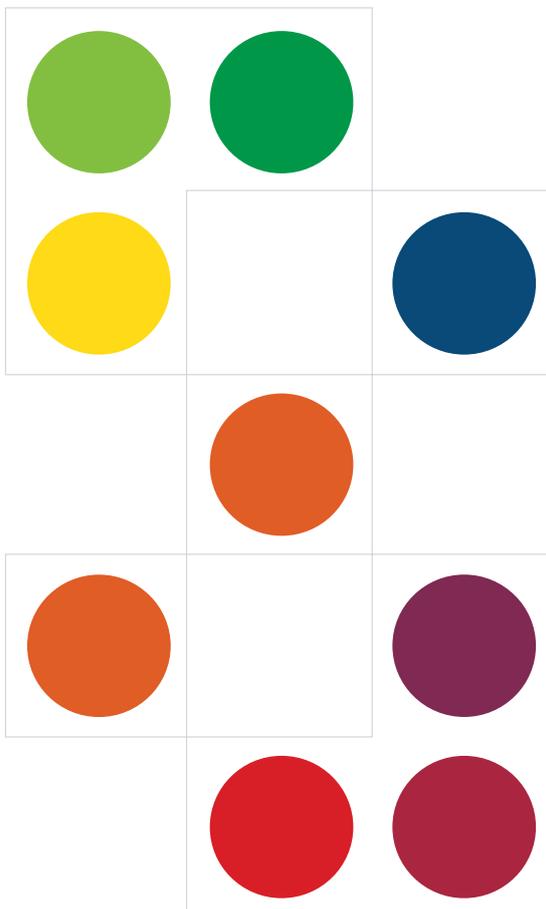


Facet5

Appendix 1.0

Translations



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Introduction to translations

The Facet5 questionnaire was originally created in English in the late 1980's. Since then it has been translated into numerous languages to enable people to complete the questionnaire in their native languages wherever possible. This Appendix explains the process and the results of the translation into languages other than English.

We are acutely aware of the issues involved in the translation of Facet5 into languages other than the original English. In our translations we follow the ITC guidelines for translations laid down in 'International Test Commission Guidelines for Translating and Adapting Tests - 2010'¹. These guidelines stress the importance of translating contemporary meaning rather than just words.

Facet5 takes an 'etic' approach to translation in that we attempt to translate the tool so that the English language structure is carried over to the target language. An etic approach applies a common framework to a cross cultural situation. This is described more fully in Wikipedia².

The etic and emic approaches each have their own adherents. It is claimed by some, for example Fanny Cheung at the Chinese University in Hong Kong, that an etic approach attempts to force a standard cultural model onto a people for whom it may not be appropriate. They see it as a form of Cultural Imperialism. She demonstrates this in her development of a personality structure specifically for Chinese people³.

Proponents of an etic approach (including Facet5) argue that, while it may be true that there is no single model that is a perfect fit across all cultures, there is sufficient commonality to make the adoption of a common structure useful. This utility becomes even more important when working in a global, cross-cultural marketplace. This description fits many situations where Facet5 is used and therefore an etic approach is preferred. This becomes obvious when people are being compared or different approaches are being discussed. The etic approach used by Facet5 allows a common language for discussion.

Translation process

The translation process is an iterative one. While we may use translation services for a 'first cut', we do not rely on them since it is critical that the translators capture the meaning of the statements and relate them to the current business environment. For this reason we insist that translators are not only bi-lingual (at least) but that they are currently active in the Human Resources or Organisation Development field.

We provide guidance to the translators. We advise that they should use a multi-stage process involving more than one translator. Items are translated first from English into the target language then the translation is cross checked by another person who translates back in to English. This process is repeated until there is agreement. Sometimes the original author is consulted to clarify specific issues of interpretation as some concepts do not translate easily from one language and culture to another.

Facet5 questionnaire

Facet5 consists of 106 items which are arranged as semantic differentials i.e. pairs of statements which tend to be opposite in meaning. Each pair is separated by a 5 point scale so that individual item scores can range from 1 to 5. Total word count is a little under 2000 words in English.

Facet5 translation engine

Translation of the main reporting functions of Facet5 is more complex and laborious than the core questionnaire. The main Facet5 report consists of approximately 30000 words in English which is a lot of high grade translation. To assist this task we have created a Facet5 Translation Engine which shows the English version in one window on screen and then translators can type the target language version directly into another window on the same screen. If there is already a version in the target language that is also shown in a separate window.

In this way translators have content presented to them in a convenient way with the base language version always in front of them. If they are editing an existing language, the current target version is also shown.

Once the text is translated, the Facet5 Translation Engine automatically writes new SQL scripts to be loaded to the system.

Process for analysis of translations

Sample

To test the translated version we need to collect an appropriate sized sample. We have two alternate approaches to this:

- In the first model we collect data from a perfectly balanced sample taken from 12 different job functions and balanced for gender. The job functions are balanced because it is known that personality and job preference are clearly linked. Students of Holland's work or that of Strong among many others will recognise the tendency for particular personalities to be drawn to specific roles. Therefore over-representation of a small number of job functions (e.g. a call centre or a large sales team) would skew the results of the trials.

The Facet5 Balanced Sample is made up as follows:

Job Function	Number Male	Number Female
Administration	10	10
Consultant	10	10
Finance	10	10
HR/Personnel	10	10
Banking	10	10
IT	10	10
Marketing	10	10
Operations	10	10
Sales	10	10
Scientist	10	10
Technical	10	10
Telesales	10	10

This gives a total sample of 240. We accept over or under sampling up to 20% in each category. If we are significantly oversampled in a category we will select a random sub-set of that category to bring it within the guidelines.

- The second approach is used when we have access to large samples from the beginning. Here we are happy to accept a more serendipitous sampling providing the gender balance broadly reflects the working population of the target language. In some situations this may change the gender balance significantly (for example in countries where women are significantly under-represented). A good example is where we were given access to the entrants to MBA programmes at Fundacion Dom Cabral, one of Brazil's top business schools. Here the participants were all highly educated and represent a broad group of Brazilian firms. Again we monitor the sample for unexpected gender bias.

Data capture

Once the questionnaire translation is thought to be adequate (as a result of the translation/backward translation process) it is loaded to the Facet5 administration system for data collection.

Collection is managed by Facet5 partners in the participating language. All data is held on the main Facet5 servers.

Data cleaning

Even web presented questionnaires can suffer from poor data which requires cleaning.

Data may need cleaning due to:

- Missing data – Facet5 allows respondents to skip items. However if too many items are skipped the profile would be unreliable and should be deleted. For a normal amount of missing data we replace the missing value with 3 which is the centre point of the scale.
- Extreme/random responses can be obtained by someone who is not taking the profile seriously. For example all '3's or all '1's would result in the profile being deleted.
- Facet5 records Response Latencies and extremely short response latencies can be taken as an indication that the person is not actually reading the question. Intra-individual response times are compared to known sample response times. Extreme results are removed.

Post coding

Facet5 does not automatically capture demographic data such as age, gender, race or education.

However we are able to post code for some of these variables. The most common is gender which is done by first name. The result is a three point code as follows:

Gender	Code
Unknown	0
Male	1
Female	2

This coding allows us to test for adverse impact.

Item analysis

Facet5 has simple structure which means that each item loads on only one factor. The number of items per factor varies between factors. The first step in the analysis once the data is cleaned is to compute item statistics. These are then compared to the base sample to check for similarity. Exactly similar means and SDs are not critical since we have the capacity to transform variables if required.

The next step is to compare the item X factor correlation matrix to confirm that simple structure still exists. What we are doing here is checking that the item still loads significantly on its home factor and that it does not load significantly on any other factor.

Scale reliabilities

Scale reliabilities are computed using Cronbach's Alpha and are checked for comparison. Values greater than 0.7 are deemed acceptable.

Adverse impact

As a result of the post coding mentioned previously, we are able to compare for adverse impact where data is available. Most commonly this is for gender. Mean gender differences are computed and Cohen's D is calculated as a measure of effect size.

Norm creation

Once we have tested the target language version as described we are able to create a sample Norm for initial use. The degree to which the results can be used practically depends on the sample base that was used for the research. A small, balanced (stratified by job function) sample can be used as a short term measure until a larger more representative norm group is available. A larger, representative sample might be immediately applicable.

Norm sample

To prepare a norm for addition to the Facet5 system we simply need to compute the means and SDs for each item in the target language. We also compute means and SDs of the main Facet5 factors. These are loaded to the Facet5 data base of norms.

Norm label

In addition we construct a description of the norm group giving as much information as possible. This is done in English which is then sent for translation.

Comparison to global norm

The final step in the translation process is to create a summary report which compares the target language results to the main reference sample. This is shown as a series of charts showing the direction and magnitude of the deviations.

References & notes

- 1 International Test Commission (2010). International Test Commission Guidelines for Translating and Adapting Tests. [<http://www.intestcom.org>]
- 2 Wikipedia contrasts etic and emic approaches as follows:
 - An 'emic' account is a description of behavior or a belief in terms meaningful (consciously or unconsciously) to the actor; that is, an emic account comes from a person within the culture. Almost anything from within a culture can provide an emic account.
 - An 'etic' account is a description of a behavior or belief by an observer, in terms that can be applied to other cultures; that is, an etic account attempts to be 'culturally neutral.'
- 3 Indigenous Chinese Personality Constructs: Is the Five-Factor Model Complete? Fanny M. Cheung, Kwok Leung, Jian-Xin Zhang, Hai-Fa Sun, Yi-Qun Gan, Wei-Zhen Song and Dong Xie, Journal of Cross-Cultural Psychology 2001; 32; 407