Focus Styles Expert Report follows the same format as the Professional Styles Expert Report. The difference is in the Psychometric Profile. Where Focus Styles is a shorter instrument, we have a more condensed output; here all four Clusters and Sections are included on one page, we have just taken out the Dimensions.

Feedback

Feedback can help to increase understanding between feedback provider and recipient by raising self-awareness, coaching, mentoring, probing and interviewing.

To share understanding

What does the information from the assessment tell us about the individual's job-fit for a role in a selection scenario? In a development situation, what does the information tell us about an individual's strengths and potential development priorities?

To reach agreement

Through discussion with the individual, the feedback provider and recipient reach a shared understanding of how the individual's potential strengths and areas of improvement may affect their performance in work.

For public relations

Giving meaningful feedback is likely to enhance the experience of successful and unsuccessful candidates and also give them a favorable impression of the oranization, when done well.

To meet ethical responsibilities

When candidates have invested time in an assessment, it is fair to offer feedback. This should be done in a professional and sensitive manner, respecting confidentiality throughout. Test users must treat the applicant with respect and ensure that the assessment is used for its intended purpose, eg. Work-based applications.

To comply with applicable legislation

To comply with legislation in many countries, e.g. GDPR requirements in the UK, candidates have the right to see any data held on them, including assessment results.

Feedback Process

Feedback can help to increase understanding between feedback provider and recipient by raising self-awareness, coaching, mentoring, probing and interviewing.

Setting the scene

It is important to set the scene and to clarify with the feedback recipient what the feedback session will cover. This is also a good opportunity to begin building rapport with the individual, everything you find out about them, their role and future career aspirations can help to contextualize the feedback you give.

- Purpose
- Time Available
- Experience When Completing
- Confidentiality & Data Storage
- Agree Objectives

- Past History
- Current Role
- Clarifying Potential Steps
- Aspirations

Explain how Wave works

Giving a high-level overview of the instrument and the report can help guide the feedback recipient through the rest of the feedback conversation.

- Self-report but Powerful Prediction
- Comparison Group
- Scores/Scales Explained
- Behavioral Styles

- Overview of four Clusters
- Levels of Detail (Clusters, Sections, Dimensions and Facets)

Response summary

The response summary gives a high-level overview of how the individual has completed the questionnaire. If the individual has responded much more or more less in any are compared to the benchmark group this may be worth exploring. We will look at this in more detail on the practical part of the course.

- Ratings Acquiescence
- Consistency of Rankings

- Motive-Talent Agreement
- Normative-Ipsative Agreement

Feedback the profile

In a selection context, you may choose to only go through the most relevant areas to a given role, however, in a developmental context you could choose to give in-depth feedback across the whole profile, being sure to ask plenty of questions and explore any deep dives that present areas of uniqueness in the profile.

- Discuss Deep Dives
- Ask questions
- Broad Questions: How does this affect your work?
- Focussed Questions: What strengths come from this behavior?

- Try to avoid closed, leading, multiple choice or double questions
- Make links between Dimensions

Summarize

At the end of the conversation it can be helpful to wrap up by summarizing the key points you discussed during the session as well as outlining any agreed actions; such as development steps for example. If this is a selection context you can let the candidate know that the next steps of the process will be.

- Conclusion and next steps

Feedback Tips

More Effective Feedback

- Prepare
- Keep the conversation two-way
- Be sensitive and empathic; be objective with the profile
- Actively listen and summarize

Less Effective Feedback

- Making assumptions
- Using technical jargon
- Value judgments

Barnum statements: The Barnum Effect is where individuals accept general truisms as accurate portrayals of their own uniqueness.

Set Up & Interpretation

Job Profiling & Administration

Job analysis is a process to identify and determine in detail the particular duties and requirements in a role, as well as the relative importance of these for a given job. There are several ways to profile a role, including: interviews with incumbents and supervisors, questionnaires (structured, open-ended, or both), observation, and gathering background information such as job descriptions.
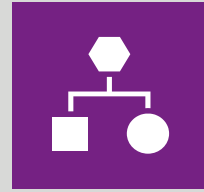
Job Analysis

- Identify and determine in detail the particular duties and requirements in a role, as well as the relative importance of these for the job

Methods used to Conduct Job Analysis

- Interviews with incumbents and supervisors
- Questionnaires
- Observation

- Job descriptions
- Saville Assessment Job Profiler tool
- Wave Performance Culture Framework card deck

Saville Assessment Profiling Tools

Saville Assessment have developed the Job Profiler questionnaire and the Wave Performance Culture Framework card deck to support organizations with their job profiling activities. When looking at the importance of Wave scales for a particular role, selecting six Wave sections as 'critical areas' is generally a realistic and manageable number.

Stakeholder agreement on what 'good' looks like for a role is essential to selecting the right people. Our profiling tools enable those involved in the hiring process to:

- identify behaviors most predictive of performance and potential
- gather different stakeholder perspectives on what is important to the role
- articulate requirements objectively for fair and standardized benchmarking

Wave Performance Culture Framework

The card decks can be used on a one-to-one basis, with small groups/teams or with large focus groups as part of interactive sessions to assess key characteristics. It offers an engaging and interactive approach with line managers and non-HR teams at all levels in an oranization. The vocabulary is simple, direct and jargon-free. The cards enable users to cover a lot of ground quickly and tease out areas of agreement/disagreement using a constructive process.

- The Hire and Build card decks support interactive sessions with individuals and teams to assess key characteristics in roles
- They enable users to cover a lot of ground quickly and tease out areas of agreement/disagreement using a constructive process

Job Profiler

Saville Assessment have developed the Job Profiler questionnaire, an online measure (taking just 15 minutes to complete) that captures the essential features of jobs in an efficient and effective manner.

- An online multi-rater tool that gathers perspectives from different oranizational levels on what makes a person effective in a given role

- The tool takes 15 minutes to complete and gathers quantitative and qualitative input from stakeholders

- The results provided by each rater group are represented by a different shape and positioned on the rating scale with arrows reflecting any differences or ranges in opinion

Selecting Norm Groups for Wave

Appropriate Norms

The choice of norm group against which individuals are benchmarked will have an impact upon scores. Your choice of norm group should always take into account the job being applied for, the educational level and the work experience level required from a candidate. For example, it is appropriate to use a norm group of senior managers and executives for a company Director entering an organization. It would not be appropriate to compare directors' scores to a group of individual contributors who have no management responsibility.

- The comparison group or norm group is an external benchmark for individuals being assessed

- You should select a norm group based on the job being applied for, the educational level and the work experience level required

- Norm groups should be up to date; Saville Assessment refresh their norm groups every five years

- Larger norms (i.e. those greater than 150 people) are likely to be more representative of the wider population, up to a point. That is, you could have a very large but unrepresentative group of, for example, all women

Wave Norms Available

The following general norm group categories are available for Wave Professional Styles and Wave Focus Styles as standard:

- Graduates - All
- Graduates - Recent
- Mixed Occupational Group

- Individual Contributors
- Professionals and Managers
- Senior Managers and Executives

The Saville Assessment norm groups are available for UK, International, Regional (e.g. continental) and Country samples. Once you are Wave qualified you will have access to our Client Resource Area where you can learn about the comparison groups available in more detail.

Administration of Wave

When you invite an individual to complete a Wave questionnaire, there are a few things you need to consider around Candidate Preparation.

You can also choose to invite individuals via our support team, the Bureau, or via your own test platform, an Oasys site.
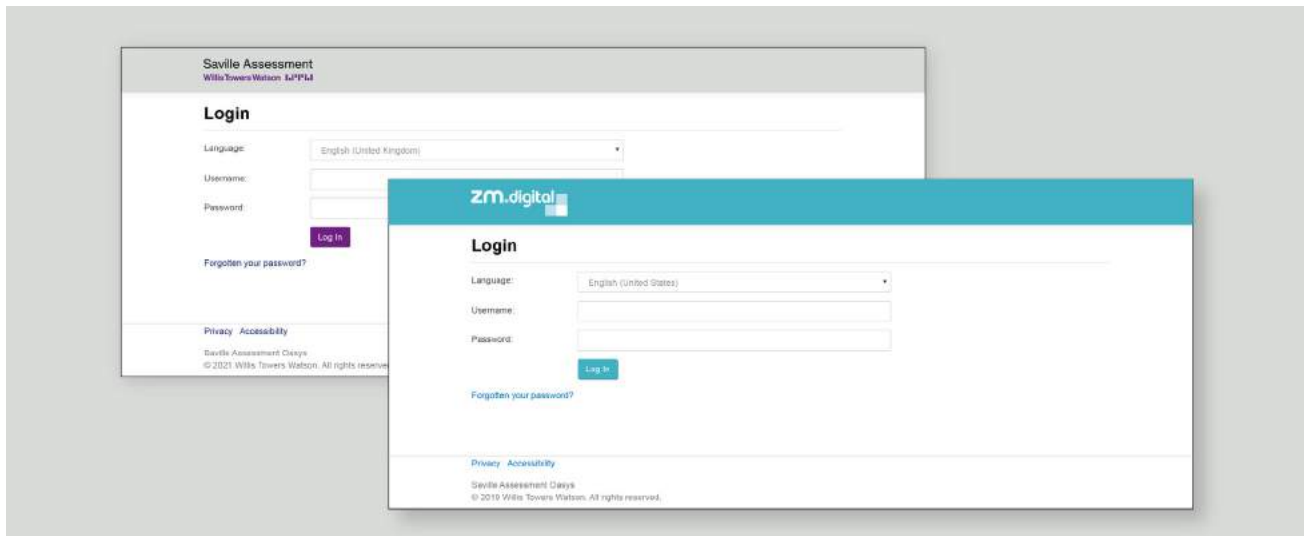
Candidate Preparation

When candidates complete Wave Professional Styles and Wave Focus Styles questionnaires in an unsupervised, 'Invited Access' environment, typically a unique secure link to the questionnaire is emailed to the individual along with a password and username. Therefore, the candidate needs to have reliable access to the internet and an email address.

Prior to individuals completing Wave Styles, candidates will have access to preparation guidance on the Candidate Dashboard, accessible via their assessment link. Individuals should also be given the opportunity to declare any special requirements for completion of the online questionnaire.

Supervised administration of Wave is less common than unsupervised. Whether you are conducting a supervised session in person or remotely, please seek guidance from your contacts at Saville Assessment.

▪ Candidates need to have reliable access to the internet and a valid email address to access Wave questionnaires

▪ Candidate preparation materials are accessible via the Candidate Dashboard

▪ If you want to conduct a supervised administration of Wave, please contact Saville Assessment

Invited Access – Bureau

Using our Bureau service is a more cost-effective option if you will be using only a small number of assessments. Our dedicated bureau team will set up your project for you in a turnaround time of up to two hours during working hours. In order to set up a project this way, you are required to complete a bureau request form where you provide:

▪ the company details and the project details such as start and reminder date

▪ the participant deadline date

▪ an indication of what instrument, reports and norms you require

▪ and the candidate name and email addresses

Benefits:

▪ Cost effective for small numbers

▪ Fast turnaround; set up within two hours

▪ Complete the Bureau Request Form and we will do the rest

Invited Access – Oasys

Investing in your own Oasys system is the most cost-effective option if you plan on assessing larger volumes of candidates. There is a one-off set up fee but no further annual licence fees apply. If you have your own system, you will receive discounted fees for your ongoing usage.

This option means that you will now be in charge of setting up the assessments internally, and our Bureau team are still available to help with any technical queries. As part of the set up you will receive complementary training on how to administer assessments on the Oasys system. At additional cost, there is also the option of having the Oasys platform branded in line with your organization brand image.

Saville Assessment Wave can also be integrated into an applicant tracking system; please contact us if you would like to find out more about which ATS systems we have integrated with.

Benefits:

- Cost effective for larger numbers
- You are in control of set up of assessments
- Two-hour help desk response time during normal business hours
- Option to be branded
- Systems availability 99.9% on network average
- Can be integrated with an applicant tracking system

Interpretation & Group Differences

It is critical that great effort is put into ensuring that assessment objectivity and fairness carries through into the interpretation of results. You can maintain fairness in a number of ways.

Measurement

Be clear what you are measuring and what you are forecasting when you describe results. For example, in Wave you are measuring someone's self-reported workplace style, e.g. Assertive, in order to forecast their likely workplace performance in terms of Providing Leadership.

- Identify what you are measuring and how this relates to the workplace behavior that you are predicting

Consistency of Interpretation

Consistency matters and whether you are hiring, developing or assessing for leadership or potential, it is important that all users make equivalent interpretations of the data. To ensure consistency, you should seek agreement with other Wave users in a given assessment process as to which scales are most important, and a consistent assessment process should also be agreed upon.

This is particularly important if you are weighting or integrating any of the Wave data with other assessment results. In selection, you may wish to calibrate your approach with other Wave users. The Wave reports promote consistency of interpretation through the provision of Facet verbalizers; using the report language rather than seeking to add your own interpretation to any results helps to ensure consistency and standarization.

- Ensure users follow a consistent process when interpreting Wave data
- Assessors should align with each and reach agreement in terms of important dimensions and where Wave results are used in conjunction with other assessment information

Appropriate Comparison Groups

Wave interpretation is always based on a comparison against others; appropriate norms that are suitably large and representative of the applicant group should be used, e.g. Professionals and Managers in the UK.

The question often arises as to whether differences between groups should be taken account of in interpretation. The simple answer for Wave is 'no'. We do not see any large, average group differences on the basis of gender, age or ethnicity and so we do not publish separate norm groups or advise any user to make differences in interpretation on the basis of group membership.

- Wave interpretation uses comparison groups as external benchmarks to make sense of candidate responses
- Comparison groups, norms, should be suitably large and representative of the applicant group
- We have not found any large group differences in Wave data based on age, ethnicity or gender and therefore see broad norms to be more appropriate than specific norms, e.g. an all female norm

Group Differences

Virtually all assessment methods, including personality questionnaires, have historically tended to show some differences between groups. Wave shows no large differences and very few small to moderate differences in any group for age, gender or ethnicity.

Gender Differences

Only Rational shows a moderate gender difference; males score approximately 1 Sten higher than females and females are slightly higher than males on Attentive and Activity Oriented.

Ethnicity Differences.

On Learning Oriented, Self-assured, Striving, Receptive, Conforming, Black respondents (including Black Caribbean, Black African and other Black backgrounds) scored approximately 1 Sten higher than the White group (including White European, White North America and other White backgrounds). This is a moderate difference.

On Activity Oriented the White and Asian (including respondents from Indian, Pakistani, and other Asian backgrounds) groups scored approximately 1 Sten higher than Black respondents, which is a moderate difference.

Ethical Considerations for Using Wave

Equal Opportunities Legislation

Equal opportunities legislation has developed over time to protect more groups, with major legislative developments in the latter half of the 20th Century. This legislation has continued to strengthen and evolve to cover more protected groups.

For example, the UK Equality Act 2010 protects the following characteristics:

- Age
- Disability
- Gender reassignment
- Marriage and civil partnership
- Pregnancy and maternity

- Race
- Religion or belief
- Sex
- Sexual orientation

Unfair treatment of any group protected by the UK Equality act would be considered as discrimination. Discrimination may be Indirect or Direct.

Indirect Discrimination

Indirect Discrimination is the unintentional differential treatment or adverse impact that affects different groups as a result of the testing conditions imposed. Hiring managers should consider whether there is clear justification for their testing choice, for example, it would be indirect discrimination to ask one group of candidates to complete an English language test but not asking all of the candidates to do this.

- The unintentional differential treatment of candidates in different groups
- Testing decisions need to be justifiable if it could be claimed that indirect discrimination has occurred, for instance, the cut-score in a selection process negatively impacts a particular group but it is vital for selected candidates to have that level of performance in a given area
- Be sure to select tests that have minimal observed group differences

Direct Discrimination

Direct Discrimination treats people differently because of the group they belong to; this is almost universally outlawed and this is not something that any high-quality assessment is designed to do. An example of direct discrimination of assessment could be not allowing a person with a disability to complete a test as part of a selection process.

- The intentional differential treatment of people depending on a certain group they may be part of, such as gender, race or religion
- High-quality assessments are not designed to be used in this way

Using Tests Responsibly

Training and Responsibilities for Test Users

It is important to complete training before using some assessments but, as with any skills or knowledge, over time parts may be forgotten and bad habits can develop. Equally, new developments may require updating of knowledge. Engaging with these developments to maintain up-to-date knowledge and develop skills means that you can continue making best use of assessments. It is the responsibility of the test administrator to ensure proper practice and ensure that all interpretations from the test are valid and appropriate to the context and for the person who is using the information.

- It is important to complete appropriate training ahead of using some assessments
- Test administrators should stay up to date with any new developments to ensure they are delivering best-practice assessment use
- Saville Assessment provides opportunities for Wave users to attend workshops, masterclasses and events to keep skills up to date

Interpreting Score

Care should always be taken to interpret an assessment correctly. You can use the assessment descriptions in the technical manuals to support you. Consider the appropriate scales to feedback to candidates, the most suitable comparison groups and whether any reasonable adjustments made have impacted test scores. Remember to take into account the size of error around their responses and how they perform in comparison to the benchmark group.

- Make sure you know what the assessments you are using are measuring
- Use Wave for its intended work based purposes; i.e. it is not a clinical instrument and should never be used to make inferences about a person's mental health
- Be clear on how to interpret scores, their error of measurement and how best to give feedback on these to a candidate

Feedback

In selection and development contexts, we recommend a feedback interview or discussion to enable greater understanding of an individual's responses and to avoid incorrect assumptions and judgments. Candidates are likely to be interested in their results. Giving the option to have written or spoken feedback is recommended and in some regions, candidates have a legal right to access their results. This can help to increase candidates' self-awareness and better understand how their results have been used in the decision-making process. This is likely to make candidates feel more comfortable about the way in which their results are used in selection and development processes.

- Feedback may be a legal requirement based on the country in which the process takes place
- Feedback can help the candidate's self-awareness and understanding of the process

Test-Use Policy

It is generally good practice for the use of tests to be guided by a test-use policy. This will set out standards and local policies on a range of relevant issues. This helps ensure that minimum standards are maintained and that there is a consistency in practice across different assessment processes.

- Your organization should have and use a test-use policy
- A test-use outlines the standards and requirements to be used consistently through your organization's testing processes
- A sample test-use policy is available from us

Disability Considerations

Many jurisdictions, including the UK, make legal provisions for individuals with disabilities and/or who require special accommodations in workplace situations. This can sometimes mean that reasonable adjustments are required during an assessment process to give people with a disability as fair and comparable an assessment experience as possible. For modern, online personality assessments such as Wave, this tends to be less of a consideration than for some other methods. However, accommodations such as providing the assessment in another format (e.g. use of screen reading software, assistance by a sighted administrator or administration in a hard copy format) may occasionally be necessary. The Saville Assessment team are available to provide guidance and support with any such cases.

- Individuals with disabilities or who require special accommodation should have reasonable adjustments to give them as fair and comparable a testing experience as others
- During development, items were extensively reviewed to control for stereotyping and bias and ensure readability and international application. More information is available in the Wave technical manual
- Reasonable adjustments should be made on a case-by-case basis
- Saville Assessment can provide guidance and support with any such cases

Proper Data Management - GDPR

When using assessments, you need to follow these six principles of the General Data Protection Regulation (GDPR).

1	Processed lawfully, fairly and in a transparent manner. The scores should be used to make fair decisions about people. This requires the use of well chosen tests with appropriate interpretation. Ensure that candidates are provided with sufficient information about the assessment process.
2	Collected for specified, explicit and legitimate purposes and not further processed for another purpose unless explicit informed consent is provided. Ensure scores are only used for the purposes for which they were collected. To use them for other purposes requires gaining further permission from the candidate. If an assessment is completed as part of a development process it is unlikely it would be appropriate to use the results for selection or promotion decisions at another time.
3	Adequate, relevant and limited to what is necessary in relation to the purpose. Ensure only appropriate tools are used. Questionnaires are not used unless the information is needed for a proper business purpose, e.g. making effective selection decisions, developing staff.
4	Accurate and, where necessary, kept up-to-date. Ensure that care is taken in collecting and processing data to ensure it is accurate.
5	Kept in a form which permits identification of data subjects for no longer than is necessary for the purpose. That there is a policy of deleting data once it is no longer useful. Typically test scores remain relevant for 12-24 months. After this they should be erased.
6	Processed in a manner that ensures appropriate security of the personal data; appropriate security should be in place when storing data. Appropriate technical or oranizational measures should be in place to protect against unauthorized or unlawful processing and against accidental loss, destruction or damage. Each oranization should take their own legal advice with regard to their human resource activities. Saville Assessment is not in a position to advise on legal matters.

Reliability and Validity

Reliability

Reliability is fundamental to measurement and concerns how precise and error-free a tool is in measuring desired constructs. Any instrument that measures something in the real world needs to have a level of precision or accuracy, for example, weighing scales, a digital clock or a light meter in a camera. The greater the reliability or precision, the greater the chance that it will allow for valid decision-making.

- Reliability is concerned with how precise and error-free a tool is in measuring intended constructs
- Any instruments of measurement need to have a level of reliability, or precision, to be useful
- Regarding behavioral measures, the greater the reliability, the greater the chance of making a valid testing decision in selection or development

Types of Reliability

Test-Retest

Test-retest reliability refers to the stability of a measure over time. It is calculated by correlating results from a measure completed by the same group of people at two points in time.

+ Gives indication that attribute is stable

- Candidates not willing to do it twice

Alternate or Parallel Form Reliability

Alternate or Parallel form reliability refers to the consistency between two versions of the same measure. This is the correlation between the results for the same group of people who complete two versions of the questionnaire.

+ Shows developer is clear/consistent on what is measured

- Has the expense of developing two forms
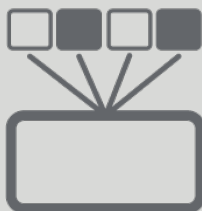
Internal Consistency Reliability

Internal Consistency reliability relates to the internal correlations of the components of the measure, for example the relationship between the different scales within one questionnaire.

+ Easy to do as only requires one set of data from one time period

- Can be misleadingly high with repetitive item content

While all forms of reliability are important, internal consistency is often the most practical and accessible form of reliability, which can be more readily calculated in large samples. The generally accepted benchmark level for test reliability is r = +.70.

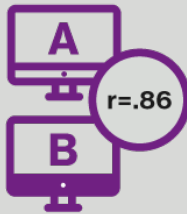# Wave Professional Styles Reliability
Wave Test-retest Reliability

Wave Test-retest Reliability

The 36 Dimensions of Wave Professional Styles demonstrate acceptable test-retest reliabilities over an 18-month interval with coefficients ranging from .58 on the 'Principled' Dimension to .85 on 'Activity Oriented' with a mean reliability coefficient of .75 across all Dimensions.

- Average dimension reliability: .75
- This demonstrates that Wave can consistently measure attributes over time

Wave Alternate-form Reliability

The alternate form reliability of Saville Assessment Wave Professional Styles is based on two versions of Professional Styles; Invited Access and Supervised Access. At the Dimension level, the mean reliability of the scales was .86 and the minimum reliability estimate for any Dimension was .78.

- Average dimension reliability: .86
- This demonstrates that the Invited Access and Supervised Access version of Wave questionnaires measure individuals' attributes consistently with each other
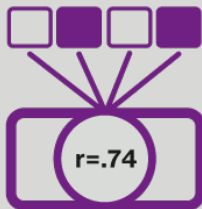
Wave Internal Consistency Reliability

The Wave Styles assessment scales were designed to have moderate, around .60 to .90 coefficients, rather than high internal consistencies at the dimension level. This is because they are designed to measure distinct behaviors and should therefore demonstrate some construct separation.

The mean internal consistency is in the centre of this desired range, at .74.

- Average dimension reliability.74
- This demonstrates that the areas of Wave consistently measure the scales that they were developed to measure. Additionally, this value is not so high that it suggests the scales overlap, that is, the Wave dimensions reliably measure different areas of behavior

Error

Self-report scores can contain errors of measurement for a number of reasons.

Individual

If the individual feels unwell, has not given themselves appropriate time, misinterprets the questionnaire instructions or experiences severe test-related anxiety, these factors could all mean they may not complete a questionnaire properly.

- Feeling unwell
- Misinterpreting instructions
- Severe test anxiety

Administration

If the test administrator has chosen a test which doesn't accurately measure what it claims to measure, e.g. a behavioral measure with very little workplace validity, this can be a form of error. Likewise, when administrators do not properly brief candidates or set up the testing environment appropriately, to minimize disruptions for example, this results in distractions which can reduce a questionnaire's reliability. The administrator should diligently mark any hard-copy responses, where used, and be sure to accurately interpret results; where this is not the case assessment error is introduced and the reliability of the results will be lowered.

- Using an unreliable test
- Poor candidate briefing
- Misinterpreting responses

Questionnaire Developer

Questionnaire developers should be rigorous in ensuring the quality of their measures to support the reliability of their findings. This includes writing clear questions or items which lack any ambiguity, giving straight-forward instructions and being sure that their assessments are measuring what they claim to measure. Reliability is about getting the test right; validity is about getting the right test. It is the test developer's responsibility to develop an accurate test and ensure it is a reliable measure.

- Ambiguous items
- Items measuring the wrong thing
- Poor instructions

An example of an ambiguous item could be one that uses a colloquialism or metaphor such as, 'I often feel blue'. This may not translate well into a number of languages and could be confusing to individuals completing the questionnaire.

Reliability and Error

Scores obtained in occupational questionnaires invariably contain a degree of error. The Standard Error of Measurement, or SEm, takes this error into account when dealing with individual responses. That is, the SEm measures the margin for error in an individual's score. It enables us to assess the confidence we can have in the precision of an individual's score, by presenting a band in which we are confident their score lies. When a score lies in a band of plus or minus one SEm, we have a 68% confidence level in the score being accurate. A band of two SEms reflects a confidence of 96% accuracy. The use of the SEm means that scores can be generalized across the population, using confidence levels. The typical SEm of Wave Professional Styles is slightly less than one Sten. This means an individual's true measure is likely to be within one sten score of what is reported on their Wave profile.

- All behavior tools have a degree of error
- Standard Error of Measurement (SEm) accounts for this error
- SEm provides a band in which we are confident that an individual's true score lies
- The typical SEm of Wave Professional Styles is slightly less than one Sten, this means that an individual's true response is likely to always be within around one Sten of what is shown on their profile
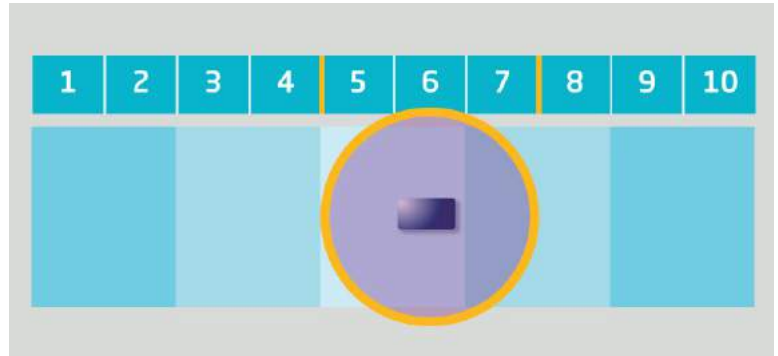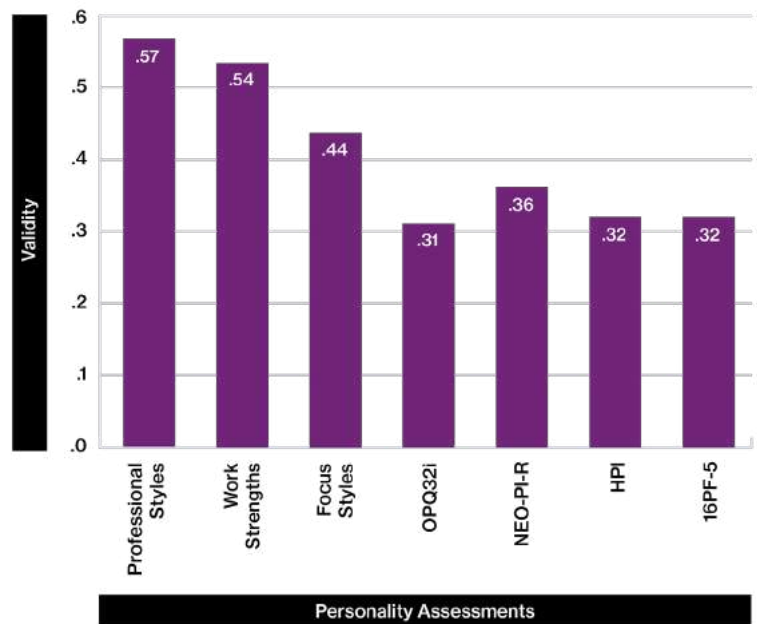

Validity

A test is valid to the extent that it measures what it is designed to measure. In particular, validity is a measure of how relevant a behavioral questionnaire is to job content.

This is a key aspect of using occupational tools; if the tool is not valid, then there is little point in using it. You may have a highly reliable questionnaire, but if it is not measuring the particular job competency you are interested in assessing, then it is not useful. Remember, that a valid tool has to be reliable in the first place. Studies generally indicate that a good personality questionnaire can have a validity of +0.3. Validities above +0.7 are virtually unknown in the literature. The higher the validity, the better.

- A valid tool measures what it is intended to measure
- In particular, a questionnaire should be relevant to job content
- Wave Styles questionnaires were constructed incorporating validity from the outset; building on a robust model of personality and ensuring workplace relevance
- Validity values of +.3 are indicative of good personality measures

Types of Validity

Assessment validity can be thought of as Informal or Formal. Informal types of validity are more concerned with how a test appears whereas Formal types of validity are more rigorous.

Informal

Face Validity

Tools with high face validity ensure buy-in from candidates and line managers, but with face validity alone, questionnaire choice is not based on hard evidence and is unlikely to be legally defensible if challenged. However, it may be the lack of face validity which instigates a legal challenge when candidates question the relevance of the questions they are being asked in relation to performing effectively on the job.

Face validity looks at whether the instrument appears to be measuring what it should be. Questionnaire items should be written with face validity in mind to ensure that the questionnaire 'looks right' and that it is acceptable to individuals completing it. It is important to remember that whilst face-validity is important for buy-in from candidates and users it does not guarantee any statistical robustness of the tool. Using tools that lack psychometric robustness can lead to mistakes in selection & development, and feedback & interpretation.

Faith Validity

Faith validity is a spurious form of validity. It is an unquestioning belief that a questionnaire is appropriate and predictive of job effectiveness. Faith validity can aid in getting buy-in for the use of objective assessment methods. However, lacking hard evidence of robust assessments can lead to misuse of tools and in the worst-case scenario could lead to the use of measures that are not legally defensible or valid, which don't allow for the selection of better candidates.

An unfounded belief that a tool is appropriate and effective; a feeling that the test works in the absence of evidence. Faith validity is the least defensible form of validity.

Barnum Effect

A 'Barnum effect' occurs when a statement in a questionnaire, or a description on a profile, is phrased in such a way that it could be applicable to anyone. Consequently, a candidate's positive response to such a statement has minimal value since all candidates are likely to agree with this statement.

- The phrasing of questionnaire statements or profile descriptions mean that they could be applicable to anyone

- Responses to such items have minimal value as most candidates will respond similarly

Formal

Consequential Validity

The intended and unintended consequences of using a test.

Test users should be mindful of how their use of assessments could impact assesses. For example, when using assessments to identify high potential there is the intended consequence of encouraging individuals to develop in relevant areas. An unintended consequence could be narrowing individuals' focus to just those areas being assessed rather than other relevant work areas.

Content Validity

Content validity reflects the extent to which the items in an instrument are representative of job-relevant content. Wave Professional Styles has been designed to measure a core set of personality characteristics required for a broad range of roles. The items cover both the Talent (e.g. 'I am good at selling') and Motive (e.g. 'I enjoy selling') aspects of the personality dimensions being measured. In the development of Wave, a research and conceptually-driven hierarchical model was created, which maps to the Wave competency framework. Items were written and refined based on statistical analyzes and professional expertise.

- Content validity refers to the relevance of the items of an instrument to job-related content

- Wave Styles questionnaires measure core personality characteristics relevant to a number of roles

- Wave Styles capture both self-perceived Motive and Talent related to such areas

- Research and a conceptually-driven approach led to the development of the Wave Styles and Competency frameworks

- Wave items were written and refined based on statistical analyzes and professional expertise

Construct Validity

Construct validity concerns the extent to which an instrument measures some underlying theoretical construct or trait. Wave Styles has been designed capture the 'Big Five' model, as well as competency constructs such as the 'Great Eight' model. At the same time, we retained important work constructs even if they did not fit neatly into established academic theories.

- Construct validity pertains to the extent to which an instrument measures an underlying theoretical construct or trait
- Wave Styles was developed to capture the Big Five personality theory and Great Eight model of workplace competencies

Criterion-related Validity

Criterion-related validity is the extent to which a questionnaire is able to predict job performance variables such as appraisal ratings, potential for promotion and achievement of targets and objectives. The most common way of establishing criterion-related validity is by correlating questionnaire scores with measures of job performance. The main methods of approach to this are through concurrent validation and predictive validation.

Refers to evidence that the test predicts relevant criteria (e.g. competencies or workplace outcomes).

Concurrent

The potential effectiveness of a new questionnaire is investigated on current employees within an organization.

Predictive

The impact of a new questionnaire is evaluated by following up the performance of selected individuals some months after being recruited.
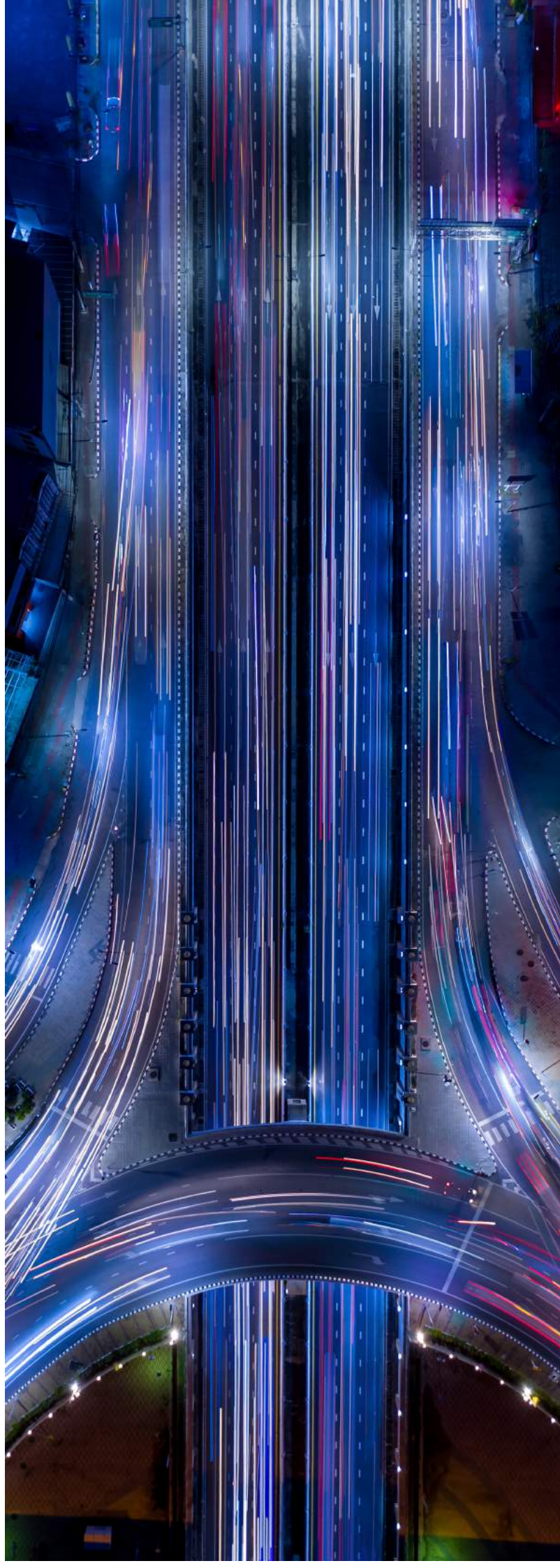
Project Epsom: Criterion-related Validity

The sample

308 participants from a number of roles and industries with a variety of educational backgrounds and levels of work experience. This was a subset of a larger sample from the Epsom study.

What they did

Participants completed a range of personality questionnaires including OPQ32i, 16PF, NEO, Hogan's PI and Wave Professional Styles and Wave Focus Styles. They were then rated by independent raters against two criterion measures.

Criterion Measures

1. A global work performance measure covering accomplishing objectives, applying specialist knowledge and demonstrating potential.

2. The SHL Great Eight work competencies.

Measures of participants' work performance were established by asking third-parties to independently rate how effectively the participants performed in the work competencies covered by the Great Eight and global performance criteria.

What did we find?

The more accurately a personality questionnaire predicts how independent raters have judged the work performance of the participant in a separate rating form, the more valid the personality questionnaire.

Project Epsom: Criterion-related Validity Conclusions

Global Work Performance

All of the questionnaires show at least a moderate level of validity in predicting work performance according to the global work performance criteria. The Saville Assessment Wave Professional Styles questionnaire comprehensively outperforms all other questionnaires in terms of validity. Wave Focus Styles takes under 15 minutes to complete, yet compares favorably in terms of validity with much longer questionnaires such as the OPQ32i, the Hogan Personality Inventory and the 16PF5.

- All questionnaires showed moderate criterion-related validity in that they predicted ratings on the Global Work Performance measure
- The Saville Assessment Wave Professional Styles questionnaire comprehensively outperforms all other questionnaires in terms of validity

Great Eight Competencies

The Saville Assessment questionnaires are the most valid questionnaires for measuring work performance, even when defined by the independent SHL Great Eight measures of work performance. The Saville Assessment questionnaires are strong in terms of validity in comparison to SHL's OPQ® against its own model of work effectiveness.

- The Wave Styles questionnaires were found to be the most predictive measure of the Great Eight competency model

Implications for questionnaire use: Validity and Return on Investment

When putting together a selection process you should use the most valid methods.

Effectiveness of assessment methods*

*Includes all assessment methods generally deemed acceptable for use in hiring across different occupations
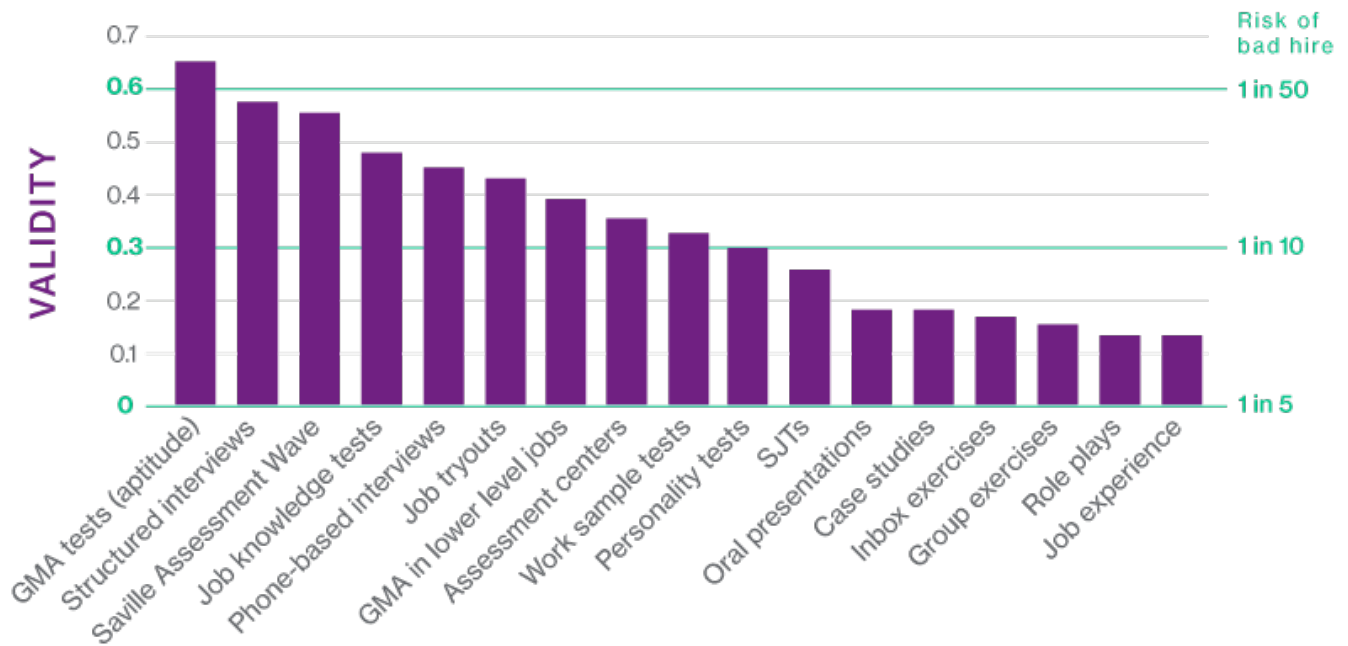
Hunter & Schmidt (1998), Schmidt et al (2016) and Saville et al (2012)

- 1/5 – If you have a validity of 0 you have a 1 in 5 chance of hiring a poor performer

- 1/10 – If you have a validity of .3 you have a 1 in 10 chance of hiring a poor performer

- 1/50 – If you have a validity of .6 the risk of a poor hire is greatly reduced to 1 in 50
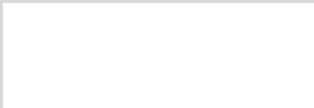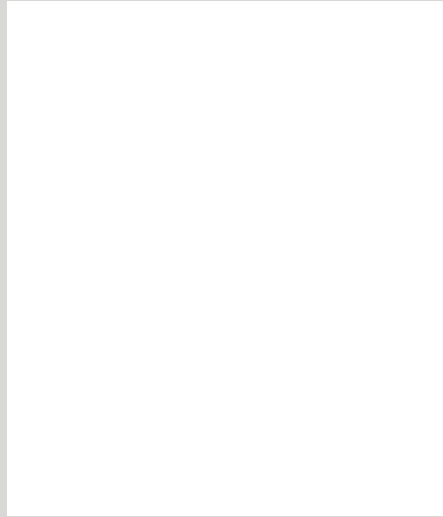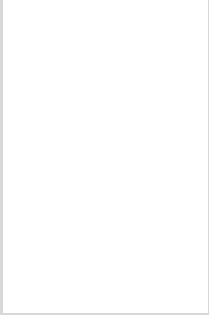
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training