# **Technical Review**

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#### Facet5 Technical Review

These pages are designed to provide convenient access to technical information about Facet5. They follow the guidelines provided by the British Psychological Society for the review of psychological tests. For more detail on these guidelines you should visit the BPS web-site at www.psychtesting.org.uk.

#### Instrument name

The full name of this product is: Facet5

The name Facet5 is a protected trade-mark as follows:

EU: 1573797

Australia: Applied for.

An early version of this profile was marketed under the name of 'Insight' from 1990 until approximately 1992.

# **Authors of the original instrument**

The copyright to Facet5 is held by the authors. The authors are:

#### Norman Lee Buckley

Norman Buckley graduated in Psychology in Sydney and gained his initial experience with a consulting organisation in Australia. From 1978 he ran his own company in the UK, during which time he pioneered the use of custom built assessment and development processes and worked extensively on biographical and personality data analysis. More recently he built on ten year's research in personality theory and developed Facet5, which was the first major advance in personality assessment in the EU in the past ten years. Now Facet5 is one of the few fully web-enabled approaches to personality measurement and incorporates cutting edge technology specially designed for the web. Facet5 forms part of a range of individual and corporate diagnostic tools covering individual differences, leadership development, corporate culture and environment scanning.

He has extensive experience of psychometric methods and is an expert in questionnaire design and assessment techniques. He has created numerous assessment and development centres, trained management in structured interview techniques and delivered programmes of management assessment, counselling and development. He worked for many years as a consultant to newly privatised companies especially on Leadership development with government scientific research body as they transformed to become a commercial entity.

He has presented papers to International Test Commission, the Australian Psychological Society and the British Psychological Society. He travels extensively to support business partners in the EU, USA, South America and Asia Pacific and is a regular speaker at professional conferences. He recently published a paper on the use of Response Latency Analysis for detecting Impression Management in webbased questionnaires.

His clients include consultancies, multi-nationals in the pharmaceutical,

manufacturing, retail, aviation, cosmetics, food and tobacco sectors, as well as Central and Local Government Departments and education.

In 1999 Norman returned to Australia and is now applying his experience in the Australian market. He is continuing to work on the development of Facet5 and integrating web-based processes for 360-degree review and high volume on-line assessment. These processes are currently being translated into a number of major languages to allow simultaneous use of Facet5 and all its extensions across the world in multiple languages.

#### Rebekah Justine Williams

Having graduated in psychology, Rebekah began her career in the clinical field. She specialised in puerperal psychosis and over a period of ten years contributed to research and the treatment of the disorder. During this time she was also very active in the Women's Health movement and was instrumental in setting up and running the first two Well Women clinics in Manchester, UK. She worked as a Counsellor for the Clinics and promoted the establishment of the first community based self-help groups attached to GP practices. Towards the end of her clinical work, Rebekah was seconded to the Medical School to work with trainee GP's on the development of doctor patient communication programmes.

She transferred to the field of business psychology in 1987 and completed a second Masters in Organisational Psychology at UMIST. From here she moved through a number of consulting assignments associated with major organisational change/restructuring programmes. She developed specific expertise in the design and delivery of corporate climate surveys and team leader assessment and development programmes.

Rebekah joined Redfield in 1996 to work on the development of a unique range of personal development processes. During this time she also delivered many individual and team development programmes for both UK and Continental European clients. Her work ranged from individual assessment through leadership development and teambuilding to the design and delivery of training programmes to transfer complex knowledge and technology to Redfield's clients.

Redfield moved its operations to Australia in 2000 and Rebekah relocated to Sydney as a Director. She has continued to be involved in product development, training and consulting to a growing number of large and small Australian clients. She travels extensively to support Redfield's work in Europe, South America and the USA.

#### **Acknowledgements**

In addition we received considerable support from Dr Chris Brand formerly of the University of Edinburgh Department of Psychology. He contributed valuable comments and made available much of his original research in this field. Ian Fraser helped shape the original Facet5 concept from a theoretical framework to a practical tool. Nicky Hayes contributed greatly with her review and précis of the original literature and her ability to see through the complexities when I couldn't. Bob Stewart's extraordinary ability to link personality theory, psychometrics and computer programming has been invaluable in taking Facet5 from a concept to a working tool.

Phil Lindsey added further comment and refinement. Valuable insights have been provided by Janet Taylor and Claire Whittington, contributing from both a very broad philosophical perspective and from their practical insights. Finally we must acknowledge the many Facet5 users over the years that have helped to clarify what specific Facet5 profiles mean in the work place. Some of them have seen fit to comment on the way in which they have found Facet5 helpful (click here testimonials)

# Local instrument distributor/publisher

Facet5 is distributed in Australia by the publisher, Redfield Consulting Pty Ltd. EU and US distribution is managed by:

Consulting Tools Limited 5 Caxton House Broad Street Great Cambourne Cambridge CB3 6JN United Kingdom

Telephone: 44 [0] 845 370 0237 or 44 [0] 1954 710760

Fax: 44 [0] 845 370 0236 info@consultingtools.com www.consultingtools.com

Sub-distributors for Facet5 include Iceberg.

# Publisher of the original version of the instrument

Facet5 is published by:

Redfield Consulting Pty Ltd Level 22/201 Miller Street North Sydney NSW 2060 Australia

Tel: +61 2 9025 3776 Fax: +61 2 9025 3777 info@redfieldconsulting.com

#### **Publication Date**

Facet5 was first published in the UK in 1990 and the working concept was presented at the BPS Occupational Psychology Conference held at Bowness on Windermere in January 1990. The structure of Facet5 was outlined in the paper by the primary author titled 'The Magical No 5: Towards a Theory of Everything'.

#### **Content domains**

Facet5 is designed to measure personality traits using a statement-based normative

format. 106 statements are arranged as semantic differentials. Scores are produced on 5 main factors and 13 sub-factors and is based upon Big 5 theory. In addition Facet5 assigns a profile to one of 17 Facet5 Families which can be seen as pseudo types. However since the underlying factors are continuous and normally distributed, this 'typology' is a convenient way of describing a pattern of scores rather than a suggestion of 'type' as such.

It is also possible to extract core motivations and work related interests from the Facet5 profile.

The factors and sub-factors measured by Facet5 are:

#### Will

- Determination
- The inner drive to commit to own ideas
- Confrontation
- · A drive to confront issues as they arise
- Independence
- A tendency to go your own way

# Energy

- Vitality
- · Obvious enthusiasm and energy
- Sociability
- · Interest in being with people
- Adaptability
- Involving other's in your thinking

# Affection

- Altruism
- Putting other people's interests first
- Support
- Always trying to be understanding
- Trust
- Tendency to take people at face value

# Control

- Discipline
- Being personally organised and planned
- Responsibility
- Being willing to take personal responsibility

# **Emotionality**

- Tension
- A general sense of tension or stress
- Apprehension
- Being cautious and not over-optimistic

For a full description of these domains you should refer to the Facet5 User Manual, Section 4.

The rationale for these major domains can be seen in a <u>table</u> which compares different psychological models and shows the similarities and differences.

#### Intended areas of use

Facet5 is a 'broadband' model, the output from which has been specifically designed for organisational/occupational use. The basic output is the Facet5 Profile which provides all the base information from the Facet5 scores. This includes Sten Scores for 5 main and 13 sub-factors, Response distortion data and summary interpretations of the data. Click <a href="here">here</a> for a sample.

In addition there are four distinct application areas within this domain and each is supported by one of more unique application modules. They are:

#### Recruitment:

There are two elements within the Facet5 system designed to support the recruitment/selection process.

- Searchlight: This includes a graphical profile and narrative based on competencies and structured as a guide to interview. Click here for a sample.
- Audition: Where there is sufficient research to support the creation of an 'ideal' template, Audition provides a detailed, behaviour based interview guide combining detailed graphics and specific interview guidelines. Audition also shows the closeness of fit to the 'Ideal' and comments on deviations from this 'Ideal'. Click <a href="here">here</a> for a sample.

#### Leading and Managing:

This is supported by two elements – Leading Edge and the Strategic Leadership Review. Both are underpinned by a 7-element model of leadership based on the work by Bass & Alvolio, Quinlan and others.

- Leading Edge: Leading Edge provides a step by step guide to managing and leading a person with the respondent's profile. Click here for a sample.
- Strategic Leadership Review (SLR): The SLR is an integrated multi-rater review process using the 7 Leadership domains supported by 12 Leadership behaviours for each domain. The Facet5 system allows inferences to be drawn from a Facet5 profile which are then compared to the actual ratings received. Click <a href="here">here</a> for a sample.

# Integration

In the Facet5 model, understanding the effect of introducing a new person to a team or changing the make-up of a team is critical. The Facet5 system provides guidance here through:

TeamScape: TeamScape is designed to demonstrate the effect of introducing the
respondent to an existing team. Focusing on two core team activities, Problem
Solving and Conflict resolution, TeamScape combines graphics and narrative to
show where the respondent is similar to and different from other team members.
TeamScape also allows the graphics to be 're-centred' to show how the team
looks from the perspective of any individual team-member. Click <a href="here">here</a> for a
sample.

# Development:

Longer term guidance for individuals requires some understanding of their core work based motivation. Facet5 does not attempt to uncover core motives in a Maslowian or similar sense but instead concentrates on personal predilections inferred from the core model. These are captured in:

 Work Preferences: This module is designed to outline the broad work based motivation (inferred from the core model). In addition it nominates key role elements that the respondent is likely to find motivating or demotivating. Click here for a sample.

# Intended populations

Facet5 was created to provide valid information at the managerial and professional level. The original development sample was split 70:30 (Male to Female) which broadly represents the working population in Western countries. Most were educated to High School graduate ('A'-level, Baccalaureate, Higher School Certificate, etc) standard and the majority were in the age range from 20 to 45. These are broadly the characteristics of the Managerial and Professional working population in Western countries.

However there have been numerous cases where Facet5 has been applied outside this intended population. Numbers have been insufficient to allow a detailed analysis of any sample based response bias but no reading level problems have been reported. Facet5 was in fact designed to minimise the use of idiom or slang and the reading level was designed to be relatively low. The Flesch Kincaid Readability Index for the Facet5 Questionnaire items is 6.4 indicating that an US 6th Grade student should be able to comprehend it.

Our advice is generally to apply Facet5 with confidence in the population for which it was developed and normed. Should there be a pressing need to use Facet5 outside this norm base then proceed with caution and contact the authors for advice.

# Number of scales and description of the variables

Facet5 is designed to measure 5 major personality factors and 13 sub-factors and is based upon Big 5 theory. The factors and sub-factors measured by Facet5 are:

#### Will

- Determination
- The inner drive to commit to own ideas
- Confrontation
- A drive to confront issues as they arise
- Independence
- A tendency to go your own way

# Energy

- Vitality
- Obvious enthusiasm and energy
- Sociability
- · Interest in being with people

- Adaptability
- Involving other's in your thinking

#### Affection

- Altruism
- Putting other people's interests first
- Support
- Always trying to be understanding
- Trust
- Tendency to take people at face value

#### Control

- Discipline
- Being personally organised and planned
- Responsibility
- Being willing to take personal responsibility

# **Emotionality**

- Tension
- A general sense of tension or stress
- Apprehension
- Being cautious and not over-optimistic

For a full description of these domains you should refer to the <u>Facet5 User Manual</u>, <u>Section 4</u>.

The rationale for these major domains can be seen in a <u>table</u> which compares different psychological models and shows the similarities and differences.

#### **Item format**

Facet5 consists of 106 items. Each item is arranged as a 'Semantic Differential' following the example of Osgood and Suci. Further explanation of the Semantic Differential format can be found in the Facet5 User Manual, Section 3 page 3.

Although the respondent is asked to choose between mutually exclusive alternatives, each pair of alternatives represents a single scale. The format is therefore fully normative. This is fundamentally different from the case where people are asked to choose between mixed-scale alternatives (Ipsative format) with its inherent statistical problems. For a description of some of these see Johnson, C.E., Wood, R. & Blinkhorn, S.F. (1988) 'Spuriouser and spuriouser: The use of ipsative personality tests' J. Occupational Psychol. 61, 153-162.

Left hand item stems are right justified and right hand item stems are left justified in order to maintain a constant visual distance between the statement and the scale.

#### **Number of items**

Facet5 consists of 106 semantic differential scales. Some people have suggested that this format can actually be unpacked to show 212 Likert scales but since each

pair is antonymous this argument would appear to be spurious.

Of these 106 scales, only 83 are actually used to create the Sten Scores. The others are used as placeholders for research items. Facet5 is under constant revision and having un-scored place holders allows us to trial new items as and when we wish without affecting the scoring of the existing items since order effects remain constant.

#### Administration mode

Facet5 is a fully web-enabled process. As such administration requires web-access but beyond that the specific mode is up to the user. The following modes are all possible:

- Computerised Web-based application supervised/proctored
- Computerised Web-based application unsupervised/self-assessment

In addition, although not recommended, it is possible to administer Facet5 using a paper based format. Therefore both:

- Interactive individual administration
- Supervised Group administration are possible should it be desired.

#### Response mode

Facet5 is designed to capture responses directly into the system. When the user logs onto the system (via secure user-ID and password) the Facet5 questionnaire is downloaded to the user's browser as Java script. There is no further communication between the browser and the server until either the respondent chooses to perform an intermediate 'Save' or has completed the questionnaire. At this time the raw data is transferred to the server as an encrypted string.

Note: if the user has chosen to administer by paper then the browser only downloads a simple screen for data entry. Upon completion the data string is again transmitted to the server.

# Time required

Administration, including preparation and set up

Facet5 is extremely quick to administer. Authorised users need to log on to the Facet5 system using an assigned USER-ID and PASSWORD. They then enter the name, demographic details (if required) and email address for the respondent. They have the option of modifying the invitation email on the fly if required but then click on 'Send Email Invitation'. The email is automatically sent to the respondent and the system waits for a response.

Upon receiving the completed responses, the system notifies the authorised user by email that the respondent has completed the questionnaire.

Total administration time, including log on, creation of new respondent record and sending emailed invitation is approximately 2-3 minutes.

#### Time allowed for answering the items

Facet5 is un-timed and respondents are not put under any pressure to complete in a

particular timeframe. They are advised to try and answer spontaneously and not to think too deeply about any one question.

Research has demonstrated that the original paper and pencil version took approximately 25 minutes to complete on average. The switch to item by item test administration via the web has reduced this completion time to approximately 17 minutes on average.

# Scoring, analysis and report generation

Since Facet5 is fully web-based, all scoring and report generation is carried out immediately upon receipt of the raw data from the respondent's web-browser.

# De-briefing or feedback

Time taken to provide adequate feedback can obviously vary according to the situation. Where Facet5 is used in a very focused way (concentrating on specific competencies for example), feedback may be quite brief. For such purposes we have created the Facet5 Family Portrait which is a computer generated report providing a simple overall summary of the score pattern. Such feedback can be conducted in approximately 30 minutes.

Where more comprehensive feedback is required (eg, development, counselling, career guidance) then more thorough use of the raw data is recommended which would extend the recommended feedback time to at least one hour.

When Facet5 is linked with multi-rater feedback (for example when it includes the Strategic Leadership Review), then feedback would normally extend to 2 hours or more.

#### Parallel forms

There are no parallel forms for Facet5. However it does exist in multiple languages. At present Facet5 can be completed in more than twenty different languages, including:

- Bulgarian
- Chinese (Mandarin)
- Chinese (Traditional)
- Danish
- English (British)
- English (US)
- French
- German
- Greek
- Hungarian
- Italian
- Japanese
- Norwegian
- Polish
- Portuguese (Brazilian)
- Romanian
- Russian

- Slovak
- Spanish
- Turkish
- Welsh

# Software/hardware requirements

Facet5 has no specific hardware requirements. Browsers need to be able to support dynamic HTML and Java script needs to be enabled. If Cookies are enabled, Facet5 will make use of them to allow the respondent to partially complete the questionnaire and return at a later stage.

This means that Facet5 requires Internet Explorer (version 5 or higher) and Netscape (V6 or higher). While we have seen Facet5 running on Mozilla and Opera, it has not been fully tested on these platforms. There are known problems running Facet5 on Firefox.

Facet5 requires Adobe Acrobat Reader for accessing fully formatted .pdf reports.

# Measurement and scoring

All scoring is computer based with direct entry of responses by respondent. No intervention is required from the administrator. Appropriate norms are selected by default but can be changed by the administrator when the email invitation is sent. The norms applied can also be changed after the data has been processed.

Should it be necessary it is also possible to apply computer scoring with manual entry of responses from the paper response form.

Finally, there is a Bureau-service available where profiles are scored from faxed answer sheets.

Although the scoring is automatic, the steps it goes through are as follows:

### Step 1: Calculation of Raw Scores.

Facet5 items have 'simple structure' in that each item loads on only one domain. The number of items loading on each item are:

Will: 15Energy: 15Affection: 18Control: 17Emotionality: 18

Within each domain items are balanced for polarity so that the 'high' end is sometimes on the right and sometimes on the left. This is to avoid obvious left-right response bias. Where necessary, items are reversed to provide consistent polarity.

This provides raw scores that are linear sums of the responses for each domain.

# Step 2: Conversion to Sten Scores

Once we have the Raw Scores we can convert them to Sten scores. To do this the Raw score mean (calculated from the research sample) is subtracted from the Raw score and then the whole is divided by the standard deviation. This leaves a Z-score which has a mean of 0.0 and 95% of the cases will lie between -1.96 and +1.96. This is then converted to a Sten Score (standing for Standard Ten) by multiplying by 2 (Sten scores have a Standard Deviation of 2 so the SD needs to be doubled) and than adding 5.5 which moves the whole scale up to an average of 5.5. This is shown below.

Finally any extreme scores which are either below 1 or greater than 10 are truncated to 1 and 10 respectively. This is done for each Facet5 scale in turn. It is these scores which are reported by Facet5 although for research work it is more appropriate to use the original raw scores.

# Step 3: Calculating Sub-Factors

Facet5 sub-factors are factor scores based on analysis of the factor structure of the items loading on each main Factor. Sub-factor scores are calculated as weighted linear sums where the weights applied to each item are derived from the original factor analysis. These scores are also converted to Sten Scores.

# Step 4: Adjusting sub-factor scores

There is one final adjustment to the sub-factor scores. Since the main factor scores and the sub-factor scores are calculated using different processes, the average of the sub-factors was not equal to the main factor score. This is perfectly logical since each sub-factor accounted for a different proportion of the total variance. It was possible to get the sub-factor scores to average to the main factor score by weighting them by the proportion of variance accounted for but this became impossible to explain to statistically inexperienced recipients. We therefore decided to adjust the sub-factor scores post-calculation so that they did average out to the main factor score. In each case the adjustment was small and we maintained the ratio of one sub-factor to another.

# Step 5: Assigning profiles to a Facet5 family

The final step is to decide which Facet5 family the profile belongs to. There are 17 reference families and the Facet5 system simply calculates a similarity co-efficient for each of these 17 'reference' families. The metric used is a simple Euclidean DSQ. For example the reference profile for a 'Promoter' has Will and Energy at 7.5, Control and Affection at 3.5. DSQ for this is calculated as follows:

$$DSQ = SQRT()$$

It should be noted that the DSQ is calculated using only the 4 main factors. Emotionality is excluded since it is defined as an interpreting factor, qualitatively different from the other 4.

The profile is allocated to the family where the DSQ is lowest, indicating that the overall profile is more similar to that family than to any other. It should be noted that the Facet5 system includes a link labelled 'Close Relatives'. This link shows, graphically by means of an overlay, how close the respondent's profile is to the

assigned family and also shows the next two closest fits.

Note: We are currently reviewing the similarity metric used to assign profiles to families. The first step will be to normalise the DSQ (by dividing by the maximum possible DSQ) which has the advantage of constraining the metric to between 0 and 1. This will be reported as a percentage. Our next approach will be to subtract the DSQ from 1. This is because a high DSQ (for example 75%) actually indicates 'Dissimilarity'. We believe users will find it more intuitively useful for high numbers to indicate 'Similarity'. As a result of these changes the metric reported will range from 0% to 100% with 100% indicating perfect Similarity. This follows the comments made by Paul Barrett in a paper to the NZ Industrial and Organizational Psychology Conference in 2003 titled 'Person Target Profiling for Selection & Recruitment'. This paper examines the effect of Score Elevation and Score Scatter on a number of different similarity/difference coefficients.

# Impression Management

In addition to the main Facet5 scoring process, the system also calculates measures of response bias. There are two which are used: Response Pattern and Response Latency. Full details of these measures are given in the paper 'Response Patterns and Impression Management', paper delivered to the ITC Conference, Winchester, June 2002.

# **Computer generated reports**

A number of computer generated reports are available. They include:

# **Facet5 Profile**

Description

The Facet5 Profile provides all the raw Facet5 data along with Impression Management statistics in a fully developed format combining text and high quality graphics.

A sample of this report can be seen <u>here</u>.

Media – Integrated Text and Graphics

This report is available either in the form of web screens or as a fully formatted .pdf. The Profile uses integrated text and graphics.

The report included graphics and data for all 5 main factors and 13 subfactors. It also includes the Impression Management statistics. The web system allows for 'drill down' from main factor through sub-factor to representative items if required.

# Complexity

Some text is fixed (e.g. the descriptive anchors at the ends of the scales) while some is dynamic and linked to the pattern of scores obtained. Reports are scale/factor based and are 'in between' in that they incorporate suggested analyses of patterns of Facet5 factor and sub-factor scores.

#### Report structure

This report is both Scale and Factor based.

#### Sensitivity to context

There is one version of this report for all contexts

#### Clinical-actuarial

The written content of the Facet5 report was created over a period of time by the authors with considerable support from peers and colleagues. They are therefore 'clinical judgement' by a group of experts.

# Modifiability

The .pdf's are not easily modifiable (although they can be with appropriate software). However the web based data is presented as pure HTML and is therefore completely modifiable/editable if required by anyone with user level access to the profile.

# · Degree of 'finish'

Facet5 reports (as .pdfs) are designed to be 'publication' quality. With appropriate quality colour printing they are ready to be bound and presented. Obviously the .pdf itself can be transmitted electronically to the point of delivery.

# Transparency

The fixed text provides a clear indication of the behaviours likely to be found at the top and bottom ends of the scales. There is an obvious graphical link between the scores and the text. The closer the result is to the end of the scale the more appropriate the comments will be.

The link between the scores and the dynamic text is less obvious. For example each set of sub-factors gives rise to a descriptive comment. The driver for this is the pattern of sub-factor scores. To decide which description to use the system recodes the sub-factor scores into High, Medium and Low (<4, 4-7, >7) giving a three element index. This index (eg, HHM for High, High and Medium) is associated with a descriptive paragraph. This methodology is explained during training so is clear to trained users but may not be obvious to respondents without explanation.

#### Style and tone

The Facet5 report is descriptive only. Guidance is provided by the additional, situation specific reports.

#### Intended recipients

Qualified instrument users either use the Facet5 Profile to support their own feedback and reporting or take the content from the web and re-work it for their own specific purposes.

Qualified system users use the Facet5 Profile as the benchmark for their own feedback. They will tend to refer to it during feedback and use it as a framework.

Test takers are usually given the Facet5 Profile after feedback along with

whatever other information is generated. It is written in 'normal' language that respondents can identify with. There is no use of jargon or slang. Users are strongly advised against giving a Facet5 Profile to the respondent without full structured feedback.

Third parties can use the Facet5 Profile if they have gained either specific training or incidental experience with the model. Untrained third parties are specifically forbidden from providing feedback to respondents.

# **Family Portrait**

# Description

The Family Portrait provides an interpretation of the overall pattern of Facet5 factor scores. As such it attempts to integrate the influences from each factor to provide a broad description of likely behaviour under 5 main headings:

- Word Picture
- Contribution to a team
- As a Leader
- Motivated by
- To Manage
- Effect of emotionality if appropriate?

Each commentary is provided as bullet points. Under each heading we maintain a 2:1 balance between positive and negative statements so that overall the Family portrait presents a positive picture of the respondent.

Although the Family Portrait is not anodyne in its commentary, the positive overall flavour is such that it is unlikely to cause offence to respondents. Therefore should the situation arise where the report is provided to the respondent without appropriate feedback (and we know this happens in spite of strong recommendations to the contrary), little harm will be done.

A sample of this report can be seen <u>here</u>.

# Media – Integrated Text and Graphics

The Family Portrait shows the overall Facet5 Profile (without sub-factors) and, for comparison, the reference profile for the 'Family' to which the respondent has been assigned. Text is provided in bullet form for clarity.

# Complexity

The whole report is based on a pattern analysis of the Facet5 Profile and a subsequent linking to the Facet5 Families. All text therefore relates to the assigned family.

# Report structure

The report is construct based under the headings mentioned above. The only variation is when Emotionality is extreme (high or low) when additional comment is added to flavour the behavioural descriptions.

# Sensitivity to context

There is one version of the Family Portrait designed for general application.

#### Clinical-actuarial

The written content of the Facet5 report was created over a period of time by the authors with considerable support from peers and colleagues. They are therefore 'clinical judgement' by a group of experts.

# Modifiability

The .pdf's are not easily modifiable (although they can be with appropriate software). However the web based data is presented as pure HTML and is therefore completely modifiable and editable if required by a user with appropriate access to the system.

# Degree of 'finish'

Facet5 reports (as .pdfs) are designed to be 'publication' quality. With appropriate quality colour printing they are ready to be bound and presented. Obviously the .pdf itself can be transmitted electronically to the point of delivery.

# Transparency

The content of the Family Portrait is based on the Family structure. Fully trained Facet5 users will be completely familiar with the source of the report commentary. A respondent will need to have these links explained to them during feedback.

# Style and tone

The Family Portrait is both descriptive and provides guidance. Four bullet points provide pure description (e.g. 'Is ambitious and goal-oriented') while two are suggestions (e.g. 'May tread on others' toes').

# Intended recipients

- Qualified instrument users tend to use parts of the Family Portrait as the backbone for custom reports. For example by taking the section on 'As a Leader' and extending and modifying as appropriate to provide a comprehensive review of Leadership Style.
- Qualified system users use the report as is an construct a feedback process around the Portrait structure.
- Test takers can use the Family Portrait as an 'aide mémoire' to the feedback discussion.
- Third parties would use the Family Portrait to provide a quick summary of key points. For example the Family Portrait is frequently used by consultants running teambuilding programmes.

# Searchlight

### Description

Searchlight is designed to take the Family structure and to then provide competency based descriptions under six broad competencies.

 Leadership Using appropriate methods or interpersonal styles in guiding individuals or groups toward the accomplishment of goals or tasks. This competency is concerned with the ability to adjust behaviours and approaches

- according to the situation and individual concerned.
- Communication The ability to express ideas succinctly and clearly, both orally and in writing, to convince others to consider a different point of view and to keep appropriate people informed of project progress.
- Interpersonal The ability to be acceptable to internal and external clients and to respond quickly to their needs. Someone demonstrating this competency should be able to deal competently with a wide variety of people, both inside and outside the company.
- Analysis and decision making The capacity to identify problems, evaluate relevant facts, generate ideas and alternatives, and reach sound conclusions.
- Initiative and effort The active attempt to influence events in order to achieve goals.
- Planning and organising Establishing a course of action for self and/or others to accomplish a specific goal, including planning the proper allocation of resources. This competency is concerned with establishing goals, budgeting time and setting priorities.

As with the Family Portrait, each commentary is provided as bullet points. Under each heading we maintain a positive balance between positive and negative statements so that overall Searchlight presents a positive picture of the respondent.

Searchlight is designed as a guide to behaviour based interviewing. Therefore it provides specific guidance to the interviewer in terms of 'What you should expect' and 'What you should look out for'. It is expected that users will be familiar with behavioural interviewing techniques and will construct questions using the Searchlight pointers as anchors.

A sample of this report can be seen here.

### Media – Integrated Text and Graphics

Searchlight shows the overall Facet5 Profile (without sub-factors) and, for comparison, the reference profile for the 'Family' to which the respondent has been assigned. Text is provided in bullet form for clarity.

# Complexity

The whole report is based on a pattern analysis of the Facet5 Profile and a subsequent linking to the Facet5 Families. All text therefore relates to the assigned family.

#### Report structure

The report is construct based under the headings mentioned above.

#### Sensitivity to context

There is one version of Searchlight designed to provide a guide to interviewing.

### Clinical-actuarial

The written content of the Facet5 report was created over a period of time by the authors with considerable support from peers and colleagues. They are therefore 'clinical judgement' by a group of experts.

# Modifiability

The .pdf's are not easily modifiable (although they can be with appropriate software). However the web based data is presented as pure HTML and is therefore completely modifiable or editable if required by a user with appropriate level of access.

# Degree of 'finish'

Facet5 reports (as .pdfs) are designed to be 'publication' quality. With appropriate quality colour printing they are ready to be bound and presented. Obviously the .pdf itself can be transmitted electronically to the point of delivery.

# Transparency

The content of Searchlight is based on the Family structure. Fully trained Facet5 users will be completely familiar with the source of the report commentary. An interviewer does not need to fully understand the relationship between the comments and the underlying Facet5 profile but will obviously do a better job it they do. A respondent will need to have these links explained to them during feedback.

#### Style and tone

Searchlight is both descriptive and provides interview guidance. For example a description under 'Leadership' might be 'Is demanding with a strong sense of purpose'. The linked suggestion is therefore 'Watch for being unsympathetic'

# Intended recipients

Qualified instrument users tend to use parts of the Searchlight to help structure the competency section of a written report. The competencies are generic but are frequently found in organisation's competency structures so may require little modification to fit.

Qualified system users use the report as is and construct an interview process around the Searchlight guidelines.

Test takers can use Searchlight as an 'aide mémoire' to the interview and feedback discussion.

Third parties would use Searchlight to provide a quick summary of key points. For example Searchlight is frequently used by recruitment consultants.

# Leading Edge

### Description

The Leading Edge report is designed to indicate the optimal management style that is required to work best with the respondent. As such it is a guide for the respondent's manager rather than the respondent him/her self. Leading Edge uses the same Leadership Structure found in the Strategic Leadership Review. It is broadly based on work by Bass, Alvolio and Quigley and differentiates between Transactional Leadership (managing people to reach agreed goals) and Transformational or Visionary Leadership (inspiring people to go above and beyond expectations). These domains are defined as follows:

Transformational/Visionary Leadership

# V1: Creating a Vision

Visionary leaders are described as motivating, inspiring and convincing. A vision cannot be established by edict. To ensure colleagues 'buy in' to a vision you must persuade, excite and influence. People who do this well, communicate a sense of purpose and focus, make people feel they understand where the organisation is going, enthuse and motivate people about what can be achieved, appear passionate and committed to the work, and look to the future with enthusiasm.

# V2: Intellectual Stimulation

Such people who do well are able to provide a positive and challenging environment for other. They make people think and re-examine their ideas and look for alternatives. They quickly see new applications and ways forward, are innovative and imaginative, are seen as experts and authorities in their fields, and are aware of trends and developments in their fields.

### V3: Individual consideration

This means creating an environment where people feel valued and encouraged to contribute, where they can explore their own talents and utilise individual strengths. People who enable others to do this are seen as positive and fair minded. They ensure justice and are not judgmental. They are attuned to the feelings and natures of their colleagues and show respect for them. Such people can establish a positive environment for each person in the team, get people to contribute in the way they work best, allow for individual differences, do not pre-judge people or impose their own prejudices. They are accessible and responsive to others needs. They accept people for what they are.

#### Transactional Leadership

# T1:Goal Setting

Goals are the operationalisation of a corporate vision. They are the engine of activity, which provides a specific, practical focus for efforts. Goals need to be specific to ensure clear direction. They must be measurable so people know whether they are being met. They must be achievable since an unrealistic goal is de-motivating. They must be relevant so they convey a realistic sense of purpose and they need a time limit to crystallise them and provide an agreed end point.

# T2:Performance Monitoring

There is little point in setting clear goals if no effort is made to determine whether they have been met. Performance review can be very structured with centralised administration or more fluid relying more on the individual than the system. This helps a person to understand whether the goals have been achieved. The process for monitoring, the frequency of review and the individual responsibility for this review needs to be made clear.

# T3:Feedback

Performance appraisal is a normal part of corporate life now. Feedback is designed to answer two questions: What are we expecting and 'How are we doing? And for feedback to be effective it must be: Understood, Believed and Accepted

# **T4:Developing Careers**

The key to developing others is to demonstrate genuine interest and concern for

them. It involves selflessness and a willingness to put others first. In order to achieve this you need first to understand yourself and, following that, understand the needs, interests and desires of other people. To be effective you need to also understand the political and organisational sensitivities that exist. Introducing Facet5 raises the power of an interview considerably. Although many organisations now use personality questionnaires as part of the selection process, it is most powerful when it is used early. Therefore it is important to explain to candidates why they are being asked to fill in a questionnaire and the place it will take in the whole process.

Each commentary is provided as bullet points. Each statement is designed to provide a guide to specific behaviours that are likely to encourage that aspect of a sub-ordinate's performance. For example where Control is high and the manager needs to set objective it will recommend taking a thorough and careful approach, provide background and address the details. Where Control is low the Leading Edge report will suggest a more free wheeling, unstructured approach.

Leading Edge uses the Facet5 family structure so there are 17 different management/leadership strategies on offer.

A sample of this report can be seen <u>here</u>.

#### Media – Integrated Text and Graphics

Leading Edge shows the overall Facet5 Profile (without sub-factors) and, for comparison, the reference profile for the 'Family' to which the respondent has been assigned. Text is provided in bullet form for clarity.

#### Complexity

The whole report is based on a pattern analysis of the Facet5 Profile and a subsequent linking to the Facet5 Families. All text therefore relates to the assigned family.

#### Report structure

The report is construct-based under the headings mentioned above.

### Sensitivity to context

There is one version of Leading Edge designed to provide a guide to managing/leading.

#### Clinical-actuarial

The written content of the Facet5 report was created over a period of time by the authors with considerable support from peers and colleagues. They are therefore 'clinical judgement' by a group of experts.

# Modifiability

The .pdf's are not easily modifiable (although they can be with appropriate software). However the web based data is presented as pure HTML and is therefore completely modifiable or editable if required by users with an appropriate level of access.

#### Degree of 'finish'

Facet5 reports (as .pdfs) are designed to be 'publication' quality. With appropriate

quality colour printing they are ready to be bound and presented. Obviously the .pdf itself can be transmitted electronically to the point of delivery.

# Transparency

The content of Leading Edge is based on the Family structure structured around the Leadership dimensions. Fully trained Facet5 users will be completely familiar with the source of the report commentary. A manager does not need to fully understand the relationship between the comments and the underlying Facet5 profile but will obviously do a better job it they do. A respondent will need to have these links explained to them during feedback.

#### Style and tone

Leading Edge is both descriptive and provides guidance.

#### Intended recipients

Qualified instrument users tend to use parts of the Leading Edge to help structure the 'How to Manage' section of a written report. The leadership competencies are generic but are frequently found in organisation's leadership structures so may require little modification to fit.

Qualified system users use the report as is and construct an management/leadership strategy around the Leading Edge guidelines.

Test takers can use Leading Edge as a guide to their own leadership requirements.

Third parties (managers/leaders) would use Leading Edge to provide a reference so they can adjust their leadership style to make it more 'person specific'. Leading Edge is predicated on the efficacy of a dyadic leadership style.

#### **Work Preferences**

#### Description

The Work Preferences report grew out of research where responses were obtained using a 100 item 'Work Elements' questionnaire originally based on Schein's 'Career Anchors' concept. The principal behind it is that of all the different 'work elements' embedded in people's daily activities some will be more appealing than others. This questionnaire attempted to identify and categorise these Elements' into broader 'Anchors'.

We also had parallel Facet5 data for the sample and it was the analysis of the relationship between the two that produced the 'Work Preferences' report. For example people with high Will stated that they preferred roles where they were able to influence events and take important decisions. High Control people said they wanted respect and a logical structure to their work. High affection people said they wanted to help and to feel they were making a difference to people's lives.

The constructs underlying the correlated elements were closely related to a number of different motivational constructs. Will seems related to needs for 'Power'. Affection links to a need for 'People' and Control links to a preference for 'Process'. Energy

clearly linked to 'Participation' with its emphasis on involvement and activity.

A sample of this report can be seen <u>here</u>.

The Work Preferences Report takes these constructs and combines them to give firstly an overview of the pattern of motivations as they might relate to work roles. It then goes on to list work elements likely to prove 'motivating' and elements likely to prove 'de-motivating'.

Work Preferences uses the Facet5 family structure so there are 17 different Work Roles and sets of motivational elements on offer.

# Media – Integrated Text and Graphics

Work Preferences shows the overall Facet5 Profile (without sub-factors) and, for comparison, the reference profile for the 'Family' to which the respondent has been assigned. Text is provided in bullet form for clarity.

#### Complexity

The whole report is based on a pattern analysis of the Facet5 Profile and a subsequent linking to the Facet5 Families. All text therefore relates to the assigned family.

# Report structure

The report is construct based under the headings mentioned above.

# Sensitivity to context

There is one version of Work Preferences designed for use in career development.

### Clinical-actuarial

The written content of the Work Preferences report was created over a period of time by the authors with considerable support from peers and colleagues. They are therefore 'clinical judgements' by a group of experts.

# Modifiability

The .pdf's are not easily modifiable (although they can be with appropriate software). However the web based data is presented as pure HTML and is therefore completely modifiable or editable if required by users with an appropriate level of access to the system.

# Degree of 'finish'

Work Preferences reports (as .pdfs) are designed to be 'publication' quality. With appropriate quality colour printing they are ready to be bound and presented. Obviously the .pdf itself can be transmitted electronically to the point of delivery.

### Transparency

The content of Work Preferences is based on the Family structure structured around the Work Motivation dimensions. Fully trained Facet5 users will be completely familiar with the source of the report commentary. A manager/counsellor does not need to fully understand the relationship between the comments and the underlying Facet5 profile but will obviously do a better job it they do. A respondent will need to

have these links explained to them during feedback.

# Style and tone

Work Preferences is both descriptive and provides guidance. The list of 'job role elements' is descriptive.

# Intended recipients

Qualified instrument users tend to use the Work Preferences report to help structure the 'Career Development' section of a written report. The 'role elements' can be used to help define new roles or to evaluate existing roles.

Qualified system users use the report as a guide to Career Development discussions and workshops.

Test takers can use Work Preferences to either evaluate their existing role or to assess possible future roles.

Third parties (managers/counsellors/coaches) would use Work Preferences to provide a reference so they can provide career guidance and role clarification.

#### **Audition**

Description Audition is a structured interview guide produced by Facet5 by aligning a respondent's Facet5 profile (at the sub-factor level) with a reference template or 'Ideal' profile. The ideal template can be created in three ways:

- 1 Empirical research
- 2 Rational analysis
- 3 Collective Intelligence

These processes are outlined below:

# Audition based on Empirical Research

The most typical application of Audition is for high volume selection processes such as Call Centres. Where the volumes warrant it Audition should be based on a thorough research project designed to provide the specification for the Audition Role Template.

#### Audition based on Rational Analysis

This approach requires a detailed job analysis. This may be a formal written analysis that has already been prepared but it could also be created from interviews using a Critical Incident or Repertory Grid technique. In either case the steps are:

- Parse the job description, identifying those actions that can be related to specific behaviours
- Relate the actions/behaviours to individual Facet5 factors and sub-factors. It is more helpful (and easier) to work at the sub factor level than the factor level. The behaviours are more specific.
- Tally the number of behaviours linked to each sub-factor to show which are most important.
- Starting with the most important (highest tally), decide on an 'ideal' score for that sub-factor.

 Where there are other Audition templates in use, you should finally cross-check by comparing the scores you have decided on against those for other roles to ensure that there is relative consistency across the roles as well as consistency within a role.

When you have a Role template identified, (i.e. the ideal score and the direction
of preference e.g. higher is better), this template can be loaded to the system. At
present this part of the development can only be done by the System
Administrator. We are developing a process that will allow users to tailor their
own Audition Templates.

# Audition based on Collective Intelligence

This approach utilises Facet5's integrated multi-rater process. Direct estimates are obtained from multiple raters who are deemed to be 'informed' regarding the requirements of the role. The system produces a multi-rater view of the requirements for the role expressed directly as behaviours related to Facet5 sub-factors. When agreed these can be loaded directly to the system to create an Audition template.

A sample of an Audition report can be seen here.

# Media - Integrated Text and Graphics

Audition shows the overall Facet5 Profile (without sub-factors) and, for comparison, the 'Ideal' profile for the role that has been defined. Respondent scores are shown as 'deviation' scores to show graphically where the fit is closest. Text is provided in bullet form for clarity.

# Complexity

The report is based on a factor X factor deviation analysis. A convergence chart is used with deviation bars varied by colour and intensity according to closeness of 'fit'.

### Report structure

The report is sub-factor based but the sub-factors have been re-worked to represent work behaviours.

#### Sensitivity to context

The structure of Audition is fixed as a guide to behavioural interview.

#### Clinical-actuarial

Audition is a combination of clinical comments driven by actuarial data. Templates can be defined by 'clinical' analysis, by actuarial research or by a combination of the two.

#### Modifiability

The structure of Audition is fixed although the behavioural descriptors, ideal points, interpretative comments, BARS scales and interview questions are when a template is set up. The .pdf's are not easily modifiable (although they can be with appropriate software). However the web based data is presented as pure HTML and is therefore completely modifiable or editable if required by a user with an appropriate level of access.

# Degree of 'finish'

Audition reports (as .pdfs) are designed to be 'publication' quality. With appropriate quality colour printing they are ready to be bound and presented. Obviously the .pdf itself can be transmitted electronically to the point of delivery.

# Transparency

The content of Audition is based on the Audition Template which is in turn based on a 1:1 relationship with the Facet5 sub-factor structure. Fully trained Facet5 users will be completely familiar with the source of the report commentary. A manager/counsellor does not need to fully understand the relationship between the comments and the underlying Facet5 profile but will obviously do a better job it they do. An interviewee would need to have these links explained to them during feedback although we know that in many cases feedback is minimal.

### Style and tone

Audition is both descriptive and provides guidance.

#### Intended recipients

Qualified instrument users tend to use parts of Audition to help structure a behaviour based interview.

Qualified system users use the report as is and construct an interview process around the Audition guidelines.

Test takers can use Audition as an 'aide mémoire' of the interview and feedback discussion.

Third parties would use Audition to provide a quick summary of key points. For example Audition is frequently used by recruitment consultants. HR departments can use the Audition guides along with the accompanying notes to provide a written history of the interview process.

### Strategic Leadership Review (SLR)

# Description

The SLR is an extension of Facet5 that integrates multi-rater responses to a Leadership Review with the results of a Facet5 profile. The SLR uses the same Leadership Dimensions as Leading Edge (click here for definitions). The SLR can work as a normal multi-rater leadership review tool but the integration of Facet5 adds another dimension. Facet5 uses a software integration engine called 3DV to identify those of the 84 defined leadership behaviours where there people with profiles similar to the respondent are likely to receive above average ratings. And, conversely where they are likely to receive below average ratings.

The specific behaviours are then identified in the report and compared to the actual ratings that were received. This provides four possible results.

- 1 Natural Skills: a behaviour was predicted to be highly rated and it was.
- 2 Latent Skills: a behaviour was predicted to be highly rated but it wasn't.
- 3 Barriers or 'Not Really You': a behaviour which was predicted to be lowly rated and it was and

4 Learned Skills: a behaviour which was not predicted to be highly rated but which was.

This type of report is then used as part of the full multi-rater review where the SLR produces a picture of what is actually happening and Facet5 contributes an understanding of 'why' it is happening. The integration of the two suggests where development might be most profitably focused.

A sample of an SLR can be seen here.

# Media – Integrated Text and Graphics

The SLR does not show the overall Facet5 Profile. Instead it focuses on a representation of the multi-rater data with additional bars and markers for different viewpoints. Results are shown as a simplified 'box and whisker' chart. Significant behaviours are colour-coded.

### Complexity

Although there is a lot of data shown (both the full multi-rater view and the impact of Facet5) the report is entirely empirical. Apart from explanatory text there is no attempt at automatic interpretation.

# Report structure

The report uses the Leadership domains as its foundation with representation of the 12 behaviour associated with each domain as well.

# Sensitivity to context

The SLR is designed as a support diagnostic for leadership review so is 'insensitive'.

#### Clinical-actuarial

The SLR is entirely actuarial. Interpretation is left to the coach or counsellor responsible for the feedback to the target individual.

#### Modifiability

The .pdf's are not easily modifiable (although they can be with appropriate software). However the web based data is presented as pure HTML and is therefore completely modifiable/editable if required.

#### Dearee of 'finish'

The SLR reports (as .pdfs) are designed to be 'publication' quality. With appropriate quality colour printing they are ready to be bound and presented. Obviously the .pdf itself can be transmitted electronically to the point of delivery.

#### Transparency

Since the core of the report is a graphical portrayal of the multi-rater feedback, much of the output is obvious. The Facet driven links do require explanation but fully trained Facet5 users will be completely familiar with the source of the highlighted items. The SLR is not designed for naive or occasional users but is an in depth tool for experienced coaches. A target manager would need to have these links explained to them during feedback although we know that in many cases feedback is minimal.

# Style and tone

The SLR is entirely descriptive.

# Intended recipients

Qualified instrument users use The SLR to for leadership development.

Qualified system users use the report as is and construct a coaching process around the SLR guidelines.

Test takers (target managers) can use The SLR as an 'aide mémoire' of the feedback discussion and as the foundation of a development plan.

HR departments can use the SLR to support the agreed development processes and, when summarised across a group, as an indicator of training needs.

# **Corrections and Future Developments**

#### **Process for Corrections**

All errors with simple solutions are corrected as soon as is practicable after they have been noticed. The web based technology means that there are only a small number of installations to be updated. More complex updates are scheduled approximately every 6 months.

# Additions and Future Developments

The following additions and modifications are currently either being researched or are in the process of being programmed into the system:

- Additional norms for Brazil, USA, Denmark, Singapore, China, Hungary, New Zealand and Greece. We are also looking at producing a set of norms for 'Multinational' managers across countries.
- Extension of the Impression Management Statistics to provide help interpreting the figures produced.
- Creation of a distance learning alternative as a front end to the accreditation process
- Extension of the Facet5 model to provide multi-rater views on the behaviours linked to the Facet5 domains.
- Extension of Audition to allow Role templates to be created 'on-the-fly'
- Creation of a database of Audition templates based on previous research
- Creation of a self/multi-rater description using Searchlight competencies
- Addition of a Conflict Resolution model to TeamScape
- Addition of a self report survey on job satisfaction linked to Work Preferences
- Addition of a role review survey to describe roles using the same Work preferences.

### **Documentation**

Documentation provided with Facet5 includes:

#### User Manual

A comprehensive manual is provided in an A4, 4 ring binder. Professionally printed with colour cover and sections covering:

Section 1: Origins and Application

Section 2: Introduction and Background

Section 3: Development of Facet5 Section 4: Description of Factors

Section 5: Facet5 Families

Section 6: Selecting for the Job

Section 7: Selecting for the Organisation

Section 8: Work Preferences
Section 9: Leading Edge

Section 10: Preparing for Feedback Section 11: Using the Facet5 system

### Technical (psychometric) information

Technical information is provided both in the User Manual and on the web under the heading 'Facet5 Live'.

Facet5 Live (login 'demo', password 'demo1234') is a section of the Facet5 system which contains a number of case studies and technical summaries of Facet5. This library is dynamic and grows as new research is added. At present the list includes:

#### Customer Service Validation

A major call centre was looking to reduce staff turnover and increase productivity. A Facet5 Audition profile showed how to double the selection success rate and focus interviews on key areas. Click here for the report.

#### Response Patterns and Impression Management

Presentation to the International Test Commission Conference in Winchester, UK June 2002. To view this paper click here.

#### The Magic Number 5

In spite of the millions spent and the thousands of studies, the occupational psychology profession still has not developed a cohesive language or body of knowledge. While it is unlikely that we are going to discover laws as immutable as Bernoulli, Ohm or even Heisenberg in the near future, there are developments which may provide the sort of underpinning which organisations are seeking.

# Case Study 1 – Successful Accounting

Graduate applicants to a large firm of Chartered Accountants were given Facet 5.0 during the selection stages as part of the selection process.

# Case Study 2 - Retailing Differences

A major high street retailer used Facet as part of a management training programme. Respondents were 36 department managers in stores from around the UK.

# Case Study 3 – Culture Clash

The following study took place in an investment bank, and came about as a result of complaints about a team of investment bankers. This team was comprised of the international investment bankers based in New York and their style of operation was being poorly received by other banking functions.

# Case Study 4 – Managing Relationships

Derek, an employee of an investment bank, and Bob, his manager, were complaining about each others performance to such a degree that intervention was requested by the manager.

# Case Study 5 – Commercially Centred

A large recently privatised science and technology company aims to recruit 10-12 future managers from the graduate population every year. Redfield were commissioned to design, and implement an assessment centre to select individuals for these management roles.

# Case Study 6 – Getting a Head

A large, aggressive commercial organisation wished to employ a new head of Human Resources. The organisation wanted someone with a supportive, more conciliatory and approachable style than the previous incumbent. The final candidates were assessed in a process that included the use of Facet.

### Case Study 7 – Culture Shots

One of the many applications of Facet is its ability to provide pictures of cultures, from the whole organisation through to teams within the organisation.

# Case Study 8 - A Question of Sex

Attraction-Selection-Attrition theory suggests that samples drawn from within individual organizations may be biased by the nature of the organisation itself. So does the data used by Facet show up inconsistencies between the sexes because of these biases?

### Case Study 9 – Reliable Results

A profile like Facet is only useful if the information it gives is generally reliable. If a person completes the questionnaire a second time will they come up with the same scores (broadly). More importantly will the results be interpreted in broadly the same way and would similar conclusions be drawn?

# Case Study 10 – When I grow up I want to be a ...

This study looks at the relationship between Facet5 and Career Anchors. Career Anchors are the factors a person tends to consider when making career decisions. The findings from this research form the underpinning for the Facet5 Work Preferences report.

#### Method of publication

Facet5 is designed to be run live on the internet. Access is via USER-ID and PASSWORD. Data flow is encrypted. Facilities exist for capturing and processing paper based responses but this is discouraged since it stops the use of Response Latency Analysis as a method of Impression Management.

#### Costs

The cost structure for Facet5 is simple. There is a single accreditation charge (see

below) and then a charge is incurred when a profile is processed and loaded to the system. Once loaded to the system now further charges are incurred for that profile. Reports may be produced at will as long as the account remains active.

#### Accreditation

Facet5 start-up costs are included in the cost of accreditation. As part of the accreditation an account is created which is tailored to reflect the client organisation's look and feel. Access to this account is provided via secure USER-ID and PASSWORD. Users are encouraged to change the PASSWORD immediately to something more secure and meaningful to them.

#### Recurrent costs

There are no annual license fees for Facet5. Recurrent costs are linked to profile usage.

The current UK prices for Facet5 are set out <a href="here">here</a>.

For prices in other countries please contact the relevant distributor via Iceberg.

# Prices for reports

There are no additional charges for Facet5 reports. A single charge is incurred when the data is processed and loaded to the database. All subsequent reports are available within that charge as long as the account remains active.

### Instrument-related qualifications

Facet5 is supplied solely to people who have been accredited by Redfield Consulting or one of its authorised distributors. The agenda for the standard accreditation process can be seen here.

The Standard Accreditation is not designed to qualify people to Level B of the BPS standard. However an extended accreditation is available should people wish to be trained to that level.

Accreditation programmes are mostly run 'in-house' and are frequently modified somewhat from this standard. This enables us to focus more closely on the specific applications relevant to that organisation.

For people who are already qualified to a high level in other instrumentation (for example Level B qualification), a Professional accreditation can be delivered.

For details of the accreditation process you should contact leeberg.

# Professional qualifications required

It is not essential for users to be qualified psychologists. However we do prefer users to be experienced practitioners in a relevant related profession.

Redfield reserves the right to refuse to supply Facet5 to people it does not believe have the professional skills to use it or to withdraw supply from people who use it

contrary to the Code of Practice laid down by their relevant professional body. In the absence of a local Code of Conduct we would refer to the Code of Conduct laid down by the British Psychological Society.

# General description of the instrument

Facet5 was developed in the early 1990s. It is a web-based normative Big 5 questionnaire that produces scores on 5 main factors, 13 sub-factors and also assigns a profile to a 'Facet5 Family' to produce a pseudo 'type'. It is available worldwide in a number of key languages. It consists of 106 questions in a semantic differential format. This combined with the use of natural language makes it quick and easy to complete.

All scoring is automatic and instant with fully formatted, professional quality reports immediately available from the system in .pdf format. It includes an innovative approach to identifying Impression Management where it occurs which is specifically designed to work with web administration.

Focus in Facet5 is on the practical application of the personality data rather than the scores themselves. Reports are keyed to support HR decisions in Selection, Integration to a team, Management and Development.

Facet5 is constantly developing. Further translations are underway into, for example, Mandarin and Spanish. Further extensions will strengthen Facet5 by adding other sources of information and integrating them into the interpretation. This will add to the tools made available through Facet5 to HR professionals, Psychologists and Consultants.

#### **Norms**

The Facet5 questionnaire was developed for the 'Managerial and Professional' groups. The norms therefore relate specifically to those groups. The database is a dynamic and rapidly growing one and currently contains in excess of 19000 profiles.

Norms available to the user are:

#### Original Development Sample

This sample was collected as part of the original development process and was made up of 693 cases. They were predominantly Male (67%), 90% under 40 year of age and 75% educated to 'A' level or higher.

#### **British Manager Sample**

Norms are based on a sample extracted from over 4600 members of the British working population. Approximately 35% of the sample was female, 65% male. Ages are: <=25-21.5%, 26-35-42.0%, 36-45-26.3% and >45-10.2%

# English Speaking Sample – paper based

This sample includes only people who completed Facet5 using the original paper and pencil format. Sample structure was:

Admin Method	Paper & Pencil	Proportion
Missing	549	4.5%
Female	3877	31.9%
Male	7746	63.6%
Total	12172	100.0%

# English Speaking Sample - web based

This includes only people who completed Facet5 using web-based administration. Sample structure was:

Admin Method	Paper & Pencil	Proportion
Missing	401	6.2%
Female	2529	39.1%
Male	3530	54.6%
Total	6460	100.0%

# <u>English Speaking Sample – combined administration methods</u>

This sample combines the data from both administration methods. Sample structure was:

Admin Method	Paper & Pencil	Proportion
Missing	950	5.1%
Female	6406	34.4%
Male	11276	60.5%
Total	18632	100.0%

Note: Analysis of the differences due to administration method showed little significant difference so we would recommend using this larger sample where possible.

# English Speaking – Male

These norms are for 11276 males who completed Facet5 using either paper based or web based administration.

# English Speaking – Female

These norms are for 6406 females who completed Facet5 using either paper based or web based administration.

Note: Analysis of the differences due to gender showed little significant difference so we would recommend using the larger combined sample where possible.

# National Norms – English version

Where the same questionnaire is used we will prepare local norms. The first place where this happened was Australia and Australian norms have been available for some years now. Norms for the USA and NZ are currently being established.

# Australian Manager Sample #1

A sample of 1850 Australian managers and professionals. 30% female, 70% male. Average age 38. Age range 20-72. Mostly applicants for jobs in Australia.

# Australian Manager Sample #2

A similar sample to above but with over 6000 cases of data. All completed Facet5

on-line in the period from November 2000 to July 2004.

Admin Method	Australian
Missing	253
Female	2258
Male	3831
Total	6342

#### Translated National Norms

As Facet5 is translated and implemented around the world, it is obviously important that we have relevant norms for that region. Since this is an ongoing process (new language versions of Facet5 are being added regularly), it is clear that we need to have a standardised process for norm creation so that the norms for Brazil in Portuguese are comparable with the norms for Denmark in Danish. Such a process is in place.

When a Facet5 is implemented in a new area, whether or not it involves a translation, we collect data according to a stratified sample. The sample includes equal numbers of men and women from 12 different job functions. The sample structure is as follows:

Job Function	National Norm Structure
Administration	People involved in the 'back office' functions of an organisation. They will include clerks, administrators, secretaries, receptionists. They are not function specific – they could come from purchasing, despatch or sales admin for example.
Consultant	People providing a professional intellectual service to other organisations.  They will usually have a professional qualification (logistics, psychology, IT or similar) but the critical point is that they use this expertise to provide solutions or services.
Finance	This will include all professionally qualified people in the finance field from Finance Directors and CFO's to accountants.
HR/Personnel	This includes HR Directors and similar as well as functional HR staff such as recruiters, trainers and learning and development specialists.
IT	All people involved in the development, implementation and support of IT systems. Usually professionally qualified.
Marketing	Includes market research, market planning, product managers and advertising specialists.
Operations	People involved in running the supply chain side of the business. It would typically include logistics, warehousing, manufacture and distribution.  Purchasing could be included here although in some organisations it is more of a finance function.
Sales	All people involved in presenting the company and its products directly to the end user. It includes sales representatives, sales managers and team leaders. It would not include sales administrators.
Scientist	People with a defined scientific discipline. They may work in research (e.g. genetics) or in an applied field such as product or process development
Technical	Includes engineering and other trades. Typically people in construction and maintenance.
Contact Centre – Outbound	People who conduct a sales activity entirely by telephone. It is outward focused requiring initiative and pro-activity. They may create appointments for other sales people or actually conclude a sale.
Contact Centre – Inbound	People who provide information by phone in response to specific queries. They are usually script based and are more reactive.

It should be noted that this sample is not designed to fully represent the full range of

functions in the working population. It is purely to provide a reference base against which new samples can be measured where function variance has been reduced as much as possible. The intention is to enable us to identify genuine population differences where they exist.

Norms based on this process are currently available for Denmark and will be available for the US, Singapore and Brazil by the end of 2004. Our intention is to provide highly relevant local norms which are broadly comparable across international boundaries.

Further norm details are available on request: please contact <u>lceberg</u>.

# Industry Sector Norms

Although data has been collected in an opportunistic manner, it has been possible to post-code a number of the profiles into broad industry sectors. As a result a certain number of Industry Sector norms are available as follows:

Sector	N
Information Technology	3529
Manufacturing	2327
Public and Community Services	1714
Financial Services	1343
Pharma	807
Banking	566
Professional	490
Engineering	412
Logistics	391
Resources	273
Media	251
Education	208
Research & Development	195
Retail	187
Construction & mgt	137
Not for Profit	120
Other	119
FMCG	55
Medical	53
Agribusiness	7

Norms are provided for IT, Manufacturing, Public and Community Services, Financial Services and Pharmaceuticals. Others will be added as data is acquired.

#### Public and Community Services

These included local government as well as government owned services. When

Global	Public and Community Services			Other data				Cohen's d
	N	Mean	SD	N	Mean	SD		
Will	1714	46.04	7.08	18087	46.84	7.29	0.11	SD
Energy	1714	51.65	7.93	18087	52.82	7.65	0.15	negligible effect
Affection	1714	67.18	8.07	18086	63.70	9.05	0.39	small effect
Control	1714	57.95	9.83	18087	59.84	9.19	0.21	small effect
Emotionality	1714	46.32	9.66	18087	46.19	9.56	0.01	small effect

This suggests that there are few real differences between Public Services and the rest of the working population. However there are small differences in Energy, Affection and Control. Public Sector workers appear to be slightly less outgoing, more caring but less conservative and disciplined.

# Information Technology

Global	Information technology			Other data				Cohen's d
	N	Mean	SD	N	Mean	SD		
Will	3523	46.96	7.21	16278	46.74	7.29	0.11	negligible effect
Energy	3523	53.62	7.80	16278	52.52	7.64	0.14	negligible effect
Affection	3523	62.48	9.29	16277	64.33	8.93	0.21	small effect
Control	3523	57.37	9.07	16278	60.18	9.23	0.31	small effect
Emotionality	3523	46.41	9.61	16278	46.16	9.56	0.03	negligible effect

IT staff are slightly lower on Affection and higher on Control.

# Manufacturing

Global	Manufactu	Manufacturing			Other data			Cohen's d
	N	Mean	SD	N	Mean	SD		
Will	2327	46.75	7.15	17474	46.78	7.29	0	negligible effect
Energy	2327	52.47	7.33	17474	52.75	7.72	0.04	negligible effect
Affection	2327	64.60	8.58	17473	63.92	9.08	0.07	small effect
Control	2327	60.66	8.65	17474	59.55	9.33	0.12	small effect
Emotionality	2327	46.17	9.04	17474	46.21	9.64	0	negligible effect

From this it would appear there are no real differences between staff in Manufacturing organisations and other industry sectors.

# Financial Services

Organisations in this sector included banks, insurance companies and other financial bodies. It does not include accountants.

Global	Manufacturing			Other data				Cohen's d
	N	Mean	SD	N	Mean	SD		
Will	1909	45.32	7.62	17892	46.93	7.22	0.22	small effect
Energy	1909	52.40	7.64	17892	52.75	7.68	0.05	negligible effect
Affection	1909	64.74	9.34	17891	63.92	8.98	0.09	small effect
Control	1909	61.97	8.52	17892	59.43	9.30	0.27	small effect
Emotionality	1909	46.06	9.15	17892	46.22	9.62	0.02	negligible effect

There are few differences between this sector and the broader economy.

# Job Function (Role) Norms

It was also possible to post-code the data set for job function in some areas. Functions available were:

## **Finance**

Based on a sample of 379 people from the Professional, Financial Services, IT and Manufacturing sectors. 70% male. Mostly UK origin.

### HR

Based on a sample of 334 HR professionals mostly from the IT, Financial Services, Pharmaceutical and Manufacturing sectors. 63% female. From UK, Australia and the US.

# Sales

Mostly from the IT, Pharmaceutical, Financial Services and Communications sectors. Mostly UK based, 75% male.

#### **Gender Differences**

The question of gender difference on psychometric tests is of critical importance. From a legal standpoint alone it is important to evaluate whether there is any evidence of adverse impact due to gender. Any process that produced scores that were systematically biased by gender could (and should) be challenged. While the impact of such bias might be of doubtful relevance for development purposes, it would be significant if the process was used for selection decisions.

As part of the original development of Facet5 we tested for gender differences. Small but significant differences were found on Emotionality but not on any other factor.

Over the following years we were regularly asked the question 'Are there differences between men and women on Facet5?' Each time we checked we found we were getting inconsistent answers. In a number of cases there were big differences but then we noticed that the score distributions were not representative of the original standardisation sample. It was clear that large systematic biases in the sample, often due to function specific selection processes, could lead to highly biased score distributions which often showed gender bias. For example approximately 500 cases of data from a UK Call Centre showed women to be significantly higher on Emotionality and Affection and lower on Will. But the sample consisted of almost entirely women.

#### Balanced sample n= 240

So we decided to re-examine the issue with a different sample in 2000 (see <u>Study 8 – A Question of Sex</u>). This sample (n=240) was selected to represent equal numbers of men and women from a range of job functions. Again there were no significant gender differences on four out of the five factors. A small but significant difference was found for Emotionality which is in keeping with our original research. Sample statistics for this analysis are shown here:

N=240	Will	Energy	Affection	Control	Emotionality

Male	4.96	5.93	6.37	6.15	4.82
Female	4.58	5.69	6.49	6.16	5.32
Т	1.54	.916	483	008	-2.14
Sig.	.125	.361	.630	.994	.034

So it appears that when we have equal numbers of men and women fulfilling similar job functions, the only gender difference that appears is on Emotionality.

Ones and Anderson ('Gender and ethnic group differences on personality scales in selection: Some British data', Deniz S. Ones, Neil Anderson, J. Occ & Org Psych, 2002, V75, pp 255-276) compared three models in terms of their Gender differences and concluded 'In overview, with regard to gender differences, no large or even moderate differences were found on any of the three measures under scrutiny.' However within their study they found that the HPI also showed significant differences between men and women (M > F) on 6 out of 13 scales including 'Adjustment' and 'Stress Tolerance', both of which would appear to be linked to Emotionality. The OPQ FS5.2 showed significant differences on 8 of its 17 scales including 'Relaxed' which would appear to the closest to Emotionality. The BPI showed gender differences on 4 out of 16 primary and secondary scales but, unusually, did not find a gender difference on 'Worrying' which would appear to be the only obvious 'Emotionality' scale. It would be interesting to examine the content of this scale in detail since this appears a somewhat idiosyncratic finding.

More importantly Ones and Anderson examined the standard deviations of the scores for men and women and concluded that few significant differences appeared. We have a similar finding with Facet5 as shown in the table below.

					Levene's Test for Equality of Variances		t-test for Equality of Means			
	Gender	Mea	Std Dev	Std	F	Sig.	t	df	Sig.	Mean Difference
147:11	N 4 - 1 -	n		Error	0.05	0.00	4.00	000	0.00	
Will	Male	4.96	1.81	0.17	0.25	0.62	1.93	238	0.06	0.46
	Female	4.50	1.86	0.17						
Energy	Male	5.93	2.00	0.18	1.11	0.29	0.92	238	0.36	0.24
	Female	5.69	2.11	0.19						
Affection	Male	6.37	2.05	0.19	0.90	0.34	-0.48	238	0.63	-0.12
	Female	6.49	1.90	0.17						
Control	Male	6.15	2.07	0.19	0.08	0.78	-0.01	238	0.99	0.00
	Female	6.16	2.11	0.19						
Emotion- ality	Male	4.82	1.70	0.15	1.36	0.25	-2.14	238	0.03	-0.50
	Female	5.32	1.93	0.18						

Here it can be seen that none of the tests for equality of variances achieved significance so we can assume that men and women tend to answer Facet5 in similar ways with just as many extreme responses. We therefore feel that one the data available to us we can be confident that there are fewer gender biases in Facet5 than in many other tests and those that there are, are limited to Emotionality where the body of research shows similar findings.

# Large sample n= 17701

On a much larger sample we were able to evaluate gender differences for 17701

profiles. Due to the likelihood of large sample sizes making normal t-tests over sensitive we applied Cohen's Effect size model. The results are as shown below.

	Males			Females			Cohen's d	
	N	Mean	SD	N	Mean	SD		
Will	11289	47.65	6.95	6412	45.10	7.42	0.36	small effect
Energy	11289	52.85	7.63	6412	52.63	7.74	0.03	negligible effect
Affection	11288	63.38	9.19	6412	65.23	8.68	0.21	small effect
Control	11289	59.38	9.43	6412	60.29	8.90	0.1	negligible effect
Emotionality	11289	44.98	9.16	6412	47.69	9.85	0.29	small effect

As can be seen, although differences existed which were deemed to be statistically significant, an examination of the effect size suggests that these differences are negligible or small. From this analysis we would conclude that such differences as exist between Males and Females are sufficiently small to justify amalgamating the samples to gain the advantage of increased generalisability.

# **Minority Group Differences**

There have not been any structured studies on Minority Group Differences in Facet5 largely because we do not capture the demographic data that would make such a study possible. However we are now implementing a study in the UK specifically to look at these questions and will report when the study is complete.

We are, however, reassured by a recent study by Ones and Anderson ('Gender and ethnic group differences on personality scales in selection: Some British data', Deniz S. Ones, Neil Anderson, J. Occ & Org Psych, 2002, V75, pp255-276) which suggests that such differences as have been found to exist are generally small. They conclude that their analyses 'provide generally supportive results of a lack of potential adverse impact.' We would like to conduct a similar study to determine to what degree their findings can apply to Facet5.

# Validity

Information in this section is under three headings: Face Validity, Content Validity, Construct Validity and Predictive/Concurrent Validity. Information about the original validation can be found in Section 3 – Development of Facet5. However there have been a number of further studies designed to evaluate the validity of Facet5 in a number of different ways. These are available under Facet Live and are summarised below.

## **Face Validity**

This is frequently ignored by psychometricians when evaluating a psychometric process. It appears that 'Face Validity' is very much the poor relation when a process is being evaluated. However we believe it is fundamental to producing an effective tool. If the respondent and other users feel that it doesn't make sense to them or they cannot see a good reason for asking the questions, their commitment and mental approach to the process is not likely to be conducive to getting reliable results. This can be likened to the difference between the way Work samples and Assessment Centres are viewed by the participant compared to cognitive tests alone. Personality

measures rely on the integrity of the respondent and if the person has no faith in the process, then it is unlikely they will take it seriously.

Facet5 has attempted to ensure face validity in three ways:

- · to only use work based language
- · to avoid the use of idiom or slang as far as possible
- to use an item structure which is not obvious thereby making it difficult to identify so-called 'correct' responses.

As a result Facet5 appears to be very well received by respondents and users both at the data capture phase and during feedback. A number of Facet5 users have volunteered comments on their experience and these can be seen here. Click here for testimonials.

# **Construct Validity**

Construct validity refers to the degree to which the model is felt to measure the theoretical characteristic (or 'construct') which it says it is measuring. Facet5 has attempted to ensure construct validity by thorough research into the field of personality theory and other people's findings. For example if Facet5 attempts to measure the construct of 'Will', does it seem to exist as a factor in other people's work. We developed Facet5 using the 16PF as a reference. We have two studies that relate to this, summarised below. We also have summarised additional studies relating Facet5 to Self-ratings given on a multi-rater Leadership Review and a survey of work preferences. Studies are currently being undertaken to look at the relationship with, among others, FIRO-B, 16PF5, NEO-PI. Further studies will be undertaken as data becomes available.

#### Facet5 and 16pf n=193

## Sample

193 assessment candidates for managerial & professional roles in the UK. This data was collected alongside cognitive and other non-cognitive measures as part of an individual assessment process.

## Criterion

Correlation between Facet5 scores and 16pf Form B scores. Correlations were corrected for attenuation using the following reliability figures:

16 pf Factor	Q3
A	Q4
В	Reliability
C	0.80
E	0.43
F	0.66
G	0.65
H	0.74
1	0.49
L	0.80
M	0.85
N	0.75
0	0.67
Q1	0.35
Q2	0.70

0.50 0.36 0.37 0.66

Source: Paul Kline

Facet5 Factor	Will	Energy	Affection	Control	Emotionality
Reliability	0.75	0.71	0.8	0.78	0.81

### Result

The following table shows the relationships. Absolute correlations greater than .35 are highlighted.

	Sten sco	res			Correla	tions Correcte	ed for Attenu	ation		Label
Factor	Mean	SD	Min	Max	Will	Energy	Affection	Control	Emotion- ality	
Α	6.58	2.32	1.00	10.00	0.02	0.44	0.04	0.29	-0.14	Cool <> Warm
В	7.36	1.63	3.00	10.00	0.04	-0.16	-0.05	-0.36	0.20	Intelligence
С	7.79	1.83	1.00	10.00	0.09	0.20	0.14	0.15	-0.48	Emotional <> Calm
E	6.99	1.62	3.00	10.00	0.47	0.41	-0.28	-0.04	-0.14	Submissive <> Dominance
F	6.28	1.67	1.00	10.00	0.30	0.74	-0.12	-0.09	-0.19	Sober <> Enthused
G	5.83	2.00	1.00	10.00	-0.01	-0.08	0.29	0.72	0.04	Expedient <> Conscientious
Н	7.10	1.69	1.00	10.00	0.24	0.71	0.04	0.20	-0.46	Shy <> Bold
1	5.01	1.93	1.00	10.00	0.03	-0.16	0.09	0.05	0.02	Tough <> Tender
L	4.96	2.02	1.00	10.00	0.21	-0.06	-0.51	-0.08	0.19	Trusting <> Suspicious
М	6.79	1.80	2.00	10.00	0.29	0.01	0.05	-0.46	-0.09	Practical <> Imaginative
N	5.36	1.90	1.00	10.00	-0.28	-0.37	0.18	0.67	-0.07	Natural <> Calculating
0	3.92	1.59	1.00	9.00	-0.18	-0.31	-0.09	-0.12	0.55	Assured <> Apprehensive
Q1	7.17	1.81	1.00	10.00	0.36	0.20	-0.21	-0.33	-0.11	Conservative <> Liberal
Q2	4.37	2.01	1.00	10.00	-0.05	-0.76	-0.26	-0.46	0.37	Group <> Individual
Q3	6.56	1.58	2.00	10.00	-0.06	-0.05	0.04	0.68	-0.19	Undisciplined <> Controlled
Q4	3.72	1.97	1.00	10.00	0.01	-0.06	-0.15	-0.38	0.45	Relaxed <> Tense

# Key links are:

Will: Dominant, Liberal

Energy: Warm, Enthusiastic, Bold, Group Oriented and (slightly) Dominant and

Natural

**Affection:** Trusting

Control: Conscientious, Controlled, Calculating, Practical, Group Oriented. Also

negative on Intelligence.

**Emotionality:** Emotional, Shy, Apprehensive, Tense and more Individualistic

# Comment

All these relationships are in the expected direction. Dominance loads onto two factors although the prime one is Will.

## Facet5 and 16pf n=131

# <u>Sample</u>

131 candidates for selection and career guidance who attended individual assessment sessions in Adelaide, South Australia during 2003-4. Both Facet5 and the 16pf were administered as part of an overall battery including cognitive and non-

cognitive tests.

# **Criterion**

The Correlation between Facet5 scores and 16pf Form B scores. Correlations were corrected for attenuation using the following reliability (stability) figures:

16 pf Factor	Reliability
A	0.80
В	0.43
C	0.66
E	0.65
F	0.74
G	0.49
H	0.80
1	0.85
L	0.75
M	0.67
N	0.35
0	0.70
Q1	0.50
Q2	0.37
Q3	0.36
Q4	0.66

Source: Paul Kline

Facet5	Will	Energy	Affection	Control	Emotionality
Factor					
Reliability	0.75	0.71	0.8	0.78	0.81

# Result

The following table shows the relationships. Absolute correlations greater than 0.35 are highlighted. Note that in this case the 16pf raw scores wee used instead of Sten scores.

	Raw Sc	ores			Correla	tions Corr	ected for Att	enuation		
Factor	Mean	SD	Min	Max	Will	Energy	Affection	Control	Emotionality	Label
Α	12.39	3.34	4	20	0.09	0.51	0.09	0.03	-0.37	Cool <> Warm
В	8.83	1.94	3	13	0.07	-0.03	-0.04	-0.42	0.04	Intelligence
С	19.21	3.70	7	26	0.06	0.29	0.05	0.21	-0.71	Emotional <> Calm
E	14.05	3.67	5	22	0.67	0.63	-0.47	-0.16	-0.12	Submissive <> Dominance
F	17.42	4.11	6	26	-0.09	0.65	0.05	0.03	0.01	Sober <> Enthused
G	14.37	3.33	6	20	0.24	0.27	0.13	0.89	-0.23	Expedient <> Conscientious
Н	20.49	4.39	5	26	0.23	0.69	0.18	0.18	-0.39	Shy <> Bold
ı	10.72	4.19	1	20	-0.38	-0.29	0.49	0.08	0.35	Tough <> Tender
L	5.47	3.10	0	13	0.18	-0.04	-0.38	-0.28	0.25	Trusting <> Suspicious
М	13.66	3.40	3	21	0.10	-0.13	0.00	-0.23	-0.26	Practical <> Imaginative
N	8.40	2.52	2	15	-0.58	-0.60	0.33	0.19	0.30	Natural <> Calculating
0	6.89	3.73	0	18	-0.25	-0.32	0.01	-0.01	0.66	Assured <> Apprehensive
Q1	9.17	3.18	2	18	0.56	0.07	-0.51	-0.46	-0.09	Conservative <> Liberal
Q2	8.07	3.30	2	16	0.19	-0.74	-0.34	-0.08	0.41	Group <> Individual
Q3	14.79	2.76	8	20	-0.36	-0.09	0.36	0.81	-0.35	Undisciplined <> Controlled

Q4	7.54	5.01	0	23	-0.02	-0.28	-0.20	-0.15	0.74	Relaxed <> Tense

# Key links are:

**Will:** Dominant, tough Minded, Natural, Liberal and Undisciplined **Energy:** Warm, Enthusiastic, Bold, Natural, Group Oriented, Dominant

**Affection:** Submissive, Tender Minded, Trusting, Conservative and Controlled **Control:** Conscientious, Conservative, Controlled and also negative on Intelligence. **Emotionality:** Cool, Emotional, Shy, Apprehensive, Tense and more Individualistic

# Comment

All these relationships are in the expected direction although there appears to be some flooding across factors here which was not apparent in the previous study. It is also clear that the Facet5 factor intercorrelations are higher than would be expected from a sample drawn from the same reference group so part of these discrepancies may be due to sampling issues. In particular the correlation between Will and Affection was much more substantially negative than previously found as was the correlation between Energy and Emotionality.

# Facet5 and Self Ratings of Leadership

# **Sample**

247 managers in both the UK and Australia attending leadership development programmes. They each completed Facet5 and the Strategic Leadership Review, a multi-rater (360) evaluation of leadership behaviour. Data was captured over a period from 1995 to 2004. Managers were employed by a range of organisations including small businesses in Wales, scientific research organisations, pharmaceutical companies and government bodies.

# Criterion

Correlation between Facet5 factors and ratings on Leadership Domains. For a description the leadership domains covered by the SLR click here. Correlations were corrected for attenuation using the reliability figures shown in the table:

# Result

The correlations between Facet5 and the Strategic Leadership Review (SLR) are shown below.

			Raw S	cores			Correlations Corrected for Attenuation				
Reliability	Factor	N	Mean	SD	Min	Max	Will	Energy	Affection	Control	Emotionality
0.85	V1 Vision	247	48.25	6.15	32	60	0.41	0.52	-0.01	0.06	-0.34
0.82	V2 Intellectual Stimulation	247	46.31	6.31	26	60	0.65	0.35	-0.16	-0.10	-0.16
0.81	V3 Individual Consideration	247	48.08	5.73	29	60	- 0.13	0.25	0.27	0.22	-0.19
0.86	T1 Goal Setting	247	46.64	6.17	26	60	0.27	0.16	-0.01	0.35	-0.27
0.85	T2 Performance Monitoring	247	44.84	6.66	26	59	0.26	0.15	0.02	0.46	-0.20
0.82	T3 Feedback	247	47.10	5.82	29	60	- 0.01	0.12	0.11	0.29	-0.26
0.83	T4 Development	247	48.12	5.77	29	60	0.00	0.21	0.21	0.20	-0.21
	•		<u> </u>		Rel	liability	0.75	0.71	0.8	0.78	0.81

# Key links are:

Creating a Vision: Linked to Will and Energy with Low Emotionality

Intellectual Stimulation: Linked to Will and Energy

Individual consideration: Slight link to Energy, Affection and Control

Goal Setting: Linked to Control and lower Emotionality

Performance Monitoring: Also linked to Control

Feedback: Slightly linked to Control and lower Emotionality

Development: A generalised correlation with Energy, Affection and Control and

lower Emotionality.

#### Looked at in reverse:

**Will:** Contributes to Creating a Vision and Providing an Intellectually Stimulating environment as well as giving the focus required for Goal Setting and Performance Monitoring

**Energy:** Contributes to Creating a Vision and Providing an Intellectually Stimulating environment but also shows more Individual Consideration and an interest in people's development

Affection: Has links to Individual Consideration and Development

**Control:** Strongly linked to Individual Consideration, and all four Transactional domains

**Emotionality:** Is generally negatively correlated with every leadership domain especially Creating a Vision. Highly Emotional people would seem to underrate themselves on every dimension.

# Comment

There is consistency between the self ratings given on Facet5 and self-ratings given on a behaviourally based leadership review. All relationships are in the expected direction.

## Facet5 and Career Choice

## Sample

49 people who attended Career Development workshops on either a group or individual basis run by a major UK consulting firm. Each person completed Facet5 and a specially developed survey designed to identify the drivers of their career decisions.

#### Criterion

Correlation between Facet5 scores and 'Career Anchors' scores. Correlations were not corrected for attenuation of Career Anchors scores at either the derived factor level or at the item level since a detailed psychometric analysis of this survey has not been completed.

#### Result

The complete tables of correlations can be seen in the attached document.

# Key relationships are:

**Will**: Core elements here are influence over others, decision making and creativity. Accepting and meeting a challenge is also important. They want to stamp their mark on the world, to create and innovate. They want to make important decisions and to influence and control the way things are done.

**Energy**: Here we see elements of persuasion, affiliation and variety, all elements that would be expected to appeal to high Energy people. In addition there is enthusiasm for a leadership role although it appears that this needs to be in an area of personal interest. They also don't want to be tied down and constrained. High Energy people have little interest in longer term financial security.

**Affection**: It is clear that Affection is associated with a desire to help, to be of service and to feel they have done something 'worthwhile'. There is also a search for companionship and contribution to the greater good. What is interesting is the clear selflessness that is shown. There is no interest in financial or material issues. This may be just as well since such service and compassionate roles rarely lead to accumulation of wealth.

**Control**: There appear to be two broad themes running through the drivers for Control. First we have a preference for work that is precise, careful and neatly scheduled. There is a need for consistency and predictability. Secondly however is a strong pressure to be in a position of authority and leadership which commands status and respect. They don't show much interest in having their own name in lights or having to be imaginative and creative.

**Emotionality**: An immediate point here is that all except one of the items linked to Emotionality are negatively correlated. It seems that Emotionality acts more as a filter or limiter, showing up the things that the person doesn't want rather than what they do want. It is a negative rather than positive influence. This is in keeping with many other researchers' observations about the negative nature of Emotionality. On closer examination it seems that the pressure of Emotionality is to reduce variety, challenge and diversity. There is reduced interest in supervision of others. There is however an interest in not having to worry, in being able to ply their specialised trade and to be comfortable with the people they work with. Since Emotionality carries with it an undercurrent of self doubt and social sensitivity this is entirely in keeping.

## Comment

These relationships provide strong support for the idea that the career choices a person makes are related to their own personal style as reflected in a Facet5 profile. The information is valuable for people working in career development roles within organisations but may also be of value at an earlier stage, when people are starting to evaluate their career options.

For a more detailed report on this study click here.

#### **Content Validity**

Content validity is a very important concept since it demands that a personality model should make sure it is covering the whole domain of the factors it claims it is measuring. A good example would be 'Will' where it is known that stubbornness, commitment and independence are all aspects of 'Will'. Content validity is the degree to which the model covers the domain or 'content' of the factor under discussion. This is important to all the factors being measured but Emotionality is one that seems to be often ill-defined. For example, some questionnaires measure

Emotionality entirely by the element of 'Confidence'. While Confidence is certainly an element within the domain of Emotionality, it is by no means the whole domain. Such issues as anxiety, optimism, and physical reactions are also part of the domain and must be measured. Judge et al noted this with respect to the NEO-PI where they point out that this well respected tool has a very narrow definition of Emotionality, almost entirely focused on Anxiety. (see 'The Core Self-Evaluations Scale: Development of a Measure', Judge, T.A., Erez, A, Bono, Joyce, E., and Thoresen, C, J. Personnel Psychology, 2003). Facet5 attempts to cover this important domain very broadly.

The domains covered by Facet5 can be seen in the description of the sub-factors or 'facets' measured by the model. This can be seen in the following table:

Factor	Facet5	Description
Will	Determination	The inner drive to commit to own ideas
	Confrontation	A drive to confront issues as they arise
	Independence	A tendency to go your own way
Energy	Vitality	Obvious enthusiasm and energy
	Sociability	Interest in being with people
	Adaptability	Involving others in your thinking
Affection	Altruism	Putting other people's interests first
	Support	Always trying to be understanding
	Trust	Tendency to take people at face value
Control	Discipline	Being personally organised and planned
	Responsibility	Being willing to take personal responsibility
Emotionality	Anxiety	A general sense of tension or stress
	Apprehension	Being cautious and not over-optimistic

The constructs included in the Facet5 domain of Emotionality are:

**Concentration**: People are more easily distracted by events around them and can have difficulty maintaining concentration.

**Confidence**: There is an underlying self doubt which can damage confidence.

**Defence mechanisms**: People look for reasons to explain failures and difficulties e.g. rationalisation, denial and avoidance.

**Habits and phobias**: People get stuck in superstitious habits e.g., Favourite socks, Friday the 13th etc.

**Mental conflict / hypochondriasis**: Some suffer a genuine confusion by having so many things going on with seemingly no solution – it's all too complicated.

**Mood Swings**: People vary in their mood for no obvious reason – there are just good days and bad days.

**Nostalgia / reminiscence**: A harking back to past times when things 'were better'. This can be linked to a present feeling of failure.

**Objectivity and balance**: Personal sensitivity can make it difficult to be completely objective – things matter too much.

**Obsessional memory and absent-mindedness**: Some things just seem to be a constant worry, even when they are not so important in the cold light of day.

## **Concurrent and Predictive Validity**

These are similar concepts in that they both ask whether the model predicts some specific outcome. For example if Facet5 states that a person has scored very high on 'Will' then this should be recognised in some other, independent way. For

example a third party could be asked to give independent ratings of the respondent on behaviours which are known to relate to Will. If the ratings agree then the construct can be said to have predictive or concurrent validity.

More often people use the term to mean the degree to which test scores can predict a particular outcome. If, for example, sales performance is measured and then compared to Facet5 profiles, this would be a measure of concurrent validity. If the profiles were collected but no action taken until data on job performance was available this would be referred to as predictive. The two terms are very similar but the subtle difference is important.

Predictive and Concurrent validity can only be established through studies where a specific outcome was required. This outcome may be a reduction in staff turnover, increased sales success or something similar. For examples of Facet5 in this type of application users should refer to the authors where such studies are available or to the *Facet Live* section of the Facet5 web site. Studies are continuing on a regular basis and are published as they become available.

A number of Studies demonstrate this for Facet5.

# Successful Accounting

This study looked at the relationship between Facet5 and accounting exam success within a large professional practice. For a more detailed report on this study click here.

**Sample:** 76 student applicants for accounting placements in a major UK practice.

**Criterion:** Relationship between Facet5 scores and success in professional exams. Since the exams were held some months after Facet5 was completed this can be viewed as a 'predictive' study.

#### Result:

		Exam Resul	Exam Result		
		Fail	Pass	Total	
Facet5 Scores	Other	20	29	49	
	High Will & High Energy	5	22	27	
Values are cell counts	Total	25	51	76	
	•	Chi Sq=3.92 df=1 Prob. 0.05			

**Comment:** The combination of High Will and High Energy is related to success in professional exams. For a more complete report click here.

# Retailing Differences

This study was prompted by comments during a series of management training programmes. The company was interested in seeing whether Facet5 could assist in the development of department managers.

**Sample:** 36 department managers from a UK high street chain.

**Criterion:** Relationship between Facet5 scores and Supervisor Ratings. This was a concurrent study.

## Results

	Mean	Std Dev
Good Performers	10.3	6.8
Poor Performers	19.7	18.2
	t = 2.1 df=34 prob.= 0.04	

**Comment:** People who were more 'like' their colleagues tend to get higher ratings. 'Unusual' managers were shown to get lower ratings. For a more complete report click here.

# **Culture Clash**

Prompted by inter-departmental clashes, an international bank needed a way to categorise and explain what was perceived to be undesirable behaviour from one division in the bank.

**Sample:** 78 behavioural statements made about International Business Development staff in an international bank.

**Criterion:** The task was to see what Congruence there was between behavioural descriptors generated from Facet5 and those from a staff survey. Statements were coded and then tabulated to test for similarity.

## Results

Negative Comments	Made from Facet				
Made by Peers		Yes	No		
v	No.	%	No.	%	
Yes	16	94%	1	6%	
No	1	6%	16	94%	
Total comments	17	100%	17	100%	

Positive Comments	Made from Facet			
Made by Peers		Yes		No
v	No.	%	No.	%
Yes	10	83%	2	17%
No	2	17%	10	83%
Total comments	12	100%	12	100%

**Comment:** Comments from Facet5 matched 94% of the negative comments made and 83% of the positive comments made. For a more complete report click here.

#### Visions of Leaders

Facet5 and its companion Strategic Leadership Review have been used extensively

as diagnostic tools on leadership development programmes. This research examines the relationship between the way people see themselves in Facet5 terms and the way that other people describe them. This paper has been submitted.

# **UK Call Centre Staff**

A large UK call centre was interested to see whether Facet5 could provide information for use at the interview stage of selection that would help recruit higher performing staff.

**Sample:** The staff of a major call centre was selected for this study. There were two roles. The first role was predominantly an 'inbound service' centre responding to customer demands for advice and information. Within the centre a group of people were identified as being 'top' performers. The second role was for 'outbound' staff, more involved in telesales and promotional work.

**Criterion:** The staff were assigned to a performance group based on pooled assessments of their performance. In the end a dichotomous rating (Low vs High) was used.

#### Results

	Perfor		
	Low Performance	High Performance	Total
Inbound	63	30	93
Outbound	84	30	114
Total	147	60	207

**Whole Group:** T-test indicated that Control was a significant factor differentiating the high and low performing groups. Regression analysis of the combined group (n=207) produced a simple prediction equation with only Control entered as a predictor of rated performance. Scores calculated using this equation correlated 0.232 (sig = 0.001,n=207). We then recoded these predicted scores into 5 'Predicted Performance Bands' (quintiles) and cross tabulated them with the actual performance to give the following table.

		Performance Rating		
Performance Band		Low	High	Total
1	Count	35	7	42
	% within Band	83.3%	16.7%	100.0%
2	Count	33	8	41
	% within Band	80.5%	19.5%	100.0%
3	Count	31	13	44
	% within Band	70.5%	29.5%	100.0%
4	Count	27	14	41
	% within Band	65.9%	34.1%	100.0%
5	Count	21	18	39
	% within Band	53.8%	46.2%	100.0%
Total	Count	147	60	207
	% within Band	71.0%	29.0%	100.0%

It can be seen that the base performance level is 29% (60 out of 147 were rated as

'High Performers'). However only 16.7% of the people graded in Band 1 were actually High Performers whereas 46.2% of those graded as Band 5 were High Performers. This is shown graphically below:

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

**Inbound:** The Regression equation for Inbound staff was substantially similar with only Control entering the equation. Scores calculated using this equation correlated 0.230 (sig = 0.026, n=93). We again recoded these predicted scores into 5 'Predicted Performance Bands' (quintiles) and cross tabulated them with the actual performance to give the following table.

		Performance Rating		
Performance Band		Low	High	Total
1	Count	12	3	15
	% within Band	80.0%	20.0%	100.0%
2	Count	14	4	18
	% within Band	77.8%	22.2%	100.0%
3	Count	13	5	18
	% within Band	72.2%	27.8%	100.0%
4	Count	14	7	21
	% within Band	66.7%	33.3%	100.0%
5	Count	10	11	21
	% within Band	47.6%	52.4%	100.0%
Total	Count	63	30	93
	% within Band	67.7%	32.3%	100.0%

It can be seen that the base performance level is 32.3% (30 out of 93 were rated as 'High Performers'). However only 20% of the people graded in Band 1 were actually High Performers whereas 52.4% of those graded as Band 5 were High Performers. This is shown graphically below:

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

**Outbound:** There was reason to suspect that there would be a different result here. The outbound staff are more pro-active and act in more of a 'tele-sales' role. This was supported by the regression analysis which produced a different equation which included both Control (as before) and Will. The correlation between predicted and actual performance was 0.383 (sig. =.000, n=114). Following the same approach we produced a predicted performance band and the cross-tabulation of this score with actual performance is shown below.

		F	Performance Rating	
Performance Band		Low	High	Total
1	Count	24	0	24
	% within Band	100.0%	0%	100.0%
2	Count	18	5	23
	% within Band	78.3%	21.7%	100.0%
3	Count	18	6	24
	% within Band	75.0%	25.0%	100.0%
4	Count	12	6	18
	% within Band	66.7%	33.3%	100.0%
5	Count	12	13	25
	% within Band	48.0%	52.0%	100.0%
Total	Count	84	30	114
	% within Band	73.7%	26.3%	100.0%

The base performance level is 26.3% (30 out of 114 were rated as 'High Performers'). However none of the people graded in Band 1 were actually High Performers whereas 52% of those graded as Band 5 were High Performers. This is shown graphically below:

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

**Comment:** There is a clear relationship between Facet5 scores and performance for this group. The critical factor for all groups appears to be Control where Higher Control people are judged to be more effective. However there is a difference between Inbound and Outbound staff. Outbound staff, are required to be more proactive and assertive and for them Will is also important. In fact in a regression analysis Will is more important than Control. If people were hired and developed who conformed to these models it is likely that there would be a significant increase in the numbers of 'High Performing' staff employed.

## **Recruitment Consultants**

A major Australian Recruitment Consultancy with branches across Australia wanted to improve its selection and retention of top staff. They also wanted to avoid appointing staff who would not succeed since this had a negative affect on morale and was expensive.

**Sample:** 96 Recruitment Consultants employed by a National Consultancy in Australia. Each completed Facet5 either as part of the recruitment process (therefore prior to employment) or while employed as part of the research project.

**Criterion:** Each consultant was given a rating of 1, 2 or 3 representing High, Average or Low performance respectively. This rating represented the pooled judgement of the company board, including the person's line manager. The breakdown of the sample is shown below.

RATING	Frequency	%
High	23	24.0
Average	55	57.3
Low	18	18.8
Total	96	100.0

**Results:** For clarity we re-grouped the High and Average performers into one group of 78 people and compared their results with the 'poor' performers. This was as a result of further discussions with the Board who stated that in many cases they found it hard to differentiate between 'High' performance and 'Average' performance. However there was general agreement about the 'Poor' ratings.

On this basis four Facet5 sub-factors were identified where there was a significant difference between the groups. They were:

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

Low Performers tended to be somewhat lower on Will and Higher on Energy but these differences were not significant. It was the Affection and Control scores that proved significant. In particular we can see that there were four sub-factors that differentiated between the Low performers and those who were either Mid or High Performers. They were:

- A1 (Altruism) Lower is better
- A2 (Support) Lower is better
- A3 (Trust) Lower is better
- C1 (Discipline) Lower is better

The mean scores on these factors were:

Facet5 Sub-factor	Rated Perfo	ormance
	High + Mid	Low
A1:Altruism	5.24	6.11
A2:Support	5.22	6.17
A3:Trust	5.13	5.97
C1:Discipline	4.90	5.97

We then combined these into an index (using a Euclidean DSQ) and calculated the

score for each of the 96 people. The index showed how similar each profile was to the pattern of scores shown above. In fact the index was designed to check for the likelihood of a person being a 'Low' performer rather than a 'High' performer. This is not uncommon in Facet5 validation studies. There can be many ways of succeeding but there are certain elements which are good predictors of 'failure'. This Poor Performance Index correlated 0.263 with rated 'Poor' performance which is significant at the 0.01 level (N=96).

We then converted this relationship to an expectancy table (by recoding the Poor Performance Index into 5 roughly equal bands (quintiles). This table is shown below:

		Performance Rating		
Performance Bar	nd	High + Mid	Low	Total
1	Count	12	7	19
	% within Band	63.2%	36.8%	100.0%
2	Count	15	4	19
	% within Band	78.9%	21.1%	100.0%
3	Count	16	4	20
	% within Band	80.0%	20.0%	100.0%
4	Count	17	2	19
	% within Band	89.5%	10.5%	100.0%
5	Count	18	1	19
	% within Band	94.7%	5.3%	100.0%
Total	Count	78	18	96
	% within Band	81.3%	18.8%	100.0%

It can be seen that there is a clear relationship between the predicted Performance Rating and the actual rating received. Of the 19 people who were graded into Performance Band 5 (least similar to the Low performers) only 1 (5%) was actually a Low Performer. This compares with 18 out of 96 (19%) in the group as a whole who were Low performers. At Performance Band 4, only 2 out of the 19 (11%) proved to be Low Performers.

At the other end of the scale, those who were graded Performance Band 1, 7 out of the 19 people in the band (37%) proved to be Low performers. This is double the expected rate across the whole sample.

**Comment:** The sample size is small and therefore these results should be viewed as tentative until more data is collected. However what these results suggest is that consultants are more likely to 'fail' if they are insufficiently 'Business Like' and astute, if they are too supportive, kind and tolerant and if they take things too much at face value. Low performers also tend to be less reactive and flexible in the way they go about things, relying too much on rules and procedure. They react more slowly to changes in circumstances. They are less entrepreneurial. This would seem intuitively to be a reasonably good summary of the expected characteristics of a 'Recruitment Consultant'.

## **Facet5 and Impression Management**

This paper addresses the problems associated with identifying Impression Management (IM) in an uncontrolled environment (the web). It looks at the differences between paper based and web-based item presentation and introduces

the concept of Response Latency Analysis as a process for identifying attempts at Impression Management. It was first presented to the ITC Conference in June 2000 (Winchester, UK).

# Key points are:

- Web based data capture seems to speed up completion times. Paper based average was around 25 minutes. Web based is around 17 minutes. This is thought to be partly due to the single item presentation protocol creating a simpler and more focused cognitive task.
- People differ in their calculated response latencies
- People with higher 'Salience' attached to the assessment process (eg applying for a job) have significantly larger response latencies than those with lower attached Salience.
- Response Latency Analysis identifies not only where IM may be occurring but also identifies the domain(s) most affected.
- Response Latency Analysis is unique to Facet5 and provides a more effective base for identifying IM in web based data capture than more traditional protocols.
   For more detail on this click here.

# Reliability

As is usual we calculate two forms of reliability for Facet5: Consistency (Cronbach's Alpha) and Stability (re-test reliability). We have researched these a number of times since the original analysis during development. These results are summarised below:

#### Consistency

For a description of the concept of Consistency see the Facet5 User manual <u>Section 3 – Development of Facet5</u>. The original Consistency figures for Facet5 were calculated from the development sample of 693 cases. These and other results were as follows:

	Will	Energy	Affection	Control	Emotionality
Original	.75	.71	.80	.78	.81
Development					
Sample n= 693					
Larger sample	.68	.71	.77	.73	.74
N=6534 UK & Aust					
managers					
Balanced sample of	.66	.75	.77	.78	.75
240 used for					
National Norms					
Web based data	.68	.71	.76	.74	
n=7430					

# Stability

For a description of the concept of Stability see the Facet5 User Manual <u>Section 3 – Development of Facet5.</u> In addition see <u>Study 9 – Reliable Results</u> which provides an update. In general the Stability statistics are acceptable and have been stable over time. In summary they are:

	Will	Energy	Affection	Control	Emotionality
Original test (n=69)	.84	.85	.81	.85	.92
Increased sample (n=107)	.70	.64	.63	.73	.61
Sample without 'mischief-makers' (n=80)	.84	.81	.82	.81	.84

It should be noted that these numbers are all based on people who have genuinely retaken Facet5 either because time has elapsed or because of a change of circumstances. They therefore reflect what it likely to happen in the 'real world' as opposed to studies based on artificial re-testing in, for example, student populations.

# **Summary of Facet5**

Characteristic	Description		
Instrument name	Facet5		
Adaptation author	Norman Buckley & Rebekah Williams		
Local distributor	Consulting Tools Ltd		
Date of current version	2002 – constant revision		
Construct(s) measured	Big 5 + 13 sub-factors + 17 pseudo types		
	(Families)		
Administration mode	Web-based		
Response mode	Web-based		