

Understanding Individual Cultural Values: A Validation Test of Power Distance, Masculinity, and Long-Term Orientation in Indian Service Industry

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ABSTRACT

This research examines data obtained from 216 service sector employees in India using the most recent version of Hofstede's survey instrument in an attempt to validate three of Hofstede's cultural dimensions (Power Distance, Masculinity, and Long Term orientation). Yoo, Donthu, and Lenartowicz created the initial 26-item scale to represent Hofstede's cultural dimension at the person level. The reliability and validity of the scale was tested using descriptive statistics of Exploratory Factor Analysis (EFA) as well as Confirmatory Factor Analysis (CFA). The testing demonstrated that the three dimensions of CVSCALE and its items have sufficient reliability (high internal consistency) and validity (face, convergent, and discriminant) to be employed in the Indian service sector for individual cultural evaluation.

Keyword: Hofstede's cultural dimension, CVSCALE, Exploratory Factor Analysis, Confirmatory Factor Analysis, India

1. INTRODUCTION

1.1 Culture

Depending on the field of knowledge or the element under consideration, the term culture has multiple connotations with distinct characteristics (Sahuquillo, et.al., 1997). "A mentality or attitude linked with a particular community or collective," says the dictionary. "Culture has an impact on people's lives, attitudes, beliefs, work, and accomplishments, especially in cross-cultural management" (Kaasa, Vadi, & Varblane, et2014). "Culture can be crucial to a company's success or failure, and cultural differences may explain why management approaches that work in one culture may have negative repercussions in another"(Mooij & Hofstede, et.al., 2002; Kustin,et.al., 2006; Treven, Mulej, & Lynn,et.al., 2008).

"The programming of the human mind by which one group of individuals distinguishes itself from another," says Hofstede. Culture is a common communal phenomena that is learned from its environment."

Because culture is learned rather than inherited, Hofstede et al. (1998) proposes that "mental programming should be distinguished from human nature and the individual's personality

as the former is inherited and the latter is based on traits that are partly inherited with the individual's unique set of genes and partly learned."

After evaluating many definitions of culture and combining them, Hodgetts and Luthans et al (2003) came up with the following cultural characteristics:

1. Culture is acquired rather than inherited.
2. Organizations, organisations, or society share culture.
3. It is passed down through the generations.
4. It has a symbolic value. In different cultures, it might mean different things.
5. It has a pattern. This means that if one aspect changes, the other aspect will alter as well.
6. It is adaptable and relies on humans who can alter and adapt.

"Cultural research is exploding and marketing researchers consider culture a significant factor of behaviour" (Burgess et al, 1992, Aaker and Williams et.al., 1998; Deshpande, Hoyer, and Donthu et al.,1986;Steenkamp, and Wedel et al.,1999; Patterson, Cowley, and Prasongsukarn et al.,2006). Pedersen (1988) writes "The importance of culture to human civilization and identity has been generally

accepted. According to him while it is true that culture may be a significant social driver since values and beliefs impact individual and group behaviour, the link between culture and economic performance is not well defined or assessed." The direction of causation is also debatable, as evidenced by Granato, Inglehart, and Leblang's (1996) study on the impact of cultural values on economic development, and Inglehart and Baker's (2000) work on the reverse.

Culture, according to Tylor (1871), is "a comprehensive whole that comprises knowledge, beliefs, arts, morals, conventions, laws, and any other talents and habits acquired by a human as a member of society."

1.2 Hofstede's model of cultural dimensioning
Hofstede's five-dimensional model, which includes the aspects of individualism/collectivism, power distance, uncertainty avoidance, masculinity/femininity, and long/short-term orientation, is a widely acknowledged cultural framework (Magnusson et al., 2014).

Later, "a sixth dimension, indulgence/restraint, was added to this paradigm" (Hofstede, Hofstede and Minkov, 2010; Laroche et al., 2005; Lanier and Kirchner, 2013). Hofstede's findings were based on 116,000 questionnaires completed by over 60,000 people in 70 countries (Hofstede, 1980, 1997, 2001), resulting in a very reliable model (Soares et al., 2007: p. 280). However, this paradigm is frequently used to give individuals Hofstede's national cultural indices on the basis of their national identification, leaving little possibility for individual cultural distinctions to be assessed (Yoo et al., 2011; Farh et al., 2007; Yoo and Donthu, 2002). Hofstede's model has thus been assessed critically for examining culture at the ecological (i.e. national/macro, as opposed to the individual) level (Brewer and Venaik, 2014; Venaik and Brewer, 2016).

1.3 CVSCALE

Yoo et al. (2011) used Hofstede's cultural dimensions to create their CVSCALE, which allows consumers' individual cultural values to be measured using Hofstede's dimensions. The CVSCALE has been widely utilized in consumer and organisational research evaluating the influence of individual cultural values since its invention and validation by Yoo et al (Winterich and Zhang, 2014; Baker et al., 2013; Blume et al., 2013; Hoffmann et al.,

2013; Gunkel et al., 2014). The CVSCALE has grown in popularity and recognition in cross-cultural research since its publication in 2011. The majority of cultural definitions emphasize the shared and permanent aspect of culture. However, three factors support CVSCALE's usage as a cultural indicator at the individual level. 2016 (Yoo and Shin et al.).

We chose the three Hofstede dimensions of Power Distance, Masculinity, and Long-Term Orientation for our investigation. The importance of these three dimensions to the service sector inspired the decision. The perception of service quality varies by culture. Culture has been investigated as a determinant of service quality and customer satisfaction in research, with varied results on the impact of cultural elements on service quality expectations and perceptions. In their study, Furrer et al. (2000) found no effect of masculinity on reliability, certainty, or empathy. In another study, Kueh and Voon et al., (2007) found no influence of masculinity. Long-term orientation only connected to the reliability factor of service quality (Rand et al., (2007). Some other studies have also found very weak support for the effect of power distance, masculinity, and long-term orientation on behavioural intentions (Liu, Furrer and Sudharshan, et al., 2001). The researchers wanted to know more about these features in the context of the Indian service sector hence the selection of 3 dimensions.

1.4 Power Distance:

The degree to which the less powerful members of institutions and organisations within a society expect and accept that power is allocated unequally, is referred to as "power distance" (Hofstede, 1991). It represents a society's overall human disparity. People with a high Power Distance score accept centralization and formalisation of authority, as well as a lack of autonomy, which supports power and wealth disparities (Hofstede, 1980). Furthermore, "they allow power hierarchy, vertical top-down communication, and even age, color, religion, gender, and other forms of discrimination." (Donthu and Yoo, et al. 1998).

Employees' perceptions of power distance influences their attitudes and behaviour in the workplace. Employees who perceive large power distances obey their bosses (Kirkman, Chen, Farh, Chen & Lowe, et al., 2009) and display strong respect (Hofstede & Hofstede, et.al. 2005). Managers with a high power

distance have unlimited power and control over their subordinates (Khatri, et.al. 2009). Subordinate employees expect and obey their managers' directions. Manager's care about equality and empowerment of employees in low-distance organisations, power distributions are fairer, and sub-units are empowered to make decisions on matters that interest them. In companies with substantial power gaps, employees' judgments of fairness, trust in the organisation, work satisfaction, and performance are found to be poorer (Daniels and Greguras, et al., 2014).

1.5 Masculinity:

The Masculinity/Femininity spectrum depicts the degree to which gender roles are socially distinct. Men with a high Masculinity score are expected to be tough, assertive, and materially successful. They expect women to be modest, tender, caring for others, and concerned about the quality of life. This dimension assesses how well masculine features are understood in relation to feminine ideals such as nurturing, interdependence, service motivation, quality of life, and service equality. Cultures with a high masculinity index score have a large gap between men and women's values, whereas cultures with a high femininity index score have a small gap between men and women's values (Hofstede, 1980, 1991).

1.6 Long term Orientation:

The degree to which people have a long-term future-oriented perspective is known as long-term orientation. Long-Term Orientation assesses the relative relevance of persistence, tenacity, and thriftiness. A high score on this dimension indicates that the culture would choose to forego immediate enjoyment in exchange for future advantages, whereas a low score indicates that the culture is more concerned with immediate gratification and achievement (Hofstede, 1980, 1991).

2. RESEARCH METHODOLOGY:

2.1 Design of the questionnaire:

The questionnaire consisted of nineteen questions. First four questions were regarding the demographics and consisted of question relating to age, gender, educational qualification and level in the organization. Fifteen questions were related to the three constructs of the CVSCALE namely power distance, masculinity and long term orientation (Yoo, Donthu, and Lenartowicz 2011)

Insert table 1

2.2 Sample profile:

Simple frequency distributions were used to gather information and profile the respondents along with demographics such as age, gender, education qualification, and level in organisation.

The Table 2 shows the various demographic items along with
Table 2:Insert table 2

2.3 Data Collection procedure: Respondents were contacted through LinkedIn and personal reference to be a part of the survey. A total of 248 responses were received over a period of four months and out of which 216 samples were found to be valid. 32 responses were discarded because of incomplete response. The respondent had to fulfill the criteria of being employed in the service sector organisations of India to be a part of the survey.

3. Data Analysis

3.1 Explorative Factor Analysis

A bivariate Correlation analysis was carried out for all variables and was found to be significant. Sample adequacy test was done with KMO value which was found to be satisfactory at 0.810 (Table 3). "A minimum acceptable score for this test is 0.5" (Kaiser, 1974).

After the EFA has been carried out there a validation process. There are different ways to extract and double-check the derived scales. The proportion of the total variance explained by the retained factors should be noted. "As a general rule this should be at least 50%" (Streiner, 1994). This research found explained variance to be 55.65% with Bartlett's test of sphericity and its significance value to be 0.00. Hence data was found to be inter correlated and suitable for factor analysis. (Table 4). To ascertain whether the items have construct validity, factor analysis using orthogonal rotation was conducted for the fifteen items. The oblique rotation method was chosen, "as it allows for the components to be correlated with one another, whereas the alternative, orthogonal rotation, does not" (Field, 2013). Factor analysis using oblique rotation produced similar factor patterns, "confirming the discriminant and convergent validity of the measures" (Rummel 1970) (Table 5). All the items loaded highly on the

appropriate factors and no item loaded on more than one fac-tor, supporting the independence of the constructs and providing strong empirical evidence of their validity. Reliability values with Cronbach alpha of extracted factors is found to be Power distance (Cronbach alpha value = 0.810), Masculinity (Cronbach alpha value = 0.757), Long Term Orientation (Cronbach alpha value = 0.768). Alpha values were far from the threshold of $\alpha > 0.70$, “commonly used as a rule of thumb for accepting internally consistent scales” (e.g., DeVellis, 1991; Nunnally and Bernstein, 1994)

Insert Table 3

Insert Table 4

Insert Table 5

3.2 Confirmatory Factor Analysis

The study used CFA with the constructs Power Distance, Masculinity, and Long Term Orientation and had 216 valid examples. These latent variables were combined into one measurement model. The measurement model was estimated using the Maximum Likelihood (ML) method. Large sample size, continuous variables, and multivariate normal distribution of data are all basic ML assumptions (Brown, 2006). The relationship were significant at $P < 0.01$. The model fit were checked and all indices were appropriate. GFI=.911, NFI=.856, CFI=.927, TLI=.911, RMSEA=.063.

Many CFA outputs can be used to assess whether the model is adequate. The first is the outcome of the Chi square test (2nd). The chi-square test is one of the tests that is used to

construct various fit indices and is the most widely used global fit index in CFA. It determines whether the hypothesized variance value is more or smaller than the population variance. $\chi^2 = 161.375$ (DF = 87, $\chi^2/DF = 1.8553$), with a significant p-value ($p = 0.00$) for the model. The comparative fit index (CFI) is also a measure of fit, It ranges between 0- 1. Higher scores indicate a greater fit, scores above 0.9 are deemed acceptable.

Another statistical fit along with the comparative fit index (CFI) is the TLI or Tucker Lewis index. Scores are between 0-1, with scores indicating a good fit above .95 and acceptable between .90 and .95. The TLI score for the model is .911, meeting the standard to be considered acceptable.

The final measure of fit is the ‘root mean square error of approximation’ (RMSEA), which evaluates the difference between the hypothesised model, with optimally chosen estimates for each parameter, and the population covariance matrix. Scores are again between 0-1, with scores of zero indicating exact fit, .1 = poor fit. The RMSEA of the model is .063.

The average 15 variance extracted for each dimension was satisfactory for Power Distance (.48), and Masculinity (.47) and near satisfactory for Long Term Orientation (.40) “which indicates the independence (divergent validity) of the dimensions” (Fornell and Larcker 1981).

Table 6 presents the average variance explained

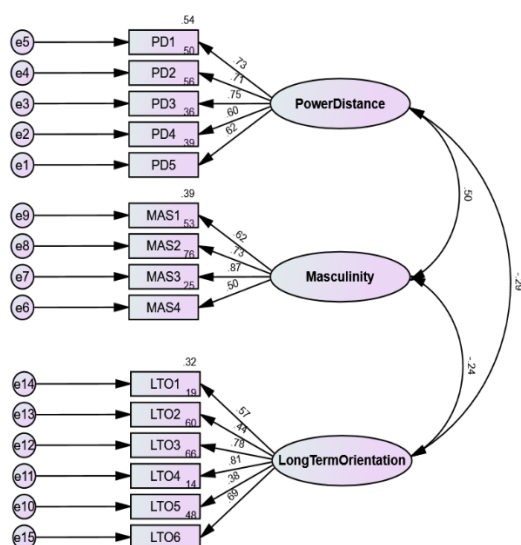


Fig 1: The Confirmatory Factor Analysis model

Insert Table 6

4. CONCLUSION AND FUTURE RESEARCH

The research objective was to validate the CVSCALE in the service sector of India. The sample size of 216 been drawn from the people working in the service sector of India. Only three constructs of the CVSCALE have been used in the model namely the power distance, masculinity and long term orientation. Hofstede's cultural dimension is no doubt one of the most popular study on cultural dimensioning as it is a result of decades of study covering all the cultural dimensions. The CVSCALE links cultural value to individual's attitude and behaviour because the source of the societal culture steams from the individual. The reliability and validity of the scale was tested using descriptive statistics of Exploratory Factor Analysis (EFA) as well as Confirmatory Factor Analysis (CFA). The tests revealed that the 3 dimensions of CVSCALE and its items had sufficient reliability (i.e., high internal consistency) and validity (i.e., face, convergent, and discriminant) to be used in Indian service sector for cultural assessment of the respondents at the individual level. Our research backs Yoo, Donthu and Lenartowicz et al. findings that "Similarities and differences in findings from individual level and national-level measures of culture will shed insights into psychological, sociological, and business managerial differences of the same constructs".

Further research can validate the scale using a larger sample from different sectors.

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