British Psychological Society

Psychological Testing Centre

Test Reviews

Occupational Personality Questionnaire,(OPQ32)

Local test distributor / publisher: S H L Group Limited

Occupational Personality Questionnaire,(OPQ32)

Reviewers:	M. Smith & N. Banerji
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Senior Update Editor:	n/a
Update Editor	n/a

GENERAL INFORMATION AND DESCRIPTION OF THE INSTRUMENT

Test Name: Occupational Personality Questionnaire,(OPQ32)

Authors of the original test: P.Saville, R.Holdsworth, G. Nyfield, L. Cramp and W.Mabey

License for Distribution Issued To: S H L Group Limited

Local test distributor / publisher: S H L Group Limited

Date of Publication of Current Review/Edition: 1999−2005

Original Test Name: OPQ Concept

Date of Publication of the Original Test: 1984

Date of Current Review: November 2006

ISBN: 9781854335340

General Description of Test: The OPQ32 consists of two broad−spectrum tests of personality. There is a normative version (OPQ32n) and an ipsative version (OPQ32i). Both are designed to measure 32 facets of personality that are relevant to occupational uses such as selection, promotion, counselling, development, team building, organisational change and audits, training needs analysis and research. The 32 facets of personality are grouped into three domains that are divided into sub−domains as follows:

Domain: Relationships with people
Sub−domains: Scales
Influence: persuasive, controlling, outspoken, independent minded;
Sociability: outgoing, affiliative, socially confident;
Empathy: modest, democratic, caring.

Domain: Thinking style
Sub−domains Scales
Analysis: data rational, evaluative, behavioural;
Creativity and change: conventional, conceptual, innovative, variety seeking, adaptable;
Structure: forward thinking, detail conscious, conscientious,
rule following

Domain: Feelings and emotions
Sub−domains: Scales
Emotions: relaxed, worrying, tough minded, optimistic, trusting,
emotionally controlled;
Dynanism: vigorous, competitive, achieving, decisive.

The normative version also has a scale to measure social desirability and the ipsative version has a consistency scale. Both of these serve as a check to flag up any issues in the way the user is responding that could affect the interpretation of the profile.

With the use of appropriate software a number of secondary scores can be derived. These include the ‘big five’ personality factors, team roles, reporting style, follower style, learning style and potential on a range of management competencies.

This model of personality is very similar to that used in the earlier version of the OPQ. The original version was published in 1984 after considerable development work and was aimed at a UK based user population. At the time of its original publication the OPQ was considered groundbreaking in its style and approach, moving away from the more clinical based instruments that were in usage. OPQ soon became a widely used instrument which underwent various refinements to aid ease of use and also to be used internationally. The most recent revision took five years to complete and was completed in 1999. It was undertaken largely to improve reliability and focus scales more tightly up on occupationally relevant traits. The test appears to measure surface traits rather than source traits.

The two tests reviewed here are particularly suitable for use with managers and graduates. They are part of a family of shorter, more focused, tests that include the CCSQ (customer contact jobs), OPQ Factor (sales, technical &administrative jobs), WSQ (technical &semi−skilled staff) and OPQ Images that gives scores on the big five personality factors and on achievement motivation. The test is available in many languages and may therefore be used in most European countries and globally as long as there is language version that is appropriate for the candidate.

The tests are supported by a wide range of materials that include practice leaflets for test takers, question books, answer sheets, profile charts, scoring keys, a comprehensive user manual and an even more comprehensive technical manual that can be downloaded from the Internet. The questionnaire can be completed online as well as on paper and the normative version can be scored manually by the test user. A wide variety of reports can be produced by computer for both versions.

Classification

Content Domains:
- Personality − Trait

Intended or main area(s) of Use:
- Work and Occupational
- Counselling, Advice, Guidance, and Career Choice

Intended mode of use (conditions under which the instrument was standardised and validated):
- Controlled unsupervised administration. Control over conditions (timing etc) and some control of identify of the test taker (e.g. tests administered over the Internet but only to known individuals − password restricted access)
- Supervised and controlled administration. Test administration under the control of a qualified administrator or proctor

Description of the populations for which the test is intended:
As a broad−spectrum test of personality it can be used with most working adult populations. Its primarily use is likely to be for managers, professional workers and graduates. Designed with the international market in mind, versions are available in a range of languages with specific country and occupational group norm data.

Number of scales and brief description of the variable or variables measured by the test:
There are 32 trait scales which fall into 3 main clusters: relationships with people; thinking style; feelings and emotions.

The scales related to relationships with people are: persuasive; controlling; outspoken; independent minded; outgoing; affiliative; socially confident; modest; democratic; caring.

The scales related to thinking style are: data rational; evaluative; behavioural; conventional; conceptual; innovative; variety seeking; adaptable; forward thinking; detail conscious; conscientious; rule following.

The scales related to feelings and emotions are: relaxed; worrying; tough minded; optimistic; trusting; emotionally controlled; vigorous; competitive; achieving; decisive.

The normative version (OPQn) contains an additional social desirability scale and the ipsative version (OPQi) contains an additional consistency scale

Items format:
- Likert ratings
- Forced choice, mixed scale alternatives (ipsative)

Number of test items:
The normative version has 230 questions where respondents indicate an agreement on a 1−5 Likert scale. Each scale is based on an average of 7 items.

The ipsative test has 104 blocks of four choices where the candidate chooses the statements most and least like them. In each tetrad a respondent indicates the most appropriate and the least appropriate statement.

Administration modes:
- Supervised Group administration
- Computerised locally−installed application − supervised/proctored
- Computerised locally−installed application − unsupervised/self−assessment
- Computerised Web−based application − unsupervised/self−assessment
- Computerised Web−based application − supervised/proctored

Response mode:
- Paper and pencil
- Computerised

Time:
Preparation: 5 minutes
Administration: 35 − 45 minutes
Scoring: 5 − 10 minutes
Analysis: 20 minutes
Feedback: 1 hour

Different forms of the test:
There are both normative and ipsative versions. Only the normative one can be fully administered and scored via a paper and pencil method, although the ipsative one could be completed on an answer sheet and then typed or scanned and then scored by an analysis program.

Both versions can be administered via computer, either directly using an SHL supplied pocket PC or on an ordinary PC via the internet or on one which has been preloaded with specific software. This includes : the Expert Assessment System, OPQ32 Expert Pack and a dongle containing sufficient units for the administration. Output can be via computed sten scores which can be manually put onto a profile sheet or by one (or more) expert system reports

Measurement and Scoring

Scoring procedure for the test:
- Computer scoring with direct entry of responses by test taker
- Computer scoring manual entry of responses from the paper response form
- Computer scoring by Optical Mark Reader entry of responses from the paper response form
- Simple manual scoring key−clerical skills only required
- Bureau−service − e.g. scoring by the company selling the test

Scores:
Hand scoring is only available for the normative version. This is done simply by the use of overlays to count up the scores for each of the 32 scales plus the social desirability scale. For each scale a raw score is achieved and simply transferred to a sten score by seeing where it comes on the profile sheet. At the moment there is only one prenormed UK chart available. However users can use a blank profile chart in conjunction with other norm tables published in the manual.
The social desirability scale is scored in the same way. High or low scores on this can flag up the need for caution in interpreting the profile.

The ipsative version is too complex to be hand scored and is only available as a computer scoring option. There is a measure of consistency to flag up any unusually high or low response patterns in terms of consistency.

Score transformation for standard scores:
- Normalised − scores obtained by use of normalisation look−up table
- This is assumed although it is not explicitly stated.

Scales Used:

Standard scores:
- Stens
-

Computer−Generated Reports

Are computer generated reports available with the instrument?:
- Yes

Number of Computer Generated Reports available: 21

Do distributors offer a service to correct and/or develop computer generated reports?:
- No

Report Name: OPQ32 Profile

Brief description of Reports..	
Media:	• Graphics Only
Complexity:	• Simple
Report Structure:	• Scale based
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on empirical/actuarial relationships
Modifiability:	• Not modifiable
Degree of 'finish':	• Draft quality
Transparency:	• Clear linkage between constructs, scores and text
Style and tone:	• Graphical display only so style and tone not applicable
Intended recipients:	• Qualified test users

Report Name: OPQ32 User Report

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Medium
Report Structure:	• Scale based • Factor based
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Mixture of clear/concealed linkage between constructs, scores and text
Style and tone:	• Directive •

Intended recipients:	• Qualified test users

Report Name: OPQ32 Manager report

Brief description of Reports..	
Media:	• Text only
Complexity:	• Medium
Report Structure:	• Scale based • Factor based
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Third parties

Report Name: OPQ32 Candidate Report

Brief description of Reports..	
Media:	• Text only
Complexity:	• Medium
Report Structure:	• Scale based • Factor based
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Guidance
Intended recipients:	• Test takers

Report Name: OPQ32 Management Competency Profile

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Simple
Report Structure:	• Construct based
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on empirical/actuarial relationships • Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Collection of simple scale descriptions with no text hypotheses or linkages. The scale descriptions are directive in tone.
Intended recipients:	• Qualified system users • Third parties

Report Name: OPQ32 Team Impact Report − group development

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Medium
Report Structure:	• The report is based on the SHL Team Impact Model which is focused on actual team processes.
Sensitivity to context:	• Pre−defined context−related versions
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified system users • Third parties

Report Name: OPQ 32 Team Impact Report − individual development

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Simple
Report Structure:	• The report is based on the SHL Team Impact Model which is focused on actual team processes.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Test takers • Third parties

Report Name: OPQ32 Team Impact Report − selection

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Simple
Report Structure:	• The report is based on the SHL Team Impact Model which is focused on actual team processes.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users • Qualified system users

Report Name: OPQ32 Big Five and Great Eight Profile

Brief description of Reports..	
Media:	• Graphics Only
Complexity:	• Simple
Report Structure:	• Scale based
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on empirical/actuarial relationships
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Clear linkage between constructs, scores and text
Intended recipients:	• Qualified test users • Third parties

Report Name: OPQ32 Team Types/Leadership Report

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Simple
Report Structure:	• The report is based on the SHL Team Impact Model which is focused on actual team processes.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users

Report Name: OPQ32 Development Action Planner

Brief description of Reports..	
Media:	• Text only
Complexity:	• Medium
Report Structure:	• The report is based on the SHL Inventory of Management Competencies (IMC) model.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Test takers

Report Name: OPQ32 Maximising Your Learning

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Medium
Report Structure:	• The report is based on an approach to learning based on two dimensions: firstly, whether the person prefers an analytic or intuitive approach and secondly, whether the person prefers to learn in a hands on way or by observing.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Guidance
Intended recipients:	• Test takers

Report Name: OPQ32 Emotional Intelligence

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Medium
Report Structure:	• The report is based on emotional intelligence defined in terms of two key areas: managing feelings and managing relationships. Managing feelings looks at the candidate's feelings and emotions. Manging relationships looks at their empathy and social ease.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Guidance
Intended recipients:	• Qualified test users

Report Name: OPQ32 Leadership Potential

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Simple
Report Structure:	• The report is based on SHL's competency−based Leadership model.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on empirical/actuarial relationships • Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users

Report Name: OPQ32 Universal Competency Report

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Simple
Report Structure:	• The report is based on SHL's Universal Competency Framework (UCF).
Sensitivity to context:	• Pre−defined context−related versions
Clinical−actuarial:	• Based on empirical/actuarial relationships • Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Draft quality
Transparency:	• Mixture of clear/concealed linkage between constructs, scores and text
Style and tone:	• Guidance
Intended recipients:	• Qualified test users • Third parties

Report Name: OPQ32 Team Types/Leadership Profile

Brief description of Reports..	
Media:	• Text only • Graphics Only
Complexity:	• Simple
Report Structure:	• This report is based on Belbin's Team Types and Bass's Leadership and Reporting Styles
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of one expert
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users

Report Name: OPQ32 Candidate Plus Report

Brief description of Reports..	
Media:	• Text only
Complexity:	• Simple
Report Structure:	• Scale based • Includes information on likely interactions within teams
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Guidance
Intended recipients:	• Test takers

Report Name: OPQ32 Manager plus report

Brief description of Reports..	
Media:	• Text only
Complexity:	• Medium
Report Structure:	• Scale based • Provides information on likely competencies using the Universal Competency Framework (UCF) and key elements of likely team performance using the SHL Team Impact model of team processes.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users • Third parties

Report Name: OPQ32 Premium Plus Report

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Medium
Report Structure:	• Scale based • Includes the profile, the User Report, Manager Plus Report, Candiate Plus Report, Universal Competency Report and Team Impact Selection Report.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on empirical/actuarial relationships • Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users

Report Name: OPQ32 Premium Report

Brief description of Reports..	
Media:	• Integrated text and graphics
Complexity:	• Medium
Report Structure:	• Scale based • Includes the profile, the User Report, the Manager Report, the Candidate Report, the Management Competency Profile and Team Type and Leadership Styles.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on empirical/actuarial relationships • Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users

Report Name: OPQ32 Users and Managers Report

Brief description of Reports..	
Media:	• Text only • Integrated text and graphics
Complexity:	• Medium
Report Structure:	• Scale based • This provides a combination of the Users and Managers Reports.
Sensitivity to context:	• One version for all contexts
Clinical−actuarial:	• Based on clinical judgement of group of experts
Modifiability:	• Not modifiable
Degree of 'finish':	• Publication quality
Transparency:	• Clear linkage between constructs, scores and text • Concealed link between constructs, scores and text
Style and tone:	• Directive
Intended recipients:	• Qualified test users • Third parties

Supply Condition and Costs

Documentation provided by the distributor as part of the test package:
- User manual
- Supplementary technical information and updates (e.g. local norms, local validation studies etc)
- Technical (psychometric) manual

Methods of publication:
- Paper
- Internet download

Start−up costs:
All users must be trained. The cost of this varies between £595+VAT and £2900 +VAT depending on the previous experience of the participant.

All users must also be licenced. The cost of this varies from £579 +VAT for an individual licence to £1675 +VAT for a corporate one. This is renewable on an annual basis.

The user manual is £94. An OPQ starter kit is £395 +VAT and can be puchased without a license.

Apart from the paper and pencil, normative version, scoring and reporting back requires a bureau service either online or offline or the use of dongle units held on a system supplied by SHL.

The pocket expert start up kit is £895 +VAT, the PC expert start up kit is £1800 +VAT. The range of reporting options is huge and typical PC prices range from £1.75 +VAT to £105 + VAT per report. A candidate may require more than one reporting option.

Recurrent costs:
The most straightforward option to cost is to administer and profile the paper and pencil normative version which works out at approx £10 per candidate.

There is a wide variety of technology options each with their associated costs. Most work on the concept of dongle units. These vary in price from approx 30p to 50p depending on the medium used and the amount purchased. Administration and scoring works out at around £10 per candidate once VAT is taken into

account.
As mentioned above, an annual licence is required to use OPQ32.

Test−related qualifications required by the supplier of the test:
- Test specific accreditation

Professional qualifications required for use of the test:
- Holder of BPS Certificate of Competence in Occupational Testing Level A
- Holder of BPS Certificate of Competence in Occupational Testing Level B

Evaluation of Test Materials

Key to symbols:

★	Inadequate
★★	No longer used
★★★	Adequate/Reasonable
★★★★	Good
★★★★★	Excellent
[N.r.i.o.r]	(for updates only) Item was not rated in original review

Quality of the explanation of the rationale, the presentation and the quality of information provided: ★★★★★

Overall rating of the Quality of the explanation of the rationale:	★★★★
i) Theoretical foundations of the constructs:	★★★★
ii) Test development procedure:	★★★★★
iii) Thoroughness of the item analyses and item analysis model:	★★★★★
iv) Explanation of content validity:	★★★★★
v) Summary of relevant research:	★★★★
Adequacy of documentation available to the user (user and technical manuals, norm supplements etc):	★★★★★
i) Rationale:	★★★★
ii) Development:	★★★★★
iii) Standardisation:	★★★★★

iv) Norms:	★★★★★
v) Reliability:	★★★★★
vi) Validity:	★★★★★
Quality of the Procedural instructions provided for the user:	★★★★★
i) For test administration:	★★★★★
ii) For test scoring, norming etc:	★★★★★
iii) For interpretation and reporting:	★★★★
iv) For providing feedback and debriefing test takers and others:	★★★★
v) For providing good practice issues on fairness and bias:	★★★★★
vi) Restrictions on use:	★★★★
vii) References and supporting materials:	★★★★★
Quality of the materials:	★★★★★
i) General quality of test materials (test booklets, answer sheets, test objects, software, etc):	★★★★★
ii) Test quality of the local adaptation (if the test has been translated and adapted into the local language):	N/A
iii) Ease with which the test taker can understand the task:	★★★★★
iv) Ease with which responses or answers can be made by the test taker:	★★★★★
v) Quality of the items:	★★★★★

Reviewer's comments on the documentation (comment on rationale, design, test development and acceptability):
The documentation is superb. It is well−designed and has an aesthetic appearance. Both the user and the technical manual are well written and easy to understand. Considerable effort appears to have gone into both to ensure that the reader can use them as easy reference sources − both contain prefaces that provide concise summaries of each chapter. The technical manual in particular has succeeded in presenting a lot of complex information in an easy to follow style. The statistical and development detail is all there and is written in a way that does not require the user to have a sophisticated technical understanding of questionnaire design. It is usually very easy to locate information but given the volume of information available both manuals would benefit from the inclusion of an index. However, the documentation could be improved by a better explanation of the problems, dangers and advantages of ipsative tests.

OPQ32 is designed to be jargon−free, straightforward and transparent. Despite being a complex, 32 trait instrument, it is easy to navigate around the instrument and all the associated documentation.

Considerable care has been taken with the design of the items to ensure that they are easy to understand, do not contain more than one concept, use clear and explicit language and are related to the world of work in the 21st century. In addition to this, the items have been validated to ensure relevance when translated into other languages for international use. The questionnaires are easy to use and are likely to have a strong face validity amongst test takers and organizations. The instructions are clear and there is the option of test takers having access to a practice leaflet in advance to ensure that they fully understand how to complete the questionnaire. The output in terms of the profile of scores is equally accessible. The scale labels accurately describe the item content and are relevant to use in occupational settings. The scales themselves relate to the three broad areas of relationships, thinking, and feelings and emotions. These in turn are broken down into factors within which each scale lies. This clustering aids interpretation and makes it easier to identify themes within the personality whilst maintaining the detail.

Norms, Validity & Reliability

Evaluation of technical information: 

Norms or reference group information:

Overall adequacy:	
i) Appropriateness for local use, whether local or international norms:	
ii) Appropriateness for intended applications:	
iii) Sample sizes:	
iv) Procedures used in sample selection:	UK general pop norm collected by Office of National Statistics: using postcode stratified by region and socio−economic status. Stratified geographical samples from USA, also some incidental samples of managers, graduates and other groups.
v) Quality of information provided about minority/protected group differences, effects of age, gender etc:	

Reviewers' comments about the norms:
Totally new norm groups have been developed for OPQ32 in tandem with the changes to the items and scales of the original questionnaire. By any standard, the norms are good and available for inspection in the User Manual. At the centre are good, scientifically derived population norms for the UK for the OPQ32n and a large standardisation sample for the OPQ32i. These are supplemented by norms for managerial and professional groups and norms for graduates. Additional norms are provided in ‘Normline Supplements’ which are published regularly.

The Technical Manual contains means and standard deviations for an extensive range of groups including:

• UK males and females
• UK managerial and professional groups, males and females

- UK graduates, males and females
- UK whites and ethnic minorities
- USA males and females
- USA whites and ethnic minorities
- South Africa males and females
- South Africa whites and ethnic groups
- Australia males and females
- International data set males and females

There is a discussion of gender and age related differences in scores in the Technical Manual. This is based on data from the standardisation samples for the normative version and for a large international data set for the ipsative version. (It should be noted that the normative version only tends to be used in English speaking countries with translations into other language using the ipsative format.) Gender showed consistent, small to medium effects while age effects were small and inconsistent. The differences found are reported fully in the Technical Manual.

Score differences in samples from around the world are also reported. Data from countries, including those listed above, are represented for each scale. Line graphs are used to show scores for males and females in each country. The presentation of this data is supported by a description of the issues involved in using aggregated norms and the dangers of making assumptions about characteristics of different nationalities. It is suggested, however, that the data can be useful in highlighting differences that may be expected when assessing candidates from different countries for the same position. The development of norm groups is ongoing in each country of operation.

In addition, mean scores are available for a wide range of occupational groups including: undergraduates; directors; professional workers in science engineering and technology; professional workers in education welfare and health; clerical and secretarial staff; personal and protective service staff; plant and machine operatives; banking; sales; consultants; manufacturing; hospitality and education.

With so much information available it would be useful for the User Manual to provide guidance on which norms to use in typical selection or guidance situations. For example, how should an English applicant for a job in a German multinational organisation based in Sweden be judged against English, German or Swedish norms?

It is not always clear which norm group is used to generate reports using the Expert software. When the profile is provided as part of the generated report then information about the norm group is included but this doesn't seem to be the case for some text based reports. Consequently it is not clear what impact choosing an alternative comparison group would have on the textual descriptions.
All of the more recent reports do specify the norm groups that have been used.

Validity:

Overall adequacy:	
Construct Validity (overall adequacy):	
i) Designs used:	Correlations with other instruments Intra−scale (item−rest correlations) Differences between groups Matrix Multitrait−Multmethod Exploratory Factor Analysis Confirmatory Factor Analysis

ii) Sample sizes:	★★★★★
iii) Procedure of sample selection:	Factor analyses conducted on data from good standardisation sample. Other studies largely based on incidental samples.
iv) Median and range of the correlations between the test and other similar tests:	★★★★
v) Quality of instruments as criteria or markers:	★★★★
vi) Differential Item Functioning (DIF) analyses:	N/A
Criterion−related validity: overall adequacy:	★★★★
i) Description of the criteria used and characteristics of the populations:	Concurrent; Predictive; Post−dictive
ii) Sample sizes:	★★★★★
iii) Procedure of Sample selection:	Incidental
iv) Median and range of the correlations between the test and criteria:	★★★

Reviewers' comments about validity:

Evidence of the construct validity of the OPQ32 comes from a variety of sources. The rationale of the OPQ32 is to have a large number of discrete scales each of which measures an aspect of personality related to the world of work. As such the items are straightforward, rationally linked to the scale and have a good degree of internal consistency. Under these circumstances it can be argued that the construct validity of the instrument has been ‘built in’.

The results of a range of studies investigating construct validity are presented in the Technical Manual. High correlations are reported between OPQ32 scales and similar scales in older or related versions of OPQ questionnaires, providing evidence of their equivalence. Correlations are presented between the OPQ32 scales and a number of other personality questionnaires including the 16PF5 (n=147) and 16PFI (n=81); the Occupational Personality Profile (n=231); the Hogan Personality Inventory (n=108); the Minnesota Multiphasic Personality Inventory (n=126); the Myers Briggs Type Indicator (n=142) and Enneagram Types (n=241). These are harder to evaluate as the correspondence between the scales requires interpretation. It should not be expected that all personality scales on one test will have significant correlations with all personality scales on another test. At face value the correlations range from inadequate to good using the review criteria above. However the true validity is hard to judge from the correlations given; because of a laudable wish to avoid false claims, the manuals only give raw correlations with no correction for artefacts. This is likely to under−estimate correlations by, perhaps, 50%.

Another way to evaluate the evidence is to assume that if personality has five dimensions about 21% (20% true plus 1% false) of correlations should be noteworthy, that is, have values of 0.3 or more. The results of the raw correlations for some of the marker tests were as follows:

	% notable	median raw correlation
16PF (Industrial Version)	16.4	about 0.45
Occupational Personality Profile	8.0	about 0.35
Hogan Personality Inventory	16.1	about 0.45
MBTI	16.4	about 0.35
NEO	14.4	about 0.35

On balance it can be concluded from this evidence that the construct validity of the OPQ32 is good − despite correlations that appear low.

Although it has been noted in the tables that no DIF analysis has been carried out between the various language versions of the instrument, the authors of this version used structural equation modelling to establish the equivalence or measurement invariance of the different language versions. This measure was carried out using a sample of 48,991 multilingual test takers using the Ipsative version of the instrument and equivalence was established.

Considerable research effort has been expended to demonstrate the fit between the OPQ32 and the Big Five factors following well publicised research which suggested that the OPQ did not measure the Big Five personality factors. A study to map the OPQ32 to the Big Five Model of personality is described. Experts working for the publisher carried out conceptual mapping between the OPQ32 and the NEO PI−R as the example of a Big Five measure. The hypothesised relationships were then assessed using data collected from 264 students who completed both the OPQ32 and the NEO short version. The correlations achieved were in line with the conceptual mapping exercise and robust measures of the Big Five were constructed using weighted composites of OPQ32 scales.

A number of exploratory, and confirmatory, factor analyses were carried out on large samples to explore the structure of the OPQ32 and to fine tune the equations used to derive Big Five scales from the OPQ32. Finally a number of convergent and divergent validity analyses were carried out. The results from these demonstrated that there is strong convergent validity between the OPQ32 and accepted measures of the Big Five.

The technical manual provides a great deal of information concerning the criterion validity of the OPQ32. Part 1 looks at studies carried out in the 1990s using earlier versions of the OPQ32, most notably those based on the OPQ Concept family of questionnaires. Given that 25 of the Concept scales correlate highly with very similar scales in the OPQ32, the argument is made that these are essentially alternate forms of the same scales and that consequently evidence of validity obtained for one can be applied to the other. At a general level this is an acceptable argument although a test user would need to check any assumptions derived from this earlier research in some detail at the individual scale level to check equivalence.

None of the studies predict a criterion such as an overall rating of job success rather they evaluate the relationships between defined job competencies and those personality scales hypothesized to be linked to successfully achieving those competencies. In these earlier studies a variety of competency frameworks are utilised. Often the actual competencies used as criterion measures are later mapped onto the SHL Inventory of Management Competencies (IMC) for analysis purposes. Data from a range of job roles in a variety of organizations and countries are collected together on the assumption that the competencies are sufficiently general to be broadly the same. This approach enables generalizations regarding the relationships between scales and competencies to be made. This is particularly helpful given that in many studies there are unlikely to be sufficiently large groups of managers in similar roles within one organization to enable meaningful statistical analysis, so that aggregation of data becomes important if conclusions are

to be drawn. However the test user needs to be aware that the meta−analyses are based on a number of assumptions not all of which are likely to be accurate.

A final study described in Part I investigated not only the concurrent relationships between scales and work competencies but also predictive relationships to see whether scores on relevant scales as identified by experts from the results concurrent study were linked to future performance. In evaluating the results of the two studies it is clear that the concurrent one showed the strongest relationships as virtually all the hypothesized scale scores produced statistically significant correlations with the assessed competencies. The results of the predictive study tended to be less strong and for some scales the hypothesized relationship was quite low; however overall, the results were judged to support the usefulness of using personality scales to predict performance on the identified competencies.

The studies reported in Part 2 have built on the earlier research with the Concept instruments. The main conclusions from the studies in Part 1 are that there is clear evidence that information from the OPQ personality scales adds to the level of prediction achieved by measures of ability and also that there is the possibility that estimates of validity are limited not by the instruments themselves but rather by the use of criteria that are not reliable or wholly relevant. In Part 1 some of the studies used the SHL Inventory of Management Competencies, in Part 2 the use of the SHL Universal Competency Framework (UCF) is described, both of which offer more reliable criteria. The UCF goes further in that it is designed to map the whole competency domain and is based on 112 detailed components that map across to 20 competency dimensions and 8 broad areas. The logic is that any work role can be described in terms of the UCF. An expert test user, utilising existing research findings, can select the combination of appropriate measures (ability, motivation and personality) that can be used to predict success in that role.

Eight recent studies of this approach are presented. In essence, the results from six of the eight studies yield median correlations of composite scores with ratings on individual competencies of 0.20, 0.23, 0.20, 0.11, 0.26 and 0.16, respectively. So, on average, a composite of three or so scales predicting performance on a single competency would expect to show a correlation of about 0.19. It is safe to say that a higher validity is likely to be obtained if the OPQ32 composites are combined to predict all the relevant competencies (and only the relevant competencies) for a particular work role. The extent of the increase in overall validity would be affected by the degree of correlation between the OPQ32 composites. Composites that are related will show less incremental validity in predicting performance in the work role than those composites which are more independent. The technical manual suggests that value of between 0.40 and 0.50 can be obtained.

Of course these results are based on a number of assumptions. First there is the assumption that the UCF maps competencies relevant to all jobs. Further, the subjects in the studies usually perform a melange of jobs in a wide range of companies, in different industries and in different countries. Allowing these factors to vary introduces additional variance that is not present in typical selection or guidance situations and it will tend to depress validity coefficients. This is in addition to any underestimation that results when corrections are not made for artifacts as is the case here.

Reliability:

Overall adequacy:	
i) Data provided about reliability:	Standard error of measurement given for a number of different groups.
Internal consistency:	

i) Sample size:	★★★★★
ii) Median of coefficients:	★★★★
Test retest stability:	
i) Sample size:	★★★
ii) Median of coefficients:	★★★★
Equivalence reliability:	
i) Sample size:	N/A
ii) Median of coefficients:	N/A

Reviewers' comments on Reliability (comment on confidence intervals for reliability coefficients and provide Spearman Brown equivalents for a 30−item scale):
OPQ32 has good reliability credentials. Concentrating on the UK version the majority of the data presented was internal consistency data. Two data sets were presented for the normative version of the questionnaire within the UK, the trial group had a median internal consistency of 0.84 across all the scales (range of 0.7 – 0.9) and the general population sample had a median of 0.79 (range of 0.65 – 0.87). The ipsative version had a median internal consistency of 0.81 (range of 0.67 – 0.88) based on the UK standardization sample. The internal reliabilities for composite scales (extroversion, openness etc) is even higher at about 0.89. All studies were based on large samples. Although focusing mainly on the UK version of the instrument, it is worthy of note that internal consistency data was also provided for US, South African, Japanese and European versions.

The values for the Standard Error of Measurement, when converted into sten scores, were consistent with the practice of marking each achieved scale value with a band of +/− 1 sten to take account of measurement error. This result provides further evidence of the accuracy of the items chosen to make up the questionnaire.

One test – retest study was presented for the UK normative version of the instrument, this was based on 107 higher education students. The time lapse between testing was approximately one month. The reliabilities ranged from 0.64 to 0.91 with a median of 0.79 across all the scales. Five scales fell below 0.7 and two of these had undergone some changes in the test – retest period. The data provides some support that the traits measured and the way in which they are measured by OPQ32 are stable. However it would be helpful to have the reassurance of extra studies confirming test−retest reliability of the normative version and also studies using the ipsative version.

Information on the equivalence of the normative and ipsative versions of OPQ32 is provided. A study with 152 undergraduates yielded a median scale correlation of 0.67 whilst a larger study with 488 individuals who participated in OPQ training courses yielded a median scale correlation of 0.71. However, given the differences in response modes and scoring protocols the two versions should not be treated as parallel versions that can be used interchangeably. As the Technical Manual points out the fact that the correlations between the two versions are lower than their internal consistency reliabilities suggests that the two versions measure constructs that are similar but not the same. Further evidence shows that differences are more likely to occur for people with a high number of 'average' scores on the normative version, that is, 'flatter' profiles, as the results suggest that it is harder for such candidates to answer the ipsative version consistently. Advice on interpretation in the test User's Manual is not to treat the versions as interchangeable, this is demonstrated using the example of someone whose profile differed dramatically on certain scales between the two versions.

Other information of interest in this section of the review is some data presented on administration mode equivalence. Comparisons were made between paper and pencil versions and online versions and also between supervised and unsupervised administration. Only small differences were achieved and it was concluded that comparable psychometric properties were found regardless of the mode of administration.

Quality of Computer−Generated Reports

Report Name: Summary ratings for all reports

Overall adequacy of computer−generated reports:	★★★★
i) Scope or coverage:	★★★★
ii) Reliability:	★★★★★
iii) Relevance or Validity:	★★★★
iv) Fairness, or freedom from systematic bias:	★★★★
v) Acceptability:	★★★★
vi) Practicality:	★★★★
vii) Length−number of printed pages:	This index does not apply very well to this test and reports. There are multiple reports of widely different lengths. As there are a large number of scales (32 plus, perhaps 10 other indices) even a long convoluted report will appear good. As it happens, the length of most reports seem suitable to their purpose.

Reviewers' comments on the quality of computer generated reports:
OPQ32 has a multitude of different computer generated reports for different audiences and different purposes. The range and variety of reports is impressive and perhaps bewildering. Some reports are simple descriptions of how the test taker has emerged on the 32 scales and others use the basic OPQ32 data to explore how the candidate emerges on a range of different derived models such as leadership style, team types, emotional intelligence, management competencies etc. The User Manual is very good in describing the various reports, who they are aimed at, and what they can be used for. It also flags up what they are less good at. Both the normative and ipsative versions of OPQ32 have scales that indicate how the test taker has responded to the items. If this falls into a danger area it is flagged up in the computer generated reports.

Interestingly, probably the most useful report for the skilled user is the simple profile chart. It is visual and easy to interpret, OPQ32 is multi−scale but it is not a particularly difficult instrument to extract key information from. The skilled user will be able to see links across scales and sections of the chart that many of the more sophisticated reports do not make. They will use this to tailor their interpretation to whatever organisational framework is in operation and the subtleties under which the instrument is being used.

The text based reports for managers and candidates are fine in themselves, the language is positive and advisory, but with the visuals and the numbers removed it tends to be a bit difficult to see where the key aspects of someone's personality may lie.

The derived reports tend to go straight to the derived scores without indicating how the person emerged on the OPQ32 itself, the instrument that they actually completed. Some make use of some simple bar charts to add a visual element to the text but these are generally blunt five point scales which lose the richness of the original data that fed into them. A clue can be gleaned from the bullet point statements that accompany the visuals as to which scales have loaded onto which derived measure, but because the language is innocuous and again no sten scores are given, it can be easy to miss what could be extremes of personality. Bearing in mind that some reports can cost as much as £250, care needs to be taken that these do actually give the range of information necessary for the user. This is especially pertinent as the organisation/client may end up ordering multiple reports for each candidate.

There is very little in the manuals concerning how the protocols and algorithms for the derived reports were developed and tested. However, there is nothing in the reports which is counter−intuitive or is cause for concern. The reports appear to be comprehensive and reflecting the scores on a test. However, this judgement is derived from an inspection of the various reports. It would be very desirable for the test publisher to provide more details of the way that reports are constructed and the links to test scores. The information presently available for review does not allow the validity and other technical aspects of reports to be confirmed.

FINAL EVALUATION

Evaluative report of the test:

Without doubt the OPQ32 is at the top of the first rank of personality tests, especially those used in occupational settings. Based on a conceptual model of personality, the instrument has strong technical and statistical credentials to back this up. One of its main advantages is that it provides a fine−grained analysis of personality. Even allowing for duplication between scales, the 32 aspects measured provide great detail of occupationally relevant traits – which also map onto a coarser grained analysis of personality, the Big Five. Considerable research effort has been put into successfully deriving measures of the Big Five based on weighted composites of scales from the OPQ32. However, evidence from the criterion related studies of validity demonstrate how useful a fine−grained analysis of personality can be for predicting work competencies. The use of competency frameworks − the IMC and UCF − represents marked progress in analyzing the world of work and may have immense future theoretical and practical importance.

However the research is complex and challenging for the test user to apply to their own situation. It would be helpful if examples could be provided that illustrate the links between conventional studies of validity, where personality scales are related to overall job outcomes, and this new approach where the job is analysed in terms of competencies and composites of relevant OPQ32 scales constructed to predict them, with estimates given of the validity values likely to be achieved. As it is, test users may still look to SHL to report standard validity studies such as examining how, for example, some OPQ scores (e.g. persuasive, outgoing, tough−mindedness and competitiveness) correlate with success of 172 salespeople or a study comparing scales related to emotional stability with the occupational success of pilots.

The evidence of internal consistency reliability is good, if not excellent, although further studies should be carried out to investigate test−retest reliability, as at present evidence of the stability of the scales is unsatisfactory. The norms are good and available for inspection by the user. They are available for, probably, an unrivalled range of countries and groups. Differences in scores between groups are fully analysed and described; there does not appear to be any evidence of bias or unfairness. Construct validity is good.

The OPQ32 is superbly presented and marketed. These are important attributes in obtaining acceptability by individuals and organizations. The instrument is straightforward; it is easy to use and interpret. The content of questions and design of tests, answer sheets, profile sheets and scoring keys are excellent. The

instrument is uncontroversial and can be used in a wide variety of occupational situations e.g. selection, development, coaching, team development etc. It is not a clinical instrument and although it may have a part to play in exploring some of the more sensitive people applications such as counseling it is likely that other tools would need to be used to help uncover some of the deeper aspects of the issue. Computerised versions are available in several media and evidence of their equivalence is provided.

In addition to providing personality information, the test publishers have invested in the development of a large range of reporting options that users can take advantage of if they so wish. Many of these give derived data on aspects not directly measured by the instrument e.g. emotional intelligence. More information as to how these links have been made would be helpful, currently the information concerning their production is not, in any way, sufficient to allow an external audit of their veracity.

As ever, care needs to be exercised by the user when using an instrument to glean information about aspects it was not specifically designed to tap. The OPQ32 is only a personality measure, it contains no items that measure skill directly. It could be easy for less sophisticated users to ‘forget’ this and to make assumptions about skill not justified by the instrument. This is always an issue with personality measures and this can be further compounded when derived measures are produced (especially when other instruments do measure skill).

The OPQ32 has an international reach and that is important to multinational organizations and those servicing their HR needs. The test publishers have successfully exploited numerous commercial and research opportunities to build up a large, up−to−date bank of data both in the UK and internationally. This work is ongoing and the resources and infrastructure is in place to ensure that the technical data is updated and expanded.

A major advantage of OPQ32 is its acceptability to users. The scales are relevant and appropriate and the items are clear and transparent, relating rationally to the scales they load onto. As ever this has the downside of being more easy to fake, and although the social desirability and consistency measures go some way in helping this to be flagged up, this is not a problem that will go away, especially when used as part of an assessment process in which a lot is at stake. There is anecdotal evidence that the OPQ suite of instruments is somewhat a victim of their own success. OPQ is a widely used instrument and many job seekers at middle/senior levels have done this or the previous version on numerous occasions. They have received feedback, and if unsuccessful, are fully aware of the areas of their approach they need to change to enhance the chances of success. OPQ32 has incorporated key changes but is still fundamentally an adaptation of a very familiar instrument.

The OPQ32 has a wealth of supporting research and documentation. The requirement that users must undertake compulsory training further serves to ensure that users are competent and confident in its usage.

Conclusions:

OPQ32 is a high quality instrument which is specifically designed to be reliable, valid and fair for most ethical occupational uses in the world of work in the 21st century. The previous version of the instrument, OPQ Concept 5.2 was a very solid instrument in this respect. The OPQ32 has successfully built upon this foundation to review and refine the items and scales and to produce changes which enhance its ability to be used both internationally and in the future. The OPQ32i and the OPQ32n are amongst the best broad spectrum personality tests available – especially for use in occupational settings where a ‘surface view’ of an individual is needed. They are supplemented by lots of additional material and features. Their technical qualities are good.

Recommendations:

- Suitable for use in the area(s) of application defined by the distributor, by test users who meet the distributor's specific qualifications requirements

SUMMARY EVALUATION OF THE TEST

Content Domains:
- Personality − Trait

Intended or main area(s) of Use:
- Work and Occupational
- Counselling, Advice, Guidance, and Career Choice

Intended mode of use (conditions under which the instrument was standardised and validated):
- Controlled unsupervised administration. Control over conditions (timing etc) and some control of identify of the test taker (e.g. tests administered over the Internet but only to known individuals − password restricted access)
- Supervised and controlled administration. Test administration under the control of a qualified administrator or proctor

Test Description:

Test Name:	Occupational Personality Questionnaire,(OPQ32)
Local test distributor / publisher:	S H L Group Limited
Date of Current Review:	November 2006
Date of Publication of Current Review/Edition:	1999−2005
Constructs Measured:	**Primary Scales** **Relationships with People:** ***Influence;*** persuasive, controlling, outspoken, independent minded, ***Sociability;*** outgoing, affiliative, socially confident, ***Empathy;*** modest, democratic, caring. ***Thinking Style:*** ***Analysis;*** data rational, evaluative, behavioural, ***Creativity and change;*** conventional, conceptual, innovative,variety seeking, adaptable, ***Structure;*** forward thinking, detail conscious, conscientious. ***Feelings and Emotions:*** ***Emotions:*** relaxed, worrying, tough minded, optimistic, trusting, emotionally controlled, ***Dynamism:*** vigorous, competitive, achieving, decisive.
Administration Mode:	Supervised Group administration Computerised locally−installed application − supervised/proctored Computerised locally−installed application −

	unsupervised/self−assessment Computerised Web−based application − unsupervised/self−assessment Computerised Web−based application − supervised/proctored
Response Mode:	Paper and pencil Computerised

Instrument Evaluation:

Characteristics	Evaluation
Quality of Documentation	★★★★★
Quality of Materials	★★★★★
Norms and reference groups	★★★★★
Construct validity	★★★★
Criterion−related validity	★★★★
Reliability−overall	★★★★
Number of Computer−Generated Reports	21