



# International Technical Manual

L. V. GORDON



## Acknowledgments

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This new version of SOSIE meets the current requirements of Human Resource professionals in the field of assessment in an international context. Indeed, the work carried out on the content of the different items, dimension names, descriptive and interpretative reports is the fruit of collaboration between different publishers of Pearson Clinical and Talent Assessment in Australia, New Zealand, the United States, the United Kingdom, the Netherlands, Germany and India. This shorter but equally robust version of SOSIE was made possible by studies carried out on the data gathered in these countries. It also led to the standardization of measures specific to each country. Other PCTA publishers will shortly be joining this project and it will be possible to further develop the norms currently proposed for each country.

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And so the SOSIE adventure goes on!

Béatrice Joubert, ECPA Director

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# Introduction

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SOSIE has been used in France for over twenty years. It integrates personality assessments with those of personal and interpersonal values. It is this combined evaluation which makes of SOSIE a tool of such value and interest to Human Resource professionals in the fields of recruitment, career management, career guidance, skills assessment and training. Whereas personality evaluations provide information about a person's personal resources, their potential, strengths and development needs, the evaluation of that person's values highlights their motivation, sources of satisfaction and their commitment.

The main goals of the work undertaken on SOSIE since 2009 are to:

- Offer users an international vision of SOSIE with national norms for managers<sup>1</sup> in each of the seven countries and also "international" norms, (made up of a "mixed" sample representing the seven countries). These norms can be used for cross-cultural comparisons and allow a users a choice of norms depending on the context. These norms will be further enriched by new data collected from other countries.
- Reduce the administration time of 35 minutes to about 25 minutes, while maintaining reliability.

## The Development of SOSIE

SOSIE integrates three classic tests produced by the eminent American psychologist Leonard V. Gordon. They are:

The Gordon Personal Profile and Inventory (GPPI, 1978). This was first published in 1953 and went through a number of editions. The GPPI combines two instruments- the Gordon Personal Profile (GPP) and the Gordon Personal Inventory (GPI)- and assesses eight important personality factors in work environments. Cattell's (1947, 1948) research with personality rating scales was particularly relevant, and six factors from this research were considered for instrument development (Gordon, 1953; Gordon, 1956). Among the four dimensions of GPI, two of them (Cautiousness and Vigour) were represented in the earlier factor analyses of Cattell (1947, 1948). All four had been reconfirmed in the factor analysis of Guilford's dimensions by Thurstone (1951).

The Survey of Personal Values (SPV, 1967). This was first published in 1967 and measures six personal values.

The Survey of Interpersonal Values (SIV, 1975) which was published in 1960 and measures six interpersonal values.

SOSIE was developed by ECPA in France and published in 1991 in its full form. The international version was based on various studies on experimentally controlled samples of 100 persons for each of seven countries. This shorter version (18 tetrads/triads have been deleted) meet the time constraints of user administration. All the data presented in this manual are based on this version.

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<sup>1</sup> The same job title can indicate different areas of responsibility in different countries. We have used the shorthand term "manager" to indicate a broad range of roles, including management of people, projects and wider functions within an organisation or professions. Job titles including words such as executive, director and manager, as well as titles relating to senior positions in very specific professions are included in this category.

## Dimensions definition

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SOSIE describes individuals in two ways.

The first addresses **personality**: they are relatively stable characteristics that influence individual behaviour. They are an individual's unique resources; they represent the potentialities that will contribute to their professional activity. These personality traits interact and give us an indication of the type of work for which a person is best suited. They tend to change very little, although they can be influenced by situations, specific environments or life events.

In addition, individual's may be described in terms of their motivation, which flows from their underlying **values**. Values are key factors, sources of motivation or involvement that have an important impact on a person's behaviour and reactions in the workplace. Values are linked to an ideal, and shape people's expectations in terms of work and environment. Work environment and the corporate culture can satisfy certain of these expectations. However, incompatibilities or conflicts may exist, with an ensuing impact on performance and success. SOSIE evaluates values related to the person's behaviour (personal values) and values relates to their interaction with others (interpersonal values).

The measurement of both personality and values is thus important in the assessment of any individual. Not only does SOSIE suggest individuals' default ways of behaving; it suggests what situations and environments may motivate or demotivate them to use this behaviour to deliver excellent performance. It thus provides relevant information that conventional personality tests do not address and which can help shape management behaviour, development plans, recruitment design, promotion decisions and guidance and counselling.

### 1.1 Personality Dimensions Definition

SOSIE measures eight aspects of personality that are significant in the daily functioning of most people: Dominance, Responsibility, Stress Resistance, Sociability, Cautiousness, Original Thinking, Personal Relations and Vigour.

The personality items in SOSIE consist of tetrads or sets of four descriptive statements or items. Each of the first four personality traits is represented by one statement in each of the first 15 tetrads. The four other personality traits are represented by a statement in each tetrad from 16 to 31. The tetrads are balanced: two of them will be considered attractive, or valued by society; two will be considered unattractive or socially undesirable by typical test takers. Respondents are asked to mark one statement in each tetrad as being most like themselves and one statement as being least like themselves. Studies show that individuals are less able to distort their responses to give a good impression in this forced-choice format than in the single-item format commonly found in normative tests. The results are thus potentially more valid.

The following descriptions of SOSIE personality dimensions are based on the item content of the scales and are supported by information from counselor evaluations, interviews, assessments, and a wide variety of research data. High and low scores on each of the scales are interpreted as reflecting the following tendencies.

#### 1. Dominance

This personality trait evaluates ascendancy- the ability to persuade and convince- as well as self-assurance.

People who obtain a high score generally demonstrate strong verbal ascendancy. They play an active part in a group, are prone to taking charge of things, and prove both convincing and persuasive. They express a willingness to lead discussions and show strong self-assurance.



If their score is very high (percentile  $\geq 91$ ) they may constantly try to assert their opinions, and can prove overbearing and invasive to others.

Those people who obtain a low score will tend to shun public attention: they listen more than they speak, and seldom go to great lengths to defend a point of view. They leave initiative and leadership to others. They may have little self-confidence. They generally feel more comfortable in smaller groups.

If their score is very low (percentile  $\leq 10$ ) they can prove very passive and easily influenced.

## 2. Responsibility

This personality trait evaluates diligence in carrying out tasks, professional conscience, and a sense of duty.

People with a high score are persistent and tenacious in seeing tasks through, even if they are tedious or of little interest to them. They are conscientious and can be relied on to finish the tasks they undertake.

If their score is very high (percentile  $\geq 91$ ) they can prove a little finicky and obstinate.

People with a low score can experience difficulties sticking to a task that is uninteresting to them or that appears boring. If they encounter difficulties in a task, they are likely to give up. They may need supervision and encouragement.

If their score is very low (percentile  $\leq 10$ ) they can do certain tasks badly or leave them unfinished.

## 3. Stress Resistance

This personality trait evaluates emotional stability and stress management.

People who obtain a high score are generally calm and behave in a stable way. They are relatively serene, even-tempered and rarely anxious. This allows them to draw on their personal strengths when facing stressful, difficult or frustrating situations, as well as failure.

If their score is very high (percentile  $\geq 91$ ) they can appear to be cold, or even insensitive.

People who obtain low scores are generally more nervous and tense, if not anxious. They can experience difficulties managing their emotions. They are sensitive and mercurial. They are less resistant to stress, frustration or difficulty.

If their score is very low (percentile  $\leq 10$ ) they can be fragile and easily irritated.

## 4. Sociability

This personality trait evaluates social and relational comfort, extraversion, and feeling at ease within a group.

People who obtain a high score generally prefer team to individual work. They find it easy to establish contact with others or with strangers.

If they obtain a very high score (percentile  $\geq 91$ ) they can exhibit superficiality in their relationships or experience problems working on their own.

People who obtain low scores are more comfortable within small-sized groups, and enjoy working alone. They do not seek variety in their contacts or easily make new contacts. They are probably more introverted.

If their score is very low (percentile  $\leq 10$ ) they may shun contact and become inwardly-focused.

## 5. Cautiousness

This personality trait evaluates precaution, reflection and the ability to take a step back before acting or making a decision.

People who obtain a high score are prudent. They think before making decisions or acting upon them, and spend a lot of time considering alternatives. They are risk-averse.

If their score is very high (percentile  $\geq 91$ ) they can be indecisive or miss out on opportunities.

People who obtain a low score have a tendency to act on the spur of the moment. They can be reckless, lack critical distance and can take unconsidered risks without concern for the consequences of these decisions or actions.

If their score is very low (percentile  $\leq 10$ ) they can prove very impulsive or take unconsidered risks.

### 6. Original Thinking

This personality trait evaluates the ease with which a person approaches complex issues, stimulating discussions and all things new or original.

People who obtain a high score are comfortable with ideas and discussion. They are attracted to new ideas and demonstrate intellectual eagerness.

If they obtain a very high score (percentile  $\geq 91$ ) they may have a tendency to complicate or over-think issues.

People who obtain a low score tend to simplify things. They are more comfortable working on issues they know, and are rather pragmatic.

If their score is very low (percentile  $\leq 10$ ) they may have a tendency to over simplify or be resistant to new ideas.

### 7. Personal Relations

This personality trait evaluates tolerance, understanding of others, open-mindedness, and the ability to challenge one's beliefs.

People who obtain a high score are quick to place their trust in others. They are tolerant, understanding, open to other people's ideas and accept criticism quite easily.

If they obtain a very high score (percentile  $\geq 91$ ) they can lack critical thought.

People who obtain a low score have difficulties putting trust in others. They are quite suspicious and often critical. They can be quite thin-skinned and experience difficulty challenging their own beliefs.

If their score is very low (percentile  $\leq 10$ ) they can prove quite negative or unable to trust others.

### 8. Vigour

This personality trait evaluates energy, dynamism, efficiency and working power.

In general, people who obtain a high score are extremely active. They are energetic and fast workers. They are not generally subject to fatigue or exhaustion.

If they obtain a very high score (percentile  $\geq 91$ ) they may demonstrate hastiness, or even hyper-activism.

People who obtain a low score are more comfortable with slower or steadier work rhythms. They prefer to work at their own rate rather than under pressure, and are more easily exhausted.

If their score is very low (percentile  $\leq 10$ ) they can lack vitality and be rather slow.

## 1.2 Interpersonal Values Dimensions Definition

The interpersonal values items in SOSIE consist of twenty-four sets of three statements, or triads with a forced-choice format from 32 to 55. For each triad, the respondent indicates one statement which represents what is most important and one statement which represents what is least important to him or her. Within each triad, three different value dimensions are represented. The three statements within each set were equated, as far as possible, for social desirability through matching them on preference value indices (Gordon, 1975). In this way, the likelihood of the individual's responding to the favorableness of the statement rather than to its degree of importance to him or her is reduced. The forced-choice method employed has proved to be less susceptible to willful distortion during administration than the traditional normative questionnaire approach.

The six interpersonal values measured are Support, Conformity, Recognition, Independence, Benevolence, and Power. The following are definitions of the scales as reflected by their item content.

### 9. Support

This value focuses on the importance given to friendliness, help, support and understanding in the workplace.

People who obtain a high score appreciate being treated with kindness and understanding, as well as being helped, supported and encouraged by their colleagues. They enjoy friendly and non-conflictual environments.

If they obtain a very high score (percentile  $\geq 91$ ) they can become too dependent on others.

People who obtain low scores do not seek support, help or encouragement from others. They care little about others' opinions, and accept conflict.

### 10. Conformity

This value deals with the importance given to rules and social norms.

People who obtain a high score have great respect for social conventions, rules and doing what is socially accepted and proper. Overall, they are quite respectful of hierarchy.

If they obtain a very high score (percentile  $\geq 91$ ) they can face difficulties when working without defined rules and processes.

People who obtain a low score give little credence to conventions and to following social rules.

### 11. Recognition

This value focuses on the importance given to social recognition, in terms of praise, consideration or status.

People who obtain a high score enjoy the respect and admiration other people express towards them. Social status and recognition are sources of motivation for them.

If they obtain a very high score (percentile  $\geq 91$ ) they may repeatedly look for situations that will put them in a good light.

People who obtain a low score are unmoved by social recognition, status or by receiving special treatment.

### 12. Independence

This value focuses on the importance given to independence, with regard to actions or decisions.

People who obtain a high score care strongly about their independence, their freedom, making their own decisions and being able to do things their own way.

If they obtain a very high score (percentile  $\geq 91$ ) they may be regarded as maverick.

People who obtain a low score don't seek independence. They are grateful for advice and guidelines, and work well tight constraints.

### 13. Benevolence

This value deals with the importance given to generosity and helping others.

People who obtain a high score are attentive to other people's needs and of the difficulties they face. They value help and sharing.

If they obtain a very high score (percentile  $\geq 91$ ) they may sometimes lose focus on efficiency and profitability.

People who obtain a very low score do not give priority to other people's needs, to their difficulties, or to helping them.

### 14. Power

This value focuses on the importance given to power, and the desire to lead others.

People who obtain a high score enjoy positions or situations that enable them to influence other people and to exercise authority. Delegated positions are of little interest to them.

If they obtain a very high score (percentile  $\geq 91$ ) they are capable of being authoritarian and highly directive.

People who obtain a low score are less concerned about leading people and having power over them. They rarely seek to influence or control others.

## 1.3 Personal Values Dimensions Definition

Personal values are evaluated in twenty-five sets of three statements, or triads from 56 to 80. These employ the same forced-choice format as for triads 32 to 55. For each triad, the respondent indicates one statement which represents what is most important and one statement which represents what is least important to him or her. Within each triad, three different value dimensions are represented. The three statements within each set were equated, as far as possible, for social desirability through matching them on preference value indices (Gordon, 1967). In this way, the likelihood of the individual's responding to the favorableness of the statement rather than to its degree of importance to that person is reduced. The forced-choice method employed has proved to be less susceptible to willful distortion during administration than the traditional questionnaire approach.

The following are definitions of the scales as reflected by their item content. The six personal values measured are Materialism, Achievement, Variety, Conviction, Orderliness, and Goal Orientation.

### 15. Materialism

This value is about the importance given to profit, material goods or immediate results.

People who obtain a high score are attracted to material goods, to profit, and to short term tangible or practical results.

If they obtain a very high score (percentile  $\geq 91$ ) they may give too much importance to very short-term returns.

People who obtain a low score are generally uninterested by material goods. They are not interested in short-term financial returns.

### 16. Achievement

This value focuses on the importance given to reaching personal goals and achieving success.

People who obtain a high score like to get on, and are not afraid of challenges, of difficulty, or of the efforts required to reach these goals. They set themselves high standards for success.

If they obtain a very high score (percentile  $\geq 91$ ) they may find themselves permanently dissatisfied, or can overestimate themselves.

People who obtain a low score generally care little about going beyond their possibilities. They do not seek out difficulty or challenges.

### 17. Variety

This value focuses on the importance given to change, variety, novelty or even a certain degree of risk.

People who obtain a high score enjoy being challenged by new experiences, different situations, and sometimes even risky situations. Repeated daily tasks can prove very demotivating for them.

If they obtain a very high score (percentile  $\geq 91$ ) they could exhibit lack of motivation.

People who obtain a low score rarely look for new or varied experiences. They are more likely to be motivated by routine tasks which they are familiar with and which occur in a predictable context.

### 18. Conviction

This value focuses on the importance given to personal commitment to decisions.

People who obtain a high score have a strong attachment to their beliefs and to the possibility of putting them into practice. They are willing to personally commit to the decisions they make and are generally fast decision-makers. They enjoy getting straight to the point.

If they obtain a very high score (percentile  $\geq 91$ ) they can be rash in their decisions.

People who obtain a low score generally attach little importance to personal commitment to decisions. They put their opinions into a broader perspective and do not want to have to make quick decisions.

### 19. Orderliness

This value addresses the importance given to structured organizations, procedures and methods.

People who obtain a high score enjoy structured work environments, and systematic approaches. They prefer planned tasks that occur within an organization run in a methodical and orderly way.

If they obtain a very high score (percentile  $\geq 91$ ) they can lack flexibility or be too dependent on the structure.

People who obtain a low score grant little importance to organization, methods or procedures. They prefer more flexible environments.

### 20. Goal Orientation

This value addresses the importance given to having clear, precise and relatively stable objectives.

People who obtain a high score prefer to have everything mapped out for them and to work to clearly defined and precise objectives. They tend to concentrate on a single task and deal with problems one after the other.

If they obtain a very high score (percentile  $\geq 91$ ) they may lack global vision or adaptability.

People who obtain a low score do not require clear or precise objectives in order to act. They enjoy doing several things at once and seeing their objectives change does not hinder them.

## Descriptive statistics

### 2.1 Australia/New Zealand (English)

The English online version of SOSIE was administered to 427 manager-level persons across various industries (female = 75.6% and male = 24.4%; mean age = 40 years and  $SD = 11$  years). These individuals took SOSIE under proctored (i.e. supervised) conditions. Scales means and  $SD$  are presented in Table 2.1.

**Table 2.1** Descriptive Statistics - Australia/New Zealand Sample ( $N = 427$ )

Scales	Mean	$SD$
1. Dominance	18.7	4.8
2. Responsibility	22.5	3.8
3. Stress Resistance	20.9	4.5
4. Sociability	16.1	4.8
5. Cautiousness	20.4	5.0
6. Original Thinking	22.6	4.8
7. Personal Relations	19.1	5.1
8. Vigour	21.0	4.6
9. Support	15.0	3.8
10. Conformity	8.6	4.5
11. Recognition	10.1	4.4
12. Independence	12.7	4.7
13. Benevolence	15.2	4.9
14. Power	10.3	4.6
15. Materialism	10.6	4.4
16. Achievement	16.1	4.7
17. Variety	11.8	6.6
18. Conviction	11.0	4.4
19. Orderliness	11.8	5.2
20. Goal Orientation	13.7	4.6

## 2.2 France (French)

The French online version of SOSIE was administered to 778 manager-level persons across various industries (female = 42.2% and male = 57.8%; mean age = 39 years and  $SD = 8$  years). These individuals took SOSIE under proctored (i.e. supervised) conditions. Scales means and  $SD$  are presented in Table 2.2.

**Table 2.2** Descriptive Statistics - France Sample ( $N = 778$ )

Scales	Mean	$SD$
1. Dominance	19.6	4.4
2. Responsibility	23.4	3.3
3. Stress Resistance	20.8	4.2
4. Sociability	17.2	3.9
5. Cautiousness	20.2	4.0
6. Original Thinking	23.0	3.7
7. Personal Relations	19.0	4.0
8. Vigour	21.9	3.8
9. Support	9.7	3.4
10. Conformity	10.2	4.3
11. Recognition	7.9	3.2
12. Independence	12.1	3.8
13. Benevolence	18.6	3.4
14. Power	13.6	4.4
15. Materialism	8.3	3.7
16. Achievement	14.3	4.0
17. Variety	12.4	5.2
18. Conviction	12.5	4.1
19. Orderliness	10.9	4.4
20. Goal Orientation	16.7	3.9

## 2.3 Germany (German)

The German version was adapted following the International Test Commission recommendations. It was administered to 476 manager-level persons across various industries (female = 34.0% and male = 66.0%; mean age = 38 years and *SD* = 8 years). Scales means and *SD* are presented in Table 2.3.

**Table 2.3** Descriptive Statistics - Germany Sample (*N* = 476)

Scales	Mean	<i>SD</i>
1. Dominance	20.0	5.3
2. Responsibility	21.9	3.7
3. Stress Resistance	20.5	4.3
4. Sociability	15.7	5.0
5. Cautiousness	18.0	3.8
6. Original Thinking	25.3	3.6
7. Personal Relations	17.6	4.4
8. Vigour	24.5	3.6
9. Support	14.3	3.8
10. Conformity	6.8	4.3
11. Recognition	9.8	4.5
12. Independence	16.3	4.4
13. Benevolence	10.0	4.7
14. Power	14.9	5.1
15. Materialism	10.4	3.5
16. Achievement	15.9	4.4
17. Variety	11.1	5.7
18. Conviction	11.3	3.5
19. Orderliness	11.9	4.2
20. Goal Orientation	14.4	4.9



## 2.4 India (English)

The English online version was slightly modified to better fit the Indian cultural and linguistic context. It was administered to 157 manager-level persons across various industries (female = 43.9% and male = 56.1%; mean age = 32 years and  $SD = 7$  years). Scales means and  $SD$  are presented in Table 2.4.

**Table 2.4** Descriptive Statistics - India Sample ( $N = 157$ )

Scales	Mean	$SD$
1. Dominance	20.8	4.2
2. Responsibility	23.0	3.8
3. Stress Resistance	20.6	4.3
4. Sociability	17.9	3.8
5. Cautiousness	20.2	4.3
6. Original Thinking	23.3	3.6
7. Personal Relations	19.6	4.1
8. Vigour	22.2	4.2
9. Support	8.9	3.7
10. Conformity	12.4	5.6
11. Recognition	10.3	4.5
12. Independence	11.6	4.7
13. Benevolence	14.1	4.6
14. Power	14.7	4.2
15. Materialism	9.3	3.6
16. Achievement	14.8	4.4
17. Variety	10.6	6.2
18. Conviction	11.5	3.2
19. Orderliness	13.5	4.8
20. Goal Orientation	15.2	5.1

## 2.5 Netherlands (Dutch)

The Dutch version was adapted following the International Test Commission recommendations. It was administered to 142 manager-level persons across various industries (female = 38.0% and male = 62.0%; mean age = 39 years and  $SD = 9$  years). Scales means and  $SD$  are presented in Table 2.5.

**Table 2.5** Descriptive Statistics - Netherlands Sample ( $N = 142$ )

Scales	Mean	$SD$
1. Dominance	21.3	5.0
2. Responsibility	21.9	3.2
3. Stress Resistance	21.2	3.4
4. Sociability	19.2	4.2
5. Cautiousness	18.4	3.7
6. Original Thinking	23.7	4.0
7. Personal Relations	19.7	4.3
8. Vigour	22.9	4.5
9. Support	12.5	4.0
10. Conformity	8.9	4.7
11. Recognition	8.2	4.2
12. Independence	14.7	4.8
13. Benevolence	12.8	4.4
14. Power	14.8	5.5
15. Materialism	10.7	4.4
16. Achievement	15.5	4.3
17. Variety	10.3	6.2
18. Conviction	12.3	4.2
19. Orderliness	12.1	4.7
20. Goal Orientation	14.2	3.9

## 2.6 United Kingdom (English)

The English online version of SOSIE was administered to 300 manager-level persons across various industries (female = 57.7% and male = 42.3%; mean age = 32 years and  $SD = 9$  years). These individuals took SOSIE under proctored (i.e. supervised) conditions. Scales means and  $SD$  are presented in Table 2.6.

**Table 2.6** Descriptive Statistics - United Kingdom Sample ( $N = 300$ )

Scales	Mean	$SD$
1. Dominance	19.5	5.0
2. Responsibility	22.2	3.8
3. Stress Resistance	20.9	4.4
4. Sociability	17.6	4.7
5. Cautiousness	18.6	4.5
6. Original Thinking	23.3	4.4
7. Personal Relations	18.2	4.9
8. Vigour	22.6	4.5
9. Support	13.3	4.4
10. Conformity	9.7	5.1
11. Recognition	11.6	4.4
12. Independence	11.5	4.6
13. Benevolence	13.2	5.1
14. Power	12.7	5.0
15. Materialism	9.6	4.3
16. Achievement	15.4	4.7
17. Variety	12.9	6.7
18. Conviction	11.5	3.9
19. Orderliness	11.6	4.8
20. Goal Orientation	14.0	4.5

## 2.7 United States (English)

The English online version of SOSIE was administered to 154 manager-level persons across various industries (female = 57.4% and male = 42.6%; mean age = 45 years and  $SD = 9$  years). These individuals took SOSIE under proctored (i.e. supervised) conditions. Scales means and  $SD$  are presented in Table 2.7.

**Table 2.7** Descriptive Statistics - United States Sample ( $N = 154$ )

Scales	Mean	$SD$
1. Dominance	20.7	4.4
2. Responsibility	24.3	3.1
3. Stress Resistance	22.8	3.5
4. Sociability	15.7	4.4
5. Cautiousness	20.9	4.2
6. Original Thinking	23.6	4.4
7. Personal Relations	20.1	4.6
8. Vigour	22.3	4.0
9. Support	12.0	4.2
10. Conformity	11.5	5.5
11. Recognition	9.3	4.6
12. Independence	11.1	5.1
13. Benevolence	15.5	5.5
14. Power	12.5	4.8
15. Materialism	10.0	4.6
16. Achievement	18.4	3.9
17. Variety	8.6	6.4
18. Conviction	12.2	4.3
19. Orderliness	12.5	4.9
20. Goal Orientation	13.3	4.4

## 2.8 International Sample

A sample of 658 manager-level persons (female = 54.6% and male = 45.4%; mean age = 37 years and  $SD = 10$  years) was built by drawing randomly from the samples of the seven countries (Australia, France, Germany, India, Netherlands, United Kingdom, United States). International norms were established from this sample. Scales means and  $SD$  are presented below.

**Table 2.8** Descriptive Statistics - International Sample ( $N = 658$ )

Scales	Mean	$SD$
1. Dominance	19.9	4.9
2. Responsibility	22.7	3.5
3. Stress Resistance	21.2	4.1
4. Sociability	17.0	4.5
5. Cautiousness	19.6	4.4
6. Original Thinking	23.4	4.3
7. Personal Relations	19.1	4.5
8. Vigour	22.2	4.4
9. Support	12.5	4.4
10. Conformity	9.6	5.2
11. Recognition	9.8	4.6
12. Independence	13.1	4.8
13. Benevolence	13.6	5.1
14. Power	13.4	5.2
15. Materialism	10.0	4.2
16. Achievement	15.4	4.5
17. Variety	11.3	6.1
18. Conviction	11.5	3.9
19. Orderliness	12.2	4.8
20. Goal Orientation	14.5	4.7

## Reliability

The reliability of a test refers to the accuracy, consistency, and stability of test scores across situations (Anastasi & Urbina, 1997).

Cronbach's alpha coefficient was used to evaluate the internal consistency of the scales. They are presented for each country and for the International Sample in Tables 3.1, 3.4, 3.7, 3.10, 3.12, 3.14, 3.17 and 3.20.

Scales intercorrelations for each country and for the International Sample are presented in Tables 3.2, 3.5, 3.8, 3.11, 3.13, 3.15, 3.18, 3.21. Because the ipsative format creates forced correlations between scales, the following methodology was used to obtain refined correlation coefficients, subtracting the portion of the correlative relation that is caused by the ipsativity's measurement approach. An artificial sample was created ( $N = 10\,000$ ) which responded randomly to SOSIE items. Raw scores were computed as well as the correlation matrix. The coefficients were transformed into  $z$  scores using Fisher formula. The correlations matrix based on the real data was computed for each country and transformed into  $z$  scores. The  $z$  scores issued from the artificial sample were subtracted from the real  $z$  scores for each country. The resulting  $z$  scores were then transformed back using Fisher formula. The factorial analyses were performed on these corrected correlation coefficients.

### 3.1 Australia/New Zealand

**Table 3.1** Internal Consistency - Australia/New Zealand Sample ( $N = 427$ )

Scales	Alpha
1. Dominance	.81
2. Responsibility	<b>.75</b>
3. Stress Resistance	.80
4. Sociability	<b>.83</b>
5. Cautiousness	.81
6. Original Thinking	.79
7. Personal Relations	.81
8. Vigour	.76
9. Support	.70
10. Conformity	.77
11. Recognition	.72
12. Independence	.73
13. Benevolence	.80
14. Power	.76
15. Materialism	<b>.69</b>
16. Achievement	.73
17. Variety	<b>.87</b>
18. Conviction	<b>.69</b>
19. Orderliness	.77
20. Goal Orientation	.71

Alphas range from .75 (Responsibility) to .83 (Sociability) for the Personality Scales, and from .69 (Materialism and Conviction) to .87 (Variety) for the Values Scales.

Out of 271 statements (31 tetrads and 49 triads), three items have a correlation item-score  $<.10$  (1.1%), while none is  $<.00$ .

**Table 3.2** Intercorrelations - Australia/New Zealand Sample ( $N = 427$ )

Personality Scales								Values Scales														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			
2	-.04	1.00																				
3	.19	.13	1.00																			
4	.42	-.09	-.03	1.00																		
5	-.30	.40	.25	-.30	1.00																	
6	<b>.43</b>	.08	.13	.24	-.21	1.00																
7	.03	.18	.39	.06	.26	-.05	1.00															
8	.42	.25	.15	.29	<b>-.35</b>	.32	-.18	1.00														
9	-.26	-.14	-.18	-.07	.11	-.19	.05	-.27	1.00													
10	-.19	.36	.12	-.09	.32	-.21	.14	-.02	.02	1.00												
11	-.03	-.16	-.14	.04	-.19	-.05	-.22	-.01	.33	-.19	1.00											
12	-.07	-.06	.01	-.17	-.10	.07	-.17	.00	.06	-.05	-.07	1.00										
13	.11	.05	.09	.16	.11	.07	<b>.38</b>	.00	.06	.19	-.20	-.10	1.00									
14	.37	-.08	.06	.11	-.24	.26	-.20	.25	<b>-.40</b>	.00	.19	.10	-.04	1.00								
15	-.25	.04	-.03	-.16	.27	-.31	-.02	-.19	.15	.16	.07	.04	-.17	-.19	1.00							
16	.14	.13	.06	-.03	.07	.36	-.01	.23	-.14	-.07	.04	-.12	.07	.19	-.16	1.00						
17	.17	-.32	-.06	.22	<b>-.39</b>	.17	-.03	.08	.10	<b>-.40</b>	-.01	.22	.04	.03	-.02	.07	1.00					
18	.29	-.23	-.03	.13	-.31	.20	-.06	.12	-.14	-.18	-.08	-.02	.19	.18	-.36	.26	.21	1.00				
19	-.25	.34	.02	-.13	.29	-.33	.05	-.14	.01	<b>.36</b>	.07	-.18	-.09	-.15	.35	-.03	<b>-.40</b>	-.22	1.00			
20	-.14	.13	.05	-.10	.20	-.15	.08	-.12	-.02	.26	-.11	-.02	-.05	-.06	.14	.00	-.28	-.05	.35	1.00		

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .10$ ,  $p < .05$ ;  $r \geq .13$ ,  $p < .01$

Scales intercorrelations range from  $-.35$  (Cautiousness x Vigour) to  $.43$  (Dominance x Original Thinking) for the Personality Scales; from  $-.40$  (Support x Power, Variety x Orderliness and Conformity x Variety) to  $.36$  (Orderliness x Conformity) for the Values Scales, and from  $-.39$  (Cautiousness x Variety) to  $.38$  (Personal Relations x Benevolence) between Personality and Values Scales.

Stability was assessed with a test-retest administration. Sixty-one persons took SOSIE twice, with a mean interval of thirty days.

Test-retest coefficients presented below are Bravais-Pearson coefficients corrected with Spearman-Brown formula.

**Table 3.3** Test-Retest Stability - Australia/New Zealand Sample ( $N = 61$ )

Scales	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$r_p$	.85	.77	.76	.86	.74	.85	.81	.84	.71	.77	.82	.87	.78	.74	.72	.84	.87	.59	.87	.74

Coefficients range from  $.74$  to  $.86$  for the Personality Scales and from  $.59$  to  $.87$  for the Value Scales, showing a better stability for personality measures.

### 3.2 France

**Table 3.4** Internal Consistency - France Sample (*N* = 778)

Scales	Alpha
1. Dominance	<b>.78</b>
2. Responsibility	<b>.66</b>
3. Stress Resistance	<b>.78</b>
4. Sociability	.75
5. Cautiousness	.69
6. Original Thinking	.67
7. Personal Relations	.71
8. Vigour	.68
9. Support	.61
10. Conformity	.76
11. Recognition	<b>.53</b>
12. Independence	.66
13. Benevolence	.65
14. Power	.77
15. Materialism	.65
16. Achievement	.60
17. Variety	<b>.79</b>
18. Conviction	.66
19. Orderliness	.69
20. Goal Orientation	.62

Alphas range from .66 (Responsibility) to .78 (Dominance and Stress Resistance) for the Personality Scales, and from .53 (Recognition) to .79 (Variety) for the Values Scales.

Out of the 271 statements, ten items have a correlation item-score < .10 (3.7%), including three items with a correlation item-score ≤ .00.



**Table 3.5** Intercorrelations - France Sample ( $N = 778$ )

	Personality Scales								Values Scales											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	.10	1.00																		
3	.26	.13	1.00																	
4	.30	-.09	-.06	1.00																
5	-.10	.41	.34	-.20	1.00															
6	.42	.13	.16	.22	-.22	1.00														
7	.19	.31	<b>.50</b>	.10	.24	-.01	1.00													
8	.37	.26	.06	.19	<b>-.28</b>	.14	-.17	1.00												
9	-.29	-.27	-.26	-.08	-.10	-.18	-.16	-.25	1.00											
10	-.04	.44	.23	-.07	.43	-.14	.29	.01	-.16	1.00										
11	-.01	-.18	-.14	.09	-.14	.01	-.14	-.02	.33	-.25	1.00									
12	-.18	-.22	-.11	-.15	-.27	-.02	-.28	-.06	.16	-.25	.05	1.00								
13	-.07	-.02	-.03	.06	.07	.01	.19	-.15	.15	.27	-.08	.04	1.00							
14	<b>.48</b>	.12	.20	.15	-.05	.28	.04	.36	-.32	.15	.13	-.01	-.25	1.00						
15	-.19	-.08	-.06	-.11	.10	-.23	-.01	-.16	.17	.05	.13	.00	-.05	-.23	1.00					
16	.24	.09	.12	.03	-.05	.28	.02	.25	-.18	-.04	.09	-.15	-.05	.28	-.09	1.00				
17	-.05	-.32	-.14	.03	<b>-.36</b>	.15	-.14	-.09	.18	<b>-.41</b>	.07	.34	.03	-.11	.08	.06	1.00			
18	.25	-.17	-.04	.10	-.32	.22	-.16	.21	-.07	-.26	-.08	.16	-.02	.24	-.27	.24	.12	1.00		
19	-.19	.32	.05	-.07	.40	-.31	.17	-.13	-.06	<b>.46</b>	-.08	-.25	.06	-.17	.28	-.06	-.32	-.26	1.00	
20	-.05	.23	.10	.01	.31	-.14	.14	-.05	-.08	.29	-.13	-.18	.01	.03	.01	-.05	-.23	-.01	.38	1.00

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .07$ ,  $p < .05$ ;  $\geq .10$ ,  $p < .01$

Scales intercorrelations coefficients range from  $-.28$  (Cautiousness x Vigour) to  $.50$  (Stress Resistance x Personal Relations) for the Personality Scales; from  $-.41$  (Conformity x Variety) to  $.46$  (Conformity x Orderliness) for the Values Scales, and from  $-.36$  (Cautiousness x Variety) to  $.48$  (Dominance x Power) between Personality and Values Scales.

Stability was assessed with a test-retest administration. Eighty persons took SOSIE twice, with a mean interval of thirty days.

Test-retest coefficients presented below are Bravais-Pearson coefficients corrected with Spearman-Brown formula.

**Table 3.6** Test-Retest Stability - France Sample ( $N = 80$ )

Scales	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$r_p$	.77	.83	.83	.83	.86	.75	.85	.79	.79	.67	.69	.59	.75	.78	.56	.72	.68	.56	.63	.59

**Note.** Correlations computed with the previous version of SOSIE (98 items).

Coefficients range from  $.75$  to  $.86$  for the Personality Scales and from  $.56$  to  $.79$  for the Value Scales, showing better stability for personality measures.

### 3.3 Germany

**Table 3.7** Internal Consistency - Germany Sample (*N* = 476)

Scales	Alpha
1. Dominance	<b>.85</b>
2. Responsibility	.74
3. Stress Resistance	.78
4. Sociability	<b>.85</b>
5. Cautiousness	.70
6. Original Thinking	.70
7. Personal Relations	.77
8. Vigour	<b>.68</b>
9. Support	.70
10. Conformity	.78
11. Recognition	.72
12. Independence	.73
13. Benevolence	.77
14. Power	.82
15. Materialism	<b>.51</b>
16. Achievement	.70
17. Variety	<b>.84</b>
18. Conviction	.55
19. Orderliness	.65
20. Goal Orientation	.78

Alphas range from .68 (Vigour) to .85 (Dominance and Sociability) for the Personality Scales, and from .51 (Materialism) to .84 (Variety) for the Values Scales.

Out of the 271 statements, five items have a correlation item-score  $< .10$  (1.8%), including two items with a correlation item-score  $\leq .00$ .

**Table 3.8** Intercorrelations - Germany Sample ( $N = 476$ )

	Personality Scales								Values Scales											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	.18	1.00																		
3	.25	.26	1.00																	
4	.42	.15	.06	1.00																
5	-.28	.25	.28	-.26	1.00															
6	.38	.13	.20	.17	-.14	1.00														
7	.23	.27	<b>.56</b>	.20	.10	.08	1.00													
8	.42	.35	.16	.28	<b>-.31</b>	.13	-.02	1.00												
9	<b>-.38</b>	-.20	-.28	-.08	.06	-.13	-.15	-.22	1.00											
10	-.05	.34	.18	-.04	.23	-.22	.13	.03	-.18	1.00										
11	-.07	-.25	-.25	.02	-.09	-.07	-.17	-.09	.31	-.20	1.00									
12	-.16	-.18	-.02	-.26	-.13	.07	-.19	-.08	.19	-.11	.02	1.00								
13	-.07	.00	.05	.04	.09	.06	.23	-.07	.17	.15	-.21	.03	1.00							
14	<b>.58</b>	.25	.25	.26	-.14	.22	.11	.35	-.41	.28	.09	-.09	-.15	1.00						
15	-.21	-.06	-.07	-.16	.18	-.19	-.09	-.18	.04	.13	.07	.11	-.10	-.21	1.00					
16	.16	.03	.04	.01	-.09	.38	.02	.24	-.15	-.14	.12	-.18	.04	.24	-.03	1.00				
17	-.07	-.31	-.05	-.04	-.26	.16	-.07	-.15	.21	<b>-.44</b>	.01	.31	.13	-.18	-.01	.17	1.00			
18	.23	-.12	-.06	.10	-.35	.13	-.08	.17	-.07	-.19	.02	.04	.00	.17	-.19	.23	.17	1.00		
19	-.16	.26	.04	-.05	.33	-.26	.05	-.09	.03	.38	-.07	-.16	-.04	-.11	.25	-.18	-.25	-.25	1.00	
20	.05	.23	.08	.13	.22	-.26	.15	.03	-.10	.35	-.13	-.17	-.08	.11	.08	-.10	-.40	-.03	<b>.42</b>	1.00

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .09$ ,  $p < .05$ ;  $r \geq .12$ ;  $p < .01$

Scales intercorrelations range from  $-.31$  (Cautiousness x Vigour) to  $.56$  (Stress Resistance x Personal Relations) for the Personality Scales; from  $-.44$  (Conformity x Variety) to  $.42$  (Orderliness x Goal-Orientation) for the Values Scales, and from  $-.38$  (Dominance x Support) to  $.58$  (Dominance x Power) between Personality and Values Scales.

Stability was assessed with a test-retest administration. Seventy-five persons took SOSIE twice, with a mean interval of thirty days.

Test-retest coefficients presented below are Bravais-Pearson coefficients corrected with Spearman-Brown formula.

**Table 3.9** Test-Retest Reliability - Germany Sample ( $N = 75$ )

Scales	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$r_p$	.86	.72	.80	.79	.84	.76	.87	.81	.64	.70	.74	.78	.75	.81	.68	.73	.79	.71	.85	.79

**Note.** Correlations computed with the previous version of SOSIE (98 items).

Coefficients range from  $.72$  to  $.87$  for the Personality Scales and from  $.64$  to  $.85$  for the Value Scales, showing better stability for personality measures.

### 3.4 India

**Table 3.10** Internal Consistency - India Sample (*N* = 157)

Scales	Alpha
1. Dominance	.78
2. Responsibility	.74
3. Stress Resistance	<b>.80</b>
4. Sociability	.74
5. Cautiousness	.72
6. Original Thinking	<b>.63</b>
7. Personal Relations	.72
8. Vigour	.72
9. Support	.65
10. Conformity	<b>.85</b>
11. Recognition	.70
12. Independence	.74
13. Benevolence	.74
14. Power	.66
15. Materialism	.52
16. Achievement	.65
17. Variety	<b>.85</b>
18. Conviction	<b>.38</b>
19. Orderliness	.75
20. Goal Orientation	.77

Alphas range from .63 (Original Thinking) to .80 (Stress Resistance) for the Personality Scales, and from .38 (Conviction) to .85 (Conformity and Variety) for the Values Scales.

Out of the 271 statements, nineteen items have a correlation item-score <.10 (7.0%), including five items with a correlation item-score <.00.

**Table 3.11** Intercorrelations - India Sample (N = 157)

Personality Scales								Values Scales											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	.16	1.00																	
3	.22	.42	1.00																
4	.27	-.03	-.03	1.00															
5	-.04	.54	.47	-.08	1.00														
6	.59	.22	.14	.19	<b>-.15</b>	1.00													
7	.17	.36	.55	.12	.27	-.05	1.00												
8	<b>.63</b>	.37	.37	.30	-.07	.40	.10	1.0											
9	-.30	-.13	-.27	.05	-.15	-.26	-.19	-.29	1.00										
10	-.02	.33	.27	-.10	.34	-.11	.23	.03	-.28	1.00									
11	.05	-.17	-.19	.22	-.29	.07	-.26	.03	.38	-.35	1.00								
12	-.05	-.24	-.15	-.17	-.17	.01	-.23	-.02	.32	-.43	.13	1.00							
13	-.05	.09	.17	.12	.29	-.06	.32	-.05	-.06	.52	-.32	-.10	1.00						
14	.35	.03	.07	-.07	-.14	.34	.04	.27	-.26	.10	.28	.15	-.28	1.00					
15	-.25	.07	-.10	-.02	.00	-.32	-.16	-.19	.40	-.08	.07	.06	-.10	-.28	1.00				
16	.16	-.02	.00	-.03	-.17	.35	-.05	.19	-.10	-.15	.11	.04	-.18	.33	-.29	1.00			
17	.17	-.31	-.14	.13	<b>-.38</b>	.10	-.12	-.01	.33	<b>-.53</b>	.11	.38	-.14	.02	.04	.31	1.00		
18	.25	-.13	-.04	.13	-.22	.24	-.09	.14	-.02	-.30	.31	.10	-.30	.30	-.07	<b>.53</b>	.18	1.00	
19	-.22	.21	.10	-.13	.26	-.10	.06	-.03	-.24	<b>.53</b>	-.22	-.37	.34	-.22	.28	-.28	-.39	-.34	1.00
20	-.13	.23	.18	-.08	<b>.50</b>	-.24	.31	-.07	-.36	.52	-.27	-.25	.27	-.10	.11	-.10	-.48	-.20	.52

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .16, p < .05$ ;  $r \geq .21$ ;  $p < .01$

Scales intercorrelations range from  $-.15$  (Cautiousness x Original Thinking) to  $.63$  (Dominance x Vigour) for the Personality Scales; from  $-.53$  (Conformity x Variety) to  $.53$  (Conformity x Orderliness and Achievement x Conviction) for the Values Scales, and from  $-.38$  (Cautiousness x Variety) to  $.50$  (Cautiousness x Goal Orientation) between Personality and Values Scales.

### 3.5 Netherlands

**Table 3.12** Internal Consistency - Netherlands Sample (*N* = 142)

Scales	Alpha
1. Dominance	<b>.84</b>
2. Responsibility	<b>.65</b>
3. Stress Resistance	.69
4. Sociability	.80
5. Cautiousness	<b>.65</b>
6. Original Thinking	.71
7. Personal Relations	.73
8. Vigour	.79
9. Support	.67
10. Conformity	.78
11. Recognition	.69
12. Independence	.76
13. Benevolence	.72
14. Power	<b>.84</b>
15. Materialism	.70
16. Achievement	.66
17. Variety	<b>.84</b>
18. Conviction	.70
19. Orderliness	.71
20. Goal Orientation	<b>.60</b>

Alphas range from .65 (Responsibility and Cautiousness) to .84 (Dominance) for the Personality Scales, and from .60 (Goal Orientation) to .84 (Power and Variety) for the Values Scales.

Out of the 271 statements, nine items have a correlation item-score <.10 (3.3%), including one item with a correlation item-score <.00.

**Table 3.13** Intercorrelations Scales - Netherlands Sample (N = 142)

Personality Scales								Values Scales												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	-.19	1.00																		
3	.11	.06	1.00																	
4	.49	-.25	-.15	1.00																
5	-.12	.30	.29	-.23	1.00															
6	<b>.54</b>	.01	.22	.40	-.24	1.00														
7	.23	.09	.32	.17	.21	-.07	1.00													
8	<b>.54</b>	.04	.29	.37	<b>-.29</b>	.28	-.03	1.00												
9	-.32	-.08	-.26	-.13	-.06	-.25	-.16	-.22	1.00											
10	-.18	.42	.12	-.20	.30	-.12	.23	-.11	-.06	1.00										
11	.05	-.12	-.33	.24	-.10	-.02	-.15	-.03	.40	-.13	1.00									
12	-.14	-.26	.06	-.17	-.16	-.09	-.18	-.03	.06	-.18	-.08	1.00								
13	-.04	.06	.03	-.05	.21	-.09	.32	-.03	.17	.28	-.14	-.03	1.00							
14	<b>.50</b>	-.04	.25	.27	-.17	.44	-.07	.33	-.41	.04	.07	.11	-.18	1.00						
15	-.30	.23	-.05	-.27	.28	-.29	-.01	-.28	.13	.25	.08	-.02	-.11	-.26	1.00					
16	.15	.09	.14	.09	.02	.26	.04	.15	-.20	.03	-.03	-.16	-.05	.32	-.08	1.00				
17	.02	-.40	-.14	.11	<b>-.42</b>	.10	-.12	-.02	.24	<b>-.49</b>	.12	.26	-.01	-.06	-.15	.01	1.00			
18	.22	-.27	.09	.12	-.21	.14	-.04	.18	-.18	-.19	-.02	.22	-.26	.32	-.27	.21	.20	1.00		
19	-.09	.31	-.02	-.06	.29	-.17	.16	-.10	-.04	<b>.41</b>	-.11	-.29	.26	-.19	.31	.00	-.33	-.23	1.00	
20	.01	.20	.05	-.02	.20	-.06	.01	.10	-.06	.19	-.10	-.12	.17	-.08	.18	.03	-.22	-.09	.35	1.00

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .17$ ,  $p < .05$ ;  $r \geq .22$ ;  $p < .01$

Scales intercorrelations range from  $-.29$  (Cautiousness x Vigour) to  $.54$  (Dominance x Original Thinking and Dominance x Vigour) for the Personality Scales; from  $-.49$  (Conformity x Variety) and  $.41$  (Conformity x Orderliness) for the Values Scales; from  $-.42$  (Cautiousness x Variety) to  $.50$  (Dominance x Power) between Personality and Values Scales.

### 3.6 United Kingdom

**Table 3.14** Internal Consistency - United Kingdom Sample ( $N = 300$ )

Scales	Alpha
1. Dominance	<b>.83</b>
2. Responsibility	<b>.75</b>
3. Stress Resistance	.80
4. Sociability	.82
5. Cautiousness	<b>.75</b>
6. Original Thinking	.76
7. Personal Relations	.78
8. Vigour	.76
9. Support	.72
10. Conformity	.82
11. Recognition	.69
12. Independence	.71
13. Benevolence	.79
14. Power	.79
15. Materialism	.66
16. Achievement	.72
17. Variety	<b>.87</b>
18. Conviction	<b>.61</b>
19. Orderliness	.72
20. Goal Orientation	.70

Alphas range from .75 (Responsibility and Cautiousness) to .83 (Dominance) for the Personality Scales, and from .61 (Conviction) to .87 (Variety) for the Values Scales.

Out of the 271 statements, three items have a correlation  $< .10$  (1.1%), while none is  $< .00$ .



**Table 3.15** Intercorrelations - United Kingdom Sample ( $N = 300$ )

	Personality Scales								Values Scales											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	.05	1.00																		
3	.25	.18	1.00																	
4	.36	-.08	-.02	1.00																
5	-.26	.34	.21	<b>-.31</b>	1.00															
6	.40	.16	.18	.21	-.07	1.00														
7	.02	.17	.35	.05	.20	.10	1.00													
8	<b>.49</b>	.31	.21	.29	-.14	.35	.09	1.00												
9	-.33	-.21	-.26	-.09	.04	-.19	-.08	-.25	1.00											
10	.05	.30	.21	-.05	.25	-.12	.18	.03	-.23	1.00										
11	.10	-.19	-.17	.19	-.20	.05	-.20	.04	.27	-.20	1.00									
12	-.19	-.12	-.05	-.20	-.08	-.10	-.12	-.17	.17	-.17	.01	1.00								
13	-.08	.07	.02	.02	.08	.08	.20	.03	.20	.13	-.29	.09	1.00							
14	.42	.08	.20	.13	-.13	.25	-.03	.28	<b>-.41</b>	.27	.27	-.05	-.23	1.00						
15	-.12	.00	-.08	-.06	.06	-.18	-.03	-.18	.08	-.02	.01	.13	-.05	-.13	1.00					
16	.20	.14	.08	-.02	.10	<b>.50</b>	.08	.33	-.17	-.08	.06	-.23	.15	.23	-.09	1.00				
17	-.08	<b>-.35</b>	-.06	.09	-.32	-.01	-.07	-.14	.21	-.38	-.03	.30	.12	-.17	.03	.05	1.00			
18	.24	-.09	.16	.13	-.23	.12	.07	.15	-.16	.02	-.11	.00	.06	.17	-.20	.18	.08	1.00		
19	-.19	.22	-.07	-.15	.31	-.27	-.09	-.11	.04	.31	.08	-.16	-.13	-.15	.24	-.05	-.32	-.15	1.00	
20	.00	.21	.02	-.02	.18	-.14	.08	.04	-.12	.31	-.02	-.15	-.20	.15	.00	.06	-.34	.09	<b>.38</b>	

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .12$ ,  $p < .05$ ;  $r \geq .15$ ;  $p < .01$

Scales intercorrelations range from  $-.31$  (Sociability x Cautiousness) to  $.49$  (Dominance x Vigour) for the Personality Scales; from  $-.41$  (Support x Power) to  $.38$  (Orderliness x Goal Orientation) for the Values Scales, and from  $-.35$  (Responsibility x Variety) to  $.50$  (Original Thinking x Achievement) between Personality and Values Scales.

Stability was assessed with a test-retest administration. Sixty-two persons took SOSIE twice, with a mean interval of thirty days.

Test-retest coefficients presented below are Bravais-Pearson coefficients corrected with Spearman-Brown formula.

**Table 3.16** Test-Retest Stability - United Kingdom Sample ( $N = 62$ )

Scales	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$r_p$	.80	.66	.74	.66	.86	.77	.71	.82	.74	.82	.53	.63	.61	.76	.66	.66	.70	.57	.53	.62

Coefficients range from  $.66$  to  $.86$  for the Personality Scales and from  $.53$  to  $.82$  for the Value Scales, showing better stability for personality measures.

### 3.7 United States

**Table 3.17** Internal Consistency - United States Sample (*N* = 154)

Scales	Alpha
1. Dominance	.84
2. Responsibility	<b>.70</b>
3. Stress Resistance	.78
4. Sociability	<b>.85</b>
5. Cautiousness	.75
6. Original Thinking	.78
7. Personal Relations	.78
8. Vigour	.72
9. Support	.71
10. Conformity	.85
11. Recognition	.74
12. Independence	.80
13. Benevolence	.84
14. Power	.77
15. Materialism	.78
16. Achievement	<b>.65</b>
17. Variety	<b>.88</b>
18. Conviction	.67
19. Orderliness	.72
20. Goal Orientation	.70

Alphas range from .70 (Responsibility) to .85 (Sociability) for the Personality Scales and from .65 (Achievement) to .88 (Variety) for the Values Scales.

Out of the 271 statements, five items have a correlation <.10 (1.8%), including three items with a correlation <.00.

**Table 3.18** Intercorrelations - United States Sample (*N* = 154)

Personality Scales								Values Scales											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	-.40	1.00																	
3	-.26	.16	1.00																
4	.50	-.26	-.28	1.00															
5	-.29	.33	.24	-.23	1.00														
6	.33	-.09	.02	.24	-.27	1.00													
7	.07	.13	.34	.11	.17	-.05	1.00												
8	.30	.15	.03	.24	-.45	.14	-.19	1.00											
9	-.16	-.06	-.23	-.08	.17	-.13	.05	-.21	1.00										
10	-.16	.35	.18	-.09	.18	-.12	.06	.13	-.11	1.00									
11	.05	-.30	-.29	.15	-.06	.01	-.03	-.14	.50	-.14	1.00								
12	-.18	-.08	-.07	-.35	-.14	-.23	-.34	-.16	-.01	-.13	.00	1.00							
13	.19	.13	.21	.32	.13	.24	.32	.19	.05	.22	-.25	-.19	1.00						
14	.25	-.14	.10	.02	-.29	.22	-.10	.11	-.34	-.06	.05	.29	.00	1.00					
15	-.23	.13	.19	-.10	.09	-.23	.04	-.13	.00	.11	-.11	.08	.00	-.12	1.00				
16	.13	.22	.21	.01	.15	.44	.20	.20	-.08	-.14	-.09	-.09	.15	.24	-.14	1.00			
17	.15	-.30	-.15	.13	-.21	.20	.01	-.02	.28	-.50	.22	.01	.09	.00	.00	.23	1.00		
18	.35	-.20	-.09	.20	-.17	.34	-.10	.17	-.27	-.12	-.09	.09	.13	.21	-.32	.34	.04	1.00	
19	-.30	.23	.07	-.26	.09	-.44	-.09	-.05	-.05	.41	-.08	.08	-.29	-.08	.20	-.19	-.29	-.11	1.00
20	-.09	.05	-.16	-.01	.15	-.28	-.03	-.12	-.03	.41	.05	-.19	-.08	-.20	.13	.00	-.47	.06	.44

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .16, p < .05$ ;  $r \geq .21, p < .01$

Scales intercorrelations range from  $-.45$  (Cautiousness x Vigour) to  $.50$  (Dominance x Sociability) for the Personality Scales; from  $-.50$  (Conformity x Variety) to  $.50$  (Support x Recognition) for the Values Scales, and from  $-.44$  (Original Thinking x Orderliness) to  $.44$  (Original Thinking x Achievement) between Personality and Values Scales.

### 3.8 International Sample

**Table 3.19** Internal Consistency - International Sample ( $N = 658$ )

Scales	Alpha
1. Dominance	.82
2. Responsibility	.70
3. Stress Resistance	.77
4. Sociability	.81
5. Cautiousness	.74
6. Original Thinking	.75
7. Personal Relations	.74
8. Vigour	.74
9. Support	.72
10. Conformity	.82
11. Recognition	.70
12. Independence	.74
13. Benevolence	.77
14. Power	.79
15. Materialism	.66
16. Achievement	.68
17. Variety	.84
18. Conviction	.59
19. Orderliness	.72
20. Goal Orientation	.73

Alphas range from .59 (Conviction) to .84 (Variety). Two scales have an alpha  $< .70$  (Materialism and Achievement) and one,  $< .65$  (Conviction).

Personality Scales alphas range from .70 (Responsibility) to .82 (Dominance), Interpersonal Values Scales alphas range from .70 (Recognition) to .82 (Conformity), and Personal Values Scales alphas range from .59 (Conviction) to .84 (Variety).

All item-score correlations are positive, 15 items (5.5%) out of the 271 statements have an item-score correlation  $< .20$  and 2 items (0.7%) have an item-score correlation  $< .10$ . None is  $< .00$ .

**Table 3.20** Intercorrelations - International Sample (N = 658)

	Personality Scales								Values Scales											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
2	.00	1.00																		
3	.15	.21	1.00																	
4	.39	-.08	-.05	1.00																
5	-.19	.36	.28	-.26	1.00															
6	<b>.49</b>	.05	.12	.27	-.20	1.00														
7	.14	.21	.35	.14	.22	-.01	1.00													
8	.47	.18	.16	.30	<b>-.34</b>	.35	-.07	1.00												
9	<b>-.32</b>	-.23	-.25	-.14	-.03	-.21	-.12	-.22	1.00											
10	-.05	.40	.21	-.05	.31	-.17	.24	-.03	-.20	1.00										
11	.02	-.19	-.19	.12	-.18	.02	-.20	.01	.29	-.18	1.00									
12	-.12	-.22	-.06	-.18	-.21	-.01	-.24	-.04	.22	-.27	.00	1.00								
13	-.04	.16	.11	.05	.23	-.03	.32	-.08	.11	.33	-.21	-.08	1.00							
14	<b>.45</b>	.01	.12	.17	-.15	.37	-.06	.31	-.38	.14	.16	.13	-.22	1.00						
15	-.18	.00	-.01	-.12	.06	-.24	-.07	-.19	.17	.00	.05	.07	-.09	-.17	1.00					
16	.24	.06	.10	.03	-.02	.41	.06	.29	-.14	-.09	.02	-.09	.03	.24	-.04	1.00				
17	.01	-.27	-.14	.12	-.29	.11	-.09	-.03	.27	<b>-.44</b>	.09	.25	.01	-.11	.00	.11	1.00			
18	.29	-.14	.04	.14	-.20	.23	-.03	.16	-.15	-.13	-.07	.13	-.03	.23	-.24	.28	.13	1.00		
19	-.19	.24	.05	-.14	.26	-.27	.03	-.10	-.08	<b>.40</b>	.00	-.25	.03	-.13	.23	-.11	-.32	-.17	1.00	
20	-.13	.16	.03	-.05	.24	-.22	.12	-.09	-.17	.36	-.13	-.15	.02	.01	.04	-.07	-.27	-.02	.37	

**Note.** 1 = Dominance, 2 = Responsibility, 3 = Stress Resistance, 4 = Sociability, 5 = Cautiousness, 6 = Original Thinking, 7 = Personal Relations, 8 = Vigour, 9 = Support, 10 = Conformity, 11 = Recognition, 12 = Independence, 13 = Benevolence, 14 = Power, 15 = Materialism, 16 = Achievement, 17 = Variety, 18 = Conviction, 19 = Orderliness, 20 = Goal Orientation.  
 $r \geq .08$ ,  $p < .05$ ;  $r \geq .10$ ,  $p < .01$

Scales intercorrelations range from  $-.34$  (Cautiousness x Vigour) to  $.49$  (Dominance x Original Thinking) for the Personality Scales; from  $-.44$  (Conformity x Variety) to  $.40$  (Conformity x Orderliness) for the Values Scales, and from  $-.32$  (Dominance x Support) to  $.45$  (Dominance x Power) between Personality and Values Scales.

Test-retest correlations coefficients were computed for the International Sample using the coefficients issued from four countries: Australia, Germany, France and United Kingdom. The average stability coefficients were calculated using Fisher's z transformation.

**Table 3.21** Average Test-Retest Stability

Scales	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
$r_p$	.82	.75	.78	.80	.83	.79	.82	.82	.72	.75	.71	.74	.73	.77	.66	.75	.77	.61	.75	.69

Coefficients range from  $.75$  to  $.83$  for the Personality Scales and from  $.61$  to  $.77$  for the Value Scales, showing better stability for personality measures.

## Convergent validity

To assess SOSIE validity, correlations with other personality and value scales were computed, based on samples issued from different countries.

### 4.1 Australia/New Zealand (English)

#### ► Correlations between SOSIE and HPI

The Hogan Personality Inventory (HPI, 1995) is designed to assess personal qualities that promote success in work, in relationships, in education and training. Sixty-one persons in Australia/New Zealand took SOSIE and HPI. Table 4.1 presents correlations between SOSIE and HPI.

**Table 4.1** Correlations between SOSIE and HPI - Australia/New Zealand Sample (N = 61)

SOSIE \ HPI	Adjustment	Ambition	Sociability	Interpersonal Sensitivity	Prudence	Inquisitive	Learning Approach
<b>1. Dominance</b>	.25	<b>.65</b>	<b>.47</b>	<b>.35</b>	-.21	.30	<b>.41</b>
<b>2. Responsibility</b>	<b>.42</b>	<b>.42</b>	-.01	<b>.33</b>	.28	.25	<b>.34</b>
<b>3. Stress Resistance</b>	<b>.55</b>	<b>.54</b>	.13	.28	.12	.28	.18
<b>4. Sociability</b>	.19	<b>.34</b>	<b>.49</b>	<b>.60</b>	.00	.01	.18
<b>5. Cautiousness</b>	.30	.08	<b>-.39</b>	.20	<b>.46</b>	-.17	-.10
<b>6. Original Thinking</b>	<b>.35</b>	<b>.53</b>	.32	-.02	-.20	<b>.61</b>	<b>.40</b>
<b>7. Personal Relations</b>	<b>.60</b>	.32	.08	<b>.47</b>	<b>.41</b>	.09	.02
<b>8. Vigour</b>	<b>.47</b>	<b>.53</b>	.16	.04	.13	.28	.21
<b>9. Support</b>	-.21	-.29	-.18	-.01	-.10	-.12	-.03
<b>10. Conformity</b>	.13	-.03	-.28	.09	<b>.35</b>	-.17	-.05
<b>11. Recognition</b>	-.05	-.07	.29	-.19	.03	-.04	.20
<b>12. Independence</b>	-.03	.01	.00	-.10	-.23	.17	.00
<b>13. Benevolence</b>	.00	-.08	-.08	.25	-.01	-.10	-.24
<b>14. Power</b>	.10	<b>.43</b>	.29	-.08	-.12	.27	.13
<b>15. Materialism</b>	-.02	-.15	-.31	.08	.29	-.24	-.30
<b>16. Achievement</b>	-.10	.20	.04	-.15	-.08	.15	.19
<b>17. Variety</b>	.16	-.04	<b>.35</b>	.12	-.23	.25	-.02
<b>18. Conviction</b>	-.07	.09	.07	-.12	<b>-.40</b>	.08	.09
<b>19. Orderliness</b>	-.03	-.08	-.17	-.01	<b>.37</b>	-.28	-.01
<b>20. Goal Orientation</b>	.00	-.03	-.19	.04	.18	-.12	.05

*Note.*  $r \geq .26, p < .05$ ;  $r \geq .33, p < .01$

Main correlations between SOSIE Scales and HPI are presented below.

- Dominance is positively correlated to Ambition (.65), Sociability (.47), Learning Approach (.41), and Interpersonal sensitivity (.35).
- Responsibility is positively correlated to Adjustment (.42), Ambition (.42), Learning Approach (.34), and Interpersonal Sensitivity (.33).
- Stress Resistance is positively correlated to Adjustment (.55), and Ambition (.54).
- Sociability is positively correlated to Interpersonal Sensitivity (.60), Sociability (.49), and Ambition (.34).
- Cautiousness is positively correlated to Prudence (.46), and negatively to Sociability (-.39).
- Original Thinking is positively correlated to Inquisitive (.61), Ambition (.53), Learning Approach

(.40), and Adjustment (.35).

- Personal Relations is positively correlated to Adjustment (.60), Interpersonal Sensitivity (.47), and Prudence (.41).
- Vigour is positively correlated to Ambition (.53), and Adjustment (.47).
- Conformity is positively correlated to Prudence (.35).
- Power is positively correlated to Ambition (.43).
- Variety is positively correlated to Sociability (.35).
- Conviction is negatively correlated to Prudence (-.40).
- Orderliness is positively correlated to Prudence (.37).

### ► Correlations between SOSIE and MVPI

The Motives, Values, Preferences Inventory (MVPI, 1996) is an inventory that reveals a person's core values, goals and interests. Sixty-one persons in Australia/New Zealand took SOSIE and MVPI. Table 4.2 presents correlations between SOSIE and MVPI.

**Table 4.2** Correlations between SOSIE and MVPI - Australia/New Zealand Sample (N = 61)

SOSIE \ MVPI	Aesthetics	Affiliation	Altruistic	Commerce	Hedonism	Power	Recognition	Science	Security	Tradition
<b>1. Dominance</b>	.19	<b>.53</b>	.16	.01	.10	.31	.29	.13	<b>-.35</b>	.08
<b>2. Responsibility</b>	-.06	.16	.09	.05	.01	.05	-.13	.03	-.05	-.01
<b>3. Stress Resistance</b>	-.02	.15	-.13	-.06	.12	.11	.04	.00	.02	-.09
<b>4. Sociability</b>	.05	<b>.74</b>	.31	-.09	.30	.09	.30	-.19	-.23	.11
<b>5. Cautiousness</b>	-.19	-.12	.00	-.09	-.05	-.22	-.27	-.15	<b>.34</b>	.02
<b>6. Original Thinking</b>	<b>.34</b>	.12	-.06	-.06	-.02	.29	.10	<b>.46</b>	<b>-.39</b>	-.16
<b>7. Personal Relations</b>	-.07	.30	.07	-.10	.11	-.12	-.13	-.15	.08	-.02
<b>8. Vigour</b>	-.09	.16	.04	.23	.08	<b>.38</b>	-.08	.18	-.18	-.04
<b>9. Support</b>	.05	-.02	-.18	-.27	.05	<b>-.33</b>	.01	.01	-.05	-.04
<b>10. Conformity</b>	<b>-.39</b>	-.20	-.14	.08	-.02	-.23	-.26	-.17	<b>.38</b>	.21
<b>11. Recognition</b>	.13	.13	-.08	.13	.02	.15	<b>.53</b>	.14	.03	-.07
<b>12. Independence</b>	.20	-.19	-.06	.01	-.03	.05	-.20	.12	-.14	-.16
<b>13. Benevolence</b>	.05	.25	<b>.33</b>	-.16	.25	-.11	-.19	-.28	-.12	.03
<b>14. Power</b>	.05	.06	.12	.18	-.25	<b>.47</b>	.17	.22	-.17	.00
<b>15. Materialism</b>	-.18	-.06	-.14	.13	.04	-.12	-.21	-.14	.31	-.11
<b>16. Achievement</b>	-.07	-.15	-.10	-.15	<b>-.40</b>	.10	.12	.21	-.02	-.02
<b>17. Variety</b>	<b>.41</b>	.28	.03	-.05	.30	.12	.16	.16	<b>-.37</b>	-.09
<b>18. Conviction</b>	.20	.02	-.03	-.22	-.22	.00	.02	.09	-.30	-.08
<b>19. Orderliness</b>	<b>-.33</b>	-.20	.09	.21	.10	-.10	-.04	-.26	<b>.39</b>	.27
<b>20. Goal Orientation</b>	-.25	-.03	.18	.13	.08	-.10	-.17	-.19	.17	.09

Note.  $r \geq .26$ ,  $p < .05$ ;  $r \geq .33$ ,  $p < .01$

Main correlations between SOSIE Scales and MVPI are presented below.

- Dominance is positively correlated to Affiliation (.53), and negatively to Security (-.35).
- Sociability is positively correlated to Affiliation (.74).
- Cautiousness is positively correlated to Security (.34).
- Original Thinking is positively correlated to Science (.46), Aesthetics (.34), and negatively to Security (-.39).
- Vigour is positively correlated to Power (.38).
- Support is negatively correlated to Power (-.33).
- Conformity is positively correlated to Security (.38), and negatively correlated to Aesthetics (-.39).
- Recognition is positively correlated to Recognition (.53).
- Benevolence is positively correlated to Altruistic (.33).
- Power is positively correlated to Power (.47).
- Achievement is negatively correlated to Hedonism (-.40).
- Variety is positively correlated to Aesthetics (.41), and negatively to Security (-.37).
- Orderliness is positively correlated to Security (.39), and negatively to Aesthetics (-.33).



## 4.2. France (French)

### ► Correlations between SOSIE and NEO PI-R

The Revised NEO Personality Inventory (NEO PI-R, 1992) consists of 30 facet scales that define the broad domains of the Five-Factor Model of personality: Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), Conscientiousness (C) (Costa and McCrae, 1992; Costa, McCrae, and Rolland, 1998).

Both inventories were administered to a French Sample ( $N=100$ ). Table 4.3 presents correlations between SOSIE and NEO PI-R.

Main correlations between SOSIE Scales and NEO PI-R Five Factors are presented below.

- Dominance is positively correlated to Extraversion (.50), Conscientiousness (.41), and negatively to Neuroticism (-.49).
- Responsibility is positively correlated to Conscientiousness (.38) and Agreeableness (.34).
- Sociability is positively correlated to Extraversion (.52) and Conscientiousness (.30).
- Cautiousness is positively correlated to Conscientiousness (.30), and negatively to Neuroticism (-.27) and Extraversion (-.27).
- Original Thinking is positively correlated to Openness (.49).
- Personal Relations is positively correlated to Agreeableness (.48), and negatively to Neuroticism (-.33).
- Vigour is positively correlated to Extraversion (.40) and Conscientiousness (.31).
- Support is positively correlated to Neuroticism (.34).
- Conformity is correlated to Agreeableness (.32), and negatively to Neuroticism (-.27).
- Independence is negatively correlated to Conscientiousness (-.33) and Agreeableness (-.26).
- Benevolence is positively correlated to Agreeableness (.38).
- Power is negatively correlated to Agreeableness (-.33) and Neuroticism (-.27).
- Achievement is positively correlated to Conscientiousness (.32) and Extraversion (.26).
- Variety is positively correlated to Neuroticism (.31), and negatively to Conscientiousness (-.35).
- Orderliness is positively correlated to Agreeableness (.31).
- Goal Orientation is negatively correlated to Openness (-.26).

Table 4.3 Correlations between SOSIE and NEO PI-R - France Sample (N = 100)

SOSIE	NEO PI-R																																			
	N	N1	N2	N3	N4	N5	N6	E	E1	E2	E3	E4	E5	E6	O	O1	O2	O3	O4	O5	O6	A	A1	A2	A3	A4	A5	A6	C	C1	C2	C3	C4	C5	C6	
Dom	-.49	-.32	-.24	-.48	-.50	-.28	-.44	.50	.37	.18	.62	.24	.22	.16	.11	-.05	.01	.22	-.04	.26	.00	-.25	-.08	-.25	.17	-.21	-.42	-.04	.41	.59	.23	.27	.32	.30	.24	
Resp	-.20	-.09	-.26	-.04	-.06	-.23	-.25	-.03	.08	.13	-.06	.09	-.27	-.07	-.16	-.20	-.16	-.17	.02	.07	.34	.24	.41	.18	.23	.14	.13	.38	.19	.24	.42	.14	.45	.28		
StrRes	-.19	-.32	-.17	-.11	.03	-.09	-.19	-.09	.02	-.08	-.03	-.03	-.03	-.17	-.04	-.03	-.07	-.05	-.15	.15	-.01	-.05	-.02	-.01	-.02	.03	-.13	-.06	.10	-.01	.18	.06	.12	.07		
Soc	-.16	.08	-.14	-.11	-.32	-.10	-.17	.52	.47	.39	.23	.24	.28	.30	.12	.06	.09	.13	.09	-.06	.11	.19	.23	-.06	.40	.02	.03	.29	.30	.31	.25	.22	.25	.26	.12	
Caut	-.27	-.05	-.24	-.18	-.10	-.42	-.27	-.27	-.08	.11	-.06	-.20	-.46	-.25	-.21	-.29	-.03	-.36	-.17	.11	.17	.25	.14	.33	.06	.31	.03	.08	.30	.20	.17	.18	.02	.21	.53	
OrTh	-.24	-.19	-.17	-.12	-.16	-.21	-.20	.11	.10	-.01	.21	-.05	.06	.05	.49	.30	.41	.08	.27	.57	-.14	-.08	.00	-.07	.27	-.21	-.22	-.01	.21	.27	.01	.22	.27	.17	.07	
PerRe	-.33	-.27	-.39	-.23	-.20	-.26	-.16	.20	.30	.23	.02	-.02	-.01	.21	.05	-.11	.01	.15	.22	.17	.13	.48	.52	.23	.38	.25	.21	.32	.16	.13	-.03	.22	.06	.26	.08	
Vig	-.24	-.15	-.15	-.17	-.25	-.14	-.33	.40	.22	.10	.32	.53	.20	.11	-.03	-.14	-.05	.11	.03	-.01	.01	-.04	.05	-.02	.13	-.14	-.06	-.14	.31	.32	.17	.16	.31	.30	.18	
Sup	.34	.36	.13	.33	.28	.30	.14	-.07	-.06	.01	-.13	.13	-.08	-.11	-.04	.11	.12	-.11	-.09	.18	-.10	.09	-.03	.04	.00	.13	.21	.01	-.22	-.35	-.06	-.14	-.17	-.17	-.15	
Conf	-.27	-.25	-.34	-.09	-.15	-.24	-.12	-.13	.02	.03	-.04	-.15	-.18	-.14	-.20	-.13	-.24	-.16	.03	-.01	-.13	.32	.12	.34	.20	.31	.10	.25	.17	.06	.18	.26	-.05	.23	.11	
Reco	.02	.03	.20	-.06	.03	.09	-.17	.21	.09	.16	.13	.20	.13	.05	-.08	-.21	-.07	.07	-.13	.05	.11	-.19	-.03	-.23	.02	-.16	-.22	-.06	.19	.11	.09	.12	.27	.15	.14	
Inde	.14	.04	.08	.01	.06	.13	.33	-.19	-.26	-.30	-.19	-.16	.02	.17	.05	.15	-.01	.08	.02	-.16	.06	-.26	-.12	-.15	-.45	-.12	-.05	-.27	-.33	-.18	-.14	-.34	-.30	-.24	-.30	
Bene	.04	.10	-.11	.11	.15	-.10	-.01	.08	.20	.12	-.12	.03	.02	.06	.20	.06	.28	.09	.04	.13	.01	.38	.22	.22	.41	.13	.23	.38	.11	.07	.02	.16	.07	-.07	.23	
Pow	-.27	-.25	.04	-.27	-.34	-.17	-.25	.16	.06	.05	.39	.03	.10	-.08	.06	-.03	-.08	.03	.09	.18	.04	-.33	-.16	-.22	-.11	-.27	-.27	-.29	.14	.30	-.05	.01	.27	.39	.31	.09
Mater	-.02	.07	-.01	-.04	.00	-.01	-.05	-.03	-.02	-.05	.02	.02	-.09	.00	-.12	-.08	-.13	-.04	-.02	-.09	.01	-.02	-.04	-.03	-.04	.01	.04	.00	-.03	.02	.00	-.03	.12	.02	-.02	
Achie	-.25	-.19	-.14	-.14	-.11	-.26	-.27	.26	.16	.22	.18	.25	.13	.00	.21	-.10	.25	.06	.24	.37	-.10	-.09	.08	-.13	.15	-.21	-.12	-.08	.32	.24	.18	.27	.39	.31	.09	
Vari	.31	.22	.20	.19	.20	.24	.31	-.02	-.05	-.31	-.08	-.02	.18	.17	.14	.31	.01	.19	.15	-.19	-.11	-.10	-.17	-.07	-.16	-.02	.11	-.14	-.35	-.31	-.14	-.32	-.20	-.34	-.28	
Conv	-.25	-.28	-.13	-.22	-.17	-.13	-.23	.07	.11	-.06	.25	.09	-.10	-.04	.14	.08	.13	-.02	.08	.28	-.18	-.15	-.07	.00	.02	-.14	-.22	-.21	.06	.07	-.02	.12	.09	.08	-.02	
Ord	.00	.07	-.07	.08	-.04	-.04	.03	-.02	.03	-.26	-.06	-.06	-.12	-.08	-.19	-.19	-.17	-.07	-.21	-.06	.19	.31	.28	.14	.14	.24	.15	.31	.16	.13	.16	.06	.04	.10	.22	
GoOr	.09	.08	.10	.06	.07	.09	.10	-.25	-.22	.03	-.26	-.25	-.09	-.14	-.26	-.17	-.12	-.21	-.29	-.23	.24	.07	-.02	.09	-.08	.12	.00	.17	-.04	-.03	-.12	.01	-.13	-.05	.10	

Note. N = Neuroticism ; E = Extraversion ; O = Openness ; A = Agreeableness ; C = Conscientiousness.  
 N1: Anxiety, N2: Angry, Hostility, N3: Depression, N4: Self-Conscientiousness, N5: Impulsiveness, N6: Vulnerability, E1: Warmth, E2: Gregariousness, E3: Assertiveness, E4: Activity, E5: Excitement-Seeking, E6: Positive Emotions, O1: Fantasy, O2: Aesthetics, O3: Feelings, O4: Action, O5: Ideas, O6: Values, A1: Trust, A2: Straightforwardness, A3: Altruism, A4: Compliance, A5: Modesty, A6: Tender Mindedness, C1: Competence, C2: Order, C3: Dutifulness, C4: Achievement Striving, C5: Self-Discipline, C6: Deliberation.  
 r ≥ .20, p < .05 ; r ≥ .26, p < .01

► Correlations between SOSIE and WVI

Super (1970) writes that the values in the Work Values Inventory were derived in part from the Allport-Vernon-Lindsey (1970) Study of Values. Other values came from the job satisfaction studies of Hoppock (1935) and Centers (1948), and theorizing by Darley and Hagenah (1955), Fryer (1931), and Ginzberg (1951). Further evidence of content validity may be derived from the similarities in Super's list of work values and the needs and work values of Dawis and Lofquist (1984).

Super views work values as the importance attached to jobs in general. Values are defined by Super as the qualities people desire and seek in the activities they engage in and in the professional situations they encounter. He suggests that values may be classified as intrinsic or extrinsic: namely as those inherent in and derived from the activity itself, or as those that are the outcomes of participating in the activity.

Super's Work Values Inventory (1970, 1991) is an instrument comprising 15 scales measuring the relative importance placed on the following work-related value dimensions: Creativity, Management, Achievement, Surroundings, Supervisory Relations, Way of Life, Security, Associates, Esthetics, Prestige, Independence, Variety, Economic Returns, Altruism and Intellectual Stimulation.

Both inventories were administered to a French Sample (N=53). Table 4.4 presents correlations between SOSIE and WVI.

**Table 4.4** Correlations between SOSIE and WVI - France Sample (N = 53)

SOSIE \ WVI	Cr	Ma	Ac	Su	SR	WL	Se	As	Es	Pr	In	Va	ER	AI	IS
<b>1. Dominance</b>	.28	.12	-.10	-.12	-.28	-.08	-.10	.10	-.02	.07	.23	.24	.18	-.11	.12
<b>2. Responsibility</b>	.13	.20	.15	-.16	.09	-.11	.13	-.04	.23	-.16	.11	.02	-.17	.09	.21
<b>3. Stress Resistance</b>	.23	.16	.07	-.17	-.06	-.07	.01	.10	.17	-.15	.18	.08	-.10	-.08	.23
<b>4. Sociability</b>	.16	-.14	.02	-.02	-.13	-.09	-.11	.14	.02	.03	-.10	.21	.03	.01	.02
<b>5. Cautiousness</b>	-.09	.02	.24	.01	.24	-.04	.19	.00	.03	-.13	-.06	.17	-.09	.03	.01
<b>6. Original Thinking</b>	<b>.60</b>	-.03	<b>.40</b>	-.24	-.10	-.16	-.18	.16	.22	-.10	-.18	<b>.40</b>	-.25	.12	<b>.56</b>
<b>7. Personal Relations</b>	.13	.21	.28	.03	.18	.12	.14	.34	.07	.08	.03	.16	-.02	.19	.32
<b>8. Vigour</b>	<b>.39</b>	.20	.13	.06	-.05	.08	.20	.10	.29	.13	.20	.05	-.04	.27	.21
<b>9. Support</b>	-.15	-.28	-.10	.01	.12	-.09	-.16	.04	-.30	.01	<b>-.39</b>	-.10	-.02	-.20	-.11
<b>10. Conformity</b>	-.14	-.07	.30	.04	.15	.14	<b>.37</b>	.05	.23	-.10	-.25	.01	-.14	.26	.02
<b>11. Recognition</b>	.04	.09	.07	.05	.07	.11	.18	.15	-.02	<b>.44</b>	-.04	-.16	.07	-.04	-.19
<b>12. Independence</b>	-.18	-.22	<b>-.36</b>	.08	-.05	.00	-.25	-.21	-.19	<b>-.36</b>	.20	-.03	.13	<b>-.36</b>	.07
<b>13. Benevolence</b>	.06	-.21	.23	.18	.12	.16	.15	.17	.33	.01	.04	.09	-.07	<b>.50</b>	.01
<b>14. Power</b>	.30	<b>.54</b>	-.10	-.27	-.29	-.24	-.23	-.12	-.10	.09	.28	.12	.05	-.16	.13
<b>15. Materialism</b>	<b>-.48</b>	.03	-.32	.05	-.12	.10	.22	-.16	-.28	-.10	.00	-.11	.32	-.32	-.25
<b>16. Achievement</b>	.25	.28	.15	-.15	-.02	-.22	.16	-.10	.04	.04	.16	-.14	.10	.19	.15
<b>17. Variety</b>	.19	-.14	-.01	-.23	-.19	-.12	<b>-.45</b>	.16	-.21	-.13	-.14	.19	-.26	.01	.14
<b>18. Conviction</b>	.30	.09	-.12	-.12	-.20	.00	-.32	-.03	.28	.00	.18	-.08	-.14	.10	-.06
<b>19. Orderliness</b>	-.31	-.12	.12	.30	<b>.41</b>	.09	<b>.36</b>	.02	.01	.13	-.19	-.10	.03	.10	-.10
<b>20. Goal Orientation</b>	.15	-.04	.20	.16	.07	.16	.08	.07	.31	.10	.14	.22	.01	-.09	.15

**Note.** Cr = Creativity, Ma = Management, Ac = Achievement, Su = Surroundings, SR = Supervisory Relations, WL = Way of Life, Se = Security, As = Associates, Es = Esthetics, Pr = Prestige, In = Independence, Va = Variety, ER = Economic Returns, AI = Altruism, IS = Intellectual Stimulation.  
 $r \geq .27, p < .05$ ;  $r \geq .35, p < .01$

Main correlations between SOSIE and WVI are presented below.

- Original Thinking is positively correlated to Creativity (.60), Intellectual Stimulation (.56), Achievement (.40), and Variety (.40).
- Vigour is positively correlated to Creativity (.39).
- Support is negatively correlated to Independence (-.39).
- Conformity is positively correlated to Security (.37).
- Recognition is positively correlated to Prestige (.44).
- Independence is negatively correlated to Altruism (-.36), Prestige (-.36), and Achievement (-.36).
- Benevolence is positively correlated to Altruism (.50).
- Power is positively correlated to Management (.54).
- Materialism is negatively correlated to Creativity (-.48).
- Variety is negatively correlated to Security (-.45).
- Orderliness is positively correlated to Supervisory Relations (.41), and Security (.36).

### 4.3 Germany (German)

#### ► Correlations between SOSIE and NEO PI-R

NEO PI-R and SOSIE were administered to a German Sample ( $N=82$ ). Table 4.5 presents correlations between SOSIE and NEO PI-R.

Main correlations between SOSIE and NEO PI-R Five Factors are presented below.

- Dominance is positively correlated to Extraversion (.58), and negatively to Neuroticism (-.42).
- Responsibility is positively correlated to Conscientiousness (.55), and negatively to Neuroticism (-.52).
- Stress Resistance is positively correlated to Conscientiousness (.31), and negatively to Neuroticism (-.68).
- Sociability is positively correlated to Extraversion (.62) and Openness (.32).
- Cautiousness is positively correlated to Conscientiousness (.28), and negatively to Extraversion (-.42).
- Original Thinking is positively correlated to Openness (.39) and Conscientiousness (.38) and Extraversion (.29), and negatively to Neuroticism (-.50).
- Personal Relations is positively correlated to Agreeableness (.43), and negatively to Neuroticism (-.52).
- Vigour is positively correlated Conscientiousness (.46) and Extraversion (.43), and negatively to Neuroticism (-.48).
- Support is positively correlated to Neuroticism (.47), and negatively to Extraversion (-.29) and Conscientiousness (-.28).
- Recognition is positively correlated to Neuroticism (.39), and negatively to Conscientiousness (-.30).
- Benevolence is positively correlated to Agreeableness (.54) and Openness (.34).
- Power is positively correlated to Conscientiousness (.41) and Extraversion (.31), and negatively to Neuroticism (-.50) and Agreeableness (-.31).
- Materialism is negatively correlated to Extraversion (-.29).
- Variety is positively correlated to Openness (.37), and negatively to Conscientiousness (-.35).
- Conviction is positively correlated to Extraversion (.33) and Openness (.28).
- Orderliness is negatively correlated to Openness (-.31).
- Goal Orientation is negatively correlated to Openness (-.37) and Agreeableness (-.36).

Table 4.5 Correlations between SOSIE and NEO PI-R - Germany Sample (N = 82)

SOSIE	NEO PI-R																																		
	N	N1	N2	N3	N4	N5	N6	E	E1	E2	E3	E4	E5	E6	O	O1	O2	O3	O4	O5	O6	A	A1	A2	A3	A4	A5	A6	C	C1	C2	C3	C4	C5	C6
<b>Dom</b>	-.42	-.31	-.28	-.38	-.51	-.05	-.40	.58	.39	.37	.66	.38	.33	.34	.21	.08	-.05	.13	.39	.13	.24	-.17	.26	-.37	-.14	-.07	-.14	-.25	.09	.42	-.24	-.03	.20	.11	-.03
<b>Resp</b>	-.52	-.32	-.55	-.50	-.16	-.40	-.43	-.04	-.02	.09	-.01	-.03	-.31	.05	-.04	-.23	-.02	-.18	-.05	.30	.02	.08	.07	.13	.14	.04	-.13	.55	.35	.37	.41	.30	.54	.40	
<b>StreRe</b>	-.68	-.54	-.71	-.51	-.30	-.49	-.51	-.12	-.15	-.12	-.03	-.11	-.13	.02	-.16	-.25	-.12	-.31	-.04	.14	.01	.08	.09	-.01	.02	.36	.06	-.15	.31	.27	.13	.23	.10	.35	.25
<b>Soc</b>	-.18	-.11	-.06	-.26	-.29	.13	-.24	.62	.57	.62	.34	.34	.30	.39	.32	.16	.16	.32	.36	.08	.18	-.05	.14	-.16	.07	-.15	-.09	.03	.11	-.09	-.09	.23	.15	-.20	
<b>Caut</b>	.01	.11	-.10	-.05	.30	-.27	.04	-.42	-.23	-.28	-.29	-.38	-.48	-.19	-.16	-.15	-.14	-.16	-.33	.17	-.02	.11	-.07	.20	.07	.25	.08	-.03	.28	.11	.17	.27	-.02	.09	.59
<b>OrTh</b>	-.50	-.29	-.49	-.43	-.27	-.37	-.39	.29	.23	.22	.20	.34	.02	.22	.39	.20	.08	.05	.35	.59	.33	.15	.24	.04	.04	.24	.09	-.09	.38	.41	-.05	.34	.43	.32	.20
<b>PerRe</b>	-.52	-.39	-.56	-.50	-.19	-.32	-.38	.25	.26	.11	.07	.12	.03	.38	.24	.07	.23	.05	.16	.28	.18	.43	.49	.09	.38	.46	.04	.10	.19	.31	-.01	.19	.14	.19	.00
<b>Vig</b>	-.48	-.36	-.32	-.48	-.38	-.22	-.40	.43	.24	.29	.49	.50	.17	.19	.17	.00	-.01	.02	.27	.30	.13	-.07	.16	-.18	-.07	.05	-.11	.46	.49	.02	.34	.44	.50	.18	
<b>Sup</b>	.47	.39	.25	.37	.40	.33	.44	-.29	-.14	-.24	-.38	-.18	-.12	-.15	-.08	.11	.10	.01	-.11	-.28	-.24	-.04	-.22	.14	-.02	-.02	-.09	-.28	-.35	.01	-.22	-.30	-.19	-.17	
<b>Conf</b>	-.27	-.21	-.27	-.22	-.06	-.26	-.22	-.05	.00	.03	-.08	-.05	-.18	.02	-.14	-.33	.07	-.12	-.10	.06	-.16	.08	.01	.08	.06	.09	.13	-.04	.27	.11	.25	.11	.22	.24	.21
<b>Reco</b>	.39	.30	.32	.38	.25	.15	.35	-.02	-.16	.08	-.06	-.02	.25	-.10	-.25	-.01	-.13	-.10	-.20	-.35	.19	-.22	.13	-.29	-.18	-.03	-.15	-.04	-.30	-.27	-.07	-.35	-.17	-.35	-.08
<b>Inde</b>	.00	-.01	.06	-.03	-.16	.12	.03	-.14	.00	-.22	-.13	-.07	-.08	-.07	.24	.24	.02	.17	.26	.10	.19	.00	.07	.26	-.13	-.05	-.01	-.16	-.03	-.02	-.06	.06	-.04	-.02	-.06
<b>Bene</b>	.10	.12	-.07	.09	.16	.15	.02	.04	.19	-.08	-.09	-.03	-.03	.18	.34	.26	.42	.22	.03	.22	.08	.54	.14	.26	.51	.10	.40	.63	.19	-.18	-.21	.00	-.10	-.16	.16
<b>Pow</b>	-.50	-.43	-.22	-.44	-.41	-.38	-.44	.31	.05	.33	.53	.24	.11	.07	-.15	-.25	-.39	-.17	.05	.13	.19	-.31	.07	-.35	-.22	-.07	-.24	-.39	.41	.53	.09	.27	.29	.37	.23
<b>Mater</b>	.17	.10	.27	.21	.14	.18	.20	-.29	-.38	-.26	-.04	-.04	-.20	-.26	-.27	-.17	-.27	-.28	-.20	.11	.03	-.25	-.31	-.08	-.21	-.06	-.10	-.12	-.09	-.15	-.03	-.01	-.16	-.13	.08
<b>Achie</b>	-.10	-.08	-.11	-.15	-.01	.01	-.10	.06	.15	.04	.10	.04	-.15	.03	.23	.16	.13	.02	.16	.23	.24	.22	.23	.07	.22	.03	.12	.11	.13	.16	-.03	.24	.06	.03	.14
<b>Vari</b>	.14	.12	.03	.13	-.01	.29	.12	.18	.26	.13	-.13	.03	.21	.25	.37	.41	.18	.35	.36	.02	.20	.22	.14	.14	.18	-.01	.11	.23	-.35	-.21	-.26	-.24	-.15	-.27	-.37
<b>Conv</b>	-.07	-.04	-.05	-.07	-.26	.18	-.05	.33	.32	.11	.30	.26	.15	.23	.28	.03	.32	.22	.26	.17	.05	.21	.16	.09	.28	-.08	.08	.22	-.02	.04	-.16	.06	.13	-.01	-.16
<b>Ord</b>	-.05	-.04	-.03	-.04	.08	-.11	-.07	-.16	-.18	-.05	-.11	-.19	.01	-.14	-.31	-.15	-.18	-.18	-.37	-.10	-.30	-.09	-.04	-.04	-.15	.12	-.10	-.13	.21	.13	.30	.10	.00	.19	.19
<b>GoOr</b>	-.14	-.09	-.10	-.11	.02	-.26	-.12	-.11	-.21	.00	.00	-.02	-.07	-.15	-.37	-.41	-.21	-.21	-.26	-.13	-.24	-.36	-.23	-.23	-.34	-.02	-.15	-.35	.21	.09	-.21	-.07	.18	.26	.19

Note. N = Neuroticism ; E = Extraversion ; O = Openness ; A = Agreeableness ; C = Conscientiousness.  
 N1: Anxiety, N2: Angry, Hostility, N3: Depression, N4: Self-Conscientiousness, N5: Impulsiveness, N6: Vulnerability, E1: Warmth, E2: Gregariousness, E3: Assertiveness, E4: Activity, E5: Excitement-Seeking, E6: Positive Emotions, O1: Fantasy, O2: Aesthetics, O3: Feelings, O4: Action, O5: Ideas, O6: Values, A1: Trust, A2: Straightforwardness, A3: Altruism, A4: Modesty, A5: Compliance, A6: Tender Mindedness, C1: Competence, C2: Order, C3: Dutifulness, C4: Achievement Striving, C5: Self-Discipline, C6: Deliberation.  
 r ≥ .22, p < .05 ; r ≥ .28, p < .01

## 4.4 United Kingdom (English)

### ► Correlations between SOSIE and OPQ

The OPQ (Occupational Personality Questionnaire, 1984) is designed to assess 32 personality dimensions, defining 5 broad domains, the Big Five. Both inventories were administered to one hundred persons in the United Kingdom. Table 4.6 presents correlations between SOSIE and OPQ.

**Table 4.6** Correlations between SOSIE and OPQ - United Kingdom Sample ( $N = 100$ )

SOSIE \ OPQ	Agreeableness	Conscientiousness	Emotional Stability	Extraversion	Openness
1. Dominance	-.21	-.10	.28	.47	.24
2. Responsibility	.10	.44	.12	-.06	-.06
3. Stress Resistance	-.09	.02	.43	-.08	-.09
4. Sociability	.03	-.11	.27	.58	.01
5. Cautiousness	.28	.17	-.03	-.23	-.20
6. Original Thinking	-.24	-.08	.32	.16	.54
7. Personal Relations	.37	-.16	.28	.05	-.02
8. Vigour	-.27	.06	.07	.22	.31
9. Support	.34	.01	-.17	.02	-.16
10. Conformity	.12	.12	-.13	-.18	-.35
11. Recognition	-.27	-.09	-.01	.28	.03
12. Independence	-.12	-.19	.09	-.12	.18
13. Benevolence	.37	.05	.03	-.24	.02
14. Power	-.40	.07	.15	.22	.20
15. Materialism	-.15	.10	.02	-.01	-.04
16. Achievement	-.09	.08	.05	-.12	.35
17. Variety	.09	-.44	.12	.09	.22
18. Conviction	-.02	-.23	.02	.09	.05
19. Orderliness	.05	.43	-.09	-.05	-.31
20. Goal Orientation	.08	.19	-.17	-.03	-.38

Note.  $r \geq .20$ ,  $p < .05$ ;  $r \geq .26$ ,  $p < .01$

Main correlations between OPQ Big Five and SOSIE Scales are presented below.

- Agreeableness is positively correlated to Benevolence (.37), Personal Relations (.37), Support (.34) and Cautiousness (.28), and negatively to Power (-.40), Vigour (-.27), and Recognition (-.27).
- Conscientiousness is positively correlated to Responsibility (.44) and Orderliness (.43), and negatively to Variety (-.44).
- Emotional Stability is positively correlated to Stress Resistance (.43), Original Thinking (.32), Personal Relations (.28), Dominance (.28) and Sociability (.27).
- Extraversion is positively correlated to Sociability (.58), Dominance (.47) and Recognition (.28).
- Openness is positively correlated to Original Thinking (.54), Achievement (.35) and Vigour (.31), and negatively to Goal Orientation (-.38), Conformity (-.35) and Orderliness (-.31).

► Correlations between SOSIE and MVPI

Both inventories were administered to one hundred persons in the United Kingdom. Table 4.7 presents correlations between SOSIE and MVPI.

**Table 4.7** Correlations between SOSIE and MVPI - United Kingdom Sample (N = 100)

SOSIE \ MVPI	Aesthetics	Affiliation	Altruistic	Commerce	Hedonism	Power	Recognition	Science	Security	Tradition
<b>1. Dominance</b>	.01	<b>.29</b>	-.05	.20	.07	<b>.34</b>	.07	.06	-.21	-.07
<b>2. Responsibility</b>	-.20	-.06	-.12	.18	-.02	-.00	-.12	-.01	.15	.02
<b>3. Stress Resistance</b>	-.22	.01	-.17	.15	.12	.07	-.16	.11	.01	-.15
<b>4. Sociability</b>	-.16	<b>.68</b>	.01	.12	<b>.28</b>	.24	<b>.27</b>	-.12	<b>-.30</b>	-.15
<b>5. Cautiousness</b>	.04	<b>-.27</b>	.09	<b>-.29</b>	-.05	<b>-.35</b>	<b>-.32</b>	-.06	<b>.29</b>	.04
<b>6. Original Thinking</b>	.16	.05	.08	.16	-.17	<b>.33</b>	.02	.19	<b>-.33</b>	.07
<b>7. Personal Relations</b>	.05	.17	.21	-.19	.03	<b>-.26</b>	-.13	-.05	-.03	-.03
<b>8. Vigour</b>	-.06	.15	-.09	.24	-.20	<b>.36</b>	.11	.15	<b>-.30</b>	.06
<b>9. Support</b>	.17	.09	.14	<b>-.50</b>	.11	<b>-.34</b>	-.08	-.23	.03	-.13
<b>10. Conformity</b>	-.22	.07	-.11	.23	-.03	-.09	-.20	.08	<b>.35</b>	.07
<b>11. Recognition</b>	-.07	<b>.30</b>	-.25	.13	.04	<b>.30</b>	<b>.42</b>	-.22	-.12	-.13
<b>12. Independence</b>	-.02	<b>-.35</b>	-.15	-.09	.15	-.12	-.13	.17	-.20	-.12
<b>13. Benevolence</b>	.23	-.13	<b>.50</b>	<b>-.29</b>	-.07	-.23	-.23	.03	-.04	.16
<b>14. Power</b>	-.10	.04	-.19	<b>.46</b>	-.15	<b>.43</b>	.22	.13	-.02	.08
<b>15. Materialism</b>	-.20	-.12	-.13	.16	.03	-.06	-.20	.15	.11	.00
<b>16. Achievement</b>	.18	-.08	.07	.03	<b>-.36</b>	.21	.04	.02	-.20	.15
<b>17. Variety</b>	.16	.19	.20	-.13	<b>.26</b>	-.00	.08	.16	<b>-.29</b>	-.10
<b>18. Conviction</b>	-.02	.07	.04	-.02	.05	-.03	.10	-.11	-.15	-.01
<b>19. Orderliness</b>	.08	.01	-.12	-.01	.03	-.00	.07	-.20	<b>.36</b>	.00
<b>20. Goal Orientation</b>	<b>-.30</b>	-.13	-.14	-.01	-.07	-.14	-.10	-.10	<b>.28</b>	-.02

Note.  $r \geq .20, p < .05$ ;  $r \geq .26, p < .01$

Main correlations between SOSIE Scales and MVPI are presented below.

- Dominance is positively correlated to Power (.34), and Affiliation (.29).
- Sociability is positively correlated to Affiliation (.68), Hedonism (.28), Recognition (.27), and negatively to Security (-.30).
- Cautiousness is positively correlated to Security (.29), and negatively to Power (-.35), Recognition (-.32), Commerce (-.29) and Affiliation (-.27).
- Original Thinking is positively correlated to Power (.33), and negatively to Security (-.33).
- Personal Relations is negatively correlated to Power (-.26).
- Vigour is correlated to Power (.36), and negatively to Security (-.30).
- Support is negatively correlated to Commerce (-.50) and Power (-.34).
- Conformity is positively correlated to Security (.35).
- Recognition is positively correlated to Recognition (.42), Affiliation (.30), and Power (.30).
- Independence is negatively correlated to Affiliation (-.35).
- Benevolence is positively correlated to Altruistic (.50), and negatively to Commerce (-.29).
- Power is positively correlated to Commerce (.46), and Power (.43).
- Achievement is negatively correlated to Hedonism (-.36).
- Variety is positively correlated to Hedonism (.26), and negatively to Security (-.29).
- Orderliness is positively correlated to Security (.36).
- Goal Orientation is positively correlated to Security (.28), and negatively to Aesthetics (-.30).



## 4.5 United States (English)

### ► Correlations between SOSIE and HPI

Both inventories were administered to sixty-three persons in the United States. Table 4.8 presents correlations between SOSIE and HPI.

**Table 4.8** Correlations between SOSIE and HPI - United States Sample ( $N = 63$ )

SOSIE \ HPI	Adjustment	Ambition	Sociability	Interpersonal Sensitivity	Prudence	Inquisitive	Learning Approach
<b>1. Dominance</b>	<b>.34</b>	<b>.73</b>	<b>.48</b>	<b>.54</b>	-.12	.28	.01
<b>2. Responsibility</b>	.03	-.26	<b>-.45</b>	-.21	<b>.35</b>	-.16	-.03
<b>3. Stress Resistance</b>	<b>.39</b>	.04	-.15	.02	.11	.07	.05
<b>4. Sociability</b>	.26	<b>.58</b>	<b>.56</b>	<b>.53</b>	-.07	.26	-.05
<b>5. Cautiousness</b>	.25	-.21	-.31	.02	<b>.49</b>	-.17	.03
<b>6. Original Thinking</b>	.10	<b>.41</b>	<b>.38</b>	.22	-.14	<b>.62</b>	<b>.33</b>
<b>7. Personal Relations</b>	<b>.58</b>	.22	.06	<b>.51</b>	<b>.37</b>	.11	-.06
<b>8. Vigour</b>	.20	.28	.15	.10	.06	<b>.36</b>	.31
<b>9. Support</b>	-.12	-.21	.00	.07	.03	-.11	-.07
<b>10. Conformity</b>	.18	-.20	-.27	-.12	<b>.41</b>	-.08	.02
<b>11. Recognition</b>	-.09	.10	<b>.40</b>	.04	-.07	.19	.05
<b>12. Independence</b>	-.25	-.13	<b>-.37</b>	<b>-.36</b>	<b>-.35</b>	-.18	-.10
<b>13. Benevolence</b>	.26	.14	.13	<b>.37</b>	.17	.10	-.01
<b>14. Power</b>	-.05	.31	.19	.02	-.25	.09	.12
<b>15. Materialism</b>	.22	-.21	-.26	-.06	.13	-.16	-.27
<b>16. Achievement</b>	.11	.24	.09	.04	.08	.30	.30
<b>17. Variety</b>	-.06	.03	.30	.18	-.30	.10	.05
<b>18. Conviction</b>	-.07	<b>.37</b>	.20	.00	-.28	.23	.26
<b>19. Orderliness</b>	-.16	-.27	<b>-.33</b>	-.14	.31	<b>-.33</b>	-.12
<b>20. Goal Orientation</b>	.01	-.09	-.08	-.07	.17	-.11	-.18

*Note.*  $r \geq .26, p < .05$ ;  $r \geq .33, p < .01$

Main correlations between SOSIE Scales and HPI are presented below.

- Dominance is positively correlated to Ambition (.73), Interpersonal Sensitivity (.54), Sociability (.48) and Adjustment (.34).
- Responsibility is positively correlated to Prudence (.35), and negatively to Sociability (-.45).
- Stress Resistance is positively correlated to Adjustment (.39).
- Sociability is positively correlated to Ambition (.58), Sociability (.56), and Interpersonal Sensitivity (.53).
- Cautiousness is positively correlated to Prudence (.49).
- Original Thinking is positively correlated to Inquisitive (.62), Ambition (.41), Sociability (.38), and Learning Approach (.33).
- Personal Relations is positively correlated to Adjustment (.58), Interpersonal Sensitivity (.51), and Prudence (.37).
- Vigour is positively correlated to Inquisitive (.36).
- Conformity is positively correlated to Prudence (.41).
- Recognition is positively correlated to Sociability (.40).
- Independence is negatively correlated to Sociability (-.37), Interpersonal Sensitivity (-.36), and Prudence (-.35).
- Benevolence is positively correlated to Interpersonal Sensitivity (.37).
- Conviction is positively correlated to Ambition (.37).
- Orderliness is negatively correlated to Sociability (-.33) and Inquisitive (-.33).

## Comparisons between countries

### 5.1 Means and Standard Deviations comparisons

Scales means and standard deviations (*SD*) for the seven countries and the International Sample are given in Table 5.1.

**Table 5.1** Means and *SDs* by country

Scales	Australia N=427		France N=778		Germany N=476		India N=157		Netherlands N=142		UK N=300		US N=154		International N=658	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1. Dominance	<b>18.7</b>	4.8	19.6	4.4	20.0	5.3	20.8	4.2	<b>21.3</b>	5.0	19.5	5.0	20.7	4.4	19.9	4.9
2. Responsibility	22.5	3.8	23.4	3.3	<b>21.9</b>	3.7	23.0	3.8	<b>21.9</b>	3.2	22.2	3.8	<b>24.3</b>	3.1	22.7	3.5
3. Stress Resistance	20.9	4.5	20.8	4.2	<b>20.5</b>	4.3	20.6	4.3	21.2	3.4	20.9	4.4	<b>22.8</b>	3.5	21.2	4.1
4. Sociability	16.1	4.8	17.2	3.9	<b>15.7</b>	5.0	17.9	3.8	<b>19.2</b>	4.2	17.6	4.7	<b>15.7</b>	4.4	17.0	4.5
5. Cautiousness	20.4	5.0	20.2	4.0	<b>18.0</b>	3.8	20.2	4.3	18.4	3.7	18.6	4.5	<b>20.9</b>	4.2	19.6	4.4
6. Original Thinking	<b>22.6</b>	4.8	23.0	3.7	<b>25.3</b>	3.6	23.3	3.6	23.7	4.0	23.3	4.4	23.6	4.4	23.4	4.3
7. Personal Relations	19.1	5.1	19.0	4.0	<b>17.6</b>	4.4	19.6	4.1	19.7	4.3	18.2	4.9	<b>20.1</b>	4.6	19.1	4.5
8. Vigour	<b>21.0</b>	4.6	21.9	3.8	<b>24.5</b>	3.6	22.2	4.2	22.9	4.5	22.6	4.5	22.3	4.0	22.2	4.4
9. Support	<b>15.0</b>	3.8	9.7	3.4	14.3	3.8	<b>8.9</b>	3.7	12.5	4.0	13.3	4.4	12.0	4.2	12.5	4.4
10. Conformity	8.6	4.5	10.2	4.3	<b>6.8</b>	4.3	<b>12.4</b>	5.6	8.9	4.7	9.7	5.1	11.5	5.5	9.6	5.2
11. Recognition	10.1	4.4	<b>7.9</b>	3.2	9.8	4.5	10.3	4.5	8.2	4.2	<b>11.6</b>	4.4	9.3	4.6	9.8	4.6
12. Independence	12.7	4.7	12.1	3.8	<b>16.3</b>	4.4	11.6	4.7	14.7	4.8	11.5	4.6	<b>11.1</b>	5.1	13.1	4.8
13. Benevolence	15.2	4.9	<b>18.6</b>	3.4	<b>10.0</b>	4.7	14.1	4.6	12.8	4.4	13.2	5.1	15.5	5.5	13.6	5.1
14. Power	<b>10.3</b>	4.6	13.6	4.4	<b>14.9</b>	5.1	14.7	4.2	14.8	5.5	12.7	5.0	12.5	4.8	13.4	5.2
15. Materialism	10.6	4.4	<b>8.3</b>	3.7	10.4	3.5	9.3	3.6	<b>10.7</b>	4.4	9.6	4.3	10.0	4.6	10.0	4.2
16. Achievement	16.1	4.7	<b>14.3</b>	4.0	15.9	4.4	14.8	4.4	15.5	4.3	15.4	4.7	<b>18.4</b>	3.9	15.4	4.5
17. Variety	11.8	6.6	12.4	5.2	11.1	5.7	10.6	6.2	10.3	6.2	<b>12.9</b>	6.7	<b>8.6</b>	6.4	11.3	6.1
18. Conviction	<b>11.0</b>	4.4	<b>12.5</b>	4.1	11.3	3.5	11.5	3.2	12.3	4.2	11.5	3.9	12.2	4.3	11.5	3.9
19. Orderliness	11.8	5.2	<b>10.9</b>	4.4	11.9	4.2	<b>13.5</b>	4.8	12.1	4.7	11.6	4.8	12.5	4.9	12.2	4.8
20. Goal Orientation	13.7	4.6	<b>16.7</b>	3.9	14.4	4.9	15.2	5.1	14.2	3.9	14.0	4.5	<b>13.3</b>	4.4	14.5	4.7

**Note.** Highest and lowest means for each scale are in bold (red for the lowest and black for the highest).

- United States obtains the highest means at four Personality Scales (Responsibility, Stress Resistance, Cautiousness, Personal Relations), Netherlands at two (Dominance, Sociability), Germany at two (Original Thinking, Vigour).
- Germany obtains the lowest means at five Personality Scales (Responsibility, Stress Resistance, Sociability, Cautiousness, Personal Relations), Australia at three (Dominance, Original Thinking, Vigour), United States at one (Sociability).
- France obtains the highest means at three Values Scales (Benevolence, Conviction, Goal Orientation), United Kingdom at two (Recognition, Variety), India at two (Conformity and Orderliness), Germany at two (Independence, Power), Netherlands at one (Materialism), United States at one (Achievement), and Australia at one (Support).
- France obtains the lowest means at four Values Scales (Recognition, Materialism, Achievement, Orderliness), United States at three (Independence, Variety, Goal Orientation), Germany at two (Conformity, Benevolence), Australia at two (Power and Conviction), and India at one (Support).

## 5.2 Scales differences - Cohen *d*

The twenty scales means of each country were compared to the twenty scales means of the other ones (21 comparisons for each scale). Table 5.2 shows the number of significant differences between countries with a large or medium effect size<sup>1</sup>; differences with a large and medium effect size; and the rate of differences with a large and medium effect size.

**Table 5.2** Scales differences between countries

Scales	Large	Medium	Large + Medium	Rate
<b>Dominance</b>	1	3	4	19.0
<b>Responsibility</b>	3	4	7	33.3
<b>Stress Resistance</b>	2	4	6	28.6
<b>Sociability</b>	4	6	10	47.6
<b>Cautiousness</b>	1	9	10	47.6
<b>Original Thinking</b>	0	6	6	28.6
<b>Personal Relations</b>	0	5	5	23.8
<b>Vigour</b>	2	7	9	42.9
	<b>13</b>	<b>44</b>	<b>57</b>	<b>33.9</b>
<b>Support</b>	11	4	15	71.4
<b>Conformity</b>	7	6	13	61.9
<b>Recognition</b>	5	5	10	47.6
<b>Independence</b>	8	3	11	52.4
<b>Benevolence</b>	9	6	15	71.4
<b>Power</b>	4	9	13	61.9
	<b>44</b>	<b>33</b>	<b>77</b>	<b>61.1</b>
<b>Materialism</b>	2	4	6	28.6
<b>Achievement</b>	5	3	8	38.1
<b>Variety</b>	2	4	6	28.6
<b>Conviction</b>	0	2	2	9.5
<b>Orderliness</b>	0	2	2	9.5
<b>Goal Orientation</b>	3	4	7	33.3
	<b>12</b>	<b>19</b>	<b>31</b>	<b>24.6</b>
<b>Total</b>	<b>69</b>	<b>96</b>	<b>165</b>	
<b>%</b>	<b>16.4</b>	<b>22.9</b>	<b>39.3</b>	

- In total, there is 16.4% of large effect size and 22.9% of medium effect size.
- Among the scales, Benevolence and Support have the greatest number of large and medium effects (71.4%) and Conviction and Orderliness the least (9.5%). The six Interpersonal Values Scales show the highest number of large and medium effects with a mean of 61.1%; the eight Personality Scales have a mean rate of 33.9%; and the six Personal Values a mean rate of 24.6%.
- Cautiousness and Sociability are the Personality Scales showing the highest number of large and medium effect differences (47.6%), Dominance the least (19.0%).
- Among the countries, Germany, United States and France have the greatest number of large and medium effects (48.3%) and United Kingdom the least (26.0%). The overall rate of large and medium effects is 39.30%.

Considering only large effects between countries:

- **Australia** shows from no difference with United Kingdom, up to five with France.
- **France** shows from three differences with India up to nine with United States.

<sup>1</sup> A *d* value around .20 is a small effect size; around .50 a medium effect size; around .80 a large effect size (Cohen, 1988).

- **Germany** shows from one difference with Netherlands, up to six with United States and India.
- **India** shows from one difference with Netherlands and United Kingdom to six with Germany.
- **Netherlands** shows from no difference with Australia, India and Germany, up to six with France.
- **United Kingdom** shows from no difference with Australia, up to four with France.
- **United States** shows from one difference with United Kingdom, up to nine with France.

### 5.3 Comparison with the International Sample

Scales means of each country were compared to the International Sample means (140 comparisons). Taking into account large and medium effects sizes:

- In total, 24 comparisons out of 140 show a large or medium effect size (17.1%).
- Eight comparisons out of 140 (5.7%) show a large effect: **United States** on Responsibility, Stress Resistance and Achievement (with a mean higher than the International Sample); **France** on Benevolence and Support (with a higher and a lower mean respectively than the International Sample); **India** on Support (with a lower mean than the International Sample); and **Germany** on Independence and Benevolence (with a higher and a lower mean respectively).
- Sixteen comparisons (11.4%) show a medium effect: **Australia** on Support (higher mean) and Power (lower mean); **France** on Recognition and Goal Orientation (with a lower and a higher mean respectively than the International Sample) and Materialism (lower mean); **Germany** on Original Thinking, Vigour, and Support (with higher means than the International Sample) and Cautiousness, Conformity (lower means than the International Sample); **India** on Conformity and Power (higher means than the International Sample); **Netherlands** on Sociability (higher mean) and Cautiousness; **United States** on Independence and Variety (lower means).
- Germany has the highest number of large and medium effects compared to the International Sample (seven), followed by **United States and France** (five).
- **India, Australia, and Netherlands** have the least number of large and medium effects with three, two, two, respectively.
- **United Kingdom** has no large or medium effect difference with the International Sample.
- Interpersonal Values Scales show the greatest number of large and medium effects (13 upon 24). Personality Scales have seven and Personal Values Scales only four.
- Support is the scale with the greatest number of large and medium effect (4 upon 24).

## 5.4 Scales Intercorrelations

Correlations coefficients have been compared across countries. Taking into account the first two positive or negative correlations (<-.30 or >.30), this comparison shows a common pattern between seven countries (see Table 5.3).

**Table 5.3** Highest shared intercorrelations across countries

Scales	PERSONALITY		VALUES	
	Positive correlations	Negative correlations	Positive correlations	Negative correlations
1. Dominance	Vigour, Original Thinking		Power	
2. Responsibility	Cautiousness		Conformity	Variety
3. Stress Resistance	Personal Relations			
4. Sociability	Dominance			
5. Cautiousness	Responsibility			Variety
6. Original Thinking	Dominance		Achievement	
7. Personal Relations	Stress Resistance			
8. Vigour	Dominance			
9. Support		Dominance	Recognition	Power
10. Conformity			Orderliness, Goal Orientation	Variety
11. Recognition			Support	
12. Independence			Variety	
13. Benevolence				
14. Power	Dominance			Support
15. Materialism				
16. Achievement	Original Thinking			
17. Variety				Conformity
18. Conviction				
19. Orderliness			Conformity, Goal Orientation	Variety
20. Goal Orientation			Orderliness, Conformity	Variety

*Note.* Correlations < -.30 or > .30.

Personality Scales show the strongest intercorrelations and the greatest number, while their few correlations with Values Scales are moderate. Values Scales intercorrelations are moderate and scarce, demonstrating their relative independence.

Table 5.4 presents the pattern of intercorrelations (< -.30 or > .30) of the International Sample (N=658).

## Comparisons between countries

**Table 5.4** Highest intercorrelations (International Sample)

Scales	PERSONALITY		VALUES	
	Positive correlations	Negative correlations	Positive correlations	Negative correlations
1. Dominance	Original Thinking, Vigour			Support
2. Responsibility	Cautiousness		Conformity	
3. Stress Resistance	Personal Relations			
4. Sociability	Dominance, Vigour			
5. Cautiousness	Responsibility	Vigour	Conformity	
6. Original Thinking	Dominance, Vigour		Achievement	
7. Personal Relations	Stress Resistance		Benevolence	
8. Vigour	Dominance, Original Thinking	Cautiousness		
9. Support		Dominance		Power
10. Conformity	Responsibility, Cautiousness		Goal Orientation, Orderliness	Variety
11. Recognition				
12. Independence				
13. Benevolence	Personal Relations		Conformity	
14. Power	Dominance, Original Thinking			Support
15. Materialism				
16. Achievement	Original Thinking			
17. Variety				Conformity, Orderliness
18. Conviction				
19. Orderliness			Conformity, Goal Orientation	Variety
20. Goal Orientation			Orderliness, Conformity	

*Note.* Correlations < -.30 or > .30.

## Factor Structure: Behaviour Styles

### 6.1 Factor analysis - International Sample and each country

An exploratory factor analysis has been performed with a 3, 4, 5-Factors solution on the International Sample and for each country. The three factors solution was retained, being represented in each country and allowing a meaningful interpretation in terms of Behaviour Style. Table 6.1 shows the scales loadings on the 3 factors (after Varimax rotation) for each country and for the International Sample.

For the International Sample, factorial analysis shows three factors after rotation combining traits and values that can be interpreted as behaviour or even management styles. Loadings on the three factors are high, ranging from -.39 to .78. Only three scales (Responsibility, Cautiousness and Support) show a secondary loading >.33, and greater than half the highest loading.

Table 6.1 presents the scales loadings on the three factors (after Varimax rotation) for each country and for the International Sample.

**Table 6.1** Factor analyses by country and on the International Sample

Scales	Australia N = 427			France N = 778			Germany N = 476			India N = 157		
	Factor1	Factor2	Factor3	Factor1	Factor2	Factor3	Factor1	Factor2	Factor3	Factor1	Factor2	Factor3
1. Dominance	-.32	<b>.65</b>	.14	.03	<b>.75</b>	.13	<b>.80</b>	.00	.12	-.16	.53	<b>.59</b>
2. Responsibility	<b>.62</b>	.24	.27	<b>.66</b>	.18	.11	.28	<b>.47</b>	.39	.38	.00	<b>.58</b>
3. Stress Resistance	.16	.23	<b>.48</b>	.26	.30	<b>.55</b>	.22	.11	<b>.73</b>	.32	.07	<b>.65</b>
4. Sociability	<b>-.34</b>	.32	.15	-.11	<b>.36</b>	.06	<b>.52</b>	.07	.02	-.29	-.05	<b>.49</b>
5. Cautiousness	<b>.57</b>	-.30	.39	<b>.64</b>	-.25	.30	<b>-.45</b>	.40	.39	<b>.55</b>	-.23	.34
6. Original Thinking	-.29	<b>.60</b>	.11	-.24	<b>.61</b>	.20	<b>.44</b>	-.42	.30	-.15	<b>.61</b>	.37
7. Personal Relations	.03	-.16	<b>.78</b>	.29	.10	<b>.72</b>	.15	.11	<b>.70</b>	.32	-.06	<b>.58</b>
8. Vigour	-.03	<b>.71</b>	-.07	.14	<b>.60</b>	-.38	<b>.65</b>	.10	-.05	-.06	<b>.44</b>	.62
9. Support	-.17	<b>-.63</b>	-.04	-.35	<b>-.51</b>	-.11	<b>-.51</b>	-.25	-.19	<b>-.57</b>	-.56	-.09
10. Conformity	<b>.61</b>	-.03	.27	<b>.68</b>	-.07	.29	-.03	<b>.67</b>	.23	<b>.80</b>	.00	.10
11. Recognition	-.07	-.07	<b>-.53</b>	-.18	-.05	<b>-.38</b>	-.02	-.10	<b>-.55</b>	<b>-.50</b>	.12	-.11
12. Independence	-.14	-.06	<b>-.21</b>	<b>-.51</b>	-.13	-.10	-.25	<b>-.38</b>	-.03	<b>-.51</b>	-.05	-.14
13. Benevolence	-.19	-.01	<b>.68</b>	-.13	-.20	<b>.57</b>	-.19	-.21	<b>.50</b>	<b>.40</b>	-.31	.29
14. Power	-.04	<b>.63</b>	-.26	.18	<b>.69</b>	-.17	<b>.73</b>	.21	.02	-.03	<b>.72</b>	-.03
15. Materialism	.36	<b>-.40</b>	-.20	.11	<b>-.45</b>	-.14	<b>-.37</b>	.21	-.13	-.11	<b>-.58</b>	-.08
16. Achievement	.02	<b>.45</b>	.09	.04	<b>.49</b>	-.08	<b>.39</b>	-.25	.04	-.19	<b>.63</b>	-.06
17. Variety	<b>-.70</b>	-.03	-.04	<b>-.68</b>	-.04	.06	-.12	<b>-.73</b>	.05	<b>-.71</b>	-.01	.07
18. Conviction	<b>-.43</b>	.32	.11	-.32	<b>.46</b>	-.10	<b>.40</b>	-.31	-.20	-.36	<b>.52</b>	-.04
19. Orderliness	<b>.71</b>	-.15	-.06	<b>.66</b>	-.35	.01	-.28	<b>.64</b>	.06	<b>.66</b>	-.25	-.05
20. Goal Orientation	<b>.48</b>	-.05	.05	<b>.51</b>	-.09	.03	.04	<b>.68</b>	.01	<b>.74</b>	-.10	.00
Eigenvalue	3.80	2.48	1.77	3.61	3.17	1.45	3.47	3.17	1.76	4.51	3.39	1.58
% var	19.0	12.4	8.9	18.1	15.9	7.3	17.3	15.8	8.8	22.6	16.9	7.9

**Table 6.1** Factor analyses by country and on the International Sample (*continued*)

Scales	Netherlands N = 232			United Kingdom N = 300			United States N = 474			International N = 658		
	Factor1	Factor2	Factor3	Factor1	Factor2	Factor3	Factor1	Factor2	Factor3	Factor1	Factor2	Factor3
1. Dominance	.83	-.01	.05	.75	.08	-.18	-.37	.60	.12	.78	.03	.02
2. Responsibility	-.09	.60	-.18	.13	.54	.37	.56	-.20	.33	.06	.52	.34
3. Stress Resistance	.21	.11	-.70	.36	.19	.43	.39	-.07	.45	.23	.24	.47
4. Sociability	.69	-.02	.44	.45	-.12	-.27	-.36	.37	.24	.48	-.09	.00
5. Cautiousness	-.26	.55	-.29	-.31	.47	.48	.24	-.56	.36	-.33	.40	.47
6. Original Thinking	.69	-.10	-.04	.67	-.10	.13	-.31	.53	.37	.71	-.16	.04
7. Personal Relations	.18	.40	-.14	.17	.11	.57	-.02	-.23	.65	.10	.13	.69
8. Vigour	.66	-.03	-.07	.68	.15	.03	.13	.58	.10	.67	.09	-.12
9. Support	-.45	-.11	.55	-.49	-.36	-.06	-.47	-.60	.00	-.50	-.50	-.05
10. Conformity	-.13	.65	-.23	.01	.63	.24	.68	-.06	.13	-.07	.69	.31
11. Recognition	.05	-.10	.67	.05	-.02	-.69	-.53	-.24	-.25	.00	-.11	-.51
12. Independence	-.24	-.57	-.31	-.25	-.40	.03	.04	.03	-.57	-.08	-.43	-.23
13. Benevolence	-.08	.38	.07	.00	-.28	.62	-.01	.15	.69	-.09	-.07	.71
14. Power	.65	-.16	-.31	.58	.30	-.30	.01	.56	-.15	.64	.24	-.30
15. Materialism	-.46	.33	.02	-.35	.06	-.08	.23	-.34	-.01	-.39	.09	-.18
16. Achievement	.37	.06	-.21	.49	.05	.17	-.04	.31	.49	.48	-.07	.11
17. Variety	-.01	-.64	.26	-.02	-.74	.02	-.72	-.02	.10	.04	-.72	.01
18. Conviction	.30	-.47	-.28	.42	-.11	.07	-.06	.63	.03	.46	-.19	.01
19. Orderliness	-.12	.69	.06	-.41	.62	-.12	.60	-.23	-.35	-.32	.64	-.06
20. Goal Orientation	.02	.46	-.02	-.05	.63	-.11	.46	-.14	-.14	-.17	.58	.01
Eigenvalue	3.89	2.98	1.72	3.37	2.84	1.94	3.65	2.57	2.12	3.55	3.11	1.63
% var	19.5	14.9	8.6	16.8	14.2	9.7	18.3	12.9	10.6	17.7	15.6	8.2

## 6.2 Matching Analyses and Congruence Coefficients

The degree of similarity between country structures and the structure of the International Sample was evaluated using congruence indicators. The overall solution congruence is the mean of the congruence coefficients calculated comparing each variable's values across all factors. The Root Mean Square Error of Approximation (RMSEA) is a measure of discrepancy between the two compared structures. The higher the overall solution congruence (.85 and above) and the lower the RMSEA (.08 and below), the closer the structures.

**Table 6.2** Factor analyses Congruence coefficients

Country	Overall congruence solution	RMSEA
United States	.88	.33
Australia	.97	.23
United Kingdom	.97	.16
India	.87	.40
Netherlands	.82	.59
France	.97	.18
Germany	.96	.22

Factorial structures of United Kingdom and France are the ones which show the most similarity with the International structure, while United States and India factorial structures have the least.



### 6.3 Interpretation of Behaviour Styles

A three factor model was retained, based on the interpretation of the clusters. Only scales with similar loading patterns across countries were kept in the final model. The three Behaviour Styles corresponding to the three factors are described below:

#### Style 1: Leader

Negatively saturated	Positively saturated
Support – Value	Dominance – Personality Original Thinking – Personality Vigour – Personality Power – Value

This style is characterized by high scores for Dominance, Original Thinking, Vigour, Power and low scores for Support.

People predominantly presenting this Behavioural Style will express themselves forcefully in discussions and meetings and often play an active role in groups. They are intellectually open, like to confront complex problems and thought provoking discussions, and are attracted by novel ideas. Dynamic and energetic, they like to work quickly. Management positions or those which confer some sort of power will motivate them. They do not need encouragement, praise or consideration from others.

#### Style 2: Organizer

Negatively saturated	Positively saturated
Variety – Value	Responsibility – Personality Cautiousness – Personality Orderliness – Value Conformity – Value Goal Orientation – Value

This style is characterized by high scores for Responsibility, Cautiousness, Orderliness, Conformity and Goal Orientation, and low scores for Variety.

People predominantly presenting this Behavioural Style are used to completing the actions they have initiated. They are cautious and think hard before acting. They prefer organization, method and a systematic approach to their work. To follow rules and social norms is very important to them. They prefer to have a specific goal to reach and to work with clearly defined objectives. New and different things do not particularly interest them. They don't like to take risks, nor to vary experiences, they enjoy rather routine tasks.

#### Style 3: Facilitator

Negatively saturated	Positively saturated
Recognition – Value	Personal Relations – Personality Stress Resistance – Personality Benevolence – Value

This style is characterized by high scores for Personal Relations, Stress Resistance and Benevolence, and low scores for Recognition.

People predominantly presenting this Behavioural Style are tolerant, trusting, understanding and are not easily offended. They are stable, relatively free from anxiety and from nervous tension. They place a lot of importance on helping others and sharing. They are not attached to recognition or respect, and they neither seek praise nor expect special treatment.

## Administration, Scoring and Interpretation

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### 7.1 Directions for administration

Administration of SOSIE requires the same environment and arrangements as those for standard personality questionnaires.

SOSIE can be administered to individuals or groups. Administration takes 25 minutes on average. There is no time limit and each participant must be given the time to finish.

All instructions are displayed on screen. The examiner must make sure that the instructions are understood, must indicate that there is no time limit but that answers must be as rapid and spontaneous as possible.

SOSIE should be administered in a quiet, well-lit room. Good environmental conditions facilitate accurate responses. Ensure that seating, light, heat and other arrangements are comfortable. The room should be free from noise and other distractions (for example mobile phones).

The examiner must ensure that all equipment is ready and in working order before administration, and making sure that the participant knows how to interact with the assessment interface appropriately.

Once participants have read the instructions, they can start answering the questions. The items appear in succession on the screen and participants select their answers using the mouse. SOSIE does not permit “double selections”.

Online SOSIE is designed for the administration, scoring and reporting of professional assessments. Results are immediately accessible in different reports.

### 7.2 Scoring

SOSIE is composed of two parts:

- ▶ A first part with 31 tetrads, where each tetrad is composed of two pairs of forced choice items, balanced from the point of view of social desirability (each time, the participant is presented with two socially favourable items and two socially unfavourable items). The sum of the scores for each tetrad can vary between 2 and 6. This part assesses Personality.
- ▶ In the second part the participant is presented with 49 triads. These are also balanced for social desirability. In this part the construction is ipsative, i.e. the total score is constant (3). This part assesses Values.

Ipsativity is defined statistically as the restriction in the variation in scores that results when the scale scores of a forced-choice measure sum to a constant. For example, this would occur when the format of the test involves pairing of every item with every other item across scales. This means that when a respondent obtains high scores to some scales, his or her scores on the remaining scales are lowered. Thus on an ipsative instrument with ten scales, if one knows nine of the subject's raw scores it is possible to obtain the score on the tenth scale through simple subtraction (since the raw score sum is a constant). Obviously on such a test it is impossible for subjects to score very high on all scales, a circumstance that has to be taken into account while interpreting the profile.

Although SOSIE Personality scales are not totally ipsative, they do contain a forced-choice feature that makes them partially or quasi-ipsative. While the total score on the test is free to vary (because of the participant's freedom to make favourable or unfavourable self-endorsements rather than merely choosing “more like you” from each of a series of pairs), the forced-choice tetrad format prevents subjects from obtaining very high scores on all scales.

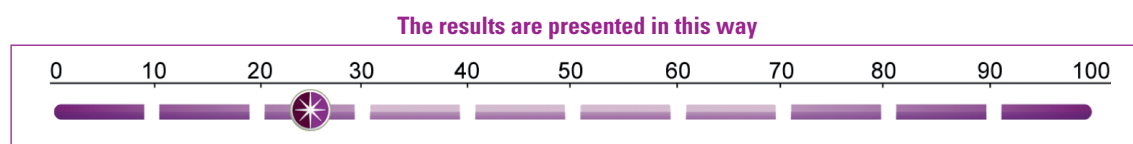
For the four first scales in SOSIE, items are paired with one another (Dominance, Responsibility, Stress Resistance, and Sociability). The items for the four other scales (Cautiousness, Original Thinking, Personal Relations, and Vigour) consist of forced-choice pairings of items.

Thus high scores on the first four scales (Dominance, Responsibility, Stress Resistance, Sociability) cannot ipsatively affect scores on scales Cautiousness, Original Thinking, Personal Relations, Vigour or vice versa.

### 7.3 Interpretation of results

SOSIE test scores are interpreted with reference to norms established on different standardized populations. Norms are constructed from the scores of a large sample of individuals who take a test. This group of individuals is referred to as the normative group. Normative groups are important for comparing individual results to the scores of other individuals who took the same test. The first common norms for SOSIE 2nd Generation are drawn from people working at a managerial level.

Results are given in rank order, which is crucial information derived from the percentile scores. The interpretation of these percentiles is very simple. It is, for a given score, the exact proportion of people in the normative group who score at or below this score. If a respondent's percentile for Conformity is 23, it means that 23% of people in the normative group have the same score or less in Conformity than this person.



The scoring software enables direct display of the correspondence between raw scores and standard scores for the chosen standardization (country or international norms).

The SOSIE library of norms can be added to and updated frequently, as well as adapted to specific demands. Online administration makes this adaptability much easier.

### 7.4 SOSIE Reports

Two different reports are available: a Profile Report and an Interpretation and Feedback Guide with Competency Mapping.

#### Profile report

The Profile Report (intended for the consultant) gives results (raw scores and percentiles) and a description derived from the results. The style of this report is fairly general and indicates the characteristics typical of individuals with low and high scores.

- A score is considered as low when the associated percentile is 30 and below.
- A score is considered as high when the associated percentile is 71 and over.
- A score is considered as average when the associated percentile varies from 31 to 70.

This report provides topics for discussion around an individual's future development and choices, and the opportunity to assess the fitness for the job.

#### Interpretation and Feedback Guide with Competency Mapping

This report is organized around eight competences (Self-Organization, Adaptability, Innovation, Emotional Adjustment, Sociability and Communication, Teamwork, Influence, Decision Making and Autonomy) and one source of motivation (Favourable Environment).

It is written for the trained user; non-trained colleagues and test-takers may misinterpret this detailed, sensitive information on an individual.

This Guide presents:

- a definition of the competency;
- the individual's scores on SOSIE dimensions which map onto that competency;
- narrative interpretations of these results, based on whether the individual scored low; medium or high on the relevant dimensions, and how these scores interact;
- some suggested questions for further investigation.

## Norms for each country

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Norms are used for interpreting a person's score by comparing it with scores of members of a defined reference group. This is facilitated by converting the person's obtained or raw score to one that directly reflects the person's relative position within the reference group. The score most commonly used for this purpose is the percentile, which gives the percentage of individuals in the reference group who have scores equal to or lower than that of the person in question. Demographic characteristics of the different norms samples of countries are presented below as well as descriptive statistics and norms.

## Australia/New Zealand Managers Sample Norms

Australia/New Zealand norms are based on data obtained from 427 manager-level persons from a variety of organizations (mean age = 40 years and *SD* = 11 years). Demographic characteristics of the Australia/New Zealand Managers Sample are presented below.

**Table A.1** Demographic Information - Australia/New Zealand Managers Sample

	<i>N</i> = 427	%
<b>Gender</b>		
Female	323	75.6
Male	104	24.4
<b>Education Level</b>		
Below year 12	12	2.8
Year 12 or equivalent	12	2.8
Certificate/Diploma	20	4.7
Advanced Diploma	11	2.6
Graduate Diploma	3	0.7
Bachelor Degree	188	44.0
Masters Degree	140	32.8
Doctorate	37	8.7
Not Reported	4	0.9
<b>Area of work</b>		
Advertising, Marketing, Public Relations	5	1.2
Arts, Entertainment, Media	5	1.2
Community Services	2	0.5
Construction	4	0.9
Disability Services	2	0.5
Education	68	15.9
Energy, Utilities	3	0.7
Financial Services, Banking, Insurance	7	1.6
Government, Public Service, Defense	40	9.4
Healthcare	142	33.3
Hospitality, Tourism	10	2.3
Information Technology	10	2.3
Manufacturing/Production	11	2.6
Natural Resources, Mining	4	0.9
Professional, Business Services	36	8.4
Publishing, Printing	56	13.1
Retail/Wholesale	9	2.1
Unknown/Other	13	3.0

Australia/New Zealand Managers Sample means and *SD* are presented below.

**Table A.2** Descriptive Statistics - Australia/New Zealand Managers Sample (N = 427)

Scales	Mean	SD
1. Dominance	18.7	4.8
2. Responsibility	22.5	3.8
3. Stress Resistance	20.9	4.5
4. Sociability	16.1	4.8
5. Cautiousness	20.4	5.0
6. Original Thinking	22.6	4.8
7. Personal Relations	19.1	5.1
8. Vigour	21.0	4.6
9. Support	15.0	3.8
10. Conformity	8.6	4.5
11. Recognition	10.1	4.4
12. Independence	12.7	4.7
13. Benevolence	15.2	4.9
14. Power	10.3	4.6
15. Materialism	10.6	4.4
16. Achievement	16.1	4.7
17. Variety	11.8	6.6
18. Conviction	11.0	4.4
19. Orderliness	11.8	5.2
20. Goal Orientation	13.7	4.6

**Table A.3** Norms - Australia/New-Zealand Managers (N = 427)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO
0	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	3	< 1	< 1	< 1
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4	1	< 1	< 1	1	< 1	< 1	7	< 1	1	< 1
2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	7	3	1	1	3	2	< 1	10	1	3	< 1
3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	12	7	2	1	6	4	< 1	13	3	5	< 1
4	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	1	18	11	4	2	10	8	< 1	17	7	8	2
5	< 1	< 1	< 1	2	< 1	< 1	1	< 1	2	26	13	6	4	15	14	1	21	13	12	3
6	< 1	< 1	< 1	2	< 1	< 1	2	< 1	3	34	20	9	5	22	20	2	25	17	19	6
7	1	< 1	< 1	4	1	< 1	3	< 1	4	42	30	12	7	30	27	4	29	25	24	10
8	3	< 1	1	6	1	< 1	3	< 1	7	54	37	19	10	39	34	5	33	31	30	16
9	5	< 1	1	9	2	1	4	< 1	8	63	46	25	14	47	43	10	37	40	35	20
10	6	< 1	2	13	3	1	5	1	12	68	55	33	18	55	50	12	42	48	41	26
11	8	1	2	17	3	2	7	4	17	74	64	42	23	62	58	18	48	56	46	33
12	12	2	4	23	6	3	10	5	22	80	72	50	27	68	67	22	53	63	55	39
13	15	3	6	30	10	4	14	7	32	85	78	58	34	75	74	30	56	69	62	47
14	19	4	10	37	14	6	17	10	42	89	85	66	43	82	80	37	63	76	67	56
15	22	5	13	44	18	7	23	13	49	91	90	72	49	86	85	44	69	82	74	62
16	30	7	17	52	23	10	29	19	59	94	92	78	59	90	90	53	73	87	80	71
17	36	10	21	60	30	14	36	23	72	96	95	82	66	92	95	61	79	92	84	79
18	46	14	27	68	35	19	43	29	81	99	96	88	73	95	97	67	82	96	89	83
19	53	19	34	76	42	24	53	35	91	99	97	92	80	96	99	75	85	98	93	89
20	62	25	42	81	49	30	59	42	95	99	98	94	86	98	99	81	89	99	96	93
21	70	35	52	87	53	38	65	50	99	> 99	99	96	89	99	99	85	93	> 99	97	96
22	78	46	61	92	62	48	72	58	> 99	> 99	99	98	95	99	> 99	90	95	> 99	98	98
23	84	58	69	95	69	56	79	66	> 99	> 99	> 99	97	> 99	> 99	> 99	95	97	> 99	99	99
24	89	69	78	96	77	62	86	77	> 99	> 99	> 99	99	> 99	> 99	98	98	> 99	> 99	> 99	99
25	93	79	84	98	84	68	91	85	> 99	> 99	> 99	> 99	> 99	> 99	99	99	> 99	> 99	> 99	99
26	96	85	90	98	89	76	94	89	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
27	99	92	96	99	93	84	96	93	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
28	> 99	97	98	> 99	96	89	97	96	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
29	> 99	> 99	> 99	> 99	99	95	> 99	99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
30	> 99	> 99	> 99	> 99	> 99	97	> 99	99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
31	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
32	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99

## France Managers Sample Norms

France norms are based on data obtained from 778 manager-level persons from a variety of organizations (mean age = 39 years and *SD* = 8 years). Demographic characteristics of the France Managers Sample are presented below.

**Table B.1** Demographic Information - France Managers Sample

	<i>N</i> = 778	%
<b>Gender</b>		
Female	328	42.2
Male	450	57.8
<b>Education Level</b>		
Below Baccalauréat	44	5.7
Baccalauréat	156	20.1
BTS, DUT, Degree	512	65.8
Masters, Doctorate, Engineer	66	8.5
<b>Area of work</b>		
Administration	56	7.2
Finance	63	8.1
Head Office	61	7.8
Human Resources	63	8.1
Information Technology	65	8.4
Sales	142	18.3
Technical	101	13.0
Unknown	227	29.2

France Managers Sample means and *SD* are presented below.

**Table B.2** Descriptive Statistics - France Managers Sample (*N* = 778)

Scales	Mean	<i>SD</i>
1. Dominance	19.6	4.4
2. Responsibility	23.4	3.3
3. Stress Resistance	20.8	4.2
4. Sociability	17.2	3.9
5. Cautiousness	20.2	4.0
6. Original Thinking	23.0	3.7
7. Personal Relations	19.0	4.0
8. Vigour	21.9	3.8
9. Support	9.7	3.4
10. Conformity	10.2	4.3
11. Recognition	7.9	3.2
12. Independence	12.1	3.8
13. Benevolence	18.6	3.4
14. Power	13.6	4.4
15. Materialism	8.3	3.7
16. Achievement	14.3	4.0
17. Variety	12.4	5.2
18. Conviction	12.5	4.1
19. Orderliness	10.9	4.4
20. Goal Orientation	16.7	3.9



**Table B.3** Norms - France Managers (N = 778)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO
0	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	1	< 1	1	< 1	1	< 1
2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	2	3	1	< 1	1	2	< 1	2	< 1	2	< 1
3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	6	7	1	< 1	2	7	< 1	4	1	4	< 1
4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5	10	14	3	< 1	3	15	< 1	7	2	8	< 1
5	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	11	15	24	5	< 1	5	26	1	11	4	11	< 1
6	1	< 1	< 1	1	< 1	< 1	< 1	< 1	19	21	37	8	< 1	7	36	2	14	8	16	1
7	1	< 1	1	2	< 1	< 1	1	< 1	29	29	50	12	< 1	10	47	4	17	12	24	2
8	2	< 1	1	3	< 1	< 1	1	< 1	39	37	63	18	< 1	14	57	7	23	19	32	3
9	2	< 1	1	3	< 1	< 1	2	< 1	49	45	71	25	2	19	65	12	28	25	38	4
10	3	< 1	2	6	1	< 1	3	1	59	54	79	35	2	24	73	19	36	32	47	6
11	4	< 1	3	9	2	< 1	4	1	68	63	85	44	3	31	81	25	44	40	55	10
12	7	1	4	12	4	1	6	2	78	68	91	52	4	39	87	33	52	48	65	14
13	9	1	7	15	5	1	9	3	86	76	95	62	9	46	91	42	59	58	73	20
14	13	2	9	21	8	2	12	4	91	83	97	71	12	54	93	54	66	67	79	28
15	17	3	12	30	13	4	19	6	95	89	99	81	19	62	96	63	71	76	85	37
16	23	4	15	39	17	6	26	8	98	93	99	87	26	71	97	71	77	83	89	47
17	29	5	19	50	24	9	34	13	99	95	> 99	92	35	79	99	78	83	88	93	56
18	38	8	26	61	32	13	41	18	> 99	97	> 99	96	46	86	99	84	87	93	96	66
19	44	11	34	71	40	17	52	24	> 99	99	> 99	99	56	93	99	90	91	97	97	76
20	54	17	42	81	50	23	61	33	> 99	> 99	> 99	> 99	66	97	> 99	94	94	99	98	83
21	63	25	50	88	59	32	72	43	> 99	> 99	> 99	> 99	78	98	> 99	96	97	> 99	99	89
22	71	33	62	94	70	42	80	53	> 99	> 99	> 99	> 99	89	> 99	> 99	98	98	> 99	99	94
23	80	46	73	97	79	53	88	64	> 99	> 99	> 99	> 99	95	> 99	> 99	99	99	> 99	99	97
24	88	60	83	98	87	62	93	75	> 99	> 99	> 99	> 99	99	> 99	> 99	> 99	> 99	> 99	> 99	99
25	94	72	89	98	93	72	96	84	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99
26	97	83	94	99	96	84	98	90	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99
27	99	91	97	> 99	98	90	99	94	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99
28	> 99	97	99	> 99	99	95	> 99	98	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99
29	> 99	99	> 99	> 99	99	98	> 99	99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99
30	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99
31	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99
32	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99

## Germany Managers Sample Norms

Germany norms are based on data obtained from 476 manager-level persons from a variety of organizations. Demographic characteristics of the German Managers Sample are presented below.

**Table C.1** Demographic Information - Germany Managers Sample

	<b>N = 476</b>	<b>%</b>
<b>Gender</b>		
Female	161	33.8
Male	313	65.8
<b>Age</b>		
19 - 20	4	0.8
21 - 25	13	2.7
26 - 30	85	17.9
31 - 35	86	18.1
36 - 40	102	21.4
41 - 45	112	23.5
46 - 64	64	13.4
Unknown	10	2.1
<b>Education Level</b>		
Professional	93	19.5
Bachelor	107	22.5
Masters	2.2	42.4
Promotion	37	7.8
Unknown	37	7.8
<b>Area of work</b>		
Finance	33	6.9
Administration	19	4.0
Human Resources	22	4.6
Marketing	77	16.2
Sales	5	1.1
Information Technology	53	11.1
Production	19	4.0
R & D	39	8.2
General Management	45	9.5
Unknown/Other	164	34.5

Germany Managers Sample means and SD are presented below.

**Table C.2** Descriptive Statistics - Germany Managers Sample (N = 476)

Scales	Mean	SD
1. Dominance	20.0	5.3
2. Responsibility	21.9	3.7
3. Stress Resistance	20.5	4.3
4. Sociability	15.7	5.0
5. Cautiousness	18.0	3.8
6. Original Thinking	25.3	3.6
7. Personal Relations	17.6	4.4
8. Vigour	24.5	3.6
9. Support	14.3	3.8
10. Conformity	6.8	4.3
11. Recognition	9.8	4.5
12. Independence	16.3	4.4
13. Benevolence	10.0	4.7
14. Power	14.9	5.1
15. Materialism	10.4	3.5
16. Achievement	15.9	4.4
17. Variety	11.1	5.7
18. Conviction	11.3	3.5
19. Orderliness	11.9	4.2
20. Goal Orientation	14.4	4.9

**Table C.3** Norms - Germany Managers (N = 476)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO
0	< 1	< 1	V1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	10	1	< 1	2	< 1	< 1	< 1	1	< 1	< 1	< 1
2	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	17	4	< 1	5	1	< 1	< 1	5	< 1	1	< 1
3	< 1	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	25	8	< 1	9	1	< 1	< 1	9	< 1	1	1
4	< 1	< 1	< 1	3	< 1	< 1	< 1	< 1	1	34	13	< 1	14	3	3	< 1	14	3	3	1
5	1	< 1	< 1	3	< 1	< 1	1	< 1	2	43	18	1	18	5	7	1	20	5	8	2
6	1	< 1	< 1	5	< 1	< 1	1	< 1	3	53	24	1	23	6	14	2	24	8	11	4
7	1	< 1	< 1	7	< 1	< 1	2	< 1	5	61	33	2	30	9	23	3	30	15	16	8
8	3	< 1	1	10	< 1	< 1	3	< 1	9	70	41	4	39	12	31	6	36	22	21	14
9	5	< 1	1	13	1	< 1	5	< 1	11	77	50	7	48	16	42	8	43	31	29	21
10	6	1	2	17	2	< 1	7	< 1	16	82	58	11	57	20	54	13	48	42	38	27
11	9	1	3	20	4	< 1	10	< 1	24	86	66	15	64	25	64	16	54	52	47	32
12	11	2	5	24	8	< 1	14	< 1	31	89	75	20	70	30	75	23	61	62	54	38
13	13	3	7	29	12	< 1	16	1	42	93	80	28	75	38	82	30	67	74	63	44
14	18	4	9	35	17	1	21	1	48	95	86	33	82	45	87	39	72	82	72	49
15	22	6	13	41	26	2	28	3	57	96	89	41	85	52	92	43	76	87	79	54
16	26	9	17	52	36	2	35	4	69	97	92	51	91	59	94	52	80	92	86	63
17	28	13	23	61	47	3	45	4	80	98	93	58	95	65	97	62	84	95	90	70
18	34	17	29	69	58	4	56	6	88	99	97	66	96	74	98	70	88	98	94	77
19	39	22	36	78	67	7	65	9	93	99	98	73	97	79	99	76	91	> 99	97	83
20	45	28	45	85	76	10	76	12	98	> 99	99	79	98	85	> 99	84	94	> 99	99	87
21	52	39	55	90	82	14	82	18	> 99	> 99	99	87	> 99	90	> 99	89	96	> 99	99	94
22	59	51	62	93	89	20	87	25	> 99	> 99	> 99	93	> 99	96	> 99	95	97	> 99	> 99	96
23	69	63	73	96	93	27	91	33	> 99	> 99	98	> 99	99	> 99	99	99	> 99	> 99	> 99	98
24	79	74	82	97	95	35	95	44	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99	99	> 99	> 99	99
25	87	84	89	98	96	49	98	57	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
26	94	91	95	99	97	60	99	71	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
27	98	97	98	> 99	99	72	99	84	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
28	99	99	99	> 99	> 99	81	> 99	90	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
29	> 99	> 99	> 99	> 99	> 99	89	> 99	93	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
30	> 99	> 99	> 99	> 99	> 99	96	> 99	98	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
31	> 99	> 99	> 99	> 99	> 99	99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99
32	> 99	> 99	> 99	> 99	> 99	99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99

## India Managers Sample Norms

India norms are based on data obtained from 489 manager-level persons from a variety of organizations (mean age = 31 years and *SD* = 5 years). Demographic characteristics of the India Managers Sample are presented below.

**Table D.1** Demographic Information - India Managers Sample

	<i>N</i> = 489	%
<b>Gender</b>		
Female	184	37.6
Male	305	62.4
<b>Education Level</b>		
Diploma	27	5.5
Graduate	275	56.2
Post Graduate	175	35.8
Doctoral	3	0.6
PUC	1	0.2
Unknown	1	0.2
Other	7	1.4
<b>Area of work</b>		
Administration	14	2.9
Commercial	6	1.2
Computing	1	0.2
Finance	25	5.1
Human Resources	61	12.5
Marketing	20	4.1
Technical	31	6.3
Other	331	67.7

India Managers Sample means and SD are presented below.

**Table D.2** Descriptive Statistics - India Managers Sample (N = 489)

Scales	Mean	SD
1. Dominance	21.3	3.2
2. Responsibility	24.3	3.1
3. Stress Resistance	21.7	3.6
4. Sociability	18.4	3.7
5. Cautiousness	21.4	3.4
6. Original Thinking	23.7	3.1
7. Personal Relations	20.7	3.4
8. Vigour	22.8	3.3
9. Support	7.2	3.2
10. Conformity	16.5	4.4
11. Recognition	9.4	4.1
12. Independence	9.0	4.2
13. Benevolence	14.3	4.6
14. Power	15.7	3.9
15. Materialism	8.5	3.8
16. Achievement	14.7	3.7
17. Variety	8.4	5.1
18. Conviction	10.3	3.8
19. Orderliness	15.9	4.2
20. Goal Orientation	17.2	4.5

**Table D.3** Norms - India Managers (N = 489)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO
0	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	1	1	< 1	< 1	1	< 1	5	< 1	< 1	< 1
2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5	< 1	3	4	1	< 1	3	< 1	9	1	1	< 1
3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	11	1	6	9	1	< 1	9	< 1	17	2	1	< 1
4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	22	2	11	13	2	< 1	14	< 1	25	6	1	< 1
5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	34	3	17	20	3	1	23	< 1	34	12	1	< 1
6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	47	4	25	29	4	2	35	1	42	18	2	1
7	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	59	6	35	40	7	3	42	2	50	24	4	2
8	< 1	< 1	1	1	< 1	< 1	< 1	< 1	68	8	43	49	10	4	53	4	57	32	6	3
9	< 1	< 1	1	2	< 1	< 1	< 1	< 1	78	9	52	60	15	7	63	7	64	42	8	6
10	1	< 1	1	2	1	< 1	1	< 1	84	11	64	68	21	10	74	13	71	54	11	10
11	1	< 1	1	3	1	< 1	2	1	90	13	71	75	29	14	80	22	77	62	15	12
12	1	< 1	2	4	1	1	2	1	93	14	79	82	36	21	85	29	80	70	19	16
13	2	< 1	2	6	2	1	3	1	97	19	85	86	42	29	90	38	85	79	24	21
14	3	< 1	3	9	3	1	4	2	98	25	90	90	51	38	93	48	87	86	33	28
15	4	1	6	18	5	2	7	3	98	33	93	92	59	47	96	59	90	91	43	34
16	7	1	7	30	7	2	10	4	99	44	95	94	68	56	97	69	92	94	51	40
17	14	2	11	42	10	3	15	6	> 99	53	97	96	74	64	98	76	94	98	62	49
18	17	5	18	55	16	4	24	9	> 99	62	97	97	81	74	99	84	95	99	71	57
19	24	8	24	64	25	9	31	13	> 99	73	98	98	86	84	> 99	89	96	> 99	80	66
20	34	11	33	72	34	15	45	22	> 99	83	99	98	91	91	> 99	94	97	> 99	87	74
21	48	18	44	81	49	21	57	32	> 99	91	> 99	99	95	95	> 99	97	98	> 99	93	82
22	60	25	55	87	63	28	71	43	> 99	97	> 99	> 99	97	97	> 99	98	99	> 99	97	88
23	75	37	66	92	76	42	79	55		99	> 99	> 99	99	99	> 99	99	99		99	92
24	87	47	77	93	84	57	88	68		> 99	> 99	> 99		> 99	> 99	> 99	> 99		> 99	97
25	93	61	88	97	92	71	94	79					> 99			> 99	> 99		> 99	99
26	98	74	93	98	95	84	97	88					> 99			> 99	> 99		> 99	99
27	99	86	97	99	97	91	99	95												
28	> 99	95	99	> 99	99	96	99	99												
29	> 99	99	> 99	> 99	> 99	99	> 99	99												
30	> 99	> 99	> 99	> 99	> 99	> 99	> 99	> 99												
31				> 99	> 99	> 99	> 99	> 99												
32				> 99	> 99	> 99	> 99	> 99												

## Netherlands Managers Sample Norms

Netherlands norms are based on data obtained from 489 manager-level persons from a variety of organizations (mean age = 40 years and *SD* = 9 years). Demographic characteristics of the Netherlands Managers Sample are presented below.

**Table E.1** Demographic Information - Netherlands Managers Sample

	<i>N</i> = 254	%
<b>Gender</b>		
Female	106	41.7
Male	148	58.3
<b>Education Level</b>		
Below 12 years	22	8.7
12 years	3	1.2
13 years	52	20.5
Bachelor	111	43.7
Masters	55	21.7
PhD	4	1.6
Unknown	7	2.8
<b>Area of work</b>		
Administration	12	4.7
Sales	68	26.8
Top Management	12	4.7
Finance	12	4.7
Human Resources	27	10.6
Information Technology	5	2.0
Marketing	7	2.8
Technical	18	7.1
Unknown/Other	93	36.6

Netherlands Managers Sample means and SD are presented below.

**Table E.2** Descriptive Statistics - Netherlands Managers Sample (N = 254)

Scales	Mean	SD
1. Dominance	21.1	4.7
2. Responsibility	21.9	3.2
3. Stress Resistance	21.3	3.7
4. Sociability	19.1	3.9
5. Cautiousness	18.7	3.8
6. Original Thinking	23.4	4.2
7. Personal Relations	20.0	4.4
8. Vigour	22.9	4.2
9. Support	12.4	3.8
10. Conformity	9.0	4.8
11. Recognition	7.8	4.2
12. Independence	15.0	4.6
13. Benevolence	13.1	4.6
14. Power	14.8	5.4
15. Materialism	10.3	4.3
16. Achievement	15.3	4.4
17. Variety	10.5	6.5
18. Conviction	12.3	4.1
19. Orderliness	12.1	4.4
20. Goal Orientation	14.4	4.0

**Table E.3** Norms - Netherlands Managers (N = 254)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO
0	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3	< 1	< 1	< 1
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4	2	< 1	< 1	1	< 1	< 1	7	< 1	< 1	< 1
2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	8	8	1	< 1	2	1	< 1	12	< 1	1	< 1
3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	13	14	1	1	3	4	< 1	17	1	2	< 1
4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	20	23	1	2	5	9	1	20	4	4	1
5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4	27	34	2	5	7	15	2	28	8	6	2
6	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	7	33	41	5	9	9	20	3	31	10	12	2
7	1	< 1	< 1	1	< 1	< 1	1	< 1	10	40	53	7	12	14	30	5	38	14	16	4
8	3	< 1	< 1	2	< 1	< 1	1	< 1	15	50	63	10	17	15	38	6	45	18	20	5
9	4	< 1	< 1	2	1	1	2	< 1	22	57	68	12	23	18	44	9	50	24	26	12
10	4	< 1	< 1	3	2	1	2	1	31	63	76	17	28	22	52	14	54	30	36	17
11	5	< 1	1	6	4	1	4	1	41	69	83	22	35	27	61	19	57	41	47	26
12	7	< 1	2	9	6	2	6	2	53	76	86	28	45	30	68	25	60	50	56	32
13	7	< 1	3	10	9	2	7	4	63	85	90	34	52	37	77	34	67	63	63	43
14	9	2	5	11	12	4	10	5	73	87	93	45	62	44	84	42	70	70	70	51
15	11	4	6	14	19	4	13	6	78	91	95	50	72	50	89	51	74	76	77	59
16	14	6	11	19	31	6	18	9	82	93	96	60	77	57	92	60	79	83	84	65
17	19	9	16	25	40	9	26	11	90	94	98	70	85	63	94	69	83	89	88	78
18	24	15	20	39	49	13	33	13	94	96	98	78	89	71	97	76	85	93	90	83
19	31	21	29	49	57	17	42	19	96	97	98	85	93	76	98	80	89	98	94	89
20	38	28	37	65	67	21	53	24	99	98	> 99	88	94	86	98	87	93	> 99	96	96
21	45	40	49	76	76	27	64	31	> 99	99	> 99	92	97	92	99	91	95	> 99	99	97
22	54	55	59	83	83	37	74	39	> 99	> 99	> 99	96	98	96	99	96	> 99	> 99	98	98
23	64	70	70	89	91	46	81	48	> 99	> 99	> 99	98	99	98	> 99	98	98	> 99	> 99	99
24	77	81	79	93	95	56	85	62	> 99	> 99	> 99	99	> 99	> 99	> 99	98	98	> 99	> 99	99
25	88	91	87	97	97	66	89	72				99				> 99	> 99	> 99	> 99	> 99
26	94	93	94	98	98	77	94	80				> 99				> 99	> 99	> 99	> 99	> 99
27	95	98	98	> 99	99	87	96	89												
28	98	99	> 99	> 99	> 99	91	98	96												
29	> 99	> 99	> 99	> 99	> 99	95	99	98												
30	> 99	> 99	> 99	> 99	> 99	98	> 99	> 99												
31				> 99	> 99	> 99	> 99	> 99												
32				> 99	> 99	> 99	> 99	> 99												

## United Kingdom Managers Sample Norms

United Kingdom norms are based on data obtained from 300 manager-level persons from a variety of organizations (mean age = 32 years and *SD* = 9 years). Demographic characteristics of the UK Managers Sample are presented below.

**Table F.1** Demographic Information - United Kingdom Managers Sample

	<i>N</i> = 300	%
<b>Gender</b>		
Female	173	57.7
Male	127	42.3
<b>Ethnicity</b>		
Asian or Asian British & Any other Asian Background	3	1.0
Asian or Asian British & Chinese	6	2.0
Asian or Asian British & Indian	7	2.3
Asian or Asian British & Pakistani	3	1.0
Black or Black British & African	4	1.3
Black or Black British & Caribbean	4	1.3
British mixed	1	0.3
English/Chinese	1	0.3
Latin American	1	0.3
Mixed & Any other Mixed Background	3	1.0
Mixed & White and Asian	1	0.3
Mixed & White and Black African	1	0.3
Other	1	0.3
Prefer not to say	7	2.3
White & Any other White Background	40	13.3
White & British	209	69.7
White & Irish	8	2.7
<b>Education Level</b>		
GCSE or equivalent	19	6.3
A-Level or equivalent	45	15.0
Bachelors Degree or equivalent	144	48.0
Masters Degree or equivalent	76	25.3
Doctorate	5	1.7
Post graduate diploma	3	1.0
Other	8	2.7
<b>English primary language</b>		
No	41	13.7
Yes	256	85.3
Unknown	3	1.0
<b>Area of work</b>		
Administration	16	5.3
Commercial	29	9.7
Finance	20	6.7
Government, Public Service	42	14.0
Human Resources	20	6.7
Information Technology	18	6.0
Marketing	36	12.0
Technical	9	3.0
Unknown/Other	110	36.7



United Kingdom Managers Sample means and SD are presented below.

**Table F.2** Descriptive Statistics - United Kingdom Managers Sample (N = 300)

Scales	Mean	SD
1. Dominance	19.5	5.0
2. Responsibility	22.2	3.8
3. Stress Resistance	2.9	4.4
4. Sociability	17.6	4.7
5. Cautiousness	18.6	4.5
6. Original Thinking	23.3	4.4
7. Personal Relations	18.2	4.9
8. Vigour	22.6	4.5
9. Support	13.3	4.4
10. Conformity	9.7	5.1
11. Recognition	11.6	4.4
12. Independence	11.5	4.6
13. Benevolence	13.2	5.1
14. Power	12.7	5.0
15. Materialism	9.6	4.3
16. Achievement	15.4	4.7
17. Variety	12.9	6.7
18. Conviction	11.5	3.9
19. Orderliness	11.6	4.8
20. Goal Orientation	14.0	4.5

**Table F.3** Norms - United Kingdom Managers (N = 300)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO
0	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	1	1	< 1	< 1
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4	1	< 1	< 1	< 1	2	< 1	3	1	< 1	< 1
2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	9	2	1	1	1	5	< 1	6	1	< 1	< 1
3	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	1	12	4	2	3	2	9	1	10	2	2	< 1
4	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1	2	18	6	5	5	4	14	1	15	4	5	1
5	< 1	< 1	1	1	< 1	< 1	2	< 1	4	23	9	8	7	8	20	3	19	5	9	3
6	1	< 1	1	2	< 1	< 1	2	< 1	7	29	12	12	9	12	25	3	22	10	17	5
7	2	< 1	1	4	< 1	< 1	3	1	12	36	17	21	14	15	32	4	24	17	23	9
8	3	< 1	1	6	3	< 1	4	1	18	44	25	28	21	21	39	8	28	24	30	12
9	6	< 1	1	7	3	1	5	1	24	51	33	36	26	28	49	11	31	32	37	16
10	7	1	2	9	4	1	6	2	28	58	40	45	31	36	58	15	36	41	45	23
11	8	1	3	11	8	1	9	2	32	65	50	53	39	43	66	21	42	49	53	30
12	12	1	5	13	9	1	13	3	41	70	58	60	46	50	75	26	46	58	58	38
13	13	2	6	15	12	3	16	3	48	76	68	69	53	57	80	31	51	66	64	49
14	16	4	9	21	17	4	18	4	57	81	75	75	58	63	86	44	56	76	71	55
15	20	6	13	28	25	6	25	7	66	84	80	79	64	70	91	52	61	85	78	61
16	23	8	17	36	31	8	32	11	74	88	86	85	70	76	96	62	69	91	83	69
17	29	11	22	43	38	10	41	15	82	91	91	88	76	79	98	67	73	94	87	76
18	35	16	27	53	49	14	52	18	88	96	94	91	82	85	98	72	78	97	91	84
19	41	23	33	64	57	18	60	24	92	97	96	95	88	90	99	79	81	98	93	88
20	51	32	38	73	64	25	68	29	97	98	98	97	93	93	99	84	84	99	96	92
21	62	37	47	80	75	32	76	34	99	99	98	98	94	96	> 99	89	87	> 99	97	95
22	74	49	60	87	82	38	82	43	> 99	> 99	99	99	98	98	> 99	94	93	> 99	99	97
23	79	58	68	91	87	45	87	52	> 99	> 99	> 99	99	99	99	> 99	97	96		99	98
24	86	69	79	95	91	53	92	61	> 99	> 99	> 99	> 99	> 99	> 99	> 99	99	97		> 99	99
25	91	80	89	97	94	65	95	71								> 99	98		> 99	> 99
26	95	88	94	99	96	74	97	81								> 99	> 99		> 99	> 99
27	99	96	98	> 99	98	84	98	89												
28	> 99	98	> 99	> 99	99	90	99	95												
29	> 99	99	> 99	> 99	> 99	95	99	98												
30	> 99	> 99	> 99	> 99	> 99	98	> 99	99												
31				> 99	> 99	> 99	> 99	> 99												
32				> 99	> 99	> 99	> 99	> 99												

## United States Managers Sample Norms

United States norms are based on data obtained from 474 manager-level persons from a variety of organizations (mean age = 40 years and *SD* = 10 years). Demographic characteristics of the US Managers Sample are presented below.

**Table G.1** Demographic Information - United States Managers Sample

	<i>N</i> = 474	%
<b>Gender</b>		
Female	246	51.9
Male	228	48.1
<b>Education Level</b>		
Less than High School diploma/GED	1	0.2
High School diploma/GED	15	3.2
1 Year of College	32	6.8
2 Years of College/Associate's Degree	44	9.3
3 Years of College	14	3.0
4 Years of College/Bachelor's Degree	260	54.9
Master's Degree	99	20.9
Doctorate/Professional Degree	8	1.7
Trade School	1	0.2
<b>Area of work</b>		
Administration	69	14.6
Finance	63	13.3
Human Resources	87	18.4
Information Technology	78	16.5
Marketing	62	13.1
Sales	54	11.4
Technical/Science	61	12.9

United States Managers Sample means and SD are presented below.

**Table G.2** Descriptive Statistics - United States Managers Sample (N = 474)

Scales	Mean	SD
1. Dominance	19.9	4.9
2. Responsibility	22.7	3.5
3. Stress Resistance	21.2	4.1
4. Sociability	17.0	4.5
5. Cautiousness	19.6	4.4
6. Original Thinking	23.4	4.3
7. Personal Relations	19.1	4.5
8. Vigour	22.3	4.4
9. Support	12.5	4.4
10. Conformity	9.6	5.2
11. Recognition	9.8	4.6
12. Independence	13.1	4.8
13. Benevolence	13.6	5.1
14. Power	13.4	5.2
15. Materialism	10.0	4.2
16. Achievement	15.4	4.5
17. Variety	11.3	6.1
18. Conviction	11.5	3.9
19. Orderliness	12.2	4.8
20. Goal Orientation	14.5	4.7

**Table G.3** Norms - United States Managers (N = 474)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO
0	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	1	< 1	1	< 1	< 1	< 1	5	< 1	< 1	< 1
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4	1	< 1	1	1	< 1	< 1	9	< 1	< 1	< 1
2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	7	4	< 1	3	1	1	< 1	14	1	1	< 1
3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3	10	7	2	4	2	3	< 1	19	3	2	1
4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	4	15	11	4	5	4	1	22	4	5	1
5	< 1	< 1	< 1	1	< 1	< 1	1	< 1	7	20	17	7	8	7	7	2	26	8	8	2
6	< 1	< 1	< 1	1	< 1	< 1	1	< 1	11	25	22	12	9	11	11	2	32	12	14	4
7	< 1	1	< 1	2	< 1	< 1	2	1	16	31	31	18	13	13	18	3	35	18	18	7
8	1	1	1	3	1	1	3	1	25	38	41	23	14	20	24	6	40	25	25	12
9	1	1	1	4	1	1	4	1	33	45	47	30	18	28	32	10	43	34	31	17
10	1	1	1	5	2	1	5	2	42	51	56	37	22	35	42	16	50	44	36	24
11	2	1	2	6	3	1	6	2	52	58	64	43	28	41	48	22	55	55	46	31
12	4	2	3	9	6	2	8	3	58	66	72	50	38	49	57	27	59	63	54	39
13	4	3	4	13	8	2	10	3	67	72	78	57	43	58	64	34	64	72	63	46
14	8	3	5	17	11	4	14	4	74	77	84	64	50	65	71	42	68	81	72	55
15	11	5	7	25	16	5	19	7	82	83	89	68	56	71	77	52	73	89	77	65
16	14	7	10	36	24	8	24	10	86	88	92	74	61	76	83	60	77	92	82	72
17	20	9	15	45	31	12	31	12	93	92	93	79	66	81	88	66	82	96	88	78
18	26	12	21	57	41	17	39	15	96	95	95	83	72	87	92	73	85	98	92	83
19	35	15	26	66	50	20	48	22	99	96	97	86	77	90	95	81	88	99	96	87
20	45	20	34	74	59	26	56	28	99	97	98	89	82	93	98	84	91	> 99	98	92
21	55	28	46	81	67	33	66	36	> 99	99	99	93	87	97	> 99	91	93	> 99	98	96
22	67	35	57	87	77	41	76	45	> 99	> 99	> 99	96	92	99	> 99	95	96	> 99	99	97
23	77	46	67	93	82	50	82	57	> 99	> 99	99	94	> 99	> 99	97	98		99	99	
24	85	54	79	96	87	60	89	66	> 99	> 99	> 99	97	> 99	> 99	99	99		> 99	99	
25	92	65	86	98	91	69	92	74				99			> 99	> 99		> 99	> 99	
26	96	77	93	99	96	79	95	83				> 99			> 99	> 99		> 99	> 99	
27	99	86	97	> 99	97	88	98	91												
28	99	95	99	> 99	98	92	99	95												
29	> 99	98	> 99	> 99	99	97	99	98												
30	> 99	> 99	> 99	> 99	> 99	99	> 99	99												
31				> 99	> 99	> 99	> 99	> 99												
32				> 99	> 99	> 99	> 99	> 99												

## International Managers Sample Norms

A sample of 658 persons, drawn randomly and proportionately from inventory-takers in seven countries, constitutes the basis for International norms for SOSIE (mean age = 37 years and *SD* = 10 years).

**Table H.1** Demographic Information - International Managers Sample

	<i>N</i> = 658	%
<b>Gender</b>		
Female	359	54.6
Male	299	45.4
<b>Education level</b>		
Masters	202	30.7
Bachelor	349	53.0
High school diploma	107	16.3
<b>Area of work</b>		
Administration	54	8.2
Sales	76	11.6
CEO	21	3.2
Finance	50	7.6
Marketing	47	7.1
Human Resources	68	10.3
Technical	78	11.9
Information Technology	54	8.2
Other	210	31.9

International Managers Sample means and *SD* are presented below.

**Table H.2** Descriptive Statistics - International Managers Sample (*N* = 658)

Scales	Mean	<i>SD</i>
<b>1. Dominance</b>	19.9	4.9
<b>2. Responsibility</b>	22.7	3.5
<b>3. Stress Resistance</b>	21.2	4.1
<b>4. Sociability</b>	17.0	4.5
<b>5. Cautiousness</b>	19.6	4.4
<b>6. Original Thinking</b>	23.4	4.3
<b>7. Personal Relations</b>	19.1	4.5
<b>8. Vigour</b>	22.2	4.4
<b>9. Support</b>	12.5	4.4
<b>10. Conformity</b>	9.6	5.2
<b>11. Recognition</b>	9.8	4.6
<b>12. Independence</b>	13.1	4.8
<b>13. Benevolence</b>	13.6	5.1
<b>14. Power</b>	13.4	5.2
<b>15. Materialism</b>	10.0	4.2
<b>16. Achievement</b>	15.4	4.5
<b>17. Variety</b>	11.3	6.1
<b>18. Conviction</b>	11.5	3.9
<b>19. Orderliness</b>	12.2	4.8
<b>20. Goal Orientation</b>	14.5	4.7

**Table H.3** Norms - International Sample (N = 658)

Raw score	Do	Re	SR	So	Ca	OT	PR	Vi	Su	Co	Re	In	Be	Po	Ma	Ac	Va	Co	Or	GO	
0	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	
1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3	1	< 1	< 1	1	1	< 1	5	< 1	< 1	< 1	
2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	7	3	< 1	1	2	3	< 1	8	< 1	1	< 1	
3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	12	8	1	3	3	6	< 1	11	1	3	< 1	
4	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	3	18	13	3	4	5	10	< 1	15	3	4	1	
5	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	6	25	19	5	7	7	15	1	21	7	9	2	
6	1	< 1	1	1	< 1	< 1	1	< 1	9	32	26	8	8	11	22	2	25	10	14	4	
7	2	< 1	1	3	< 1	< 1	1	< 1	14	39	34	13	12	15	28	4	29	16	20	8	
8	3	< 1	1	5	1	< 1	2	< 1	22	47	40	18	17	19	35	6	35	23	24	12	
9	4	< 1	1	7	2	< 1	3	1	27	53	49	25	22	24	45	11	40	33	30	16	
10	5	< 1	1	10	2	1	4	2	34	58	58	32	28	30	55	15	47	42	38	21	
11	6	< 1	2	13	4	1	5	2	42	64	66	40	35	36	64	20	53	49	44	28	
12	9	1	3	17	6	2	7	3	49	70	72	48	42	43	74	26	58	58	53	34	
13	10	2	4	20	9	3	10	4	59	76	78	55	48	49	81	34	63	70	60	41	
14	15	2	7	25	12	4	14	6	66	80	84	63	56	57	86	43	68	77	67	49	
15	18	4	10	31	18	6	20	8	73	85	88	68	62	64	90	52	73	83	74	57	
16	23	6	13	41	24	7	26	10	79	89	91	74	68	69	93	60	78	88	80	65	
17	29	7	17	50	32	10	34	14	85	93	95	81	76	75	96	67	83	93	86	72	
18	34	11	22	60	40	13	44	18	91	95	96	85	82	81	98	74	87	96	89	77	
19	42	16	30	69	48	17	53	25	95	96	97	90	87	86	98	81	89	98	93	84	
20	49	23	37	79	57	23	62	31	98	98	99	93	91	91	99	86	91	> 99	95	90	
21	57	33	49	86	66	31	69	39	> 99	99	99	95	95	95	99	89	94	> 99	97	92	
22	66	45	61	92	73	38	77	46	> 99	> 99	> 99	98	98	98	> 99	93	97	> 99	99	95	
23	74	58	70	95	80	46	83	56	> 99	> 99	> 99	99	99	> 99	97	98		> 99	98		
24	82	67	79	96	85	54	89	66	> 99	> 99	> 99		> 99	> 99	99	98		> 99	99		
25	89	78	87	98	90	65	93	75				> 99			> 99	99		> 99	> 99		
26	94	86	93	99	94	76	96	82				> 99			> 99	> 99		> 99	> 99		
27	97	93	97	> 99	97	85	98	91													
28	99	97	99	> 99	99	90	99	97													
29	> 99	99	> 99	> 99	> 99	95	99	99													
30	> 99	> 99	> 99	> 99	> 99	98	> 99	99													
31					> 99	> 99	> 99	> 99													
32					> 99	> 99	> 99	> 99													

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