Personality and Values:
The Generation Game

Carole Fortier, PhD and Alice Keane, CPsychol

Pearson
TalentLens

Executive Summary

This white paper presents the results of a study looking into intergenerational differences in the values and personality traits measured by SOSIE.

The research is in response to ongoing demand from Human Resources professionals as they consider which management methods and resources to draw on in order to nurture the talent, skills and wellbeing of employees, not only taking into account the specific characteristics of each generation, but also with a view to encouraging intergenerational interaction and minimising intergenerational tension.

The analyses showed that small but significant differences exist for most SOSIE dimensions. A comparison of these results with experts' predicted differences between the generations shows sufficient agreement to conclude that these differences, which can be interpreted in terms of intergenerational behaviours, may be taken into account in Human Resources management. Interventions such as mentoring programmes and team building sessions can help to build on each generation's strengths and motivating values, and ensure that knowledge and skills are shared between generations.

Background

The intergenerational variations in intelligence test scores have been the subject of extensive research and are well-established (Flynn, 2007; Neisser, 1998; Wicherts et al., 2004). Despite this, there has been less interest in variations in personality profiles. Personality, which can be defined as the set of behaviours adopted by a particular individual in different situations, is stable over time. This stability, which is inherent in the notion of personality traits, and extends throughout the life of an individual, does not rule out intergenerational variations in the distribution and structure of personality traits. However, research has shown that, in addition to well-established genetic and environmental influences (Eaves, Eysenck, & Martin, 1989), the general social and cultural context can also affect personality (Twenge, 2000, 2001).

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According to the theory of generations developed by Karl Mannheim, each generation has its own particular characteristics due to social and historical factors that are common to all its members during their formative years. Mannheim's work sought to show that an individual's behaviours and thought processes are impacted by the events they lived through and the influences they experienced during their early years.

The generational approach sees each generation as being characterised by beliefs, values, attitudes and expectations that have an impact on its members' behaviours, including in the world of employment. These intergenerational differences have implications in terms of management when it comes to recruitment, communication styles, technological requirements, occupational motivation, and preferred leadership styles, as well as for training and development (Haeberle, Herzberg & Hobbs, 2009; Shaw & Fairhurst, 2008).

Method

For the purposes of this study, in order to facilitate comparisons between generations, subjects were selected belonging to two age brackets: Generation X (i.e. individuals born between 1963 and 1979) and Generation Y (i.e. individuals born between 1980 and 1994).

A number of Human Resources experts were asked about the personality traits and values which, in light of their professional experience as SOSIE users, they see as characterising Generation Y.

According to these experts, the **personality traits** considered the strongest in Generation Y are:
- Sociability
- Personal Relations
- Vigour

(with Dominance being less pronounced)

They felt that the more pronounced **values** in Generation Y are:
- Support
- Recognition
- Independence
- Materialism
- Variety

A sample of individuals who completed SOSIE for either recruitment or development purposes was taken for this research. Two age groups were formed: Generation X (n = 2150) and Generation Y (n = 2152). A number of different statistical analyses were carried out on the data set, full details of which are contained in Appendix 1. To summarise, based on Student's t with a threshold of p < .01, the following scales were found to have small but significant differences:

- **Generation X** individuals obtained higher scores for Dominance, Vigour, Independence, Power and Conviction.
- **Generation Y** individuals obtained higher scores for Responsibility, Stress Resistance, Sociability, Personal Relations, Conformity, Recognition, Achievement and Orderliness.

Results

Considering the results we can come to the conclusion that small but significant differences exist for most SOSIE dimensions between Generation X and Generation Y. The main differences between the generations can be summarised as follows:

Gen X individuals...
- may be self-assured in relationships with others and adopt an active role in a group. They are **confident in influencing** others.
- are dynamic and energetic; they like to **work at a fast pace**, and will rarely display tiredness.
- consider personal **independence** as important; they might look for ways to do what they want in their own way, making their own choices.
- value positions and opportunities in which they can influence, manage and **lead others**; they might seek situations in which it is possible to establish their own power and leadership.
- may value situations, opportunities and tasks which enable them to make important decisions and **defend their opinions** and convictions.

Gen Y individuals...
- are **persistent** and determined in completing tasks even when faced with obstacles or if the work is not central to their interests; they can be relied upon once asked to do something.
- tend to be worry-free, **handle change well**, and act in a calm manner even when the environment might create a more emotional reaction in most people.
- like to be around other people and to work with others. They find it easy to make new acquaintances, and **get along with others** socially.
- tend to be tolerant, patient, and **accepting**. They may accept things at face value and be insufficiently critical or challenging.
- tend to **value social rules**, standards and conventions. They are likely to be motivated by situations requiring them to conform to what is socially accepted and 'proper'.

small but significant differences exist for most SOSIE dimensions between Generation X and Generation Y

- are likely to place importance on the praise and admiration of others. They may value being noticed and having esteem and status offered to them by others.
- are likely to value accomplishment. They enjoy challenging work, particularly of the type that allows personal initiative and in which individual effort can pay off.
- may value an organized and systematic work environment and prefer to work in a methodical and structured way.

A comparison of these results with experts' opinions of expected differences between the generations on the basis of SOSIE dimensions shows sufficient agreement to conclude that these differences, which can be interpreted in terms of intergenerational behaviours, may be taken into account in Human Resources management.

Discussion

The findings suggest that the intergenerational differences identified here in terms of personality traits, values and behaviours should be considered by Human Resources professionals when building or developing teams, or working in areas such as communication, change management or interpersonal conflict.

Raising awareness of generational differences in teams and focusing on productive behaviours can bring teams together and enable them to function more efficiently. The diversity of perspective, behaviours and motivating values found between individuals from different generations can be particularly beneficial in project teams where such differences can improve innovative thinking and enhance problem solving and decision making techniques.

Mentoring programmes and team building sessions can help to build on each generation's strengths, and ensure that knowledge and skills are shared between generations. Personality assessments such as SOSIE can be particularly useful in such interventions to provide a rich picture of the differences in behaviours, strengths and values between individuals.

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References

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Appendix 1

1) Student's *t* test and variance analysis

First of all, a **Multivariate analysis of variance** (MANOVA) was performed for the 20 dimensions. A significant difference (p < .001) was observed for all dimensions.

In order to investigate these results further, the mean scores on the different scales for the Generation Y subjects were subsequently compared to those obtained by the Generation X subjects using **Student's *t* test** for an independent sample. The means and standard deviations for the raw scores, the differences in means between generations, the significance threshold of Student's t and Cohen's d for the different dimensions of SOSIE are presented in Table 1.

Results

For the personality traits, there is no significant mean difference for Cautiousness and Original Thinking between the two generations. For interpersonal values, there is no significant mean difference between the two generational groups only for Support and Benevolence, and for personal values, there is no significant mean difference only for Materialism and Variety.

There are significant mean differences for all the other dimensions, although these remain minor according to Cohen's criteria (Cohen, 1992).

The largest effect sizes for personality are obtained for Responsibility (d = .21), Conformity (d = .23), Recognition (d = .20) and Independence (d = .23) for interpersonal values, and for Conviction (d = -.31) and Orderliness (d = .22) for personal values. No SOSIE dimension presents a significant effect size difference.

However, based on Student's t with a threshold of p < .01, it is worth noting the following:

- Generation Y obtains a higher score for Responsibility, Stress Resistance, Sociability, Personal Relations, Conformism, Recognition, Achievement and Orderliness.

- Generation X obtains a higher score for Dominance, Vigour, Independence, Power and Conviction.

If these results are compared with the opinions of the experts (Table 1), support for their opinions is evident for ten of the dimensions: Dominance, Sociability, Cautiousness, Original Thinking, and Personal Relations in the personality traits, and Recognition, Benevolence, Power, Conviction and Goal Orientation in terms of values.

Table 1. Study of mean differences for Generations Y (n = 2,152) and X (n = 2,147)

SOSIE Scale	Generation Y		Generation X		Diff, a_y-a_x	Cohen's d	P (Student's t) DF =	Difference in favour of
	Mean	Standard deviation	Mean	Standard deviation				
Dominance	19.71	3.49	20.36	3.76	-0.65	-0.18	p < .001	X
Responsibility	24.77	2.92	24.15	3.03	0.63	0.21	p < .001	Y
Stress Resistance	22.29	3.54	21.89	3.62	0.40	0.11	p < .001	Y
Sociability	18.19	3.24	17.78	3.36	0.41	0.12	p < .001	Y
Cautiousness	21.44	3.51	21.31	3.64	0.13	0.04	ns	=
Original Thinking	23.58	3.39	23.53	3.51	0.05	0.01	ns	=
Personal Relations	20.34	3.63	20.00	3.63	0.34	0.09	p < .01	Y
Vigour	22.41	3.44	22.78	3.44	-0.38	-0.11	p < .001	X
Support	9.85	3.71	9.72	3.75	0.13	0.04	ns	=
Conformity	13.84	4.50	12.76	4.96	1.09	0.23	p < .001	Y
Recognition	7.95	3.67	7.22	3.70	0.72	0.20	p < .001	Y
Independence	10.99	4.12	12.00	4.61	-1.01	-0.23	p < .001	X
Benevolence	15.58	4.10	15.56	4.13	0.02	0.01	ns	=
Power	13.79	4.85	14.72	5.13	-0.94	-0.19	p < .001	X
Materialism	7.92	3.33	7.85	3.26	0.06	0.02	ns	=
Achievement	15.43	4.05	14.83	3.87	0.60	0.15	p < .001	Y
Variety	11.07	5.19	11.21	5.26	-0.14	-0.03	ns	=
Conviction	11.15	3.95	12.36	3.89	-1.21	-0.31	p < .001	X
Orderliness	12.42	4.63	11.40	4.55	1.03	0.22	p < .001	Y
Goal Orientation	16.89	4.12	17.15	4.18	-0.25	-0.06	ns	=

2) Linear discriminant analysis

Linear discriminant analysis was performed in order to test the relevance of the SOSIE dimensions for categorizing individuals from the sample as belonging to Generation X or Y.

The results of discriminant function analysis include several elements. *Overall indicators* make it possible to assess whether subjects can be classified on the basis of their scores; the *analysis* itself gives information about the weight of each of the variables in predicting which group a subject belongs to; and lastly a classification comparison can be established based on the results of the analysis with the original classification.

Results

Overall, the analysis shows that SOSIE dimensions offer significant differentiation between the generations (p < .001). The canonical correlation coefficient is equal to .313. It can be asserted that differences between generations explain 10% of the variance in dimensions.

Table 2 presents the standardized coefficient values obtained by the analysis. As the negative pole of the function corresponds to Generation X and the positive pole to Generation Y, it is possible to determine for which generation each of the variables comes into play when establishing the linear classifier: a negative coefficient indicates that the variable acts in favour of Generation X, a positive coefficient means it intervenes in favour of Generation Y.

Table 2. Standardized coefficients obtained by linear discriminant analysis

SOSIE	Coefficients
Dominance	-.385
Responsibility	.265
Stress Resistance	.171
Sociability	.480
Cautiousness	-.267
Original Thinking	.138
Personal Relations	-.034
Vigour	-.308
Support	.170
Conformity	.543
Recognition	.402
Independence	.060
Benevolence	.030
Power	-.293
Materialism	-.122
Achievement	.488
Variety	.258
Conviction	-.442
Orderliness	.090
Goal Orientation	-.048

For the largest coefficients, the signs and effect sizes lead to the same conclusions about the relationships between the variables and generations, namely:

- Generation X has the highest coefficients for the following dimensions: Dominance, Vigour, Power and Conviction.

- Generation Y has the highest coefficients for the following dimensions: Responsibility, Stress Resistance, Sociability, Conformity, Recognition and Achievement.
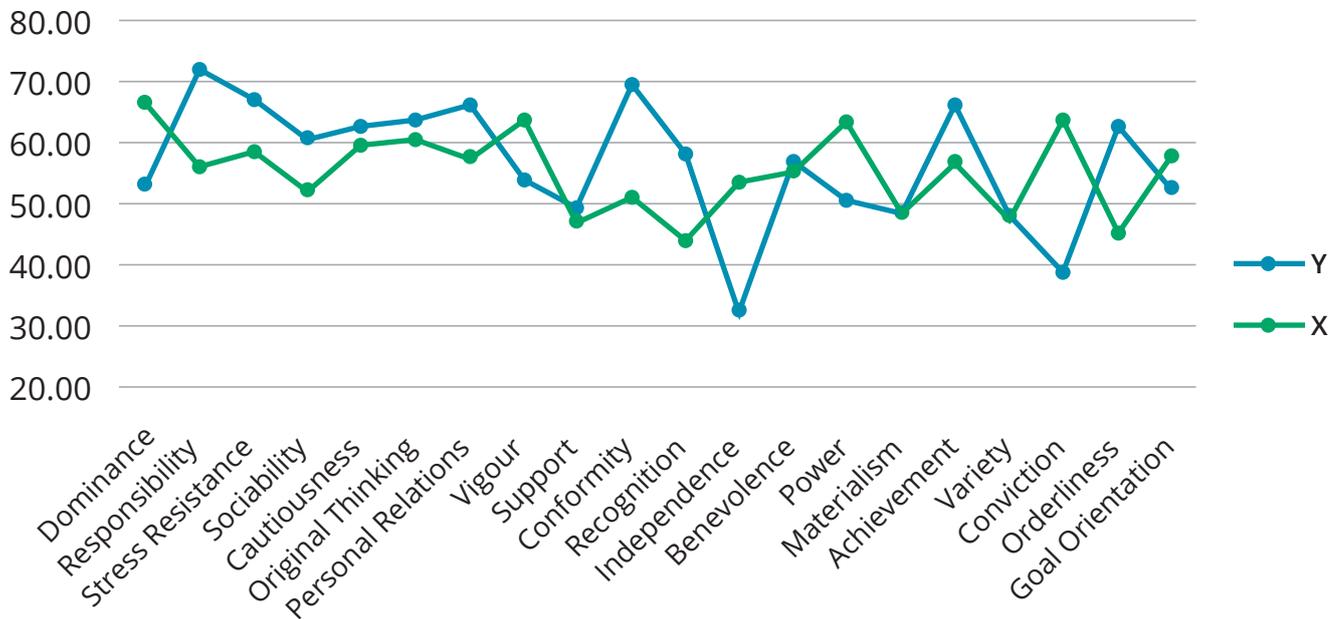
To estimate the ability of the linear classifier to predict whether an observation belongs to one of the classes studied (in this case, generations), the discriminant score for each individual is calculated using the function. Based on this score, the probability of belonging to Generation X or Y is estimated. This probability of belonging as predicted by the function is then compared with actual data. The percentage of subjects classified by the linear classifier in accordance with their original class (said to be the "percent correctly classified") allows the effectiveness of the linear classifier to be appraised. The percent correctly classified is 64.1% for Generation Y and 63.0% for Generation X: a total of 63.5% correctly classified. This rate is much higher than it would be for a random assignment (50%); therefore, it can be concluded that the function can predict whether or not a person belongs to Generation X or Y on the basis of SOSIE dimension scores.

This approach has the drawback of being skewed by a tendency towards overestimation, due to the fact that the function has been optimized for the sample. To compensate for this overdetermination bias, it is customary to draw a sample at random from the sample that is not used to calculate the function (known as the test sample), and apply the function to it once it has been calculated on the basis of the rest of the sample. Approximately 10% of the individuals were drawn at random to form a test sample (n = 218 for Generation Y and n = 213 for Generation X). The comparison of the original class and the predicted class gives a percent correctly classified of 62.4% for Generation Y, 58.2% for Generation X and 60.3% overall. These rates are slightly lower than those obtained for the sample used to calculate the function, but are nonetheless higher than the rate observed for random classification. The effectiveness of the linear classifier remains high once overdetermination bias has been corrected.

Mean profiles: Generation Y and Generation X

To illustrate the profiles of each of the generations, the mean profile for the standardized scores of subjects correctly separated by the linear classifier was calculated (X: n = 1,342; Y: n = 1,375). These mean profiles are shown in figure 1. They are expressed in conventional units of measurement and allow SOSIE users to come to their own interpretation of the characteristics of Generations X and Y on the basis of their profiles. The dimensions highlight the main distinctive differences between the two generations.

Figure 1. Profile of Generations X and Y based on the means of standardized scores for correctly classified subjects Y (n = 1,375) and X (n = 1,342)

Profile of Generations X and Y based on the means of standardized scores for correctly classified subjects Y (n = 1,375) and X (n = 1,342)