INDUCE Culture Scan Reading Guide

INDUCE

Towards a Sustainable agro-food INDUstry

Capacity building programmes in Energy efficiency

Project factsheet

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INTRODUCTION

This reading guide explains the use of a valid instrument to assess the culture in an organization. It is of interest for anyone who wants to decide on what measures or interventions are necessary and effective in an organization in order to change behavior or current practices.

Background: Measuring culture

There are different ways to study organizational culture. Although organizational culture varies between organizations (and also within departments of the organization), there are some common traits. The instrument to assess organizational culture in INDUCE is primarily based on the Portrait Values Questionnaire from dr. Shalom Schwartz (PVQ-21). The PVQ-21 is used by the European Social Survey and tested in different countries. It is widely used among international scholars and policy makers. For the use of research and science, the PVQ-21 is free.

Values are a core theme in various social disciplines, like psychology, anthropology and sociology. Values are believed to be the driving motivational force ("guiding principles in the life of a person or group") behind many actions of individuals and groups. Dr. Shalom Schwartz developed the Theory of Basic Human Values. This theory aims to assess universal values among cultures and to describe the relations amongst them. The theory holds there is such a thing as universal organization of human motivation. And although the nature of values and the structure may be universal, the importance that is attributed to these values varies amongst different individuals and groups. In other words, individuals and groups prioritize values differently.

The basic human values distinguished in the PVQ-21 are Self-Direction, Stimulation, Hedonism, Achievement, Power, Security, Conformity, Tradition, Benevolence, Universalism. These values are displayed graphically in a circle (see picture). The circle structure shows how the values relate to each other. The outer circle of shows four dimensions (i.e. Openness to Change, etc). These four dimensions are overarching motivational forces which are at play within the ten values. values. The instrument describes an individual with certain traits, corresponding to the ten values. The respondent describes how much the person in the description is similar to him or her and thus describes oneself. universal values. The instrument describes an individual with certain traits, corresponding to the ten values. The respondent describes how much the person in the description is similar to him or her and thus describes oneself.
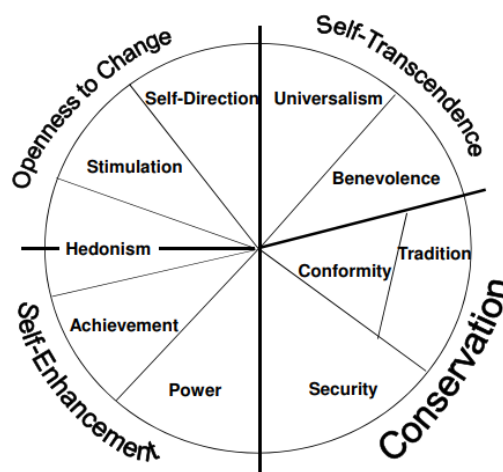
Using the PVQ-21 value instrument

Below we summarized twelve steps for conducting the culture scan, using the PVQ-21 value instrument. The steps are divided over a preparation stage, the data collection stage and the analysis and interpretation stage.

Preparation

1. Read about the universal value theory of dr. Shalom Schwartz to gain an understanding of these values. See references for
2. Determine the language you want to use for the survey. For many languages, translations of the PVQ-21 are available via www.europeansocialsurvey.org.
3. Determine whether you will contact the employees directly via an email database or via a contact person at the company. Having someone within the company to advertise the survey may help to raise the response rate substantially.
4. Determine what you can offer the respondents in exchange for their participation (e.g. a small gift) to raise the response rate.
5. Determine whether you will use online surveys, paper surveys or a combination. Online surveys are easier to distribute, collect and analyze, but require some form of digital communication (e.g. email or WhatsApp) to distribute. Even if you are using an online survey, some people would prefer a survey on paper. Make sure you provide people the opportunity to fill the survey out on paper.
6. If you are using online surveys:
   a. (If needed) find survey software to program and host the survey. Many free tools are available, such as SurveyMonkey. Many of these tools can be used for the purpose of this culture scan, but may limit the number of surveys and/or responses to surveys. You might also think of using mobile apps like Kahoot, Mentimeter or Socrative.
   b. Program the survey questions, including the PVQ-21 and supporting questions (e.g. company, location). Limit the number of personal questions to be able to keep the individual responses to the survey anonymous.
7. Develop a printable version of the survey.
8. Write an invitation email (with the survey link). Pay attention to:
   a. Goal of the survey.
   b. Length of the survey.
   c. Instructions for filling out the survey.
   d. What you will do with the results of the survey (e.g. sharing of results with supervisors, how you will store the results).
   e. Provide your contact details.

Data collection

9. For data collection use the questionnaire in attachment I and collect the results.

Analysis & interpretation

10. Analyze the results using the coding instructions (see attachment II) by dr. Shalom Schwartz. Pay particular attention to:
    a. A clean data set. Check whether the answers to the survey reflect which value you like to measure.

  b. Reliability of the results. Check whether the reliability – also called internal consistency - of the scores for each of the 10 values is sufficient. If the reliability is sufficient, the results of the culture scan can be used as intended. If the reliability is insufficient, the answers to the culture scan likely contain too much measurement error (e.g. surveys that have not been filled out seriously, people that have misunderstood the question, or errors in entering the data). For reliability, you can use standardized measures, such as Cronbach's alpha. This analysis is easiest to carry out with statistical software packages, such as SPSS, but can also be done in Excel.

  c. Response rate: number of people that filled out the survey as a percentage of the possible responses (i.e. number of employees). Did many employees fill out the survey (at least 20-30%)? If not, the results may not be representative for the company as a whole. For this reason, it is important to make sure the response rate is as high as possible (see instructions above). This relates to the number of respondents which are necessary. As a rule of thumb, aim for more than 100 respondents for your sample size.

11. Interpret the results individually
  a. What values are most important to the respondents?
  b. What values are least important to the respondents?
  c. What could these values mean in the organization of interest?
  d. Think of suggestions for the kind of interventions that would make sense in the organization of interest, given the results.
12. Interpret the results in co-creation with the organizations.

Attached are the survey questions of the PVQ-21 (I), the instructions for analysis (II) and the interpretation of the scores of basic values in INDUCE (III).

Survey Questions PVQ-21 (I)

* It is advised to change the statements into statements for him or her. In the example below statements are show for both a male and female respondent.

Several statements are shown below. These statements could concern a typical representative of your organization. Read every statement and indicate to what degree the statements are also applicable to you.

	Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not like me at all
Thinking up new ideas and being creative is important to him/her. He/She likes to do things his/her own original way.						
It is important to him/her to be rich. He/She wants to have a lot of money and expensive things.						
He/She thinks it is important that every person in the world be treated equally. He/She believes everyone should have equal opportunities in life.						

It's very important to him/her to show his/her abilities. He/She wants people to admire what he/she does.						
It is important to him/her to live in secure surroundings. He/She avoids anything that might endanger his/her safety.						
He/She likes surprises and is always looking for new things to do. He/She thinks it is important to do lots of different things in life.						
He/She believes that people should do what they're told. He/She thinks people should follow rules at all times, even when no-one is watching.						
It is important to him/her to listen to people who are different from him/her. Even when he/she disagrees with them, he/she still wants to understand them.						
It is important to him/her to be humble and modest. He/She tries not to draw attention to him/herself.						
Having a good time is important to him/her. He/She likes to "spoil" him/herself.						
It is important to him/her to make his/her own decisions about what he/she does. He/She likes to be free and not depend on others.						
It's very important to him/her to help the people around him/her. He/She wants to care for their well-being.						
Being very successful is important to him/her. He/She hopes people will recognize his/her achievements.						
It is important to him/her that the government insures his/her safety against all threats. He/She wants the state to be strong so it can defend its citizens.						
He/She looks for adventures and likes to take risks. He/She wants to have an exciting life.						
It is important to him/her always to behave properly. He/She wants to avoid doing anything people would say is wrong.						

It is important to him/her to be in charge and tell others what to do. He/She wants people to do what he/she says.							
It is important to him/her to be loyal to his/her friends. He/She wants to devote him/herself to people close to him/her.							
He/She strongly believes that people should care for nature. Looking after the environment is important to him/her.							
Tradition is important to him/her. He/She tries to follow the customs handed down by his/her religion or his/her family.							
He/She seeks every chance he/she can to have fun. It is important to him/her to do things that give him/her pleasure.							

Scoring and Analysis Instructions (II)

For instructions for different types of statistical analysis, see below 'correcting for scale use bias'. These are instructions by Schwarz himself.

Scoring Key for 10 Original Values with the PVQ-RR Value Scale

Self-Direction	1,23,39,16,30,56	Security	13,26,53,2,35,50
Stimulation	10,28,43	Conformity	15,31,42,4,22,51
Hedonism	3,36,46	Tradition	18,33,40,7,38,54
Achievement	17,32,48	Benevolence	11,25,47,19,27,55
Power	6,29,41,12,20,44	Universalism	8,21,45,5,37,52,14,34,57

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Scoring Key for Higher Order Values in the PVQ-RR Value Scale

Self-Transcendence	Combine means for universalism-nature, universalism-concern, universalism-tolerance, benevolence-care, and benevolence-dependability
Self-Enhancement	Combine means for achievement, power dominance and power resources
Openness to change	Combine means for self-direction thought, self-direction action, stimulation and hedonism
Conservation	Combine means for security-personal, security-societal, tradition, conformity-rules, conformity-interpersonal

Correcting for scale use biases

The score for each value is the mean of the raw ratings given to the items listed above for that value. For most purposes, it is necessary to make a correction for individual differences in use of the response scale before performing analyses. Below are instructions for making the correction that is appropriate to various types of analyses. **Failure to make the necessary scale use correction typically leads to mistaken conclusions!**

Individuals and cultural groups differ in their use of the response scale. Scale use differences often distort findings and lead to incorrect conclusions. To correct for scale use:

(A) Compute scores for the 19 values by taking the means of the items that index it (above). If you wish to check internal reliabilities, do so for these value scores before the next steps.

(B) Compute each individual's mean score across <u>all</u> 57 value items. This is the individual's Mean RATing of all values. Call this MRAT.

(C) Subtract MRAT from each of the 19 value scores. This centers the scores of each of the individual's 19 values (computed in A) around that individual's Mean Rating.

    1. <u>For correlation analyses</u>: Use the centered value scores (C).

    2. <u>For group mean comparisons, analysis of variance or of covariance (t- tests, ANOVA, MANOVA, ANCOVA, MANCOVA)</u>: Use the centered value scores as the dependent variables.

    3. <u>For regression</u>:
        a. If the value is your **dependent** variable, use the centered value score.
        b. If the values are **predictor** variables:
            1. Enter **un**centered values as predictors in the regression.

                a' If all 19 values are included, the single regression coefficients for the values are not clearly meaningful and interpretable because the values are interdependent. This is so even if the multicollinearity statistics do not look problematic.

                b' Choose the values to exclude as predictors *a priori* on theoretical grounds because they are irrelevant to the topic.

            2. If you are interested **only** in the total variance accounted for by values and not in the regression coefficients, you may include all 19 **un**centered values as predictors. The R^2 is meaningful but, because the 19 values are exactly linearly dependent, the coefficients for each value are not precisely interpretable.
            3. If you use only one value as a predictor, use the centered value because this is equivalent to correlation.
        c. In publications, it is advisable to provide a table with the correlations between the centered values and the dependent variables in addition to any regression. These correlations will aid in understanding results and reduce confusion due either to multicollinearity or to intercorrelations among the values.

    4. <u>For multidimensional scaling,</u> both centered and uncentered item responses work equally well.

    5. <u>For canonical, discriminant, or confirmatory factor analyses</u>:

Use **raw** (uncentered) value scores for the items or 19 value means. However, if only some of the 57 items are included, centered scores can be used.

6. <u>Exploratory factor analysis </u>is not suitable for discovering the theorized set of relations among values because they form a quasi-circumplex, which EFA does not reveal. Factors obtained in an EFA with rotation will only partly overlap with the 19 values, combining them to form larger factors, and will exploit chance associations. The first *unrotated* factor represents the way respondents use the response scale. It may represent an acquiescence bias, social desirability, the overall importance of values to the person, or some combination of these and other influences. It does not represent specific value preferences. A crude representation of the circular structure of values can be obtained using EFA by plotting the value items in a two-dimensional space according to their loadings on factors 2 and 3 of the *unrotated* solution.

Interpreting scores of basic values in INDUCE (III)

The first step is to understand what the cultural values mean in a specific context. In one organization "conformity" might mean something else than in another organization. This means the interpretation of values needs an extra translation for good advice on how to implement energy efficiency. In other words, what works in one company which scores high on "conformity", might not work in the other company. With cultural sensitivity in mind, table 1 shows how individual values were translated in the INDUCE project. Examples of interplay between different values are given as well. This translation is meant to inspire the interpretation of the values when a culture scan is conducted elsewhere.

Table 1: INDUCE interpretation of the Theory of Basic Values for the implementation of energy efficiency measures via trainings

High scores on **universalism** and **benevolence** means "enhancement of others and transcendence of selfish interests"	A focus on group results and maintaining good relationships with the ingroup relations (ingroups are groups of employees who are in frequent contact with one another, like a team or department) is advised to emphasize in the trainings. Creating and implementing EE measures for the organization needs to be done with respect to organizational processes, positions and group opinion and with reference to "the greater good". Creating a shared interest among colleagues before implementing EE measures might prove an efficient first step and extra important in this organization. How an individual can not only gain individually but help one's colleagues might prove effectively in the training program of this company. Individuals who value benevolence are driven to preserve and enhance the welfare of one's in-group. It promotes cooperative and supportive social relations. One should not focus on individual achievement and/or displays of power (such as mentioning status differences).
High scores on **conformity** and **tradition** stands for "protection of order and harmony in relations".	The driving force behind the value of tradition is respect, commitment and acceptance of current customs and ideas in an organization. The expression of

	current customs are for example catchphrases, symbols or practices which are part of the organization. A tradition can be a barbeque every last Friday of the month in which employees tease one-another in informal ways. A tradition can be to always share ideas with colleagues before sharing them with management. The value of conformity links closely to tradition. Whereas tradition entails acceptance of current customs and ideas, conformity entails acceptance of the current social order. A high value for conformity displays a social norm of respect and subordination to persons with whom one frequently interacts, such as managers or team leads. The implementation of EE measures should focus on expectations from the past, such as previous goals and vision and enforced individuals who have become the leaders in the company. One should not emphasize change or disruptive innovative practices which could flow from EE measures.
High scores on **self-direction** and **universalism** reveal a "reliance upon one's own judgment and comfort with the diversity of existence"	Self-direction refers to the needs for control and mastery of subject matter and independent. Employees in an organization which scores high on self-directions, find it stimulating to choose their own goals and are curious and independent. Universalism refers to understanding, appreciation, tolerance and protection for the welfare of all. Hence, a high score on both self-direction and universalism means an organization who is willing to not only focus on group results (benevolence) but who also focusses on the "best" solution for all people and nature. The way to do so, is by letting individuals choose their own goals and with high levels of autonomous behavior. EE measures could more successfully be implemented through self-organizing teams, driven by long-term outcomes like a sustainable future for all. One should not focus on maintaining the status quo (i.e. a society or organization with moderate goals, preserving the way how things are done without the ambition to change for the greater good).
The value of **security** in work context refers to stable work relations, in terms of employment safety. It could also mean a secure and stable work order is meant; in which management has a clear role to play and enables employees to do their work.	The value of security can be linked to both individual interests and group interests. How energy efficiency enables stable employment (compliance with energy efficiency shows one is a good employee and one who is in line with the long-term strategy of the company) is an argument which could be used to gain critical mass in favor of energy efficiency.

	One should not emphasize an approach on novelty and change, such as individually chosen goals for successful EE implementation.
A score on both **conformity** and **security** are values which aim at a social order.	One can conform to a norm (when others do as well) and one feels secure if others behave in a certain way. For example, if stable employment is offered, one can know what to expect to do in a profession, what the role of the person is and how the role links to others in the organization. A high score on conformity means it is generally considered upsetting and unhelpful if group function are disrupted by actions of individuals. Social norms and expectations to cohere to those norms are important. Hence, when implementing EE, one should be aware of the social norms and how to match the EE measures with the social norms in place. Social norms refer to everyday interactions, such as expressions of politeness, self-discipline and obedience. One should not focus on implementations or actions required which are not in line with the social norms. Employees will not suddenly speak up if EE measurements are violated, when addressing colleagues on behavior is not-done.
The combination of **hedonism** and **self-direction** could be interpreted as a desire for pleasure in one's chosen path. **Stimulation** is the neighboring value to both hedonism and self-direction, is closely related.	According to Schwartz, self-direction derives from the needs for control and mastery. Individuals who hold the value of self-direction highly value independent thought and action. The fun-factor and how individuals could shape the energy policy of the company should be emphasized when implementing energy efficiency measures. Hedonism in work context could be interpreted as a drive for pleasant highs which make an employee feel good in the workplace. An urge for novelty, excitement and challenges in life arises from the value of stimulation. If one scores high on stimulation, variety and stimulation of the senses and mind is important to remain ambitious and motivated. Attuning to a strong desire for mastery and purpose (self-direction) by clarifying what one can learn in the training is advised for implementing EE measures. It is estimated employees of this company are more eager to participate when it will be clear for them how they can grow as a professional by means of this training. It could be that a part of the training is focused on making energy efficiency interesting and attractive, not only during the training but also for the implications for the workforce after the training on EE measures. Maintaining current practices, group efforts without any form of entertainment or challenge for the implementation of EE measures is best to be avoided in this situation.

The values of **achievement** and **power** link to social recognition and an ambition for successful performances.	Achievement and power are closely aligned. Whereas achievement merely focuses on meeting standards of excellent set by one-self (or perhaps, together with management), power focuses on taking a strong role with others. The drive to give a successful presentation and to be recognized by others comes from the value of achievement. The drive to be in a dominant position within a network (semantically, "the power over…") relates to the value of power. Individually, power can refer to individual needs for control. As power and achievement focus on social recognition and esteem, it is advised to pay attention to hierarchy and opportunities for personal achievements through EE measures. One should pay respect to the achievements and results of individuals. It is advised to focus on individual achievements and create possibility to increase one's (social) status. One should not neglect social status nor individual efforts.

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