



# Construction of the psychometric tool of occupational values assessment



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## ABOUT

Stéphanie Rambaud has a PhD in Psychology and creates psychometric tools for JobTeaser, ensuring that the tools are scientifically valid.

JobTeaser's mission is to prepare the new generation to reach their full potential, embrace the future with optimism and make their mark in the world.

Stéphanie is also a researcher affiliated to LaPEA (Laboratoire de psychologie oppliquée et d'ergonomie, Université de Paris, France, University de Paris, France).

Her main subjects are: emotions - self-knowledge - career guidance - social relations and well-being.

She also works as a freelance researcher and trainer for specific projects.



Contact

**in** Linkedin innovation@jobteaser.com

## DEFINITION

A value is defined as a mental representation of the desirable (i.e. ideal, moral) that is expressed through opinions, attitudes and choices. Most authors agree that values are types of motivations (e.g., Schwartz, 1996; Tisdale, 1961). They represent desirable goals to be achieved and serve as the basis or criteria for guiding the individual's actions and thinking (Rokeach, 1979; Schwartz, 1996).

In this sense, occupational values are defined as **the goals that individuals would like to achieve through work** (Brief, 1998; Cherrington, 1980; Frieze, Olson, & Murrell, 2006; Nord, Brief, Atieh & Doherty, 1988). There must be a correspondence between the values prioritised by the individual and the values conveyed by the professional environment for the individual to feel satisfaction at work (Dawis, Lofquist, & Weiss, 1984; Gillet, Berjot, & Paty, 2010; Holland, 1966, 1973). Thus, values are beneficial to vocational decisions. According to Sagiv (2002) and Wach (2005), values provide additional information to professional interests (i.e. branches of activity of interest, measured in our <u>Marco</u> tool), particularly in the case of conflicting situations concerning orientation choices.



## THEORETICAL MODELS OF VALUE

In this theoretical context, we have chosen to identify and evaluate work values as **external conditions** transmitted by the work environment (i.e. actions caused by a condition external to the individual, such as rewards). Indeed, extrinsic motivation implies that satisfaction does not come from the activity itself (i.e. measured in Marco), but rather from external factors related to engagement in the activity (e.g., recognition).

Each person tends to **prioritise** their occupational values. That is to say, from their point of view, some values are more important than others. Prioritisation is important because, in a career choice, several values may be in competition with each other (e.g., a highly paid job with little work-life balance, or a low-paid job in a mission-oriented company). The relative importance of this value prioritisation will determine the choice of the individual.

Existing models of values are often developed on the principle of parsimony. Indeed, there is an infinite number of values and therefore the dimensions obtained depend on the values identified a priori. As a result, the models take into account a reduced number of values, which can lead to difficulties in generalising the results at an individual or generational level. The numerous scientific studies carried out mainly agree on a **hierarchical model** made up of **four main families of occupational values**, which themselves group together into several sub-dimensions (e.g. Lyons, 2003). As an example, Cameron and Quinn's (2011) model highlights corporate cultures by contrasting them along two axes: Stability vs. flexibility, and social cohesion vs. outcomes. This model is itself very similar to the basic values model proposed by Schwartz (2012), which also groups together four dimensions, which are themselves transposable to the professional domain (Ros, Schwartz, & Surkiss, 1999).

The most recent studies focusing on the occupational values shared by different generations mainly focus on the difference between Generation Y (i.e. 1981-2004) and Generation X (i.e. 1966-1980; e.g., Stankiewicz, & Łychmus, 2017). Hewlett et al. (2009) found, for example, that Generation Y representatives had a greater need - compared to Generation X representatives - to recognise the meaning of their work, and are characterised by a greater sensitivity to the social and environmental consequences of their actions. As far as we know, there are **very few studies on the occupational values of Generation Z**. Indeed, this generation is still not very present in the working world, which poses a problem of representativeness.

This is why **we wanted to create a new model that would be more adapted to the values of the new generation** (e.g. social justice, environmental commitment) but inspired by pre-existing models in literature.

## QUESTIONNAIRE DESIGN

### Participants

In order to pre-test a first pool of items, 697 participants aged between 18 and 30 voluntarily completed our online questionnaire via TypeForm (49.35% female, 50.07% male, 0.57% other). Participants were recruited via a paid panel. We removed from the sample participants who had completed the questionnaire several times or who had not complied with our instructions (N=38). Thus, our final sample is composed of 659 participants (49.47% female, 49.92% male, 0.61% other; Mage = 24, SD = 4<sup>1</sup>).

### Materials and procedure

After reading the instructions, participants were asked to answer 54 items. For each item, the participant rated its importance using a ten-point ordinal scale ranging from "Not important at all" to "Very important". The 54 items were preconstructed to cover values according to pre-existing models and adapted to the new generation.

At the end of the questionnaire, participants were asked to fill out sociodemographic data (gender, age, status).

1. Mean and standard deviation of the sample's age

#### Data analysis

The statistical analyses carried out on the pre-test constitute the first stage in the construction of the model. They make it possible to define the dimensions of our model and to discard the least representative items.

Thus, all the items were subjected to a **hierarchical ascendant classification** (i.e. cluster analysis), which makes it possible to obtain a hierarchical grouping tree of the items (i.e. dendrogram). The analysis reveals the existence of **five** clusters using the ward method (for Euclidean distance between items). To arrive at this number, we chose the most harmonious partitioning (i.e. leading to a better intra-cluster homogeneity). The first cluster groups five items measuring social and environmental commitment. The second cluster contains eleven items measuring team work and kindness. The third cluster is composed of eight items measuring work-life balance and working conditions. The fourth cluster concerns stimulation and self-development through nine items. Finally, the last cluster includes thirteen items measuring social recognition and status.

Our model is thus composed of **two levels** (see figure below), the first being composed of the five clusters mentioned above and the second of 18 subdimensions representing more specific values (e.g. professional support, challenge, independence). Each of the major clusters is made up of three to five sub-dimensions.

Our final model is thus composed of 46 items, with the eight items furthest from their cluster removed.



# FREYA MODEL

### Figure: Dimensions of the Freya model

### Social and environmental commitment

- Environmental commitment
- Social Justice
- Social commitment

### Working together and kindness

- Respect and honesty
- Professional support
- Team work
- Friendly and welcoming environment

### Work-life balance and working conditions

- Work-life balance
- Pace of work
- Independence
- Salary

#### Stimulation and self-development

- Taking advantage of skills
- Learning
- Challenge

#### Social recognition and status

- Reputation
- Influence
- High energy
- Technological progress

### Conclusion

The model we have created, with the aim of identifying the values of 18-30 year olds in France, **follows the structure of the scientific literature models**, namely four dimensions relating to : working conditions, achievement (i.e. stimulation and self-development), social values (i.e. cooperation and benevolence) and prestige (i.e. social recognition and status; Lyons, 2003; Ros, Schwartz, & Surkiss, 1999). The novelty of our model lies in the **appearance of a fifth dimension** relating to social and environmental commitment which, in the models in the literature, was previously integrated into the "social values" dimension. Indeed, this dimension separately groups together needs that are focused on work ethics (e.g., social justice) about which Generation Z is particularly concerned (Lidija, Kiril, Iliev, & Shopova, 2017).

## ADMINISTRATION MODALITY

In its online version, Freya includes the 46 items from the pre-test that identify the importance of values for individual development through **two exercises**. In the first exercise, in the normative modality, the participants must situate themselves for each of the items using an eleven-point ordinal measurement scale ranging from "Not important to me at all" to "Very important to me". In order to propose a hierarchy of values, a second exercise in ipsative modality (i.e. choice between two options) is presented to the participant. Based on the results of the previous exercise, the participant sees the value items, on which they have identical scores, presented as pairs of cards. For each pair, the participant has to choose the value that is most important to them.

### Principle of scoring

The Freya psychometric questionnaire aims to assess the individual's professional values according to the **five main families** of the model, with the 18 values grouped into these families. Each of the five families is thus assessed using five to thirteen items by means of a percentage. This rate is calculated from the sum of the scores for all the items in the family. The 18 needs are measured through one to four items, and are then ranked according to the importance given by the participant in exercise 2.

## NEXT STEP

A psychometric tool must respect three main qualities: it must be normed (discriminating), reliable (stable) and valid (concordant with the construct). Since our pre-test is the first step of a heavy scientific procedure that should lead to a later version, the future elements of statistical analysis will be carried out according to these psychometric qualities.

Thus, the final stage of scientific validation of our Freya tool will be carried out on the current online version and will be the subject of a **psychometric report**. This new version of the tool will be subject to iteration and will therefore be more robust thanks to our statistical analyses. All these steps in the construction of the tool allow us to provide the participant with a reliable assessment of their occupational values.



#InnoTeam innovation@jobteaser.com

