

RESULTS ON THE INITIAL DUTCH TRANSLATION OF THE SOQ

- A CRU RESEARCH UPDATE -

Scott G. Isaksen
Creativity Research Unit
The Creative Problem Solving Group, Inc.

Luc De Schryver
CEO
Creative Problem Solving Group, Brussels

Wouter Aerts
Research Associate
Creative Problem Solving Group, Brussels

Erik J. Isaksen
Manager of Database Operations
The Creative Problem Solving Group, Inc.

The Situational Outlook Questionnaire® (SOQ) is based on over 50 years of research and development. The original and foundational work was done by Dr. Göran Ekvall in the 1950's (Isaksen & Ekvall 2007). The original climate assessment was in Swedish. Since assessing the climate for creativity was a major research priority, and Ekvall's work was so promising, we completed a translation process in order to make the SOQ available to English speakers. Since the 1980's we have developed and tested six versions based on a total sample of over 12,000 individuals. Our updated manual (Isaksen & Ekvall, 2007) provides a comprehensive summary of each major phase of development, along with the key foundational work of Ekvall.

Luc De Schryver was one of the first to translate the SOQ into another language. Given his interest in using the SOQ in Belgium, Luc worked on both the Dutch and French translations. These translations were conducted in the late 1990's and this research update reports the current status of the translation work on the Dutch version of the SOQ. Every effort has been made to follow best practices for translation and adaptation of the SOQ (APA, 2003; APA, 2004; Hambleton, 2001; Hambleton, Merenda, & Spielberger, 2005; Lowman, 2006; Muñiz, & Bartram, 2007).

Step 1 – Forward Translation

An individual who is qualified and knowledgeable about the assessment should perform the initial translation from English into the target language. This individual should be thoroughly familiar with the assessment's theoretical and conceptual basis, and be experienced in its application and use. This means that those who do the initial forward translation should be

qualified and active users of the tool. This is best practice, but at times, the initial translation may be done by someone who is a professional translator. In this case, others who are both bilingual (English and the target language) and qualified to use the assessment should review the initial translation.

In the best case, multiple forward translations are completed and compared. The desired characteristics of the forward translators include:

- Qualified and knowledgeable about the assessment
- Culturally anchored in the target language and fluent in English
- Some knowledge of test development

Relevant materials are forwarded in Microsoft Word format to those who will do the forward translation. These materials include:

- The actual assessment instrument including instructions and items
- Additional web-based instructions and information
- Feedback and interpretive materials for end-users
- PowerPoint slides used to make presentations of results
- Standard invitation memos and other templates
- Other materials as needed

Luc De Schryver met all these requirements and involved a team of colleagues in Belgium to cooperate and check the initial translation. Since the language of the Flemish region of Belgium is Dutch, as is the language in The Netherlands, Luc included members of his team from both regions.

Step 2 – Back Translation

Once the assessment has been translated into the target language, other translators will translate it back into English, for comparison purposes, to the original form. The back translation will be examined for equivalence in language, phrases, reading level, and to ensure similar meaning.

Someone who is not familiar with the conceptual or empirical background of the measure accomplishes the back translation. In addition, this person should have had no prior contact with the assessment. When possible, a group meeting involving others who are fluent in both languages should be held to review the back translation and make suggestions to ensure the items reflect the dimensions and are culturally appropriate.

Luc supervised the back translation process and included individuals from both Flanders and The Netherlands to insure that one Dutch translation would work in both regions. Once it was agreed that the translation compared favorably with the language and would fit the target culture, data were collected to allow the examination of the reliability and validity of the translation.

It is during this stage that the translator may conduct pilot testing of the assessment and obtain feedback on the appropriateness and acceptability of the translated assessment and related materials. Luc conducted numerous pilot studies with the Dutch translation in both Flanders and The Netherlands, resulting in improved item clarity and appropriate modifications of the support materials.

Step 3 – Initial reliability studies

Once the translation has been back translated and compared with the original English, modifications can be identified to produce a final translation into the target language. This step involves assessing the basic statistical adequacy of the translated version.

An initial sample is identified with an adequate size (this is usually at least 150 individuals). A sub-sample of at least 50 must agree to take the assessment twice, a few weeks or months apart. Once both administrations are completed, the participants should receive feedback on their results.

The analysis of the results should include:

- Descriptive statistics (means, SD, ranges)
- Cronbach's Alpha (overall, and for each dimension)
- Test-Retest correlations
- Item analyses for each dimension of the assessment

The results of these analyses may require further modification and additional rounds of reliability studies until the assessment demonstrates a Cronbach's Alpha of at least .70, and the items perform as they are designed.

Step 4 – Validation studies

Once the translation demonstrates satisfactory statistical performance, it can be subjected to numerous validation efforts. Minimally, this includes a factor analysis to examine the loadings of each of the items. This can also include correlating the SOQ to other related measures. In this case, factor analysis was performed to examine the validity of the Dutch SOQ and to help determine which, if any, items needed to be reworded.

Results

The Dutch SOQ Version 1.1 was administered to 214 native Dutch-speaking individuals between 2006 and 2007. The sample was one of convenience comprised of five organizations located in The Netherlands and the Flemish region of Belgium. The five organizations comprising the sample represent: an industrial manufacturing organization; the engineering sector; a not-for-profit organization; one bank; and an institute of higher learning. Of the individuals that were willing to disclose their gender, there were 107 males and 101 females (six individuals decided not to disclose their gender). For a percentage breakdown see Table 1 below.

Table 1: Gender Demographics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	107	50.0	51.4	51.4
	Female	101	47.2	48.6	100.0
	Total	208	97.2	100.0	
Missing		6	2.8		
	Total	214	100.0		

The mean age of the sample was 42.4, and the age range was from 23 to 63 with 19 subjects wishing not to report their age.

In addition to individual item analysis, the Dutch SOQ was examined for reliability utilizing a test for internal consistency known as Cronbach's Alpha. This measures the strength of relationship among items and their respective dimensions. The accepted standard is an Alpha value of at least .70. As shown in Table 2, all of the Dutch SOQ items meet or exceed this standard. Furthermore, the mean and standard deviations are consistent with the current English version of the SOQ. The standard error of measure however (SEM), is substantially lower for the Dutch version. This is due to the considerable difference in sample size between the versions. The current English SOQ sample includes many more subjects from a wider pool of organizations, resulting in slightly higher SEM.

Table 2: Means, Standard Deviations/Standard Error of Measure, and Cronbach's Alphas (N=213)

Dimension	Mean	SD/SEM	α
Challenge/Involvement	200.9	57.2/3.9	.87
Freedom	175.4	58.3/4.0	.85
Trust/Openness	153.6	61.7/4.2	.75
Idea-Time	140.1	61.9/4.2	.85
Playfulness/Humor	150.1	63.6/4.4	.84
Conflict	94.7	71.0/4.9	.88
Idea-Support	163.8	69.2/4.7	.90
Debate	167.2	53.2/3.6	.85
Risk-Taking	135.7	52.3/3.6	.73

Another useful tactic to verifying the psychometric properties of this measure is to apply Analysis of Variance of perceived differences in climate between males and females. The result of this analysis found only the dimension of Freedom to be significantly different, with a value exceeding the .05 cut-off, as shown in Table 3. When looking at the mean Freedom scores between females and males, the males perceived significantly more Freedom in their organizational climate.

Table 3: Analysis of Variance–Differences in Gender (N=207)

Dimension	Male Mean	Female Mean	df	F	Sig.
Challenge/Involvement	200.5	200.3	206	0.01	.976
Freedom	182.6	166.5	206	3.93	.049
Trust/Openness	154.8	151.2	206	0.17	.680
Idea-Time	141.6	136.2	206	0.40	.531
Playfulness/Humor	147.8	151.2	206	0.14	.705
Conflict	93.9	96.9	206	0.90	.764
Idea-Support	162.2	164.2	206	0.04	.840
Debate	168.7	163.5	206	0.49	.485
Risk-Taking	138.5	131.4	206	0.97	.327

When comparing the means of both the Dutch and English samples, the discrepancies are easily accounted for by the overall differences between the sample sizes. This is because even small differences can be statistically significant when the sample is so large, as is the case with the English version.

Finally, correlations were computed to explore the relationship between age and the nine SOQ dimensions. As seen in Table 4, the correlations were relatively weak. The dimension of Playfulness/Humor had a value exceeding the .05 level. When comparing the r values found with the Dutch SOQ v.1.1, and those achieved when analyzing the almost three thousand individuals that disclosed their age for the English SOQ, all r values were weak and were relatively similar.

Table 4: Correlation of SOQ Dimensions & Age (N=194)

Dimension	Pearson Correlation	Significance
Challenge/Involvement	-.062	.392
Freedom	-.008	.911
Trust/Openness	-.112	.119
Idea-Time	.003	.965
Playfulness/Humor	-.235	.001
Conflict	-.067	.351
Idea-Support	.010	.165
Debate	-.094	.195
Risk-Taking	-.064	.374

A factor analysis was conducted to acquire evidence of the Dutch SOQ's internal structure. As seen in Table 5, all 52 active items loaded onto the nine SOQ dimensions. Despite seeing a fairly strong loading in many dimensions, some items co-loaded on other than the dimension for which they were targeted. Those who were involved in the initial translation reviewed the items. This group included Flemish-speaking Belgians, native Dutch speakers from The Netherlands, as well as two Americans. When items loaded on another factor than that which they were designed, they were reworded so that they should perform better for the next round of review. In all, 11 items were reworded, resulting in version 1.2 of the Dutch Translation.

**Table 5: Principle Component (Promax Rotation) Analysis
SOQ NL version 1.1 (N=213)**

Theoretic Dimension	Component								
	1	2	3	4	5	6	7	8	9
Conflict	-1.01								
Conflict	-.94								
Conflict	-.88								
Conflict	-.84								
Conflict	-.81								
Conflict	-.76	-.41							
Idea-Support		.82							
Idea-Support		.81							
Idea-Support		.71							
Idea-Support		.67							
Idea-Support		.34							
Idea-Time			.87						
Idea-Time			.89						
Idea-Time			.84						
Idea-Time			.82						
Idea-Time			.61						
Idea-Time		-.40	.53						
Freedom				.87					
Freedom				.75					
Freedom				.75					
Freedom				.74					
Freedom				.72					
Freedom		.48							
Playfulness/Humor	-.40				.87				
Playfulness/Humor					.86				
Playfulness/Humor					.72				
Playfulness/Humor					.71				
Playfulness/Humor	.39				.36				
Playfulness/Humor	.44								
Debate						.90			
Debate						.82			
Debate						.71			.33
Debate						.70			
Debate						.57			
Debate						.34			.30
Challenge/Involve							.90		
Challenge/Involve							.63		
Challenge/Involve		.36					.63		
Challenge/Involve							.49		
Challenge/Involve	.41						.30		
Challenge/Involve	.50								
Challenge/Involve	.30	.35							
Risk-Taking								.75	
Risk-Taking								.71	
Risk-Taking		.45						.53	
Risk-Taking								.52	
Risk-Taking		.70							
Trust and Openness									.77
Trust and Openness									.67
Trust and Openness	.47								
Trust and Openness		.34							
Trust and Openness					.70				
Eigenvalues	16.97	4.32	3.17	2.01	1.97	1.41	1.35	1.25	1.07
% Variance Accounted for by Factors	32.65	8.31	6.09	3.86	3.71	2.71	2.60	2.40	2.05

In conclusion

In summary, the initial Dutch translation of the SOQ performs similarly to the English original. Through numerous pilot tests and psychometric evaluation, we are satisfied that this translation is suitable for application for those who speak Dutch.

Further work will be accomplished using the newer version and will include examining its stability over time. Additional updates will follow.

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