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Making Waves – Saville Consulting Wave Styles questionnaires

THE SAVILLE CONSULTING (SC) WAVE STYLES questionnaires have been developed by Saville Consulting, an entirely new business founded by Professor Peter Saville. The vision of the company is to transform assessment and the first tranche of new products have now been launched including a range of aptitude tests and culture assessment tools.

The SC Wave Styles questionnaires are central to the integrated development strategy. The individual measures (the styles questionnaires) of the SC Wave suite and the organisational measures (culture and climate) have been developed from one integrated model.

This article discusses the concepts and development that formed the backbone of the individual measures: the SC Wave Styles questionnaires.

SC Wave Styles – An overview

SC Wave Styles presents a uniquely integrated model of personality, competency, culture and motivation. The concepts of motive and talent are integral to the structure and have real implications for individual development, career planning and performance management as well as selection.

Rather than taking a paper questionnaire and putting it on the internet, SC Wave Styles questionnaires are an innovative suite of self-report measures developed with the opportunities and challenges of the internet at the heart of their design. They operate as both trait and type instruments and rely on a new hierarchical model of work performance that we have developed. Our model is aligned to the Big Five personality factors and the Great Eight competencies but provides more information than either model.

The development of the questionnaires has benefited from a performance driven or valida-

R. MacIver, P. Saville, R. Kurz,
A. Mitchener, K. Mariscal, G. Parry,
S. Becker, W. Saville, K. O'Connor,
R. Patterson & H. Oxley
Saville Consulting Group

tion centric methodology to maximise the validity of the questionnaires by selecting the most valid items from our item pools.

A new dynamic online format integrates rating and ranking responses and results in a combined profile that highlights differences between the ipsative and normative scores on the profile. This new scaling technology also allows unprecedented levels of detail to be tapped, yet with radically reduced completion times.

The research matching the questionnaire to the preferred culture, environment and job demands allows individuals (and their managers) to gain new perspectives on what they can take from their job and what will motivate them.

SC Wave Styles questionnaires are different in several respects from established psychometric questionnaires. Below we provide an overview of the new features and approach before taking a brief look at the reliability, validity and applications of the questionnaires.

The motive talent concept

SC Wave Styles questionnaires have been developed to separate out talents from underlying predispositions or motives. For every work construct measured there is one motive item and one talent item.

The Expert Report profile indicates where 'motive-talent splits' occur. This allows the user to identify whether the individual is motivated to

develop in a particular area or needs their talent in an area supported or encouraged because there is a lack of underlying motivation or interest.

The approach has profound implications for the development of individuals. Because the model matches every talent item with an underlying motive item, it is much simpler to understand the impact of motivation on work performance

Performance driven content

SC Wave Styles questionnaires have been developed (and continue to be developed) using a variety of development strategies, but at the core is a validation centric strategy.

As Burisch (1984) points out mixed approaches, which include validity data as part of scale development, are surprisingly rare in questionnaire development.

> 'Actually this is rarely done, particularly the combination of deductive scale writing and external information for item analysis.'

For the initial development of the Professional Styles questionnaires 214 work constructs were written (each with separate motive and talent components. 428 work constructs in total). 108 of these constructs (facets) made it into the final questionnaire with item selection based first and foremost on criterion validity. Items were correlated with external ratings on relevant work behaviour competencies as well as overall job proficiency and potential for promotion.

The SC Wave Styles questionnaires are, therefore, based on the work constructs which are the best indicators of performance (i.e. performance driven).

The facet approach to measurement ensures that each item in the questionnaires measures a different work construct to help avoid the feeling of 'needless repetition' that respondents can experience when completing questionnaires.

Clearer interpretation

One of the criticisms that can be fairly levelled at self report questionnaires is that despite their reliability and validity there is a degree of subjectivity in their interpretation.

Despite users being trained prior to questionnaire use, subject matter experts in assessment believe that poor interpretation is a significant source of error in the use of personality questionnaires (Smith & Foley, 2006). A lack of consistency between interpreters is much more likely where an aspect of work performance is predicted by a complex combination of predictor scales which is the situation with many multi-scale self-report personality instruments.

Is inconsistency a given? Can we do anything about it? With the performance driven approach, the work constructs that best predict a work competency are brought together to form a scale. This largely removes the need to look around the profile for what scales relate to a particular competency (i.e. we move from predictor centric models to criterion centric models of work performance and have to work less hard to join the dots).

The feedback provider also no longer has to guess what an average score overlooks, where there are differences in scores underpinning a dimension these are highlighted in the profile.

Better interpretation, inevitably leads to improved validity in decision making based on questionnaire data (i.e. better decision making, fewer selection errors and better identification of development needs).

Dynamic normative-ipsative format

There are advantages and disadvantages to both normative and ipsative response formats. At the practitioner level, it is useful to have both sources of information. The online SC Wave Styles questionnaires firstly present a group of six normative statements. The system then calculates their ipsative rankings based on the order the statements have been rated (this saves the individual time by calculating the majority of rankings for an individual). Where an individual ties their ratings the system immediately represents the tied items to be placed in rank order.

Where there are differences between normative and ipsative scores these are highlighted on the profile to allow the user to explore the reasons for the difference (which of the two scores is most representative of the true score and which is more distorted). The user can then focus on specific areas where socially desirable responding (or overly self critical responding) may have occurred.

New levels – new lessons

SC Wave is a model with several levels in its hierarchy. The new scaling technology allows much more to be assessed in less time.

At the top of the Professional Styles model are four clusters which also provide the basis of the Saville Consulting Types model which profiles People Type and Task Type.

Each cluster breaks down into three sections giving a total of 12 sections. Each of the Big Five and Great Eight constructs has a counterpart with one of these sections and four further areas are covered.

Each of the 12 sections covers three themes giving 36 dimensions which is the fidelity level of many occupational personality measures.

The newly developed scaling allows SC Wave to go down one more level with each of the 36 dimensions being composed of three facets giving a total of 108 facets.

The 216 questions are usually answered in around 40 minutes. The ultra-compact Wave Focus questionnaires measure 36 facets selected for their strong validity in just 15 minutes.

The new dynamic 'Ra-Ra' (Rate-Rank) format combining ipsative and normative scores has profound implications for measurement – it is simply not necessary to have six or eight items in a scale when two items can do as well or better (i.e. strong validity, strong reliability, good spread of scores, etc). More items are required to achieve this with conventional five-point Likert items or ipsative-only questionnaires (MacIver, 1996).

The profile highlights within any of the 36 dimensions where there is a significant 'facet range', i.e. one or more of the three underlying facets having markedly different scores from the others.

As well as many more individual scales being measured this provides the user with much more detailed insight into the 'uniqueness' of the individual.

Configurable competency reporting

The level of detail that SC Wave Styles achieves also enables a more detailed match with client competency models allowing for fast configuration of output reports to predict client competencies and even their competency indicators.

This detailed configuration has also enabled the Entrecode® model of successful entrepreneurs developed by Professor David Hall and his associates to be available as a separate report.

Figure 1: The Saville Consulting Wave Work Hierarchy.
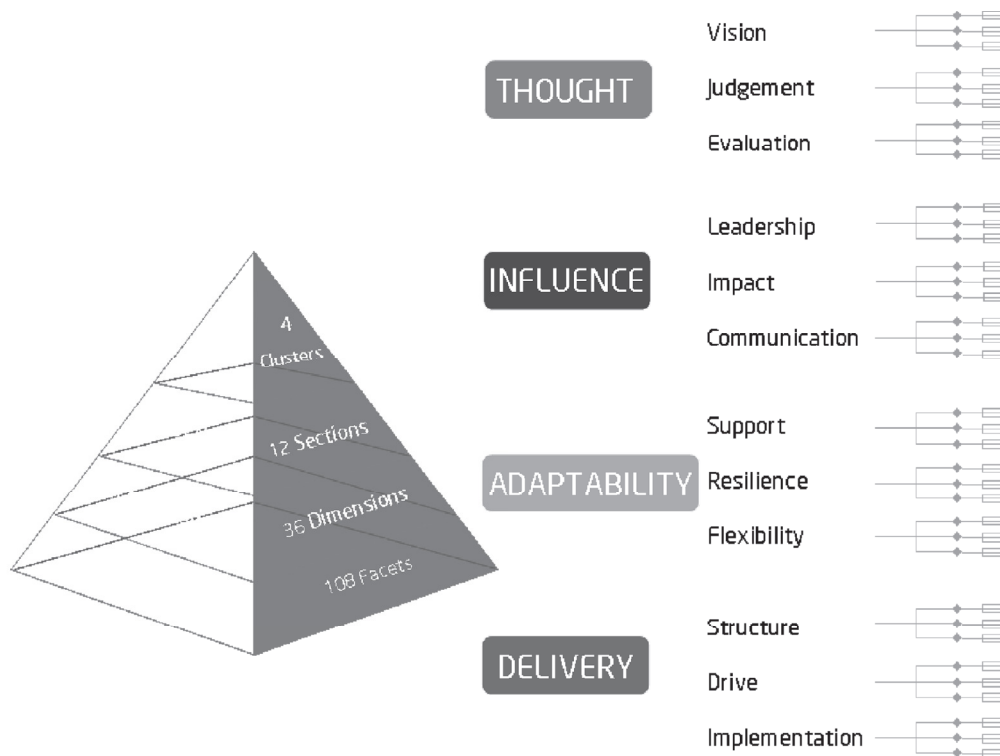
Enhanced security

The internet offers great convenience in allowing individuals to respond at great geographical distance (without an administrator present) by sending a link to the questionnaire directly to an e-mail address. This so called 'controlled' mode does present security concerns. For example, not being sure the questionnaire is completed honestly by who you have sent it to (and not say, by a group of the candidate's friends one evening). We believe strongly that as well as 'controlled' (or 'invited access' forms) a self report questionnaire (particularly questionnaires that can be used for selection or other decision making processes) should have a separate supervised secure form. Therefore, two parallel forms of SC Wave are available for 'Invited Access' and more secure 'Supervised Access' administrations.

Culture match

The SC Wave development programme has also developed measures of work culture that are parallel to the SC Wave Styles model. This empirical research allows us to indicate the preferred culture/environment and job demands that would suit an individual based on completion of SC Wave Styles questionnaires.

From the perspective of Positive Psychology, Seligman (2003) has argued that work can be changed to suit the employee (rather than just finding an employee that fits the job or trying to develop the individual to better match/meet job demands). Assessment can be constructed to support this approach.

With our unique model (See Figure 2) which ties together motive, talent, competency and culture, we can help individuals understand what work demands (culture, job and environment) they are most likely to favour.

Armed with this understanding it becomes easier to discuss what enhances or inhibits individuals' performance at work and therefore facilitate constructive discussions about how a job could better reflect a person's motives and talents.

This approach can also help managers think about how to tailor work to suit individual employees to keep them satisfied and motivated.

Reliability

A development goal of the SC Wave Styles questionnaires was to have alternate form and test retest reliability estimates as high as possible. In contrast, the SC Wave Styles questionnaires were designed to have moderate (0.6 to 0.8) rather than high internal consistencies at the dimension level (as they are made up of six different work constructs).

The alternate form reliability average across the two forms of the Professional Styles questionnaires is 0.86 with the lowest reliability 0.78 and the highest 0.93 (*N*=1153).

The highest correlation with a scale in one form was with its respective twin in the other form (e.g. Inventive in Invited Access form correlates most highly with Inventive in Supervised Access form not with any other scale).

Figure 2: The Saville Consulting Model of Work Performance Effectiveness.
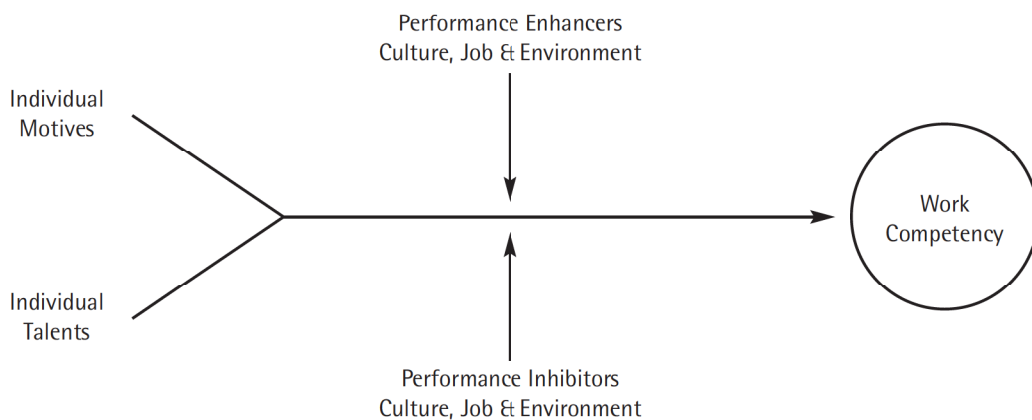
The internal consistencies of the dimensions of the two Professional Styles questionnaires range from 0.58 to 0.87 with an average of 0.76 (N=1153).

Test retest average is 0.79 across the dimensions of the two normative Professional Styles questionnaires with an interval of one month. The lowest reliability was 0.71 and the highest ranged up to 0.91. (N=112).

Validity

SC Wave has already been validated on over 1500 people globally during its development, standardisation and initial use. Gathering validity on every item continues on an ongoing international basis.

The validation results from the development trial were cross validated in the standardisation trials of the questionnaire. As each dimension has been designed in the development trial to predict one of 36 work competencies, there were clear a priori hypotheses for the standardisation trial of which SC Wave Style dimension will correlate with which work competency.

In the standardisation 34 out of the 36 dimensions had significant correlations (p<0.05, one-tailed) with their matched criteria across the two forms. The combined ipsative and normative dimensions predict external ratings (manager or colleague) of effectiveness on the work competency that each was designed to predict with an average of 0.39 for the Invited Access form and 0.39 for Supervised Access. These figures are corrected for criterion unreliability but no other corrections have been applied, e.g. restriction of range, predictor unreliability, etc. (N=556–658).

Validity figures based on multiple regression equations cannot be used as an unbiased estimate of the validity of the questionnaire when they are not cross validated. The mean validity of the composite equation of SC Wave Styles dimensions in relation to the 36 work competencies is an average of 0.46 for both forms. This was based on developing the equation on one half of the standardisation data and cross validating the equation to the second half of the standardisation sample. These figures are corrected for criterion unreliability but no other corrections have been applied, e.g. restriction of range, predictor unreliability, etc. (Hold out Sample N=252–316).

Reporting

The profiles are not simply static text describing the content of a scale. Instead the text in the profile feeds back the individual facets (giving different verbal descriptions for the different score (Sten) positions). This reduces the thinking time for the person giving feedback as they do not have to think how to explain the score. It also means that the recipient of the feedback understands the content of the profile much faster with less need for explanation.

Two of the main reports provided from SC Wave Styles are the Expert and the Types report. Each report comes with a free personal report for the respondent.

The Expert Report:

Summary of Individual's Response Styles;
Full Wave Psychometric Profile (with Motive Talent Splits, Ipsative-Normative Splits and Facet Ranges);
Culture/Environment Prediction Report;
Competency Potential Report.

Types Report:

The Types report brings together perspectives on teams, leadership and management in one straightforward individual differences model of performance at work. These are performance driven types that predict external work performance as they are based on our performance driven methodology.

Firstly, individuals are classified by their People Type which can be one of four: Individualist, Influencer, Adaptor or Transformer. Secondly they are classified as having a Task Type, again one of four: Preserver, Thinker, Doer or Transactor.

This leads to their overall Saville Consulting Type which is made up of an individual's People and Task type combined, e.g. Influencer Doer. This is followed by a bullet point summary of how they will tend to lead, work in teams and manage change.

Applications of Saville Consulting Wave

Saville Consulting Wave Styles are designed to be applied throughout the employee's lifecycle. Below are some of the applications of SC Wave Styles with an insight into where they make a difference.

Selection

SC Wave Styles are designed to create a platform for much better decision making from a self report questionnaire, leading to increases in the calibre of employees. As a feed into interview or

as a source of data to cross reference with other data and pull together a more coherent picture of an individual, SC Wave gives more valid data in less time. The detail in SC Wave also allows bespoke reports to be created with a better content match to client competency models.

Career planning
In thinking about how to manage the future of an individual's career it is useful for the individual to understand what areas they are interested in developing (insight from motive-talent splits) and what type of culture will enhance or inhibit their success and motivation (culture prediction report). By giving this unique perspective SC Wave allows an individual a perspective on what they want from their work in the future.

Coaching and development
SC Wave Styles provides insights which are useful to the person being coached and provides a clear link to understanding the impact of their personal style (motive and talent) on their performance at work. Facet splits provide more detail and interesting contrasts that lead to a precise understanding of the individual's approach to work. In development it is also extremely useful to know where an individual has an internal incentive or motive to develop or has little internal incentive or motive to improve performance (which is provided by motive-talent splits).

Self-selection
Self-selection can be aided by highlighting to individuals where they have more or less fit with job demands and culture. It may be that self selection happens before a formal application is made by candidates, or as part of the selection process itself. By supplying each candidate with a culture prediction report we can enable individuals to have their own perspective on whether they feel they are suited to the role in question.

Individualised induction
SC Wave Styles can be used in induction to give an individual a view of what they would like to get out of their work. Despite new starters tending to be satisfied in general, their satisfaction ratings are relatively weak when they are asked about the feedback of (or lack of feedback of) assessment data collected during their selection (Miles, 2006). The culture prediction report provides new starters with a picture of what is most likely to enhance their performance at work and can help them consider how best to make the most of their talents.

Team development
The Saville Consulting Types Model helps members of teams see how they complement each other (e.g. Thinker Influencers are complemented by Adaptor Doers). Group profile reporting is available for team building to explore how two or more people are likely to interact. And the detail provided on the full SC Wave Expert reports can also provide deeper insight into how people interact with each other.

Organisational talent audit/benchmark
SC Wave provides a vehicle for benchmarking groups in terms of their perceived motives and talents. This information can be combined with our organisational surveys of preferred and actual culture to give a unique insight into how the motives and talents of employees are aligned to the organisational culture which can help inform future organisational development strategy.

Conclusion
Saville Consulting Wave Styles provide a different approach to assessment. The new methods of scaling have led to super short and valid scales. The presence of ipsative and normative responses helps to make faking more difficult and allows the user to focus in on potential areas of distortion (socially desirable over rating and self critical under rating).

The SC Wave matched model of performance aids better interpretation and decision making. It brings together motives, talents, competency and culture in one integrated model, providing the 'Expert User' with clearer links between an individual's motivation, work environment and performance at work.

The culture prediction component helps the individual being assessed (and their manager or colleagues) have a perspective on how the job could alter to enhance their performance and satisfaction at work.

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Correspondence

Rab MacIver
Saville Consulting Group,
Harley House, 94 Hare Lane,
Claygate, Surrey KT10 0RB.
Tel: +44 (0) 1372 475700
Fax: +44 (0) 1372 475701
Mobile: +44 (0) 7747470864
E-mail: rab.maciver@savilleconsulting.com