

Measuring the effect of culture in experimental persuasive effects research

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1 The importance of studying culture

Persuasive effects research is interested in the effects of message factors (e.g., vividness, style), receiver factors (e.g., involvement, motivation), and situational factors (e.g., distraction) on the persuasiveness of a message. One of the receiver factors is cultural background. Receivers may be American, Asian, European, or more specific, Spanish or Swedish. There is growing interest in the impact of culture in the field of persuasion effects research (see, e.g., Fitch 2003; Le Pair/ Crijns/ Hoeken 2000). Fitch (2003: 100), for instance, remarks that it is „commonly recognized that persuasion is fundamentally shaped by culture”. The importance of culture goes back, argues Fitch (2003: 102), to the foundation of rhetoric with Aristotle’s enthymeme. This means that persuasive attempts should be consistent with the values and beliefs shared by the audience. As cultures may differ in the beliefs and values that they have, messages should be adapted to be consistent with the values and beliefs of a specific culture. This ancient Greek suggestion has received some research attention in the field of advertising research. I will come back to these advertising studies in Section 2.

Studying the effect of culture on the persuasiveness of messages is interesting, because it can indicate that what is persuasive in one culture does not necessarily have to be persuasive in another culture. A lot of insights from persuasion studies, such as those inspired by the Elaboration Likelihood Model (Petty/ Cacioppo 1986), have been developed within the American context. An example is consensus information, for instance „From a sample of 437 Dutch consumers who have used the new Philips coffee machine, 76% were satisfied“. Consensus information – representing the opinion of a large number of people – is said to influence participants’ attitudes only under conditions of low motivation (Petty/ Cacioppo 1986). If participants are highly motivated, consensus information will not influence their attitude. Aaker/ Maheswaran

(1997), however, showed that consensus information had an influence on the persuasive outcome for Chinese participants under conditions of both low and high motivation. The claim that consensus information is only important under conditions of low motivation must therefore be qualified. Cross-cultural studies such as Aaker/ Maheswaran (1997) may provide more insight into the persuasion process. From a practical point of view, such studies are also important, since most companies and firms work in an international environment. Companies may have foreign customers, production plants overseas, and employees with different cultural backgrounds. In order to communicate effectively with their international stakeholders, knowledge about the effects of culture on persuasiveness is essential.

Studies that investigate the influence of culture on the persuasion process need methods and instruments to measure the effect of culture. As cultural studies have most frequently used values as a starting point for cross-cultural differences and similarities (see Section 2), values have also been used to measure culture. Persuasive effects research involving different cultures inherently encounters a number of methodological problems. In Section 3, I will describe these problems and some solutions, and propose the inclusion of context variables other than values as an alternative way of measuring the effect of culture in experimental persuasive effects research.

2 The effect of culture on persuasion

Different types of strategies have been proposed in order to characterize cultures. These strategies help to build theoretical frameworks from which research questions can be formulated. Fiske et al. (1998) gave an overview of six strategies, such as elaborately describing individual cultures, and constructing typologies and dimensions. The most popular strategy appears to be the dimensional approach, in which cultures are compared on the basis of a number of dimensions (Fiske et al. 1998: 947). In studies taking the dimensional approach, studying values is the most frequent way of measuring culture. In this approach, cultures are classified according to differences and similarities in value hierarchies.

Research has shown that cultures may differ in their value hierarchies, that is, in the relative importance they attach to basic values such as freedom, pleasure, and creativity. The most well known evidence comes from Hofstede's (1980, 2001) extensive survey among people from 50 countries and three regions. Analyses of the large dataset revealed a pattern of five value dimensions: individualism-collectivism, uncertainty avoidance, power distance, masculinity-femininity, and long-term versus short-term orientation. Each of the countries investigated was assigned a score on these dimensions. Countries showed to have their specific value hierarchies going from values that are relatively important to values that are relatively unimportant. In the United States, for instance, individualist values are important, whereas in the Chinese culture collectivist values are prioritised.

Values are useful for understanding cultures, because value hierarchies of individuals can be related to attitudes and behaviour. According to Fishbein's (1967) belief-based approach to attitudes, an attitude towards an object is built (a) on a number of beliefs about the object, and (b) on the evaluation of these beliefs. This evaluation is based on personal value hierarchies. If a person values comfort, the belief „the Lexus GS300 is a comfortable car” will be evaluated positively. As a consequence, provided that this belief is the only relevant belief, this person will have a positive attitude towards this car, and maybe a positive behavioural intention to purchase this car.

Most of the research on the effect of culture on the persuasion process has focused on the effectiveness of value adaptation in advertising. In fact, it is the only domain in persuasion investigating the role of culture that is identified in current persuasion handbooks such as O'Keefe (2002: 245). Advertisements often refer to values, such as comfort or safety. If value hierarchies indeed differ in various cultures, advertisements will be more effective when the values that they appeal to are adapted from culture to culture. A number of experimental studies have been set up to investigate this hypothesis. Le Pair et al. (2000) provided a review of such empirical studies. In Han/ Shavitt (1994), for instance, an ad with an individualist value appeal (referring to the importance of self) was more persuasive than an ad with a collectivist value appeal (referring to the importance of groups and society) in the United States, whereas the reverse was true for Korea. In five of the six published

experiments that Le Pair et al. (2000) reviewed, advertisements were more effective when the values they appealed to were important for a specific culture than when they were not. In the other experiment, the unadapted value appeal was more persuasive than the adapted appeal.

In most of the studies in this review, the effect of culture was not empirically determined, but suggested on the basis of what is known about cultural differences in value hierarchies. In the next section, I will discuss better and more complex methods and instruments that can be used to measure the effect of culture.

3 Measuring culture

Van de Vijver/ Leung (2000: 42) claim that most of the cross-cultural research (in psychology) is done by scholars who are not specialists in cross-cultural research, but who are curious to know whether effects that have already been found apply to other cultures. Van de Vijver/ Leung (2000) stress that it is important for such scholars to take notice of suggestions made in cross-cultural methodology, such as in Van de Vijver/ Leung (1997).

Many of these suggestions are also relevant for cultural persuasive effects research. Numerous studies have used values as a means of studying cultural differences in persuasive effects research. However, using values as a way to understand cultures is not without its methodological problems (see, e.g., Fiske et al. 1998; Hoeken/ Korzilius 2003; Hofstede 1980, 2001; Smith/ Schwartz 1997; Van de Vijver/ Leung 1997). I will discuss some problems and solutions in Section 3.1. As some problems with values still persist, I will argue in Section 3.2 that it is important to include variables other than values in research designs on the effect of culture. To illustrate these problems, I will use the experiment of Hornikx/ Hoeken (2005) about the persuasiveness of expert evidence in France and the Netherlands.

3.1 Values

As cultures differ in many ways (e.g., religion, economy, politics), there are a number of explanations when there appear to be cultural differences. If values are used to predict cultural effects on a certain dependent variable, it is

important to determine the real contribution of values to the occurrence of an effect. Hornikx/ Hoeken (2005) predicted that expert evidence, which consist of an expert who underscores a claim, is more persuasive to French than to Dutch participants because of a difference in power distance between France and the Netherlands. An example of expert evidence is (2) for claim (1):

(1) The consumption of basil in tomato pasta sauce improves sporting performance.

(2) According to Prof. dr. Jacobs from the University of Amsterdam, a specialist in dietetics, the consumption of basil in tomato pasta sauce improves sporting performance.

Power distance is one of the value dimensions of Hofstede (1980, 2001), and is the degree to which people accept and expect that power is distributed unequally in their society. Whereas the French culture has a relatively large power distance, the Dutch culture has a relatively small power distance. If expert evidence indeed appears to be more persuasive to the French than to the Dutch participants, there is no proof that this effect is caused by a difference in power distance. If large power distance is valued by the French culture, most French people will value it in general because of a process of socialization (Schwartz/ Smith 1997: 83). However, the value preferences of a culture do not have to apply to every individual (e.g., Schwartz/ Smith 1997: 82). There are always individuals whose scores vary a great deal from the average score. The problem that follows from this is called the invalid inference problem (see Hoeken/ Korzilius 2003: 290). It is invalid to attribute cultural differences on a dependent variable to a supposed cultural difference in the importance attached to a value without any knowledge about the value hierarchies of the participants of the study.

A straightforward solution lies in measuring cultural values at the level of the individual participants (e.g., Hoeken/ Korzilius 2003: 290). There is a set of individual values, namely the Schwartz (1994) value list. Schwartz (1994) classified and cross-culturally validated more than 50 values. People's preference for these values was measured by asking to what extent the values are a guiding principle in their lives. Some experiments on cross-cultural persuasion have used cultural and individual values. Hoeken et al. (2003), for instance, measured the security and stimulation values from Schwartz (1994) as a con-

control for Hofstede's uncertainty avoidance dimension. Measuring value hierarchies at an individual level allows controlling whether these hierarchies correspond to cultural value hierarchies. In an experiment set up to investigate the persuasiveness of expert evidence in France and the Netherlands, Hornikx/ Hoeken (2005), for instance, could have measured the power values of Schwartz (1994). They could then have controlled whether the French participants had a higher preference for the power value than the Dutch participants. Next, they could have tested whether participants with a high preference for power were more persuaded by expert evidence than participants who have a low preference for power. If this effect was significantly higher than the difference in the persuasiveness of expert evidence for Dutch and French participants, the difference in value preference can be considered as the cause of the cultural difference in the persuasiveness of expert evidence (see, for a more detailed explanation, Hoeken/ Korzilius 2003).

Although measuring at an individual level seems a useful solution, a problem that persists is that of measuring values itself. Peng/ Nisbett/ Wong (1997) discuss specific validity problems that concern the measurement of values at an individual level. If people are asked to judge to what extent values are a guiding principle in their lives, as is done in the Schwartz (1994) questionnaire, three problems occur. First, the meaning of a value, such as equality, may differ from culture to culture. This is the problem of meaning equivalence. Second, people often assess the personal importance of a value on the basis of the importance that people around them attach to this value. A Dutch participant may think he finds power important, because his friends do not. A French participant may think that she does not attach great value to power compared to her family. In reality, however, the French participant might attach more importance to power than the Dutch participant. Finally, people sometimes attach more importance to the values that they do not possess, and relatively less importance to their own values, because these are self-evident. This phenomenon appeared to occur in a study by Hornikx/ Starren (2004). Whereas the Dutch culture is characterized by a weak uncertainty avoidance, and the French culture by a strong uncertainty avoidance (Hofstede, 1980, 2001), the Dutch participants in Hornikx/ Starren (2004) attached more impor-

tance to the Schwartz values related to strong uncertainty avoidance, and the French participants attached more importance to the Schwartz values related to weak uncertainty avoidance. If values are problematic to measure at an individual level, what else can be measured at that level? A solution is provided by the concept of so-called context variables.

3.2 Context variables

The idea of context variables is similar to that of measuring values at an individual level as a solution for the problems of how cross-cultural differences can be explained, and of how the impact of the factor culture can be validated. The difference between values and context variables is illustrated in Figure 1.

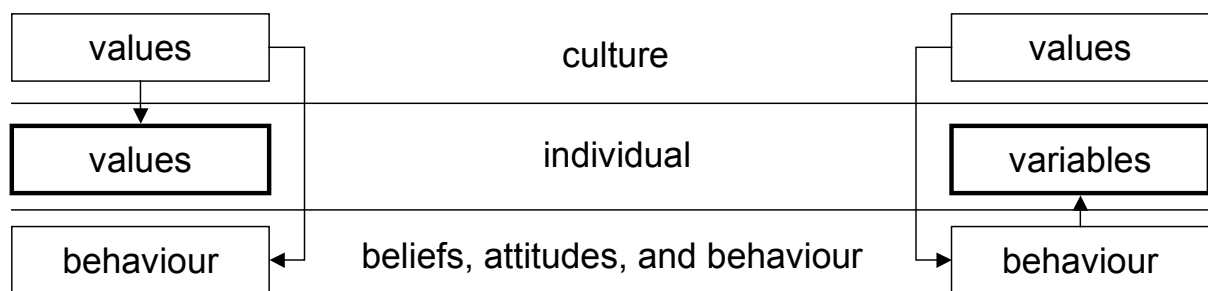


Figure 1: Factors that influence the selection of values (left-hand side) and context variables (right-hand side) at an individual level

In the most frequent approach (left-hand side of Figure 1), the choice of values at an individual level is determined by expected differences on values at a cultural level. The specific beliefs, attitudes, or kinds of behaviour that are expected to be influenced by culture do not determine the researcher's selection of values at an individual level. When, for instance, the persuasiveness of expert evidence (at the level of beliefs, attitudes, and behaviour) is expected to be affected by the dimension of power distance at a cultural level, a researcher may choose to investigate the value 'power' at an individual level.

With context variables, the researcher's approach is a little bit different. The concept of context variables comes from cross-cultural psychology (see Poortinga/ Van de Vijver 1987), where context variables are used to explain cross-cultural differences. These context variables are not chosen with regard to values at a cultural level, but with respect to the context where an effect of

culture is expected (see the right-hand side of Figure 1). In other words, the starting point is the topic itself, for instance the persuasiveness of expert evidence. Context variables are chosen with respect to the question what variables at an individual level might affect the dependent variable, such as the persuasiveness of expert evidence. Values at a cultural level may still inspire the hypothesis that culture affects the persuasiveness of expert evidence, but these values do not influence the choice of the context variables.

Hornikx/ Hoeken (2005), for instance, created a Preference for Expert Information (PEI) scale as a context variable for the persuasiveness of expert evidence. This PEI scale was expected to explain cross-cultural differences in the persuasiveness of expert evidence. This is visualised in Figure 2.

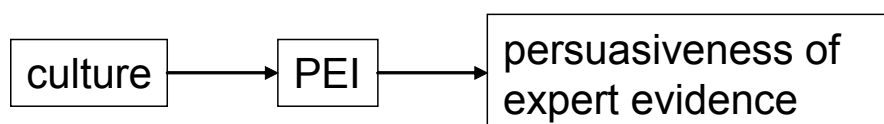


Figure 2: The expected effects of culture and PEI on the persuasiveness of expert evidence

Expert evidence proved to be relatively more persuasive for the French participants than for the Dutch participants. In order to explain this effect, the role of the Preference for Expert Information was investigated. Contrary to the expectations of Hornikx/ Hoeken (2005), the Dutch and French participants did not differ in their scores on the PEI scale. Next, for the French participants, the score on the PEI did not affect the degree to which they were persuaded by expert evidence. For the Dutch participants, however, the score on the PEI scale correlated positively with the persuasiveness of expert evidence. The more a Dutch participant personally preferred expert evidence, the more he or she was persuaded by expert evidence. In conclusion, the PEI scale was not able to provide an explanation for the cross-cultural difference on the persuasiveness of expert evidence, but it generated more insight into what determines the persuasiveness of expert evidence. Seemingly, the persuasiveness of expert evidence is not a personal matter for the French, but it is for the Dutch.

4 Conclusion

Because of the growing interest in the influence of culture on the persuasion process, it is essential to have adequate methods and instruments to validate the effect of culture. Values have proven to be important in cross-cultural research on persuasive effectiveness, because insight into cross-cultural differences and similarities in value hierarchies are useful to generate research hypotheses. The measurement of values at an individual level allows determining better the effect of culture. However, measuring values has a few disadvantages. It is, for instance, questionable whether participants' indicated value hierarchies correspond to their true value hierarchies. As the assessment of values at an individual level is indispensable but not free from methodological problems, context variables other than individual values constitute a better alternative. These context variables are also measured at an individual level. Their starting points are not the values at the cultural level, but the dependent variable in question (e.g., the persuasiveness of expert evidence). Another advantage of context variables is that they may provide further explanations for cultural differences that are found (Van de Vijver/ Leung 1997). In the Hornikx/ Hoeken (2005) study, for instance, the Preference for Expert Information correlated positively with the persuasiveness of expert evidence for the Dutch participants, but not for the French. The inclusion of context variables may thus generate more insight into cross-cultural differences. In this way, our understanding of the reasons why what is persuasive in one culture is not always persuasive in another, will increase.

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