

# Chapter 5

## Study Design and Methodologies

### 5.1 Values as Perceived Organizational Practices

In this book, we consider CSR and EO as organizational values and try to understand the differences in the perceptions of managers from different sectors and countries regarding the practice of these values. Different values generate different ethical behaviours, and are used to evaluate our own behaviour and that of others (Nelson et al. 2016). Values are enduring beliefs that a specific mode of conduct or end state of existence is personally or socially preferable to a contrary mode of conduct or end state of existence (Rokeach 1973). In particular, instrumental values reflect the means of achieving goals, that is, they represent acceptable behaviours that can be used to achieve some desired end state. In the organizational context, acceptable behaviours to achieve desired goals are guided by the values promoted by the organization.

Values are also defined as beliefs about what is desirable or ‘good’ and what is undesirable or ‘bad’. Values, beliefs and assumptions provide structure and stability to people as they attempt to understand the world around them (French and Bell 2001). Values are beliefs or convictions that guide behaviour and support the overall organizational vision. Values help define or describe the desired culture; further, they communicate what is important to the organization as well as what key practices and behaviours will be recognized and rewarded (Singh 2010). Work values influence individuals’ perceptions of right and wrong on the job (England 1967). Values also have profound effects on job choices. Traditionally, pay and advancement potential have been considered as having the strongest influence on job choice decisions. Judge and Bretz (1992), however, report on the basis of their research that three other work values—achievement, concern for others and fairness—have a greater influence on job choice decisions than pay and promotion opportunities. In this study, we regard CSR and EO as values which are close to expressions of

fairness and concern for others. We further seek to understand organizational values by exploring managers' perceptions of organizational practices regarding such values.

## 5.2 Challenges Associated with Cross-cultural Research

### 5.2.1 *The Necessity of Measurement Equivalence*

People in communities, like nations, share experiences and exposure to values by growing up and being socialized within a certain cultural context. This means that individuals within such cultural contexts can be expected to hold certain values, beliefs and worldviews in common. As individuals, we view and understand the world through our previous experiences, values and beliefs. Thus, we see the world through a cultural lens, and people with different cultural backgrounds do not necessarily have the same interpretations of a common stimulus.

This is also true when individuals are asked to report on various issues in survey research studies. Respondents with different cultural backgrounds will understand each questionnaire item (a question or statement) based on their own cultural lenses, and respond to the item based on their understanding. Thus, when performing research involving participants from different cultural backgrounds, researchers cannot take for granted that the participants understand the constructs or the questionnaire items in the same manner. For researchers who wish to compare phenomena between different cultural contexts, this poses a considerable challenge. The researcher needs to sort out differences in the measurement process from differences in the substantial phenomena studied. Thus, in order to make meaningful group comparisons, it is important to have *measurement equivalence* (Lee et al. 2011). This implies that the phenomena studied need to bear the same conceptual meaning across cultures, and that the questionnaire items used need to have the same importance for each studied group in relation to the studied construct. Ideally, the measurement of constructs in cross-cultural research should be based on measures that are culturally invariant so that differences in reports can be interpreted as true differences in the phenomena studied, and are not artefacts of various biases in the measurement procedure.

### 5.2.2 *Different Types of Threats to Measurement Equivalence*

Different types of threats to measurement equivalence have been described. Such threats, or biases, introduce nuisance in the measurement and render the construct not directly comparable across cultures (Van de Vijver 2011). Bias can come from

the construct itself, the methods applied or the items used to measure the construct. Construct bias means that a construct differs, or lacks a shared meaning, across cultures. This could be because constructs may be inseparably linked to their natural context, or are associated with phenomena specific to a cultural group and therefore lack meaning outside this context. Constructs can also take on different expressions across groups and therefore not be fully comparable. Method bias refers to nuisance factors connected to the sample, the administration or the instrument. Thus, respondents may have different preconditions when they approach the instrument, for example, differences in knowledge or experiences. The administration process may involve different conditions. Item bias occurs 'if respondents from different cultures with the same standing on the underlying construct ... do not have the same score on the item' (Van de Vijver 2011, p. 6). Thus, for measurement equivalence, an item intended to measure a certain construct should give the same information across cultures.

### 5.2.3 *Procedures to Identify Measurement Equivalence*

Procedures to identify measurement equivalence involve qualitative methods as well as statistical methods. Qualitative methods involve collecting information through cognitive interviews or focus groups. Cognitive interviews have been used in the present project, and are described in a later section in this chapter. Statistical approaches can be found within the framework of structural equation modelling and, more specifically, using confirmatory factor analysis (CFA), which involves both the covariance and the mean structure of the latent variable system (Lee et al. 2011; Van de Vijver 2011). Confirmatory factor analysis is a theory-driven statistical method where the researcher specifies a model showing how observed variables (*manifest variables*) are expected to relate to one or more unobserved variables (*factors, latent variables*) representing theoretical constructs (Kline 2005). The latent variables are specified as predictors of the manifest variables, and each relationship is expressed as a regression equation where the regression coefficient is labelled as the factor loading. When means are included in the data, the intercepts are also estimated. The extent to which the specified model fits the empirical observations is evaluated with various *fit indices*. The fit indices show the discrepancy between the observed and the estimated covariance matrices. If the discrepancy is low, it can be concluded that the hypothesized model is a good representation of the empirical observations. Confirmatory factor analysis models can be expanded to comprise several groups. In multigroup CFA models, various parameter estimates can be compared between groups and evaluated for similarity (*ibid.*). Such comparisons make it possible to test different kinds of measurement invariance systematically.

### 5.2.4 *Measurement Invariance*

There are several types of invariance that can be addressed in a CFA framework, but the most frequently described in the literature are configural, metric, and scalar invariance (Lee et al. 2011; Meredith 1993; Van de Vijver 2011; Vandenberg and Lance 2000). Configural invariance means that each factor (latent variable) is associated with the same set of items across groups. This is supported when the factor structure is invariant across groups. The implication is that the factors have the same conceptual meaning across groups.

Metric invariance, also called weak factorial invariance (Meredith 1993), means that the same unit of measurement is valid across groups. Metric invariance is supported if the factor loadings for identical items are invariant across groups. This level of invariance implies that it is meaningful to compare correlations and regression coefficients across samples.

Scalar invariance, also called strong factorial invariance (Meredith 1993), means that the same scale of measurement is valid across groups. This is supported if the intercepts for identical items are invariant across groups. This level of invariance has the important implication that it is possible to compare mean scores across samples.

## 5.3 Empirical Studies and Major Research Questions

This book is based on four empirical studies, two of which applied a quantitative methodology, while the remaining two applied a qualitative methodology. The target group for all four studies was managers in organizations in India and Sweden. Managers were chosen as respondents for the studies due to their role as representatives of organizations and key agents for affecting values and practices in their organizations. We studied two broad value concepts: CSR and EO. The following studies were conducted:

- The first survey questionnaire study: In this study, we collected questionnaire data from managers in India and Sweden. Managers were asked to assess their organizations with regard to how the values of CSR and EO were embodied in practices and procedures. The aim was to investigate to what extent expressions of organizational values could be measured in a way that made comparisons possible between different cultural contexts, i.e. India and Sweden.
- Cognitive interviews with managers: In this study, based on the method of cognitive testing, we asked managers for their understanding of value concepts and questionnaire items measuring the practices and procedures associated with these value concepts. Based on the first questionnaire study and the cognitive interviews, measures of perceptions of organizational practices expressing these values were further developed and fine-tuned, to be used in the second questionnaire study.

- The second survey questionnaire study: This questionnaire study was aimed at further testing for invariance between the cultural contexts of India and Sweden. It then sought to apply the analytical framework described in Chap. 4 to investigate the relationships between expressions of organizational values, attractive organizations and organizational performance.
- Interviews with HR managers: In this interview study, we approached HR managers for information on the socio-demographic composition of the organization. We also explored managers' practices concerning the formalization, communication and implementation of the targeted organizational values in their organizations.

## 5.4 The First Survey Questionnaire Study

### 5.4.1 *Study Design and Sample*

In studying differences in the expression of organizational values between the two cultural contexts of Sweden and India, measurement equivalence is a necessary condition for valid interpretation. Therefore, in study 1, the aim was to investigate to what extent CSR and EO could be measured in a way that made comparisons possible between different cultural contexts. A survey questionnaire study was performed in 2012–2013, directed to managers in India and Sweden. We strived to obtain diverse samples from several organizations in different industries in India and Sweden. In the Indian data collection, 150 managers from the sectors of education, public administration, manufacturing, health and social work, outsourcing, HR consultancy, finance and insurance and hospitality responded to the questionnaire. In the Swedish data collection, 176 managers responded to the questionnaire, mainly from public administration and manufacturing. The Indian managers were younger than the Swedish managers; 66% of the Indian managers were below 35 years as compared to 14% of the Swedish managers. The proportion of female managers in the Indian sample (51%) was similar to the Swedish sample (51%). The level of education was high and was approximately similar in both samples; 65% of Indian managers and 70% of Swedish managers had completed postgraduate studies.

### 5.4.2 *Instruments*

The focus of the study was on the organizational values of CSR and EO. But, as explained above, we did not measure values directly. Instead, we addressed expressions of CSR and EO values by assessing managers' perceptions of organizational practices concerning CSR and EO. Such organizational practices could

be viewed as manifestations of the underlying values in the organization. In order to measure these organizational practices, we asked the managers to report on what they saw and heard in their day-to-day work. Thus, we did not ask managers for their opinion or attitudes towards CSR and EO. Instead, we asked managers to act as *observers* of how things were handled in their organizations. This approach has the advantage of being less influenced by individual managers' own ideas, instead describing in a more objective way what occurs in the organization.

#### **5.4.2.1 Perceptions of CSR Practices in the Organization**

Corporate social responsibility can be defined as corporate behaviour that aims to affect stakeholders positively, and that goes beyond the organization's economic interest (Turker 2009). Stakeholders can be within the organization (employees) or external to the organization (the society, the natural environment, future generations, NGOs and customers/clients). Our intention was to construct separate measures for stakeholders within the organization (internal CSR) and those external to the organization (external CSR). The items for measurement of internal CSR originate from a scale of caring ethics as reported by Haas et al. (2002) and from the scale of 'responsibilities to employees' as reported by Turker (2009). The items for external CSR originate from Turker (ibid.). All items are reported in Table 5.1.

#### **5.4.2.2 Perceptions of EO Practices in the Organization**

The measures of EO practices were based on the theoretical framework presented by Connell (2006). Connell describes the context of development of events, relationships and practices in an organization as the 'gender regime'. Such a gender regime could be described in four dimensions: gender division of labour, gender relations of power, emotions and human relations and culture and symbolism. These dimensions have been described in Chap. 3.

We did not find any published questionnaire that operationalized this conceptual framework, so we had to develop a new one. We formulated 15 items (see Table 5.2) that described various manifestations of the dimensions proposed by Connell. These items were provided to the managers in the first study in order to evaluate to what extent these items could operationalize EO practices in organizational contexts in India and Sweden.

### **5.4.3 Analysis**

Descriptive statistics, exploratory factor analyses and reliability analysis were performed using SPSS v.18. Structural equation modelling was used for testing the dimensionality of the constructs as well as for testing for measurement equivalence.

**Table 5.1** Questionnaire items in study 1 for measurement of perceptions of CSR practices in the organization

Item number in study 1	Item	Hypothesized dimension	Final dimension
	I work in an organization ...		
D32	... which encourages collaboration within the organization	Internal	<sup>a</sup>
D33	... which shows respect for individual rights	Internal	CSR_care
D34	... which has a long-term approach in employer–employee relationships	Internal	CSR_care
D35	... which takes social responsibility for its employees	Internal	CSR_care
D36	Our organizational policies encourage the employees to develop their skills and careers	Internal	CSR_dev
D37	The management of our organization is primarily concerned with employees’ health and well-being	Internal	CSR_dev
D38	Our organization supports employees who want to acquire additional education	Internal	CSR_dev
D39	The employees in our organization receive a reasonable salary to maintain an acceptable quality of life	Internal	Unclear <sup>b</sup>
D40	Our organization makes an investment in creating a better life for future generations	External	CSR_ext
D41	Our organization implements special programmes to minimize its negative impact on the natural environment	External	<sup>a</sup>
D42	Our organization targets sustainable growth, which considers future generations	External	CSR_ext
D43	Our organization supports non-governmental organizations working on vulnerable social issues.	External	CSR_ext
D44	Our organization contributes to campaigns and projects that promote the well-being of the society	External	<sup>a</sup>
D45	Our organization encourages its employees to participate in voluntary activities.	External	<sup>a</sup>
D46	Our organization emphasizes the importance of its social responsibilities to the society	External	CSR_ext
D47	Our organization respects customer/client rights beyond the legal requirements	External	Single item <sup>b</sup>
D48	Our organization provides full and accurate information about its products/services to its customers/clients	External	<sup>a</sup>
D49	Customer/client satisfaction is highly important for our organization	External	<sup>a</sup>

*Internal* CSR with regard to stakeholders within the organization (i.e. employees); *External* CSR with regard to stakeholders external to the organization (i.e. future generations and society); *CSR\_care* Caring for employees; *CSR\_dev* Supporting employees’ development; *CSR\_ext* Organization’s responsibilities for future generations and the society

<sup>a</sup>Item discarded based on the testing procedure. <sup>b</sup>Item discarded based on the testing procedure, but anyhow passed along to study 2 for a second testing

Maximum likelihood estimation as implemented in AMOS 18 (Arbuckle 2007) was used. The overall fit to the observed data of the various measurement and structural models was assessed using the normed chi-square statistics (e.g. the chi-square divided by degrees of freedom), the Bentler comparative fit index (CFI), the Steiger-Lind root mean square error of approximation (RMSEA), and Kline (2005). Based on Kline's values of the normed chi-square statistics between 2.0 and 5.0, a CFI value greater than or equal to 0.90, and values of RMSEA below 0.08, were regarded as indicating a reasonable model fit. When testing for difference in model fit, the relative fit of two models was decided by the difference in CFI and the chi-square difference statistics (Kline 2005).

Multigroup CFA models were set up to test for each level of measurement equivalence. Each group was defined as responses from managers in India and Sweden respectively.

Model 1—configural invariance: The same model configuration was applied to both groups, i.e. the same number of latent variables and the same relationships between the latent variables and the manifest variables. The model consisted of latent variables representing the latent construct, and manifest variables consisting of managers' answers to specific questionnaire items hypothesized to indicate the latent construct. Furthermore, residual variables (errors) represented the variation in the manifest variables not accounted for by the latent variable. No constraints were put on factor loadings or intercept, i.e. these parameters were allowed to take different numerical values in each group. For the latent variables, the mean was constrained to 0 and the standard deviation to 1 in both groups. Configural invariance was evaluated by means of various fit indices, as described above, indicating the overall fit of the model.

Model 2—metric invariance: This model had the same configuration as Model 1, but the factor loadings were constrained to be equal in both groups, i.e. in the Indian sample and in the Swedish sample. Also in this model, the latent variable means were constrained to 0 and the standard deviations to 1 in both groups. This model, with constraints on factor loadings, was evaluated against Model 1 with free factor loadings. If the difference in model fit was small, the conclusion was that the factor loadings are similar across samples within random variation. This means that the same factor loadings can be applied in both samples, and thus that the measure fulfills metric invariance.

Model 3—scalar invariance: This model had the same configuration as Model 2, but, in addition to constrained factor loadings, the intercepts were also constrained to be equal in both groups, i.e. in the Indian sample and in the Swedish sample. Another difference in Model 3 was that the constraint on the latent mean was released in one group, but kept constrained to 0 in the other group as a reference. In our application, with managers from two countries, the mean was set to 0 in the Swedish sample, and the latent means were estimated freely for the Indian sample. This model, with constraints on factor loadings and intercepts, was evaluated against Model 2 with constraints only on factor loadings. If the difference in model fit was small, the conclusion was that the intercepts were similar across samples



**Table 5.2** Questionnaire items in study 1 for measurement of perceptions of EO practices in the organization

Item number in study 1	Item	Hypothesized dimension	Final dimension
	I work in an organization ...		
D59	... where men's and women's voices are equally important	HR	EO_rel
D60	... in which men and women are equally respected	HR	EO_rel
D61	... where managers are equally sensitive to men's and women's personal needs	HR	EO_rel
D62	... where colleagues outspokenly reject sexist comments or jokes	CS	EO_rel
D63	... where employees see it as appropriate to talk about gender issues	CS	<sup>a</sup>
D64	... where managers emphasize the importance of gender issues in the organization	CS	<sup>a</sup>
	I work in an organization which in a trustworthy way strives for ...		
D65	... equal numbers of men and women in all types of jobs	DL	<sup>b</sup>
D66	... men's and women's equal employment opportunities.	DL	<sup>b</sup>
D67	... men's and women's equal working conditions	DL	<sup>a</sup>
D68	... men's and women's equal representation on boards	P	EO_quant
D69	... men's and women's equal representation in managerial positions	P	EO_quant
D70	... men's and women's equal opportunities for job advancement	P	EO_form
D71	... equal evaluation of men's and women's performance	P	EO_form
D72	... men's and women's equal pay in relation to competence and task	P	EO_form
D73	... men's and women's equal influence over decisions	P	EO_form

*HR* Emotions and human relations; *CS* Culture and symbolism; *DL* Gender division of labour; *P* Gender relations of power; *EO\_rel* Equal opportunities in informal relations; *EO\_quant* Equal quantitative representation in vertical division of labour; *EO\_form* Equal opportunities in formal procedures and relations of power

<sup>a</sup>Item discarded based on the testing procedure. <sup>b</sup>Item discarded based on the testing procedure, but anyhow passed along to study 2 for a second testing

within random variation. This means that the same intercepts can be applied in both samples, and thus that the measure fulfils scalar invariance.

### 5.4.4 The Dimensionality of CSR Practices in Study 1

Exploratory factor analysis showed that the concept of CSR practice was clearly multidimensional. More than two dimensions were required to account for the variation among the items; in fact, four factors were suggested both in India and in Sweden. All items loaded over 0.40 in the first principal component, both in India and in Sweden, showing that there was a common underlying CSR factor.

We estimated a series of confirmatory factor models, each model with an increasing number of factors. All models were estimated separately in the Indian sample ( $n = 137$ ) and the Swedish sample ( $n = 168$ ), based on data from respondents with complete observations on the CSR items. For items and hypothesized dimensionality, see Table 5.1. Model fit for estimated models is shown in Table 5.3.

We started with a two-factor model representing internal and external stakeholders and 18 manifest variables. This first model showed a bad fit in India (Model 1i) and an even worse fit in Sweden (Model 1s). Modification indices showed that internal CSR had a more fine-grained structure in both India and Sweden, and should be divided in two dimensions. There was a very high correlation (0.92) between the latent variables in India ( $r = 0.92$ ), but a more modest correlation in Sweden ( $r = 0.54$ ). A two-factor model was obviously not a good representation of the data either in India or in Sweden.

**Table 5.3** Model fit indices for CFA models of CSR practices, for managers in India ( $n = 137$ ) and Sweden ( $n = 168$ )

Model	Description	No. item	$\chi^2$ (df)	$\chi^2$ /df	CFI	RMSEA
	India					
1i	2 factors (int/ext)	18	361.2 (134)	2.69	0.744	0.112
2i	3 factors (care/dev/ext)	18	351.6 (132)	2.66	0.753	0.111
3i	4 factors (care/dev/ext-a/ext-b)	18	317.3 (129)	2.46	0.788	0.104
4i	3 factors drop ext-b (item D47 D48 D49) also drop D39, D32	13	117.3 (62)	1.89	0.891	0.081
	Sweden					
1s	2 factors (int/ext)	18	458.3 (134)	3.42	0.729	0.120
2s	3 factors (care/dev/ext)	18	409.0 (132)	3.10	0.768	0.112
3s	4 factors (care/dev/ext-a/ext-b)	18	280.7 (129)	2.18	0.873	0.084
4s	3 factors drop ext-b (item D47 D48 D49) also drop D39, D32	13	174.6 (62)	2.82	0.873	0.104

The next model was a three-factor model, where the internal perspective on CSR practices was divided along two latent variables, one dimension representing an employer taking social responsibilities for and caring for the well-being of employees (CSR\_care), and the other representing an employer who supports the development of employees' skills and competence (CSR\_dev). The model fit was still insufficient, in both India (Model 2i) and Sweden (Model 2s), but with some improvement compared to Model 1. In both samples, modification indices showed that the items D47, D48 and D49 had common variation not accounted for by the latent variable CSR\_ext. These items have to do with one specific stakeholder—the customer. It was therefore decided to introduce a new latent variable in the next model representing the stakeholder customer.

A four-factor model with the latent variables CSR\_care, CSR\_dev, CSR\_ext-a (indicated by the items targeting external stakeholders but excluding customer items), and CSR\_ext-b (only customer items) still did not have an acceptable fit in India (Model 3i). Modification indices showed that D39 was a better indicator of CSR\_ext in India, as compared to CSR\_care that was specified in Model 3i. Furthermore, D32 was problematic in the Indian context. However, in the Swedish sample, Model 3 s showed a substantial improvement in model fit as compared to Model 2 s, and the fit was now almost acceptable.

We decided to discard the customer dimension (items D47, D48 and D49), and also drop item D39 that loaded on different latent variables in India (CSR\_ext) and Sweden (CSR\_care), and drop D32 as well. Model 4 thus consisted of 3 latent variables and 13 manifest variables. The fit in India (Model 4i) was improved and now almost acceptable. However, the fit in the Swedish sample (Model 4s) was not fully acceptable. Modification indices for the Swedish sample indicated common variation among the residuals of D43, D44, D45 and D46 (stakeholder society) and also among the residuals of D40, D41 and D42 (stakeholder future generations and natural environment). Thus, it seems that the structure of the CSR concept may be even more fine-grained in the Swedish context.

Even though we did not achieve models with fully acceptable fit, we decided to proceed with the invariance test procedure.

#### ***5.4.5 Testing for Measurement Equivalence in CSR Practices in Study 1***

To test for measurement equivalence, a series of multigroup models, with increasing numbers of constrained parameters, were estimated. These models consisted of three latent variables, two of them with a perspective on internal stakeholders (employees) (CSR\_care and CSR\_dev) and one with an external stakeholder perspective (CSR\_ext), and 13 manifest variables. Overall fit indices and differences in fit indices between models are reported in Table 5.4.

**Table 5.4** Sequential test of measurement invariance for managers in India (*n* = 137) and Sweden (*n* = 168) based on complete observations in study 1, for a three-factor model of CSR practices

Model	Description	Item	X <sup>2</sup> (df)	X <sup>2</sup> /df	CFI	RMSEA	Δ CFI	Δ X <sup>2</sup>	Δ df	p
1	Configural invariance. All parameters free	13	291.9 (124)	2.35	0.879	0.067				
2a	Metric invariance (constrained factor loadings)	13	309.7 (137)	2.26	0.876	0.065	0.003	17.8	13	0.166
3a	Scalar invariance (constrained factor loadings + constrained intercepts)	13	410.0 (147)	2.79	0.811	0.077	0.065	100.3	10	<0.001
2b	Metric invariance excluding D41 D44 D45	10	126.3 (74)	1.71	0.942	0.048				
3b	Scalar invariance excluding D41 D44 D45	10	150.9 (81)	1.86	0.923	0.053	0.019	24.6	7	<0.001

Model fit indices and model differences for CFA models with increasing number of constrained parameters

Model 1 specified the same three-factor structure for the Indian and the Swedish samples simultaneously. Thus, the model configuration was identical for the two samples. In this model, all parameters were free to take different numerical values in each sample. The model fit was not fully acceptable with a CFI slightly below 0.90, indicating some misfit, but an RMSEA below 0.08 indicating good fit. This lent some support for configural invariance between the Indian and the Swedish contexts, but with hesitation.

In Model 2a, all factor loadings were constrained to be equal across samples. The difference in model fit, compared to Model 1, showed a non-significant difference in chi-square and a difference in CFI less than 0.01. This lent support for metric invariance between India and Sweden.

Model 3a was based on Model 2a with constrained factor loadings, but in addition also constrained intercepts across samples. The difference in model fit showed a highly significant chi-square difference and a difference in CFI well above 0.01. There was thus no support for scalar invariance between Indian and Swedish managers. The main deviations were identified with the items D41, D44 and D45. These items were therefore excluded as indicators for CSR\_ext, and the testing procedure was repeated with a revised model.

The revised Model 2b with constrained factor loadings, with three latent variables and 10 manifest variables, showed a good overall model fit, indicated by a CFI above 0.90 and an RMSEA well below 0.08. Thus, excluding these items made the model configuration fully acceptable in both countries.

Model 3b was based on the revised Model 2b with constrained factor loadings and constrained intercepts across samples. The difference in model fit, compared to Model 2b, showed a significant difference in chi-square and a difference in CFI of 0.019. Scalar invariance was thus not fully achieved even in Model 3b. This had to do mainly with item D34, which showed a deviant intercept pattern across countries.

Yet item D34 was passed on to study 2 for further testing. It was also decided to test item D39, which had shown different factorial belonging, again in study 2. Item D47 was decided to be carried into study 2 as a single item regarding customers' rights. In all, 12 items were decided upon for study 2. The wording of the items D39, D43, D46 and D47 was somewhat adjusted in study 2, based on the results from the cognitive interviews.

#### ***5.4.6 The Dimensionality of EO Practices in Study 1***

Initial exploratory factor analysis showed that the perception of EO practices clearly had a multidimensional structure in both India and Sweden. This was expected given the theoretical framework from Connell (2006). Three to four dimensions were indicated. However, with two exceptions, all items loaded strongly in the first principal component, showing that there was an underlying common factor, supposed to represent a more general concept of EO value. In the Indian sample, two

items were very weak in the common factor: D63 and D64 (see Table 5.2 for reference to item numbers). This implies that the extent to which gender issues are openly discussed in the organization among employees and among managers does not relate to other issues relating to EO in the Indian context. Therefore, we concluded that those two items are not good indicators of EO in the Indian context.

We tested the hypothesized four-dimensional structure proposed by Connell in separate but identical CFA models, one for each country. The models had 4 latent variables: Emotions and human relations (HR), Culture and symbolism (CS), Gender division of labour (DL), and Gender relations of power (P), and 15 indicator variables (thus, all variables were included). The hypothesized relationship between latent variables and indicator variables is shown in Table 5.2.

In the Indian sample, the model fit was rather bad; for model fit, see Table 5.5, Model 1. Still, all factor loadings, except one, were over 0.4. The exception was D62 (estimate = 0.16). Modification indices showed that D62 had more to do with the latent variable HR than the one hypothesized CS. Modification indices also showed that D59 and D65 had common variation not accounted for by the latent variables.

In the Swedish sample, the model fit was even worse than in the Indian sample. But all factor loadings, except one, were over 0.4. The exception was D65 (estimate = 0.36). Modification indices did not show any other clear belonging for this variable, but this variable shared much variation with D68 and D69. Furthermore, these two variables in turn shared a great deal of variation with each other (not accounted for in the model), which was the greatest source of misfit in the model.

Taken together, the hypothesized model was not a good representation of the data either in India or in Sweden. Based on the modification indices presented above, and exploratory factor analysis, a three-factor model was instead specified. The latent variables were labelled as follows:

**Table 5.5** Model fit indices for CFA models of EO for managers in India ( $n = 137$ ) and Sweden ( $n = 170$ )

Model	Description	No. item	$X^2$ (df)	$X^2/df$	CFI	RMSEA
	India					
1i	Four factors (Connell)	15	309.2 (87)	3.55	0.804	0.137
2i	Three factors	11	126.5 (41)	3.09	0.896	0.124
3i	Model 2i + Rel > D66	11	99.4 (40)	2.48	0.928	0.105
	Sweden					
1s	Four factors (Connell)	15	507.9 (87)	5.84	0.815	0.169
2s	Three factors	11	87.5 (41)	2.13	0.973	0.082
3s	Model 2s + Rel > D66	11	86.3 (40)	2.16	0.973	0.083

- Equal opportunities in informal relations (EO\_rel), similar to Connell's dimension Emotions and human relations (HR).
- Equal quantitative representation in vertical division of labour (EO\_quant), similar in conceptual meaning to Gender division of labour (DL) but indicated by other items than first hypothesized.
- Equal opportunities in formal procedures and relations of power (EO\_form), similar to Connell's dimension Gender relations of power (P).

In this model, the dimension CS was dropped, and therefore the indicators D63 and D64 were excluded. These two items, as described above, were vaguely related to the more general concept of EO in the Indian context. However D62, modelled as an indicator of CS, was kept and was specified instead as an indicator of EO\_rel. The new dimension EO\_quant was indicated by two items that previously indicated P: D68 and D69. The conceptual meaning of EO\_quant is striving for an equal number of men and women in power positions, i.e. on boards and in managerial positions. With this definition, D65, striving for an equal number of men and women in all types of jobs (i.e. referring to equality in the horizontal division of labour), was conceptually deviant and excluded from the model. D66 was taken as an indicator of EO\_form, and D67 was excluded due to redundancy with regard to D67. In all, the new model consisted of 11 manifest variables.

In the Indian sample, the model fit was not fully acceptable (for model fit, see Model 2i in Table 5.5), but better than the four-factor model. The main source of misfit was a missing crossloading of D66 in EO\_rel. We estimated an additional model (Model 3i) where D66 was regressed also on EO\_rel, in addition to EO\_form (Model 3i). This model showed a substantial improvement in fit. The factor loading EO\_rel > D66 was even stronger (0.50) than the factor loading EO\_form > D66 (0.32). This implies that D66, in the India sample, was a stronger indicator of the informal aspects of EO than of the formal side of EO.

In the Swedish sample, there was a reasonably good fit of the three-factor model (Model 2s in Table 5.5), better than in the Indian sample. There were no obvious sources of misfit identified. In Model 3s, adding the same path (EO\_rel > D66) as in the Indian model described above did not improve the fit in the Swedish sample. Thus, in contrast to the Indian results, D66 was a clear indicator of EO-form, but not of EO\_rel in the Swedish context.

Based on the findings that D66 indicated different latent constructs in India and Sweden, it was decided to exclude this item from further analysis.

#### ***5.4.7 Testing for Measurement Equivalence in EO Practices in Study 1***

To test for measurement equivalence, a series of multigroup models, with increasing numbers of constrained parameters, were estimated. These models all

consisted of three latent variables and 10 manifest variables. Overall fit indices and differences in fit indices between models are reported in Table 5.6.

In the first model, answers from Indian and Swedish managers were fitted simultaneously to the same model configuration. In this model, all parameters were free to take different numerical values in each sample. The model fit was good as indicated by a CFI higher than 0.95 and an RMSEA below 0.08, showing support for configural invariance between the Indian and Swedish contexts.

In the second model, all factor loadings were constrained to be equal in the Indian and Swedish samples. Overall model fit was still good, even though somewhat worse than Model 1. Concerning difference in model fit, Model 2 had a significantly higher chi-square value ( $p < 0.001$ ), but the difference in CFI was only 0.01. Thus, Model 1 was a significantly better model, but the difference was rather modest, and we therefore concluded that there is support for metric invariance.

Finally in the third model, in addition to constrained factor loadings, the intercepts were also constrained to be equal in the Indian and the Swedish samples. Still, overall model fit was good, but somewhat worse than Model 2. Difference in model fit showed a significant difference in chi-square ( $p < 0.05$ ) but a very small difference in CFI (0.001). We concluded that the model holds for scalar invariance between Indian and Swedish managers.

We thus decided to pass the 10 items included in the invariance testing procedure on to study 2 for the measurement of EO. In addition, we decided to give two more items (D65 and D66) a second chance in the study 2 invariance testing procedure.

## 5.5 Cognitive Interviews with Managers

### 5.5.1 Cognitive Interviews

Cognitive interviews with managers were conducted in India and Sweden in order to explore their understanding of the phenomena associated with value concepts of relevance in organizations, as well as their understanding of the specific questionnaire items chosen to operationalize the perceptions of how these values were expressed in practices and procedures. Four value concepts were targeted in the cognitive interviews: CSR, EO, the organization's support for combining work and family/personal life and organizational justice. The first two of these values are covered in this book.

Cognitive interview is a method that comprises a series of memory retrieval and communication techniques designed to increase the amount of information that can be obtained from an interviewee (Biswas et al. 2015). Cognitive interviews can be used to establish semantic equality of questions in cross-cultural studies.



**Table 5.6** Sequential test of measurement invariance for managers in India ( $n = 137$ ) and Sweden ( $n = 170$ ) based on complete observations in study 1, for a three-factor model of EO Practices

Model	Description	Item	$\chi^2$ (df)	$\chi^2/df$	CFI	RMSEA	$\Delta$ CFI	$\Delta \chi^2$	$\Delta$ df	$p$
1	Configural invariance. All parameters free	10	137.5 (64)	2.15	0.968	0.061				
2	Metric invariance (constrained factor loadings)	10	168.0 (74)	2.27	0.958	0.065	0.010	30.5	10	0.001
3	Scalar invariance (constrained factor loadings + constrained intercepts)	10	182.3 (81)	2.25	0.955	0.064	0.001	14.3	7	0.046

Model fit indices and model differences for CFA Models with increasing number of constrained parameters

### 5.5.2 *Participants*

Thirty-nine managers, 20 in India and 19 in Sweden, were interviewed. The managers were drawn from four sectors: manufacturing (five in India, five in Sweden), IT (five in India, five in Sweden), healthcare (five in India, four in Sweden) and education (five in India, five in Sweden). Efforts were made to balance the number of male and female managers, but it was difficult to achieve this in each sector. In all, 24 male managers (15 from India and 9 from Sweden) and 15 female managers (5 from India and 10 from Sweden) were interviewed.

In India, all five managers in manufacturing were male; in IT and education, four out of five were male, and in the health sector, two male and three female managers were interviewed. In Sweden, three out of five managers in manufacturing and IT were male, in education, two out of five were male, and in the health sector, one male and three female managers were interviewed.

### 5.5.3 *Procedure*

All managers were given an orientation about the project, and informed consent to participation was obtained prior to the interview. The interviews were done as far as possible in an undisturbed environment (e.g. participants' office or home). Each interview lasted approximately 60 min and was recorded and thereafter transcribed verbatim. The questionnaire that was scrutinized using cognitive interviews contained 59 items covering perceptions of practices associated with four organizational values. Of these, 33 accounted for the values reported on in this book. The cognitive interview followed a protocol with three sections.

In part A, background questions about the manager and his/her organization were asked (gender, managerial position, education, tenure, gender of CEO and gender composition of the top management team). Thereafter, the manager's understanding of each of the four value concepts was sought. In this section, no questionnaire items were presented. The managers were instead asked five questions for each value concept:

1. If I say [organizational value 1–4], what do you think of then?
2. What could [organizational value 1–4] mean at your workplace?
3. Do you talk about [organizational value 1–4] at your work? Is it on the agenda?
4. In organizations in general, will you please give some [more] characteristics of what [organizational value 1–4] at work could be?
5. In organizations in general, will you please describe characteristics of a workplace that shows no [organizational value 1–4]?

Furthermore, the interviewees were asked to rank the four values based on what would make the workplace attractive for employees.

In part B, the interviewee was shown one random questionnaire item from each of the value domains, and was asked to paraphrase the statement in their own words. The interviewee was asked to respond to the statement in his/her own words and pick one of the response alternatives in a specified response format. Finally, the manager was asked if the question was relevant in his/her organization.

In part C, two questions were asked for each value concept. The interviewee was then shown the questionnaire items for each value and asked to identify items that were unclear, offending or inappropriate.

## 5.6 The Second Survey Questionnaire Study

### 5.6.1 Sample

The second survey questionnaire study, performed in 2014–2015, was directed to managers in India and Sweden. The study was designed to achieve a four-level data structure. On the highest level were the two nations, India and Sweden. In each nation, four sectors were strategically chosen: the manufacturing sector, the IT sector, the health sector (hospitals) and the higher education sector (universities). In each sector, we strived to include 10 organizations, and in each organization 10 managers. Table 5.7 shows the number of observations (organizations and managers) from each sector and country actually achieved. The total sample consisted of 964 managers nested in 77 organizations.

The organizations were chosen in order to be representative of each sector in each country, and were contacted by the researchers with a request to participate in the study. In Sweden, all manufacturing companies were privately owned, while in India both private and public companies participated. Manufacturing companies in both countries were all active in the global arena. The IT companies in both countries were also all global players with a multinational presence. They were all privately

**Table 5.7** Number of organizations and number of managers from each sector and country

Country	Sector	Organizations	Managers
India		42	404
	Manufacturing	12	115
	IT	10	95
	Healthcare	10	98
	Education	10	96
Sweden		35	560
	Manufacturing	9	156
	IT	5	76
	Healthcare	13	159
	Education	8	169
Total sample		77	964

owned. The healthcare organizations were mostly from the private sector in India, and mostly from the public sector in Sweden. Most of the educational institutions (8 out of 10) were private or trust-driven in India. In Sweden, most educational organizations were public, but one was trust-driven. Initially we tried to access data from public sector universities, medical colleges and hospitals in India. But because of the heavy workload and heavy demands on managers and the bureaucratic processes, it was only possible to access a few of these organizations.

The sampling procedures for managers within organizations were somewhat different in India and Sweden. In India, initially the HR managers of organizations were contacted. The HR managers provided lists of managers who were then approached personally, until 10 completed questionnaires had been collected by the research staff. Here, a paper version of the questionnaire was used. In Sweden, the HR department of each organization provided an e-mail list of managers. The managers were then invited by e-mail to participate in the study by answering the questionnaire in a web survey. Sixty-two per cent of the Swedish managers responded to the questionnaire.

### **5.6.2 Instruments**

The questionnaire consisted of nine background questions and 90 questions about the nature of the managerial work, perceptions of organizational practices, and reports of the managers' work and home situation. The content of the questionnaire relevant for measurement of CSR and EO practices as well as outcome variables is described below.

#### **5.6.2.1 Perceptions of CSR Practices in the Organization**

Twelve items originating in study 1 were included in study 2 to measure CSR practices. Four of these items were slightly revised based on the cognitive testing procedure. Eleven items were taken as indicators for a three-factor model of CSR practices. One item, concerning the customer as stakeholder, was included as a single-item indicator. All CSR items are reported in Table 5.8. The response format included five fixed response alternatives, coded as: 'strongly disagree' (1), 'disagree' (2), 'neutral' (3), 'agree' (4), 'strongly agree' (5). The measures were further tested for measurement equivalence and refined based on the results. This procedure and the measurement properties are reported in the following sections.

#### **5.6.2.2 Perceptions of EO Practices in the Organization**

Ten items from study 1 that showed support for measurement equivalence, and two additional items that did not pass the first testing procedure, were included in the

**Table 5.8** Questionnaire items in study 2 for measurement of perceptions of CSR practices in the organization

Item number in study 2	Item label in study 2	Item	Hypothesized dimension	Final dimension
		I work in an organization which ...		
F6	CSR1	... shows respect for individual rights	CSR_care	<sup>a</sup>
F7	CSR2	... has a long-term approach in employer–employee relationships	CSR_care	CSR_care
F8	CSR3	... takes social responsibility for its employees	CSR_care	CSR_care
F9	CSR4	Our organizational policies encourage the employees to develop their skills and careers	CSR_dev	CSR_dev
F10	CSR5	The management of our organization is primarily concerned with employees’ health and well-being	CSR_dev	CSR_care
F11	CSR6	Our organization supports employees who want to acquire additional education	CSR_dev	CSR_dev
F12	CSR7	The employees in our organization receive a salary that is enough to maintain an acceptable quality of life	Unclear	<sup>a</sup>
F13	CSR8	Our organization makes an investment in creating a better life for future generations	CSR_ext	<sup>ab</sup>
F14	CSR9	Our organization targets sustainable growth which considers future generations	CSR_ext	CSR_ext <sup>b</sup>
F15	CSR10	Our organization supports non-governmental organizations which work on social issues	CSR_ext	<sup>ab</sup>
F16	CSR11	Our organization emphasizes the importance of its social responsibilities for the welfare of society	CSR_ext	CSR_ext <sup>b</sup>
F17	CSR12	Our organization respects customers’/ students’/patients’ rights beyond the legal requirements	Single item	<sup>b</sup>

CSR\_care Caring for employees; CSR\_dev Supporting employees’ development; CSR\_ext The organization’s responsibilities for future generations and the society

<sup>a</sup>Item discarded based on the testing procedure; <sup>b</sup>reported as single-item measure

study 2 questionnaire to measure three dimensions of EO practices. These items are shown in Table 5.9. The response format was five fixed response alternatives coded as: ‘strongly disagree’ (1), ‘disagree’ (2), ‘neutral’ (3), ‘agree’ (4), ‘strongly agree’ (5). The measures were further tested for measurement equivalence and refined based on the results. This procedure and the measurement properties are reported in the following sections.

### 5.6.2.3 Measures of Attractiveness and Performance

Attractiveness and performance are considered as the outcome variables in this study. While the study addresses the question of attractiveness for managers already employed by an organization, attractiveness should be understood as the organization's capacity to retain its managers. Thus, attractiveness is operationalized as: (1) managers' commitment to the organization; and (2) low intention of managers to leave the organization.

Organizational commitment was measured as affective commitment (Allen and Meyer 1990), which refers to managers' emotional attachment to, identification with, and involvement in the organization. A four-item measure was used, including: 'I enjoy discussing my organization with people outside it'; 'I really feel as if this organization's problems are my own'; 'This organization has a great deal of personal meaning for me'; and 'I feel a strong sense of belonging to my organization.' The response format was five fixed response alternatives coded as: 'strongly disagree' (1), 'disagree' (2), 'neutral' (3), 'agree' (4), 'strongly agree' (5). The reliability calculated as Cronbach's alpha was 0.81 in the Indian sample and 0.68 in the Swedish sample.

Intention to leave (turnover intention) was measured with three items (slightly revised) from Sjöberg and Sverke (2000): 'I am actively looking for other jobs'; 'I feel like leaving this job'; and 'If the labour market situation permits, I would leave this job.' A fourth item concerning preferences with regard to the present organization was also included: 'I would like to continue working in this organization in the future as well' (reverse scored). The response format was five fixed response alternatives coded as: 'strongly disagree' (1), 'disagree' (2), 'neutral' (3), 'agree' (4), 'strongly agree' (5). The reliability, calculated as Cronbach's alpha, was 0.84 in the Indian sample and 0.87 in the Swedish sample.

Performance was operationalized as perceived effectiveness of the unit for which the manager was responsible. A four-item measure adapted from Gibson et al. (2003) was used with the following items: 'This unit achieves its planned targets'; 'This unit is responsive to its customers/students/patients (those whom you internally or externally deliver to)'; 'This team adheres to its schedule'; and 'This unit is productive.' The response format was seven fixed response alternatives coded as: 'never' (1), 'almost never' (2), 'seldom' (3), 'sometimes' (4), 'often' (5), 'almost always' (6), and 'always' (7). The reliability calculated as Cronbach's alpha was 0.87 in the Indian sample and 0.77 in the Swedish sample.

### 5.6.3 Analysis

Structural equation modelling was used to test the dimensionality of the constructs as well for testing for measurement equivalence. Maximum likelihood estimation as implemented in AMOS 18 (Arbuckle 2007) was used. The same procedures as described for study 1 above were applied.

**Table 5.9** Questionnaire items in study 2 for measurement of perceptions of EO practices in the organization

Item number in study 2	Item label in study 2	Item	Hypothesized dimension	Final dimension
		I work in an organization ...		
F23	EO1	... where men's and women's voices are equally important	EO_rel	EO_rel
F24	EO2	... in which men and women are equally respected	EO_rel	EO_rel
F25	EO3	... where managers are equally sensitive to men's and women's personal needs	EO_rel	EO_rel
F26	EO4	... where colleagues outspokenly reject sexist comments or jokes	EO_rel	<sup>a</sup>
		I work in an organization, which in a trustworthy way strives for...		
F27	EO5	... equal numbers of men and women in all types of jobs	EO_quant	<sup>a</sup>
F28	EO6	... men's and women's equal employment opportunities	EO_form	<sup>a</sup>
F29	EO7	... men's and women's equal representation on boards	EO_quant	EO_quant
F30	EO8	... men's and women's equal representation in managerial positions	EO_quant	EO_quant
F31	EO9	... men's and women's equal opportunities for job advancement	EO_form	EO_form
F32	EO10	... equal evaluation of men's and women's performance	EO_form	EO_form
F33	EO11	... men's and women's equal pay in relation to competence and task	EO_form	<sup>a</sup>
F34	EO12	... men's and women's equal influence over decisions	EO_form	EO_form

*EO\_rel* Equal opportunities in informal relations; *EO\_quant* Equal quantitative representation in vertical division of labour; *EO\_form* Equal opportunities in formal procedures and relations of power

<sup>a</sup>Item discarded based on the testing procedure

### 5.6.4 The Dimensionality of CSR Practices in Study 2

Initial exploratory factor analysis showed that item CSR5 should be moved to the dimension CSR\_care, which is also reasonable given the content of the item, reflecting an organization concerned with employees' health and well-being. To confirm the three-factor structure that was established in study 1, separate CFAs were done for the Swedish and the Indian samples based on the hypothesized

dimensions specified in Table 5.9. The specified model had three latent variables: CSR\_care, CSR\_dev and CSR\_ext, and 11 manifest variables as indicators.

The fit in the Swedish sample, based on complete observations ( $n = 537$ ), was nearly acceptable ( $X^2(51) = 263.3$ , CFI = 0.904, RMSEA = 0.088). All factor loadings, except one, were above 0.4. The exception was CSR7 'salary that is enough to maintain an acceptable quality of life' with standardized loading 0.34. We concluded that F12 was not a good indicator of caring in the Swedish context. Furthermore, CSR12 (customers' rights) had a rather low factor loading (0.43). The correlation between the latent variables was modest (Caring-Dev: 0.64; Caring-External: 0.40; Dev-External: 0.41).

The fit in the Indian sample, based on complete observations ( $n = 386$ ), was not so good ( $X^2(51) = 358.5$ , CFI = 0.875, RMSEA = 0.125). Modification indices showed that items targeting 'future generation' (CSR8, CSR9) and 'social responsibilities' (CSR10, CSR11) respectively had variation in common not accounted for by the latent variable CSR\_ext. Furthermore, the residual of CSR7 (salary) was indicated to have variation in common with CSR external. Thus, a modified model (including correlated residuals and F12 moved to CSR external) was estimated. The fit was much improved ( $X^2(49) = 166.3$ , CFI = 0.952, RMSEA = 0.079). All factor loadings were well above 0.4. The correlations between the latent variables were very high (CSR\_care and CSR\_dev: 0.97; CSR\_care and CSR-ext: 0.83; CSR\_dev and CSR\_ext: 0.97). Thus, it could be questioned whether the three-dimensional model was an effective representation of the data in India. Therefore, two alternative models were specified. A two-dimensional model (Internal & External) had significantly worse fit ( $X^2(51) = 186.0$ , CFI = 0.945, RMSEA = 0.083,  $\Delta X^2(2) = 19.7$ ,  $p < 0.001$ ). A one-dimensional model had an even worse fit ( $X^2(52) = 230.6$ , CFI = 0.927, RMSEA = 0.094,  $\Delta X^2(3) = 44.6$ ,  $p < 0.001$ ). We concluded that the three-dimensional model was the best representation of the observations.

For fitting the joint model for Sweden and India, we decided to exclude CSR7. This item had a weak relation to caring among the Swedish managers, but was strongly related to external CSR among Indian managers. Thus, the conceptual meaning was different in India and Sweden. In Sweden, it meant that the organization cared for its personnel (but it was not a core indicator), whereas in India it meant that the organization cared for the society. This corroborates the findings from study 1.

### ***5.6.5 Testing for Measurement Equivalence in CSR Practices in Study 2***

We applied the procedure for invariance testing described earlier in this chapter. Thus, a series of multigroup models with increasing numbers of constrained



parameters were estimated. Overall fit indices and differences in fit indices between models are reported in Table 5.10.

To test for configural invariance, we applied the three-dimensional model previously described, with three latent variables: CSR\_care, CSR\_dev and CSR\_ext, and 11 manifest variables (excluding CSR7), to the Swedish and the Indian samples simultaneously. In this model (Model 1a), the structure was the same for both samples, but factor loadings were free to vary between countries. This model had an acceptable fit to the data as shown by a CFI above 0.90 and an RMSEA below 0.08. Thus, there was support for configural invariance.

To test for metric invariance, factor loadings were constrained to be equal across countries (Model 2a). The difference in chi-square, as compared to Model 1a, was significant ( $p < 0.001$ ), and the difference in CFI was slightly above 0.01, showing that the unconstrained model was a better representation of data. The main difference in factor loadings was located in CSR12, where India showed a substantially higher unstandardized loading (0.73) than Sweden (0.36).

The item CSR12 was therefore discarded and revised models (unconstrained Model 1b and constrained Model 2b) were estimated. Model 1b had an acceptable fit to the data as shown by a CFI above 0.90 and an RMSEA below 0.08. Difference in model fit for Model 2b, compared to Model 1b, still showed a significant difference in chi-square, but the difference in CFI was below 0.01. We therefore concluded that there was support for metric invariance.

To test for scalar invariance, all intercepts were constrained to be equal in the Indian and Swedish samples in Model 3b. This model was evaluated in relation to Model 2b. Model 3b showed a considerably worse fit than Model 2b. The difference in chi-square was significant and the difference in CFI was 0.05. There was therefore no support for scalar invariance based on the specified items. We inspected the pattern of intercepts in Model 2b and found several items with deviating pattern of differences in intercepts between India and Sweden. Intercepts for CSR1 (respect for individual rights) had a higher country difference than expected; CSR8 (investment in creating a better life for future generations) had a lower country difference than expected; and CSR10 (supports NGOs) had a considerably higher country difference than expected. We therefore decided to exclude those items from the measurement model.

We then estimated Model 2 (Model 2c with constrained factor loadings) and Model 3 (Model 3c with constrained factor loadings and constrained intercepts), excluding items CSR1, CSR8 and CSR10. The difference in chi-square between the models was significant, but the difference in CFI was 0.01. We therefore concluded that the models were similar enough to support scalar invariance.

The final measure of CSR was a three-dimensional model similar to the one in study 1, but excluding five items. It should be noted that two of these items were already identified as problematic in study 2. Thus, the result was fairly consistent over the two data collections.

However, for the measurement of CSR with regard to external stakeholders (hereafter labelled CSR\_ext2), there were only two items left in the final model. Given that the original measure in study 1 consisted of 10 items, this was a massive

**Table 5.10** Sequential test of measurement invariance for managers in India ( $n = 386$ ) and Sweden ( $n = 537$ ) based on complete observations in study 2, for a three-factor model of perceptions of CSR practices in the organization

Model	Description	Item	$\chi^2$ (df)	$\chi^2$ /df	CFI	RMSEA	$\Delta$ CFI	$\Delta \chi^2$	$\Delta$ df	$p$
1a	Configural invariance. All parameters free	11	487.3 (82)	5.94	0.908	0.073				
2a	Metric invariance (constrained factor loadings)	11	552.7 (93)	5.94	0.895	0.073	0.013	65.4	11	<0.001
1b	Configural invariance excluding CSR12	10	410.1 (64)	6.41	0.915	0.077				
2b	Metric invariance excluding CSR12	10	451.1 (74)	6.10	0.907	0.074	0.008	40.9	10	<0.001
3b	Scalar invariance excluding CSR12 (constrained factor loadings + constrained intercepts)	10	663.2 (81)	8.19	0.857	0.088	0.050	212.1	7	<0.001
2c	Metric invariance excluding CSR1, CSR8 and CSR10	7	148.9 (29)	5.13	0.951	0.067				
3c	Scalar invariance excluding CSR1, CSR8 and CSR10	7	176.0 (33)	5.33	0.941	0.069	0.010	27.1	4	<0.001

Model fit indices and model differences for CFA models with increasing number of constrained parameters

restriction of conceptual width. This was an especially serious concern because several external stakeholders, such as NGOs and customers, would not be included in the conceptualization of external CSR using the variable CSR\_ext2.

Therefore, we decided also to report on each single item intended to measure CSR with an external perspective. It is however important to emphasize that comparisons that rely on single-item measures may be biased, and that we cannot rule out these items having different meanings in the two countries.

### ***5.6.6 The Dimensionality of EO Practices in Study 2***

To confirm the three-factor structure that was established in study 1, separate CFA models were estimated for the Swedish and Indian samples. The models had three latent variables; EO\_rel, EO\_quant, and EO\_form, and 12 manifest variables as indicators.

The fit in the Swedish sample, based on complete observations ( $n = 542$ ), was good ( $X^2(51) = 196.1$ , CFI = 0.971, RMSEA = 0.073). All factor loadings except one were well above 0.4. The exception was EO4, 'I work in an organization where colleagues outspokenly reject sexist comments or jokes' with standardized loading 0.33. We concluded that EO4 was not a good indicator of EO\_rel in the Swedish context.

The fit in the Indian sample, based on complete observations ( $n = 396$ ), was not so good ( $X^2(51) = 302.4$ , CFI = 0.935, RMSEA = 0.112). However, all factor loadings were well above 0.4. The correlations between the latent variables were rather high (EO\_rel and EO\_quant:  $r = 0.75$ ; EO\_quant and EO\_form:  $r = 0.83$ ; EO\_rel and EO\_form: 0.90). Thus, the correlation between EO\_rel and EO\_form was the highest and was pretty close to 1. Therefore, we tested whether these two latent variables could be merged into one by estimating a two-factor model. This test clearly showed support for the three-dimensional model and not for a two-dimensional model. Even though highly correlated in the Indian sample, EO\_rel and EO\_form proved to be different phenomena.

The major sources for misfit in the Indian sample were indices of covariances between the residuals of the following item pairs: EO5 and EO6; EO5 and EO7; EO10 and EO11. That is, these items had variance in common that was not accounted for by the latent variables. Including these correlated residuals in the model showed a much-improved fit, ( $X^2(48) = 167.1$ , CFI = 0.969, RMSEA = 0.079). Furthermore, an alternative model dropping EO5 and EO11 showed a nearly acceptable fit ( $X^2(32) = 128.0$ , CFI = 0.970, RMSEA = 0.087). These two items thus proved to be problematic in the Indian context, and were excluded from further analysis.

### ***5.6.7 Testing for Measurement Equivalence in EO Practices in Study 2***

To test for measurement equivalence in EO practices, we again applied the procedure for invariance testing. We estimated a serial of multigroup models, with increasing numbers of constrained parameters. Overall fit indices and differences in fit indices between models are reported in Table 5.11.

First we applied a three-dimensional model with nine indicators (excluding EO4, EO5 and EO11) to the Swedish and the Indian samples simultaneously (Model 1). The structure was the same for both samples, but all parameters were free to vary between countries. This model had a good fit to the data as indicated by a CFI greater than 0.95 and an RMSEA less than 0.08. This result supported configural invariance for the three measures of EO practices.

To test for metric invariance, factor loadings were constrained to be equal across countries (Model 2a). The fit for this model was still good. However, the difference in chi-square showed that the unconstrained Model 1 was a better representation of the data. But the difference in CFI was small (0.009), and we concluded that the factor loadings were acceptably similar to support metric invariance.

Testing for scalar invariance, i.e. invariance in intercept, was the final step. We specified a model where the factor loadings as well as the intercepts were constrained to be equal in the Indian and the Swedish samples (Model 3a). This model was evaluated in relation to Model 2a. Even though the fit for Model 3a was acceptable, model comparison showed that the difference in chi-square was significant and the difference in CFI was slightly above 0.01. We scrutinized the modification indices and found that EO6 was a candidate for removal. EO6 diverged from the other items indicating EO\_rel with regard to the patterns of the intercepts. The intercept was higher for Swedish managers compared to Indian managers for all items indicating EO\_rel, but the difference in intercept between countries was even more pronounced for EO6 than the other item. We thus decided to discard EO6.

We estimated the model with constrained factor loadings (Model 2b) and the model with constrained factor loadings and constrained intercepts (Model 3b) again, but now without item EO6. Model comparisons showed that the difference in chi-square between these models was still significant, but the difference in CFI was below 0.01. We concluded that the intercepts were now acceptably similar between the countries. Thus, there was support for scalar invariance.

So, the final measure of EO was a three-dimensional model similar to the one in study 1, but excluding four items. It should be noted that two of these items (EO5 and EO6) were already identified as problematic in study 1. Thus, the result was fairly consistent over the two data collections.

**Table 5.11** Sequential test of measurement invariance for managers in India ( $n = 396$ ) and Sweden ( $n = 542$ ) based on complete observations in study 2, for a three-factor model of perceptions of EO practices in the organization

Model	Description	Item	X <sup>2</sup> (df)	X <sup>2</sup> /df	CFI	RMSEA	Δ CFI	Δ X <sup>2</sup>	Δ df	p
1	Configural invariance. All parameters free	9	211.8 (48)	4.41	0.976	0.060				
2a	Metric invariance (constrained factor loadings)	9	287.6 (57)	5.05	0.967	0.066	0.009	75.8	9	<0.001
3a	Scalar invariance (constrained factor loadings + constrained intercepts)	9	384.0 (63)	6.10	0.954	0.074	0.013	96.4	6	<0.001
2b	Metric invariance excluding EO6	8	200.0 (42)	4.76	0.974	0.063				
3b	Scalar invariance excluding EO6	8	260.8 (47)	5.55	0.965	0.070	0.009	60.8	5	<0.001

Model fit indices and model differences for CFA models with increasing number of constrained parameters

### ***5.6.8 Reliability of the Final Measures for Perceptions of CSR and EO Practices***

Reliability was calculated as Cronbach's alpha for the revised measures of CSR and EO practices (see Table 5.12). The reliability was sufficient in both countries (over 0.70) for CSR\_care. The measure of CSR\_dev showed sufficient reliability in the Swedish sample, but a reliability slightly below 0.70 in the Indian sample. The measure of CSR\_ext showed somewhat low reliability in the Indian as well as in the Swedish sample. All three measures of EO showed excellent reliability in both countries.

### ***5.6.9 Putting All Scores on a Common Scale***

In order to make comparisons between measures more accessible, all scores were standardized. Standardization means that observed scores are transformed to scores where the mean is 0 and the standard deviation is 1. After such a transformation, the variation between observations can be interpreted in the same way for all the measures. For example, we expect most (95%) of the individual observations to be within the range of  $-2$  to  $+2$ . Also, the level of an observation can be easily interpreted. A positive standardized score is interpreted as higher than average, and a negative score indicates a rating lower than average. Considering differences between means, a rule of thumb is that when scores are standardized, 0.20 can be considered as a small effect, 0.50 a medium-sized effect, and 0.80 a large effect (Cohen 1992).

### ***5.6.10 Aggregation and Sharedness***

The transformations to standardized scores were based on individual-level variation estimates. These scores were aggregated to organization level by calculating the average of the individual responses for each organization. On the aggregated level, we expect variance between organizations to be smaller than between individuals. This implies that even though the standard deviation at the individual level is defined to unity, the standard deviations for aggregated standardized scores (i.e. the variation between organizations) were in the range of 0.49–0.63.

A requirement for aggregating individual-level measures to the organization level is that there should be a shared perception of the observed phenomena within organizations. If there is no shared perception, there is no meaning in the average score. Sharedness also implies that there is significant variation between organizations. The amount of variation between organizations is reported for each

**Table 5.12** Variables measuring perceptions of CSR and EO practices in the organization, and the reliability of these variables

Variable	Description	Sample item	No. item	Alpha India	Alpha Sweden
<i>Scales</i>					
CSR_care	Caring for employees	I work in an organization which takes social responsibility for its employees	3	0.80	0.81
CSR_dev	Supporting employees' development	Our organization supports employees who want to acquire additional education	2	0.66	0.79
CSR_ext2	Organization's responsibilities for future generations and the society	Our organization targets sustainable growth which considers future generations	2	0.61	0.63
EO_rel	EO in informal relations	I work in an organization in which men and women are equally respected	3	0.90	0.90
EO_quant	Equal quantitative representation in vertical division of labour	I work in an organization which in a trustworthy way strives for men's and women's equal representation in managerial positions	2	0.83	0.90
EO_form	EO in formal procedures and relations of power	I work in an organization which in a trustworthy way strives for men's and women's equal opportunities for job advancement	3	0.90	0.92
<i>Single items</i>					
CSR8	Responsibilities towards future generations, investments	Our organization makes an investment in creating a better life for future generations	1		
CSR9	Responsibilities t future generations, targets sustainable growth	Our organization targets sustainable growth which considers future generations	1		

(continued)

**Table 5.12** (continued)

Variable	Description	Sample item	No. item	Alpha India	Alpha Sweden
CSR10	Responsibilities towards society, supports NGOs	Our organization supports non-governmental organizations which work on social issues	1		
CSR11	Emphasizes the importance of its responsibilities	Our organization emphasizes the importance of its social responsibilities for the welfare of society	1		
CSR12	Responsibilities towards customers/students/patients	Our organization respects customers'/students'/patients' rights beyond the legal requirements	1		

measure in Chap. 11. However, for all measures, the organizational variation was great enough to justify the aggregation procedure.

### 5.6.11 Screening for Extreme Observations

We screened the individual data as well as the aggregated organizational data for extreme observations, defined as three standard deviations below or above variable mean (Hair et al. 1995). Concerning individual observations, we found a few cases slightly below  $-3$  standard deviations. But these were not dramatically more frequent than expected, given a total of over 900 observations. We decided to keep those observations.

When we scrutinized the aggregated data, we identified three organizations with values below  $-3$  standard deviations (based on standard deviation calculated from the aggregated data) on two to four variables. In fact, all three of these organizations had scores around or below  $-4$  standard deviations for at least two variables. All these organizations were from the healthcare sector in India. Given the total of 77 organizations, such extreme observations should be very rare. Still, we do not think these observations are invalid. They may very well reflect a true but extreme pattern of practices in part of the Indian healthcare sector.

Even though these three organizations may be valid observations, such extreme observations may have an unreasonable impact on various statistical calculations.



We therefore decided to exclude the observations from these organizations in the statistical models presented in Chap. 11 and in the calculation of various descriptive statistics in that chapter.

### **5.6.12 Summary of Study Variables**

In order to understand the expressions of values of CSR and EO in the studied organizations, we have defined these measures as managers' perceptions of organizational practices concerning CSR and EO. We found that the expressions of CSR and EO are multidimensional, and six dimensions were identified. The study variables are summarized in Table 5.12.

#### **5.6.12.1 Perceptions of CSR Practices**

A multiple stakeholder perspective was used to conceptualize CSR practices. We distinguished between stakeholders within the organization, i.e. employees (internal CSR), and stakeholders outside the organization, i.e. future generations, society, and customers (external CSR). Internal CSR was represented by two dimensions

- Caring for employees (CSR\_care): perception of organizations' responsibilities for their employees' well-being.
- Supporting employees' development (CSR\_dev): perception of organizations' responsibilities for their employees' growth and skill development.

External CSR could not be operationalized in its full conceptual width in a reliable and country-invariant measure. Instead, five single items representing different aspects of external CSR were used, targeting the stakeholders' future generations (CSR8, CSR9), society (CSR10, CSR11) and customers (CSR12).

However, in order to make more complex analysis possible with regard to external CSR, a composite variable representing two stakeholders, future generations and society, was constructed based on the average of CSR9 and CSR11. This limited measure of external CSR was found to be invariant between the countries.

- External CSR (CSR\_ext2): organizations' responsibilities for future generations and society.

This variable has some limitations. First, it does not represent the full conceptual width of external CSR. Second, it suffers from somewhat low reliability. This should be kept in mind when interpreting the results.

### 5.6.12.2 Perceptions of EO Practices

Equal opportunity practices were operationalized as a multidimensional concept, represented by three dimensions:

- EO practices with regard to informal relations (EO\_rel): perceptions of, to what extent men and women are equally listened to, and equally respected, and managers are equally sensitive to men's and women's needs.
- EO practices with regard to quantitative vertical division of labour (EO\_quant): perceptions of the extent to which the organization trustworthily strives for men's and women's equal representation on boards and in managerial positions.
- EO practices with regard to formal procedures and relations of power (EO\_form): perceptions of the extent to which the organization strives in a trustworthy way for men's and women's equal opportunities for job advancement, equal evaluation of performance and equal influence over decisions.

### 5.6.12.3 Outcome Variables

Three outcome variables are considered in this book in order to evaluate the effects of CSR and EO practices. These variables are summarized in Table 5.13. Two of them have to do with the attractiveness of the organization for managers—organizational commitment and intention to leave. One outcome variable has to do with the performance of the organization as rated by the managers—perceived effectiveness.

- Organizational commitment: managers' emotional attachment to, identification with and involvement in the organization.

**Table 5.13** Variables measuring organizational attractiveness and organizational effectiveness, and the reliability of these variables

Variable	Description	Sample item	No. item	Alpha India	Alpha Sweden
<i>Scales for organizational attractiveness</i>					
Commit	Organizational commitment	I feel a strong sense of belonging to my organization	4	0.81	0.68
Int. leave	Intention to leave the organization	I am actively looking for other jobs	4	0.84	0.87
<i>Scale for organizational effectiveness</i>					
Effective	Perceived effectiveness of the organizational unit	This unit achieves its planned targets	4	0.87	0.77

- Intention to leave: managers’ desire to leave the job, intention to do so if an opportunity emerged and reports of actively looking for a new job.
- Perceived effectiveness: managers’ rating of how frequently the organizational unit that they were responsible for, achieved its planned targets, was responsive to its customers, adhered to its schedule, and was productive.

### 5.7 Interviews with HR Managers

The target for the organizational interview study with HR managers was the 77 organizations participating in the second questionnaire study. The organizations were from four sectors: manufacturing, IT, higher education (universities) and healthcare (hospitals). The number of observations from each sector is reported in Table 5.14.

It was not possible to conduct a few of these interviews due to practical circumstances. Furthermore, some interviews provided information for more than one organization due to a common HR function. Information was collected from 73 organizations, 38 in India and 35 in Sweden.

The researchers took prior appointments with the HR managers and interviewed them about organizational size, structure, strategies and policies with semi-structured interview guidelines. The purpose of the interview was to supplement the information gathered through the questionnaire survey and to collect information about the formalization, communication and implementation of CSR and EO policies.

In addition to the interview, HR managers were also requested to share relevant supporting documents and annual reports if possible. In India in most cases, the

**Table 5.14** Number of organizations approached and number of organizations where information was retrieved from interviews with HR managers

Country	Sector	Organizations	Organizational information
India		42	38
	Manufacturing	12	12
	IT	10	8
	Healthcare	10	9
	Education	10	9
Sweden		35	35
	Manufacturing	9	9
	IT	5	5
	Healthcare	13	13 <sup>a</sup>
	Education	8	8
Total sample		77	73

<sup>a</sup>In some cases, information was collected for more than one organization in each interview

interviewer was directed to refer to the information shared on websites and in the public domain. Mostly, HR managers were unwilling to share other organizational documents as there were organizational constraints. In Sweden, we got access to these documents in most organizations. Taking the total scenario into consideration, the researchers have not included the documents in the analysis due to the limited possibilities for comparing these data.

In India, on average, the interviews lasted 120–150 min. In Sweden, the interviews lasted 60–120 min. Basic information about the organization, its size and expanse was explored with questions about its core activities, which countries the organization existed in, and which country owned it. The structure and composition of the organization were explored by asking about the total number of employees, temporary employees, part-time employees, employees recruited by staff agencies and the average education of employees.

Gender equality and the inclusion of women in higher management was studied by gathering information about the proportion of women in the organization, whether male and female managers were equally paid/rewarded, the representation of women in the highest managements teams, and asking managers to map the organization in terms of the presence of women in different departments.

In addition, recruitment and voluntary exit of managers in the previous 3 years were explored to understand the attractiveness of the organization. Support to managers for facilitating their managerial work was also explored. Managers were asked whether the organization communicated its values at all, and, if so, through which mode and how frequently, in order to assess the conscious dissemination and implementation of values.

After these general questions, HR managers were specifically interviewed about policies concerning the organizational values that form the focus of this research, namely, CSR and EO. Questions were asked about policies regarding these values with regard to three components: formalization, implementation and communication. Formalization is conceptualized here as an organization having a policy, having it in written form and the policy having been updated in recent years. The implementation component consists of the awareness of managers regarding the policy, their access to the policy, and whether the policy had been discussed or used in recent years. The communication component consists of questions regarding whether the policy is communicated externally and whether there is a version of the policy available to a broader public. All these components together indicate the organization's efforts to brand the value internally and externally.

## **5.8 Summary**

In this chapter, we have described details concerning the four empirical studies performed, as well as the development of measures of CSR and EO. In order to understand expressions of the values of CSR and EO in the studied organizations, we have defined these measures as the managers' perceptions of organizational

practices concerning CSR and EO. We found that CSR and EO practices are multidimensional. Six facets were identified: three for CSR and three for EO. These six measures were tested for measurement equivalence, and we achieved reliable and country-invariant measures for all facets except one—external CSR. For external CSR, we proceed with a limited country-invariant measure as well as five single items that describe various aspects of the concept. In the following chapters, we will describe the four sectors targeted—manufacturing, IT, education and healthcare—with regard to managers’ perceptions of CSR and EO practices in their organizations in India and Sweden.

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