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# Cognitive Interview as an Effective Method in Cross-Cultural Research: A Study of Organizational Leaders in Sweden and India

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# **Cognitive Interview as an Effective Method in Cross-Cultural Research: A Study of Organizational Leaders in Sweden and India**

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## **Abstract**

This research attempts to demonstrate the effectiveness of cognitive interview (CI) techniques in the process of finalizing the survey instrument by establishing the conceptual equivalence of ethical values among managers from Sweden and India, from four different sectors namely, Corporate, Health, Education and Information Technology. CI was helpful in identifying items, which were difficult to answer or to understand, and with improper response categories. The results provided substantive insight into the cultural influence in the understanding of various values in the organizations. The paper highlights the types and applications of CI in different fields of the study of human behavior.

## **Introduction**

With increasing globalization and changing demographic patterns in organizations, cross-cultural research on leadership has become important. Cultural values and traditions can influence the attitudes and behaviors of managers in a number of different ways (Adler, 1997; Fu & Yukl, 2000; House *et al.*, 1997). Cultural values affect institutions, norms, customs, and organizational practices. Cultural values represent the implicitly or explicitly shared abstract ideas about what is good, right or desirable. Cultural values can be seen to be inherently related to work values (Schwartz, 1999). Broadly speaking, work values can be seen as goals and aspirations that people want to achieve through their work (Schwartz, 1999; Nord *et al.*, 1990). The cultural value priorities of different nations are evident from the ways the societal institutions (*e.g.* family, education, economic, political and religious systems) function, through their goals and their modes of operations. Schwartz (1999) postulates that the cultural dimensions of values, reflect the basic issues or problems that societies must confront in order to regulate human activity/individual behavior. Following that, in the globalized context, organizations must carefully align their values according to national cultures and promote values to attract, retain and motivate the employees.

In human resource management, it has been suggested that ethical values may be important for the organizations' attraction for its employees. According to Hunt, Wood and Chonko (1989, p. 79), ethical values are considered to be "a composite of the individual ethical values of managers and both the formal and the informal policies on ethics of



the organizations”. The present research examines ethical values, which organizations consciously adopt through their work culture and are therefore important for already employed managers’ perception of the employer’s attraction. Managers are the representatives of the organization whose regular activity reflects values, which the organization promotes to make the workplace attractive.

The primary objective of the base project has been to explore how organizational values are presented and perceived in different organizations across four different sectors, *i.e.*, Manufacturing, IT, Health and Education. The four values considered for the project are:

*Equal Opportunities for Men and Women in the Workplace:* Organizations have policies and the policies are valued and implemented to ensure equal opportunity in recruitment and benefits and facilities offered to both male and female employees.

*Organizational Support to combine work and family/personal life:* There is a satisfactory level of involvement or ‘fit’ between the multiple roles in a person’s life.

*Corporate Social Responsibility:* The organization, which emphasizes corporate social responsibility, creates policies, makes decisions and follows strategic plans that include where the employers actually do more than what is needed according to legislation that helps social wellbeing (Hemingway & Mac lagan, 2004)

*Organizational Justice:* Concerns norms and rules about rewards, decision-making, and how managers treat their employees.

The authors realized that, getting started with the collection of data, which is a cross national, cross-sectoral study to be carried out in different gendered contexts of the organization, the appropriate methodological approach should be adopted to validate the research findings. In general, although cross-cultural studies appear interesting and elegant, several methodological problems make cross-cultural research specifically difficult. One of the major problems in cross-cultural research, is the slack of equivalence of meaning for measures developed in one country and then used in other countries (Yukl, 2010)

Cognitive Interview (CI) is used to establish the semantic equality of questions in cross-cultural studies. CI techniques are increasingly being extended to cross-cultural research, particularly where surveys are administered in multiple languages, and/or across sub-cultural groups. For example, in the present paper the pre-testing of survey questions were intended for two populations, who speak Swedish and Hindi as their first language, but were required to respond to questions which are framed in English. Such endeavors, as reported by Hunt and Willis (2009), present a set of challenges to the researchers, who must concern themselves not only with the usual sources of response error, but must take into account several additional sources of error as well, including (a) translation (and possibly mistranslation) of the instrument; (b) natural sub-group differences in language use or in survey response tendencies (Swedish, Gujarati Indians, and

Hindi speaking Indians); (c) uncontrolled variation in cognitive interviewer's behavior across staff speaking different languages or representing different cultures and (d) reconciliation of interview findings, when attempting to develop a coherent sense of the testing results and their implications for a questionnaire redesign.

CI techniques are used to investigate, assess, and refine a survey instrument (Berkanovic, 1980). Cognitive testing can minimize some sources of measurement error by identifying question items or terms that are difficult to comprehend, or are misinterpreted by the respondents, and response options that are inappropriate for the question or that fail to capture a respondent's experience (Jobe & Mingay, 1991). Willis (2005) observed that many times, respondents' ability to understand the questionnaire items have been over estimated, as those items have not been interpreted by the respondent in the exact way that the researcher asked. Generally, CI methods reflect a theoretical model of the survey response process that involves four stages: comprehension or interpretation, information retrieval, judgment formation, and response editing. CI results can be used to revise or develop new items, so that they are appropriate to respondents' cultural context and lifestyle. CI methods rely primarily on verbal probes about the interpretation of questions and recall strategies. Such probes may be scripted or spontaneously created by the interviewer. CI methods have proven to be an effective way of pre-testing questionnaire items so that respondents can find it easy to understand and respond in the way that they were intended to (Knafl, Deatrack, Gallo *et al.*, 2007)

### **Objectives of Present Research**

- To assess whether respondents understand the survey instrument
- To determine the optimum response categories for ratings and preferences/feedback
- To identify the sources of problems in comprehension: translation, reading level and survey content
- To explore whether the keywords and concepts used in the research were cognitively construed in the same way in Sweden and India.

In order to achieve these objectives and establish conceptual equivalence across both samples, the researchers carried out a) CIs among Swedish and Indian managers b) invariance analysis on quantitative data from a questionnaire on these four ethical values from 150 managers each from both countries. Results compiled from both contributed to modify the questionnaire.

### **Method**

#### **Sample**

Forty Managers from four sectors, *i.e.*, Corporate, Health, Education and IT were selected, 20 each from Sweden and India, and 5 each from the four sectors. In spite of the effort to balance the number of male and female managers from each sector, it was difficult to balance the number because of the nature of the work organizations.



## Procedure

Initially, the research team prepared a standard protocol so that the respondents could be asked questions following the same series and sequence and so that the verbal probing could be done using the same prompts. Then, four interviews, one from each of the target sectors, were conducted in the presence of the researchers, both from Sweden and India, to demonstrate the techniques to the interviewer. An explanation about the specific probes was explained to the interviewer. Later on, the interviewer contacted each manager personally and one-on-one interviews were conducted after taking the informed consent.

## Phase II

*Analysis of Measurement Invariance of the items:* Each section with items pertaining to a particular value was subjected to invariance analysis, through the confirmatory factor analysis model of Structural Equation Modeling. In general, when the scale is measuring a particular trait made up of multiple items and is used in samples from two or more distinct populations, there is a critical assumption that the scale is measuring the same trait in all of the groups. If that assumption holds, then comparisons and analyses of those scores are acceptable and yield meaningful interpretations. But, if that assumption is not true, then such comparisons and analyses do not yield meaningful results. A central principle of measurement invariance (MI) is that measures across groups are considered to be on the same scale if relationships between the indicators and the trait are the same across groups. This statement in factor analytic terms says, given multiple items that make up a scale, if the loadings for those items on the single underlying factor are the same across groups, then measurement invariance is supported.

The initial scale consisting of 59 items on the above mentioned 4 values were subjected to analysis of measurement invariance. After the analysis, the questionnaire items merged to 11 different subscales under the four broad values, with 45 items.

The responses from managers from India and Sweden on part B and part C are compiled for the 45 items with 11 subscales of 4 values, which have been identified with invariance measurement analysis.

## Results

### Data Description

The Organizational Values for Attractive Leadership (OVAL) Questionnaire consisted of 59 questions out of which, 27 questions measured organizational justice, 18 questions measured corporate social responsibility, 09 questions measured organizational support for work-life balance, and 15 items measured equal opportunity for genders. However, for CI, irrespective of the items in the questionnaire, each exposures/question to the interviewee is considered to be one response unit for the analysis.

The process of CI has been divided into three parts: A, B & C.

In part A, the interviewer asked five questions about each value. Therefore, 300 questions (5 questions x 4 values x 39 managers) were asked in part A.

In part B, 3 questions from each section of the questionnaire were selected. Thus 240 (3 questions x 4 values x 39 managers) questions were asked to the participants.

In part C, 2 questions for each value were initially selected and then, all the items in the questionnaire were shown for a feedback on difficulty level and available response format. Therefore, 2301 (59 questions x 39 managers) responses were received from the interviewees.

This paper particularly focuses on the responses achieved from form B and form C. Thus, altogether, the data set for the analysis consisted of 3549 responses from the 39 managers.

## **Findings**

### ***A) Pilot Study***

On the basis of the responses gathered from the pilot study of the four managers from each different sector, the following things were derived.

1. Indian managers did not show a clear perspective on their organization's strategy to implement the value of gender equality. When they were asked to elaborate on questions like how they understood gender equality at their work place, whether their workplace promoted this value, whether they talked about it at the workplace. They mostly understood gender equality as not having biases against female employees. It was difficult to connect to 'Gender Equality' as a value in the same way as it is conceptualized in Sweden. Thus keeping the Indian and Swedish perspectives in mind, the value was renamed as 'equal opportunities for men and women in organization' in order to bring some synchronization.

2. 'Work life balance' as a value seemed a little de-contextualized when respondents were asked about the connotations related to the value at their workplace. To make it more explicit and context specific, work-life balance was replaced with 'Organization's support for combining work and family', so that when employees talk about it they specifically report about the organization making contributions to allow the employees to balance their work and family/ personal life.

### ***B) Main Study***

#### **PHASE I**

In part A, an attempt was made to discover the understanding of the employees about the four values as defined above: 1. Organizational justice, 2. Corporate social responsibility, 3 Equal opportunity for men and women in organizations and 4 Organization's support for combining work and family. Managers were asked five questions: 1) If I say [organisational values 1-4] – what do you think of them? 2) What does it [organisational value 1-4] mean at your work place? 3) Do you talk about [organisational values 1-4] at your work? Is it on the agenda? 4). In organisations in general, will you please



give some [more] characteristics of what [organisational values 1-4] at work could be?

5) In organisations in general, will you please describe characteristics of a workplace that shows no – [organisational values 1-4]?

The respondents were then asked to rank four values from their perspective, which make the workplace attractive for the employees. Differences were found across the four sectors in ranking the four values in India. However, we are interested in discussing the findings from section B and C from India and Sweden.

In part B, interviewees referred to four items, one from each of the four values namely, organizational justice, corporate social responsibility, equal opportunities for men and women in the organisation and organizational support for combining work and family life.

For the first time, when they were shown the item, they were asked to spontaneously express their ideas about the item (think aloud technique), explaining what the item meant to them. They paraphrased a random statement from the questionnaire in their own words.

Next, they translated the same question again and found a suitable response format from the response options available (the possibility was open to say that a correct response option was not available, and then they would be asked about a suitable response option to be included).

Thirdly, managers checked how relevant the particular statement was to measure the related value in their organizational context. For example, the statement would be “I work in an organization where managers emphasize the importance of gender issues”, and they would be asked to state how this statement was relevant to their organization.

Part C: The respondents were shown all the statements of the questionnaire of each value. They were asked if there was any questionnaire statement that any manager in their organization might not understand or which was unclear or tricky to answer. They were also asked if they found any questionnaire statement offending or inappropriate.

Out of the 59 questions presented in the questionnaire, 15 statements were found to be inappropriate/difficult to understand/tricky to answer.

- One statement was found tricky to answer (*men's and women's equal representation in managerial positions*)
- Two statements were too similar (*the amount of effort that they put forth and the stresses and strains of their job*)
- Two statements were contradicting each other (*In this organisation employees can easily balance their work and family lives and to be viewed favourably by top management, and employees in this organisation must constantly put their jobs ahead of their families or personal lives.*).
- Two statements were found repeated (*Employees are often expected to take work home at night and/or on weekends and Employees are regularly expected to put their jobs*

*before their families).*

- Four statements were said to be framed inappropriately (*ex: Many employees in this organisation are resentful when their co-workers take extended leaves to care for new-born or adopted children*).

- One statement was (*Men's and Women's equal working conditions*) reported partial to gender. One manager responded that, when talking about gender equality, one need not use the terms “men's and women's”. Instead, it should be Employee's equal working condition

- One statement (*Statement: Where colleagues reject sexiest comment or jokes*) was found unprofessional. The manager mentioned that professionally, one cannot use such words in research questionnaires in India. She also suggested we use ‘*irrelevant comments*’ in place of “*sexiest comments*”. The other manager also expressed that people do joke or pass comment behind people's back in organizations, but they do not do so openly.

- In the items “*Our organisation makes investments to create a better life for future generations*” and “*Our organisation targets sustainable growth which considers future generations*”, the term ‘future generation’ was misunderstood by different managers. Thus, the term has to be changed to a more direct/specific question.

- Women managers raised objections to a question under the organizational support to combine work and family, where it says, ‘*where managers are equally sensitive to men's and women's personal needs*’, and here the term ‘*personal needs*’ needs to be replaced by ‘*needs*’ as it applies to male members as well.

## **PHASE II**

Most of the items identified initially as ambiguous, irrelevant, or repetitive either by the Indian or Swedish managers, got scrapped during the quantitative analysis for invariance measurement. Moreover, subscales emerged within three values, *i.e.*, Corporate Social Responsibility, Gender Equality, and Justice (Proactive Justice). Opportunity to combine work life remained the most consistent value, without any subscales. Within Justice, both distributive justice and interactional justice also emerged as single scales. A compilation of the summary of responses from the CI of 39 managers in Sweden and India to the 45 items, with the 11 subscales as identified through the analysis of invariance measurement, has been presented below. The major trends show:

- a. Swedish managers are more concerned about the items in Corporate Social Responsibility values. Managers expressed their views about the role of CSR for future generations, sustainable growth, well-being and quality of life of employees and the range of implications these terms may have for the Swedish culture was unraveled. These understandings may be very helpful to give the researchers a cultural perspective to understand the quantitative results from the final study.

The salient feature of the Scandinavian management style is perhaps the ranking of human being as the most important factor, which is ranked before leaders in importance.(Gustavsson,1995).



Moreover, in the Scandinavian management style, soft values are most pronounced. In Hofstede's study, Sweden scored as the most feminine country among those investigated, rating factors such as sex-roles, equality between the sexes, quality of life and sympathy with the unfortunate (see Gustavsson, 1995). Thus the response pattern in the CIs supports these findings, showing the high concern about CSR practices in organizations.

b. Gender equality/equal opportunities for men and women in the organization as a value, raised concerns and comments from Indian managers. India being a highly patriarchal country and not yet having an equal number of women in the workforce, has a different approach to gender equality in the workplace. South Asia has the largest gap in the world between men and women in full-time employment, according to a Gallup poll (2012). The polling and market research firm found that 36% of men in South Asia worked for an employer full-time – at least 30 hours a week – compared with 10% of women. The gap between the genders was the largest globally and almost doubles the worldwide average variance between men and women. The understanding of gender equality issues gives an indigenous cultural perspective to the value as adapted in India against Sweden. Thus, in spite of the invariance measurement, cultural differences still remain in the understanding and internalization of values, which in turn may affect the behavior and strategies adapted by the managers.

c. Regarding the value concerning opportunity to combine work and family, Swedish managers perceived all three items as almost similar, though they have emerged as different items in the quantitative analysis. Also, Indian managers reported these items as similar. Interestingly, items of this particular value have shown maximum consistency in the invariance analysis as well. However, a look at the verbatim report from CIs of Indian and Swedish managers, show the differences in the perspective of understanding the value.

Sweden is one of the pioneers in establishing and implementing family policies like parental leave to promote its goal of gender equality, which includes women's ability to establish themselves in the labor market, to attain economic independence and man's ability to share responsibility for care-giving. The other policy making goal is children's well-being, which includes economic security, provided by two employed parents and the opportunity to develop close relationships with both parents (Haas & Hwang, 2013).

In India, something similar to this, called a child-care leave (CCL) is sanctioned in select states like Haryana and Punjab, but it is only meant for women government employees. It shows that still in India, combining work and family, still remains a major concern only for the women in the workforce. The difference in response patterns to the items in this section, reflects Swedish managers' familiarity and acceptability of these values, whereas, because of the lack of cultural sensitivity to these issues, Indian managers are not able to give thoughtful reactions to this.

## Conclusion

Compiling the results of the responses to these three parts of the interview, researchers gained substantive insight into the cultural influence in the understanding of various values in the organizations. These cultural influences are comprised of a) the general normative societal understanding of different values and b) the organizational/sector wise culture on interpreting the values and considering its relevance. Also, it was realized that when asked about the importance or relevance of values in the context of making the organization an attractive workplace, interviewees responded more with reference to their personal experiences as data banks. Summarizing, CIs helped to understand the respondent's perspective of different values in differential organizational cultures. CIs also helped to identify questions which were difficult to answer, offensive or difficult to understand and did not have proper response options. In addition, the findings suggest that, in cross-cultural comparative research, establishing conceptual equivalence through quantitative techniques like analysis of invariance measurement, should be supplemented with CIs to have a deliberate understanding of concepts with cultural perspectives and connotations, which definitely adds value to the interpretation of results and its implications. Hence, CI is an essential aspect of developing valid and reliable standardized measures for cross-cultural research.

The research implied that, the socio-historical background may make different values attractive and desirable in national cultures, and a cross-national comparative research on work-place values, which makes work-place attractive, has to be sensitive to this fact.

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