

# Developing a measurement instrument for perceived Corporate citizenship using multi-stakeholder, multiindustry and cross-country validations

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# Abstract

Many measurement instruments of Corporate Citizenship are developed from an organizational perspective and do not adequately consider the knowledge of stakeholders which are asked to answer them. This study attempts to derive a measurement instrument for Perceived Corporate Citizenship which would be appropriately tailored for stakeholders who possess information asymmetry. A conceptualization of Corporate Citizenship which mapped the entire domain with 101 statements was adopted. Four studies then statistically refine these statements to the context of the case study firm, proceeded by Malaysia and then finally, internationally to the UK with over 1800 participants in total. Nomological and known-group validations ensure the psychometric soundness. The results provided a four-factor instrument consisting of Legal & Ethical Responsibilities, Environmental Oriented, Products & Services and Philanthropic Oriented, utilizing 28 statements. The theoretical contribution offers resolutions to critiques that had been given to Carroll's Pyramid of CSR and thus updates an aging model.

**Keywords** Corporate citizenship · Corporate social responsibility (CSR) · Scale Development · Malaysia · United Kingdom

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# 1 Introduction

Corporate Citizenship, a derivative of Corporate Social Responsibility (CSR), has become a fundamental business practice through increased public expectations and demands placed upon industry conduct. Poor Corporate Citizenship may create negative impacts upon stakeholders, the environment, and, eventually, the firm itself. However, executing socially responsible actions in line with society's continuously shifting expectations has become arduous, as Corporate Citizenship composes a dynamic phenomenon (Verbeke and Tung 2013) and has no universally accepted definition (Torugsa et al. 2012). As a result, it is ambiguous what constitutes [ir]responsible business behavior. Corporate Citizenship should not favor an instrumental approach or take preference of an individual stakeholder group over other groups but should engage stakeholders in meaningful, two-way engagement. Additionally, because Corporate Citizenship consists of a social construct (Buhanita 2015), it is necessary to include a broad array of stakeholders to comprehensively conceptualize what is deemed [ir]responsible behavior. Since the corporation is a sub-system of the societal macro-system and not a self-contained structure, it is interdependent upon stakeholders (McLennan and Banks 2019), with society's stakeholders providing the corporation with a 'license to operate' (Neron 2016) in exchange for a contribution to the common good through its socially responsible behavior and actions.

Evaluating Corporate Citizenship thus inherits many of these challenges outlined. One of the most widely adopted models that have been operationalized for measurement is Carroll's Pyramid of CSR, which is despite being established solely for adoption by managers and academics (Carroll 1979, p. 502). This indicates that the model was created to fulfill a specific purpose and may not reflect the perspectives of other stakeholders (Alvarado-Herrera et al., 2017). Additionally, many stakeholders are bereft of knowledge and possess information asymmetry, thus are unable to determine whether the corporation is adequately carrying out its civic responsibilities. This information asymmetry creates a distinction between Corporate Citizenship and perceived Corporate Citizenship, in which Corporate Citizenship is a tangible, objective metric (*i.e., this is*); however, perceived Corporate Citizenship addresses the information asymmetry by evaluating the often-subjective perspectives of stakeholders towards Corporate Citizenship (i.e., I think). This, in turn, means perceived Corporate Citizenship is defined by stakeholders and may not accurately represent actual corporate performance. However, it is suggested that research on Corporate Citizenship perceptions can be more effectively employed than objective Corporate Citizenship since stakeholders are inclined to act more reliably on their perceptions rather than upon the objective truth and reality (Hansen et al. 2016). However, when operationalizing measurement instruments for perceived Corporate Citizenship, the measurement criteria are frequently chosen on the basis of what can be tangibly or physically measured (i.e., technical) instead of what should be assessed (i.e., normative) (Salvado et al. 2015). Thus, when developing measurement instruments, they must be built in collaboration with the intended users to ensure the normative demands are fulfilled.

The issue of measuring perceptions of Corporate Citizenship and other CSR derivatives was highlighted by Freeman (1984), as he recognized a flaw in the stakeholder concept he developed, with stakeholders only being represented by management's ability to relate and emphasize with them. There has been conceptual work by Idemudia (2011) suggesting that using a bottom-up approach would allow for the normative stakeholder perspective, as well

as McLennan and Banks (2019) proposing that examining the event of interest through a 'reversed lens' generates a more holistic picture (McLennan and Banks 2019); however, the top-down approach still appears dominant in many studies. This can be evidenced by Alvarado-Herrera et al., (2017) scale development where the items of the instrument were developed from the top-down dominant literature and Fatma et al. (2014), who developed items of the instrument through qualitative interviews but only incorporated managers, thus again being a top-down perspective. The information asymmetry issue is exacerbated further with items such as '*This organization has been successful at maximizing its profits*' from Dhanesh (2014), which is clearly a top-down perspective, as stakeholders such as customers or community members are unlikely to check the company's balance sheet before engaging with the company.

This study thus aims to build upon a prior bottom-up conceptualization of perceived Corporate Citizenship developed from a case study and explore how far this conceptualization generalizes whilst also refining and validating the operationalized measurement instrument in multiple contexts. This is completed through not only Confirmatory Composite Analysis (CCA) but also nomological and known group validation. The paper continues with a brief literature review consisting of Conceptualization of Perceived Corporate Citizenship and Measuring Perceived Corporate Citizenship. Following this, the methodology and results section is divided into the four studies that this paper consists of, with studies 1 and 2 refinings and validating the operationalized measurement instrument with the case study firm, whilst studies 3 and 4 look to generalizing and further validating the measurement instrument in a broadening context, namely national and international. The discussion section deliberates both theoretical implications and methodological implications of the study before concluding the paper and evaluating limitations of the study and suggestions for future research.

## 2 Literature review

### 2.1 Conceptualization of perceived corporate citizenship

Corporate Citizenship suggests that the corporation is a fellow citizen within society and should not be managing stakeholders but rather have obligations to them. The overarching concept of CSR generally takes the form of selected implementation with managers 'cherry picking' activities based upon stakeholder management (Roth et al. 2018). The 'management' of stakeholders suggests the firm is 'above' the stakeholders or fellow citizens, which is no longer acceptable. This is based upon a change in thinking in the middle of the last century, when the business went from being considered a sealed unit into a system within another system through Systems Theory (Boulding 1956), where business is but one smaller system within the larger system of society (Lozano and van Haartman 2018). The corporation is part of society, not above it, and therefore can be considered a citizen of society. Thus, Corporate Citizenship complements the stakeholder concept, where the company considers the wants and needs of the stakeholders that comprise society as a whole, where the company affects society with its business activities. Organizations are dependent on the various stakeholder groups of society for their continued existence. When Corporate Citizenship combines with the 'stakeholder notion,' a good Corporate Citizen is an organization

that fulfills its' responsibilities imposed upon it by the stakeholders that have a 'stake' or interest in the operations of the company.

Hence, to be able to evaluate Corporate Citizenship effectively, all stakeholder groups' perspectives need to be accounted for. This method has been acknowledged within the literature as the bottom-up approach (Idemudia 2011), with normative Corporate Citizenship coming from a specific context composed of multiple stakeholder views (Fordham and Robinson 2018). From the firms' perspective, the expenditure of effort, time, as well as other resources in addressing stakeholder interests is a rational and justified business activity (O'Riordan and Fairbrass 2014). Thus, building this normative view of Corporate Citizenship requires 'reversing the lens' and viewing what is deemed as a responsible business from the target community of stakeholders (McLennan and Banks 2019). This view stems from the reverse anthropology used by Kirsch (2006) and complements the bottom-up approach proposed by Idemudia (2011). However, complexity is introduced from the subjective nature of the theories of CSR, and thus its derivative theories, including Corporate Citizenship, as they have no agreed objective definition (Dahlsrud 2008).

This subjective nature thus moves towards the stakeholder perceptions of the phenomenon, which to are subjective. Where perceived Corporate Citizenship has been defined by how a stakeholder perceives an organization as honoring its responsibilities of economic, legal, ethical, and discretionary levied by the stakeholders upon the organization (Evans and Davis 2011; Maignan and Ferrell 2000). However, this study challenges this, as Carroll's four-factor conceptualization consisting of the economic, legal, ethical, as well as discretionary responsibilities is imposed within the definition, allowing no subjectivity from the stakeholders' perceptive. Perceived Corporate Citizenship varies in that it contains the subjective element of the stakeholder's information asymmetry and perceptions of a company. Therefore, this study defines perceived Corporate Citizenship as; how an individual perceives an organization as fulfilling its' responsibilities imposed upon it by its stakeholders. This then allows each stakeholder group to perceive their own conceptualization of what Corporate Citizenship is. This idea is not new, Evans and Davis (2011, p. 458) state;

'[Perceived Corporate Citizenship] refers to individual evaluations and interpretations of business activity, not necessarily actual firm actions. Hence, the construct represents perceived corporate citizenship; an individual's interpretation of the degree of fulfillment and importance of organizational processes, activities, and policies concerning CSR.'

Whilst Corporate Citizenship and perceived Corporate Citizenship differ in; Corporate Citizenship consists of a tangible objective measure, i.e., *how it is*, however, perceived Corporate Citizenship consists of the stakeholder perceptions, i.e., *I think*, about Corporate Citizenship. Both Corporate Citizenship and perceived Corporate Citizenship are needed as the subjectivity of perceived Corporate Citizenship can be influenced by 'greenwashing' and other means, whilst objective Corporate Citizenship measures tangible components, i.e., number of employees injured at work, financial performance, etc. Perceived Corporate Citizenship of a company is only what the stakeholder perceives and may not directly reflect the true performance. Nevertheless, it has been debated that research focused upon stakeholder perceptions of Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be more of greater use than objective Corporate Citizenship can be can be

its stakeholders' perceptions. The perception of the stakeholder is also affected by the ability of individuals to transform these perceptions into categories outlined within a measurement instrument (Durham et al. 2011).

From the literature, it was deemed that prior knowledge of stakeholders drastically affected their ability to answer survey items accurately. In order to perceive Corporate Citizenship, stakeholders must be aware of Corporate Citizenship, meaning that stakeholders require some fundamental knowledge. It is suggested by Kim and Ji (2017) that socially responsible activities provide a company with little benefit if consumers are unaware of such socially responsible activities; this could be further extended to all stakeholders. Stakeholders requiring prior knowledge is evidenced by Alvarado-Herrera et al. (2017), where they propose that one of the limitations of their scale is that the consumer must have some prior knowledge or information around the company's socially responsible activities in order to stop "erratic, unthinking responses or reactions that are marked by social desirability."This issue of requiring prior knowledge leads towards a measurement instrument needing to originate from the stakeholder perspective in order to get a meaningful response from the participants, as the measurement instrument will accommodate the prior knowledge level.

#### 2.2 Measuring perceived corporate citizenship

Stakeholder typologies offer an opportunity to develop a measurement instrument in a theoretically strong manner. Donaldson and Preston (1995) have interpreted three typologies from the stakeholder theory: normative, descriptive, and instrumental. Freeman (1999) defines these clearly; descriptive typology is the way that the world really is, normative typology prescribes how the world should be, whilst instrumental typology links means and ends. The dominantly used typology is instrumental, as it allows the firm to use stakeholders to achieve its own goals. However, asking stakeholders for their opinions of what the firms' responsibilities should be, means that the stakeholder paradigm has moved to the normative typology. Whilst the use of the descriptive paradigm by stakeholders is acknowledged within Maon et al. (2010) review of the developmental stages of CSR models. However, a firm can never be fully normative, as the underlying premise is that the firm must turn a profit to exist and is fundamental. Likewise, a firm cannot be fully instrumental, as society has a minimum expectation of firms to act responsibly. This is co-creation of organizational behavior between the corporation and its' stakeholders are the most desirable purpose to stakeholder engagement (Lane and Devin 2018). The idea of co-creating the organizational behavior supports the Corporate Citizenship theory, as co-creation is created by companystakeholder and stakeholder-stakeholder interactions (Hur and Kim 2017), thus mimicking the societal interactions that are complex and interdependent.

Furthermore, within the literature, there are multiple conceptual and theoretical ideas that can assist with the development of a measurement instrument. Mirvis and Googins (2006) suggest that the Corporate Citizenship of a firm is developmental as it moves towards normative logic. Therefore, a combination of the developmental nature of Corporate Citizenship and stakeholder typologies can be used to aid the measurement of perceived Corporate Citizenship. Thus, the phenomenon of Corporate Citizenship can be considered a continuum, with the top of the continuum being that the firm is completely normative (*should be*) and the firm being completely instrumental (*means-end*) at the bottom of the continuum. This means that the rating a stakeholder gives will be of descriptive typology (*what is*); this

would then interpret as to how far the firm is progressing towards being a Corporate Citizen and the normative logic.

## 3 Methodology and results

The methodology of this study follows the discussion within the literature review, with a measurement instrument being developed for perceived Corporate Citizenship from a case study company and then psychometric properties tested as the contextual scope is expanded. The methodology begins with the normative conceptualization of perceived Corporate Citizenship developed by concept mapping from a prior study (Homer 2021). This prior study was conducted within Malaysia and gave a list of 101 statements created by the stakeholders of the case study company, with the bottom-up approach being adopted. This means that the items that will be used within the measurement instrument originate directly from the stakeholders themselves. A case study allows for the research to delve deeply into the phenomenon allowing for greater exploration of the contextual component of the phenomenon (Baxter and Jack 2008). Furthermore, the context-dependent nature of case studies is necessary because context-independent and generalized studies have become separated from the real-world context (Joo and Shin 2018). This is particularly true within social science disciplines where theories are particularly broad and thus are detached from the realworld (Trochim 1985). The importance of retaining the conceptualizations' statements was because they had been developed from qualitative data collected from various stakeholders and then validated by another group of stakeholders, thus not only addressing the lack of bottom-up scale development highlighted in the introduction but also giving strong face validity to these scale statements.

The methodology consists of four studies. The first two studies consist of exploratory factor analysis and then a confirmatory factor analysis to check the stability of the factors derived. This was deemed necessary as the original conceptualization was developed with only a small sample, and thus the generalization of this conceptualization to a wider number of participants was necessary before proceeding to a wider context. The second study also uses additional nomological and known group validity across three different stakeholder groups. Once the measurement instrument had been confirmed and validated in the case study company's context, studies 3 and 4 were then used to expand the generalizability of the instrument. Both studies selected a representative and similar company from a supermarket, banking, and petrochemicals from Malaysia and the UK. Study 3 then confirms the measurement instrument in the Malaysian context with consumers, using again nomological validation but also known group validity between the three different representative firms. To further validate the measure, the same process as study 3 is then used within the UK concept. Each study is now described and results presented.

#### Study 1

This study used the case study firm as the subject of evaluation for study 1 from Homer (2021), as it was deemed necessary to confirm and validate the instrument within this specific context before expanding to a more general context. The review paper on the topic of using concept mapping to develop measurement instruments by Rosas and Ridings (2016) was used as a guide to the validation of the measurement instrument. The initial step entails reducing the statement list; however, consideration needs to be given to adequately cover

the domain. This was done by retaining the most important statements from the concept mapping, reducing the list by half.

Rosas & Ridings (2016) propose the best way to address the dimensionality of the measurement instrument is through factor analysis, with studies using exploratory factor analysis proceeded by a confirmatory factor analysis which will determine the stability of the factors. This study has adopted this approach to strengthen the scale development process and enhance the validation procedure. The choice for the process of factor analysis is justified as concept mapping from the prior study uses Hierarchical Cluster Analysis and has not been statistically verified. The exploratory factor analysis means another reduction in the number of statements can be achieved by identifying representative variables (Hair et al. 2014), thus reducing participant fatigue within subsequent stages.

For exploratory factor analysis, the study reduced the statement list to the 50 highest rated statements. Along with this statement list of Perceived Corporate Citizenship, a quality check question was used. A *Quality Check Question*, as used by Gallagher et al. (2018), involves including a statement such as 'If you are paying attention, select strongly agree on the scale .'Thus, respondents are removed from the study if they respond in a way other than directed. A convenience sample of students was used, as they are a unique stakeholder group in the context of the study where they transverse the typical boundaries within the literature of stakeholder groups. The sample size aimed for approximately 400 participants to adequately cover 5 to 10 responses per variable (Hair et al. 2014). For this study, students were selected as participants based upon their transboundary stakeholder group, in that many students studying within the case study company private university, visited retail outlets operated by the case study company, lived in properties managed by the case study company, and also sought internship or work opportunities with the case study company. Thus, students fulfilled multiple stakeholder roles of consumers, community members, employees, and as well perspective employees. The students were recruited through convenience sampling and included a wide demographic of college, undergraduate, and postgraduates, including national and international.

Three hundred and ninety-nine respondents submitted the questionnaire; those respondents that incorrectly responded to the Quality Check Question were eliminated, reducing the usable responses to three hundred and seventy-five. The exploratory factor analysis was performed on SPSS 25. Sampling adequacy was interrogated using Kaiser-Meyer-Olkin generating a value of 0.961, which is within necessary limits. A Principal Axis exploratory factor analysis with Varimax rotation was performed. The results can be seen in Table 1, with all loadings over 0.400 being selected based on Dyer et al. (2007). Factors 6 and 7 were disregarded as no variable had a loading over 0.400. Factor 1 has 14 statements; Factor 2 has 12 statements; Factor 3 has 8 statements; Factor 4 has 9 statements, and Factor 5 has 4 statements. Statements "[firm] runs its business efficiently," "[firm] products & services are harmless to society" and, "[firm] practices no fraudulent business" had loadings under 0.400 and thus disregarded.

At this point, the statements which were to be retained were assigned an index; these items will be referred to for the rest of the study. For the selection criteria, a trade-off between representing the domain and reducing participant fatigue needs to be considered; based upon this, the six highest loading statements from each factor were retained. Cross loading items that were above the 0.400 cut-offs were also considered for retaining if they were within the six highest loadings of a particular factor and joined the factor that they had

# Table 1 Exploratory factor analysis results

Assigned	Statement	Factor				
Index		1	2	3	4	5
	[firm] has competitive advantage	0.490		0.405		
	[firm] has clear goals	0.463				
PCC 5	[firm] attempt to minimise its carbon footprint in day- to-day operation	0.650				
	[firm] products and services are worth their money	0.438		0.409		
	[firm] provides a lot of different opportunities to learn	0.514	0.451			
PCC 4	[firm] promotes sustainable practices	0.659	0.425			
	[firm] recognises individual contributions	0.445				
PCC 3	[firm] sustainability policies are beneficial to the environment	0.708				
	[firm] is at the service of everyone	0.496			0.404	
PCC 2	[firm] ensures proper waste management	0.649				
PCC 1	[firm] tries to save resources as much as possible	0.636				
PCC 23	[firm] follows the right procedures				0.646	
PCC 22	[firm] refrains from underpaying its employees				0.543	0.497
PCC 21	[firm] is non-discriminatory				0.564	
PCC 24	[firm] complies with regulatory requirements				0.493	
	[firm] products & services are quality assured by the authorities	0.421				
PCC 6	[firm] does not harm the local environment	0.514				
	[firm] top management adopt responsible leadership				0.471	
	[firm] is a trusted brand for employee wellbeing				0.474	
PCC 20	[firm] avoids misleading marketing and advertising practices				0.585	
PCC 19	[firm] has embedded the firm's ethical values		0.430		0.563	
	[firm] does not use deceptive practices		0.415		0.487	
	[firm] sustainability policies are beneficial to the whole of society		0.532			
PCC 11	[firm] gives back to society		0.540			
	[firm] allocate enough resources to maintain the quality of its projects		0.473			
	[firm] practices no fraudulent business					
PCC 10	[firm] provides a variety of products & services		0.592			
PCC 9	[firm] is accountable for its performance		0.545			
	[firm] complies with human rights		0.524		0.471	
PCC 8	[firm] provides value to the community		0.598			
	[firm] does not pollute the environment	0.511				
PCC 12	[firm] thinks ahead		0.489			
PCC 28	[firm] provides easy access to its facilities					0.518
PCC 26	[firm] sponsors and subsidises education					0.697
	[firm] products & services are harmless to society					
	[firm] business activities abide by the law		0.443			
	[firm] runs its business efficiently					
PCC 7	[firm] strives for continuous improvement		0.574	0.440		
	[firm] provides medical insurance		0.473			
PCC 27	[firm] provides professional/educational development of employees					0.646

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Table 1 (continued)

Assigned	Statement	Fact	or			
Index		1	2	3	4	5
	[firm] takes care of its employees in terms of health & safety		0.447	7		
PCC 25	[firm] refrains from delaying payment to its employees					0.570
PCC 17	[firm] welcomes suggestions for improvement of its services			0.55	7	
PCC 16	[firm] provides a pleasant experience to its consumers			0.67	9	
PCC 15	[firm] make sure customers are satisfied with its prod- ucts and services			0.72	3	
	[firm] abide by data protection laws			0.45	3	
PCC 14	[firm] is a reliable brand			0.652	2	
PCC 18	[firm] maintains a good working environment			0.52	7	
	[firm] prioritises security			0.44	0	
PCC 13	[firm] provides quality customer service			0.640	0	

the highest loading in. These were retained to test the stability of the cross-loading in the proceeding study. The statement of "*[firm] refrains from underpaying its employees*" was retained within the 4th factor as this had the higher loading, meaning that factor 5 had only four statements whilst all other factors had six.

### Study 2

Stage 2 was to assess the stability of the factors derived from study 1 based upon the case study firms' context by using Confirmatory Factor Analysis (CFA). The CFA was performed upon the SmartPLS software, with the PLS-SEM variation of CFA being *Confirmatory Composite Analysis* (CCA) as suggested by Schuberth et al. 2018. The choice to use PLS had been made as it has been advised that researchers should particularly use PLS-SEM with CCA in the case of measurement models that are indirectly measuring conceptual concepts (Hair and Sarstedt 2019), with the CCA procedure being outlined by Hair et al. (2020).

*Nomological Validity* was incorporated, with a measure being nomologically valid if it behaves as expected with respect to another construct, where this construct is theoretically related to the measure (Donia et al. 2017), meaning that the measurement instrument will have predictable associations which could be found in prior literature. Academic texts were reviewed to seek empirical studies that had known relationships between perceived Corporate Citizenship and stakeholder-specific constructs. These constructs would be correlated with the perceived Corporate Citizenship instrument and the relationship compared to the literature; students, employees, and consumers were selected for validation. For students, Firm's Attractiveness was selected from Bhattacharya and Sen (2003) and was expected to have a positive relationship with Corporate Citizenship. Organizational Commitment had been chosen for employees with an expected positive correlation (Wang et al. 2013). Whilst consumers had the construct of Trust chosen, using the 3-item instrument used by Park et al. (2017) and again an expected positive correlation.

*Known Group* Validity was also conducted; this involves the instruments' ability to differentiate among groups, where the groups were expected to rate different to one another on specific traits or aspects (Netemeyer et al. 2003). The prior selected stakeholder categories of employees, customers, and students were likely to differ in their interpretation around the social responsibility of business. Known group validity can be analyzed by a t-test (Rosas

and Ridings 2016); however, with three stakeholder groups, a one-way ANOVA was applied on a composite score.

Additionally, Corporate Citizenship measurements are unusually susceptible to the influence of social desirability, as highlighted by Hur et al. (2018), but also with Podsakoff and Organ (1986), suggesting social desirability can be a leading cause for shared method variance, which can then lead to common method bias. Thus, a test of social desirable responding was incorporated, with the Balanced Inventory of Desirable Responding 16-item (BIDR) being chosen (Hart et al. 2015), which composes of two factors which are Self Deceptive Enhancement (SDI) and Impression Management (IM). The test for social desirability is conducted by correlating perceived Corporate Citizenship with the BIDR, with non-significant results indicating no or little social desirability bias (Gupta and Agrawal 2018). This is important as participants need to answer from their personal perceptions and not answer how they think they should answer, i.e., socially desirable answers.

The sample consisted of 626 participants with evaluations based upon 234 students, 196 customers and, 196 employees. What became evident was that the overall performance was greatly improved by merging the 4th and 5th factors from the EFA. Table 2 shows the results from the CCA; in bold are those loading values that fell below the 0.707 thresholds. However, Hulland (1999) suggests that loadings above 0.600 can be acceptable within exploratory studies. Construct reliability and validity were within the acceptable values of Cronbach's alpha ( $\alpha$ )>0.700, rho\_A>0.700, Composite Reliability (CR)>0.700 and Average Variance Extracted (AVE)>0.500. HTMT values were within acceptable values, with two values (in bold) being borderline as there is ambiguity about the cut-off point; Kline (2011) suggests 0.85, and Gold et al. (2001) suggest 0.90. The factors were named based upon literature and discussion between the authors; Products & Services, Environmental Oriented, Legal & Ethical Responsibilities, and Philanthropic Oriented.

Results for nomological validity have a positive and significant standardized Pearson Correlations between Perceived Corporate Citizenship and all three constructs; for Firm Attractiveness and students [n=234] correlation of 0.546, for Organizational Trust and customer [n=193] correlation of 0.581 and Organizational Commitment and employee [n=196] correlation of 0.594. The customer sample group was reduced from 196 to 193; this was because three participants did not rate the scales that were to be used for the nomological test. The measurement instrument was acting as expected and can be considered nomologically valid.

The BIDR was also correlated with each group to test for socially desirable responses. For students, both factors of the BIDR had non-significant correlations suggesting the respondents were not answering in a socially desirable manner (SDE -0.044 and IM 0.023). For customers, a small yet significant correlation was found on both components of BIDR (SDE 0.236 and IM 0.219), meaning that there is some socially desirable responding. Employees had a non-significant relationship between BIDR self-deceptive enhancement (0.131) but did have a small significant relationship with BIDR impression management (0.198). Whilst the results from testing for social desirable responses demonstrated some small correlations, which may suggest that there is a risk of shared method variance.

Next, *known group validity* was conducted using one-way ANOVA to test for the expected differences among the selected stakeholder groups; results can be found in Table 3. Significant differences are presented between stakeholder groups which are to be expected and validated the instrument further.

Statement Index         Environmen- tal Oriented Composite         Products and Services Composite         Legal and Ethical Re- sponsibilities           PPC 1         0.682	Loading Results																																																																																																											
PPC I       0.682         PCC 2       0.804         PCC 3       0.858         PCC 4       0.805         PCC 5       0.769         PCC 6       0.721         PCC 7       0.833         PCC 9       0.830         PCC 10       0.757         PCC 11       0.760         PCC 12       0.801         PCC 13       0.851         PCC 14       0.833         PCC 15       0.903         PCC 16       0.813         PCC 18       0.787         PCC 20       0.725         PCC 21       0.731         PCC 22       0.736         PCC 23       0.836         PCC 24       0.836         PCC 25       0.656         PCC 28       0.743         PCC 28       0.743         PCC 28       0.725         Products & Services       0.992       0.992       0.939         Products & Services       0.992       0.922       0.663         Products & Services       0.992       0.922       0.663         Products & Services       0.992       0.922       0.663         Prod		tal Oriented	ic Oriented	and Services	Ethical Re- sponsibilities																																																																																																							
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 Table 2
 Study 2 confirmatory composite analysis results

The next step of the instrument development is to validate in a wider context to devise

	Sum of Squares	df	Mean	F	Sig.		
	Sum of Squares	u)	Square	-	~.8.		
Between Groups	8860.877	2	4430.439	8.199	0.000		
Within Groups	336665.9	623	540.395				
Total	345526.8	625					
POST-HOC (Bonfe	rroni)						
(I) Stakeholder	(J) Stakeholder	Mean Differ-	Std. Error	Sig.	95% Confidence Interval		
		ence (I-J)			Lower Bound	Upper Bound	
Student	Customer	-8.53962*	2.250888	0.000	-13.94279	-3.13644	
	Employee	-6.72824*	2.250888	0.009	-12.13142	-1.32507	
Customer	Student	8.53962*	2.250888	0.000	3.13644	13.94279	
	Employee	1.81137	2.34824	1.000	-3.82549	7.44823	
Employee	Student	6.72824*	2.250888	0.009	1.32507	12.13142	
	Customer	-1.81137	2.34824	1.000	-7.44823	3.82549	

how generalizable the instrument is.

#### Study 3

The third study generalized the measurement instrument within the Malaysian context by selecting three companies; a petrochemical company, a banking company, and a supermarket store. The purpose here was not only to perform a CCA but also to run *known group validity* between these companies as they are from different industries. The stakeholder group remained fixed as customers, as using customers was important as they are most likely to suffer from information asymmetry; thus, if the measurement instrument was appropriate for them, it should be appropriate for the other stakeholder groups. Again, this study attempted to build nomological validity by including the measure of Customer Loyalty which from the literature has a positive correlation with PCC, the instrument used was adapted from Martinez and Bosque (2013). A target of 300 participants was adopted for this study, with a final sample consisting of 294 participants with evaluations based upon 138 supermarkets, 111 banking and, 45 petrochemicals.

In Table 5, the results from the CCA are presented; in bold are those loading values which fell below the 0.707 thresholds. However, as previously discussed, these should not be disregarded immediately. PPC10, [Firm] provides a variety of products & services, was below the tentative 0.500 limits that were discussed by Hulland (1999) and was removed for this study. Yet, this may well have been expected as two selected industries, namely banking and petrochemical, offer limited products and services whilst supermarkets have a wider range. Construct reliability and validity, and HTMT values are all within acceptable values.

Proceeding the CCA, the other forms of validity were conducted. This includes nomological validity; PCC was correlated with Customer Loyalty and resulted in a significant positive correlation of 0.547, which was expected. The next validation was known group validity, which was done using an ANOVA test again to look at the difference between the industries selected. Results from this test can be seen in Table 4, where the ANOVA and Post-Hoc results are presented. Noticeably, although there are differences, none are significant. When further exploration was done by conducting ANOVA on each factor of the

ANOVA							
		Sum of Squares	df	Mean Square	F	Sig.	
PCC	Between Groups	2464.955	2	1232.477	2.195	0.113	
	Within Groups	163960.6	292	561.509			
	Total	166425.5	294				
POST-HOO	C (Bonferroni)						
Dependent Variable	(I) Firm	(J) Firm	Mean Differ- ence (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
PCC	Supermarket	Banking	-2.21	3.014	1.000	-9.47	5.05
		Petrochemical	-8.521	4.068	0.111	-18.32	1.27
	Banking	Supermarket	2.21	3.014	1.000	-5.05	9.47
		Petrochemical	-6.311	4.182	0.397	-16.38	3.76
	Petrochemical	Supermarket	8.521	4.068	0.111	-1.27	18.32
		Petrochemical	6.311	4.182	0.397	-3.76	16.38

## Table 4 Study 3 ANOVA results

instrument (not presented due to space limitations), there were significant differences in the Legal and Ethical Responsibilities component. This presents an interesting discussion point, as were participants suggesting that the only difference between the PCC for the three companies were the legal and ethical frameworks? Or was it a case of information asymmetry, and the participants were unable to answer accurately on the other factors. However, some variation does offer validation for the instrument, yet further validation was still needed in a yet broader context.

## Study 4

The fourth study aimed to validate and test the generalizability of the measurement instrument to an international context. This was done in a similar way to study 3 but was conducted with a sample of participants within the UK. The UK was selected because it was a developed nation, where much of consumer and regulatory pressures for Corporate Citizenship originate in such countries, whilst Malaysia is still 'developing' although it is an upper-middle-income country. Malaysia and the UK have a long relationship that dates back to the colonial period and being members of the Commonwealth post-independence, with 50 to 60% of the population speaking English to some level. It was due to these ties that the UK was selected above other Western nations to validate the instrument within a different national context. Three comparable companies to those of study 3 were selected from British companies: one petrochemical, one banking, and one supermarket. The same stakeholder group of customers was selected, and the same measure for customer loyalty was included. A larger sample was targeted this time of 500 participants, with the final sample consisting of 551 participants with evaluations based upon 383 supermarkets, 98 banking and, 70 petrochemicals. Table 7 shows the results from the CCA; in bold are those loading values that fell below the 0.707 thresholds. However, as previously discussed, these should not be disregarded immediately, one item from Philanthropic was below this threshold, and all four items which had previously composed the fifth factor were also below the 0.707 thresholds; however, all were above the 0.500 thresholds that would be a cause for concern. Construct reliability and validity, and HTMT values are all within acceptable values, with the exception of one value for HTMT, which was borderline (in bold). This is due to some elasticity around an appropriate cut-off threshold within the literature.

Loading Results					
Statement Index	Environ-	Philan-	Prod-		and Ethical
	mental	thropic	ucts and	1	onsibilities
	Oriented Composite	Oriented Composite	Services Composite	Comp	osite
PPC 1	0.634	Composite	Composite		
PCC 2	0.785				
PCC 3	0.892				
PCC 4	0.844				
PCC 5	0.836				
PCC 6	0.694				
PCC 7		0.858			
PCC 8		0.755			
PCC 9		0.856			
PCC 11		0.773			
PCC 12		0.843			
PCC 13			0.855		
PCC 14			0.804		
PCC 15			0.891		
PCC 16			0.882		
PCC 17			0.820		
PCC 18			0.805		
PCC 19				0.739	
PCC 20				0.733	
PCC 21				0.748	
PCC 22				0.782	
PCC 23				0.776	
PCC 24				0.759	
PCC 25				0.616	
PCC 26				0.748	
PCC 27				0.673	
PCC 28				0.739	
Construct Reliability and Validity Res		ula a			
Environmental Oriented	α	rho_		-	AVE 0.618
Philanthropic Oriented	0.873 0.876				0.669
Products & Services	0.870				0.712
Legal & Ethical Responsibilities	0.891				0.536
Heterotrait-Monotrait Ratio (HTMT)		. 0.09	0.912	-	0.550
	Envi	ron- Phila	an- Prod	ucts &	Legal & Ethical
	ment				Responsibilities
	Oriei	-			*
Environmental Oriented					
Philanthropic Oriented	0.803	3			
Products and Services	0.625				
Legal and Ethical Responsibilities	0.613	3 0.71	6 0.700	)	

 Table 5
 Study 3 confirmatory composite analysis results

Known group validity was conducted using ANOVA to test the difference between the industries selected; the results are presented in Table 6. These results demonstrate multiple

		Sum of Squares	df	Mean Square	F	Sig.	
PCC	Between Groups	35133.87	2	17566.94	29.372	0.000	
	Within Groups	327754.1	548	598.091			
	Total	362,888	550				
POST-H	OC (Bonferroni)						
Depen- dent Variable	(1) Firm	(J) Firm	Mean Differ- ence (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
PCC	Supermarket	Banking	1.42459	2.76850	1.000	-5.22355	8.07272
		Petrochemical	24.21438*	3.17896	0.000	16.58059	31.84818
	Banking	Supermarket	-1.42459	2.76850	1.000	-8.07272	5.22355
		Petrochemical	22.78980*	3.82716	0.000	13.59944	31.98015
	Petrochemical	Supermarket	-24.21438*	3.17896	0.000	- 31.84818	- 16.58059
		Banking	-22.78980*	3.82716	0.000	- 31.98015	- 13.59944

#### Table 6 Study 4 ANOVA results

significant differences among the industries within the post-hoc results, which would be expected as the companies have very different business practices. This demonstrates a stark difference to study 3's results, where possible reasons were discussed; however, it is not within the scope of the study to delve deeper into why the differences between the results of these studies exist. Next nomological validity correlated PCC with Customer Loyalty resulting in a significant positive correlation of 0.446, further validating the instrument.

The four studies have refined and developed a measurement instrument from the original 101 item conceptualization from the Homer (2021) paper. The multiple contexts and validation stages incorporated in the study have tested the psychometric properties of the developed instrument on a very broad basis. The measurement instruments' performance varied within the different studies, however for exploratory testing of a newly developed instrument, the results were acceptable. The paper continues with the discussion next to scrutinize the theoretical underpinning of the instrument, as well as the application.

## 4 Discussion

This study constructed a measurement instrument based on an existing bottom-up conceptualization and extensively examined its psychometric qualities in a variety of contexts. The results provided a four-factor solution that had been statistically confirmed and validated across stakeholder groups, industries, and cross-national. The shift from the widely used instrumental, top-down approach adopted by CSR is quite evident, exemplified by the shift to Products & Services, which demonstrates what the company has to offer society, rather than what the company can take from society (i.e., profits). This is in line with theory, as CSR tends to be from the organizational, top-down perspective; however, Corporate Citizenship revolves around the co-creation of company behavior based on interactions (Hur

Loading Results					
Statement Index	Environ-	Philan-	Prod-		and Ethical
	mental	thropic	ucts and		onsibilities
	Oriented Composite	Oriented Composite	Services Composit	Comp	oosite
PPC 1	0.801	composite	composi		
PCC 2	0.870				
PCC 3	0.866				
PCC 4	0.839				
PCC 5	0.738				
PCC 6	0.803				
PCC 7		0.782			
PCC 8		0.781			
PCC 9		0.749			
PCC 10		0.623			
PCC 11		0.763			
PCC 12		0.765			
PCC 13			0.863		
PCC 14			0.821		
PCC 15			0.865		
PCC 16			0.862		
PCC 17			0.750		
PCC 18			0.714		
PCC 19				0.738	
PCC 20				0.724	
PCC 21				0.765	
PCC 22				0.740	
PCC 23				0.832	
PCC 24				0.752	
PCC 25				0.696	
PCC 26				0.577	
PCC 27				0.660	
PCC 28				0.666	
Construct Reliability and Validity Res	ults				
	α	rho_	-		AVE
Environmental Oriented	0.902				0.674
Philanthropic Oriented	0.839				0.556
Products and Services	0.897				0.664
Legal and Ethical Responsibilities	0.894	4 0.90	1 0.9	13	0.515
Heterotrait-Monotrait Ratio (HTMT)		<b>D1</b> 11		1	
	Envi ment			oducts &	Legal & Ethical Responsibilities
	Oriei		nted	vices	Responsionnes
Environmental Oriented					
Philanthropic Oriented	0.785	5			
Products and Services	0.640		4		

 Table 7 Study 4 confirmatory composite analysis results

and Kim 2017). Thus, although differentiating between CSR and Corporate Citizenship

is highly debated and contested, this study would propose that whilst similar items can be used, the difference would depend upon who's perspective the measurement items are intended for. Either top-down management and organizational perspective, which is instrumental for CSR, or whether it is bottom-up and formed around what the company can offer society for Corporate Citizenship.

#### 4.1 Theoretical implications

The four-part model derived statistically from these studies includes the Environmental Oriented factor, Philanthropic Oriented factor, Products & Services factor, and Legal & Ethical Responsibilities factor; this appears to complement the widely used Carroll's Pyramid of CSR (1991b); however, there are also key differences within this paper that adapts Carroll's model and as such addresses many of the criticisms within the literature. Carroll has consistently defended the Pyramid of CSR conceptualization as recently as 2016 with 'Carroll's Pyramid of CSR: Taking another look' with the original conceptualization being published in 1979 and thus now has been the dominant model of CSR for over 40 years. Some authors have attempted to modify Carroll's successful model, such as Masoud (2017) with the International Pyramid of CSR and Baden (2016) with the pyramid of CSR for the 21st century. However, these attempts have been based in the conceptual and theoretical domains and thus have found it difficult to be accepted as Carroll's model has been operationalized and has proven useful for several decades. This paper has added some empirical support to the necessity for Carroll's model to be adopted to fulfill its role from different stakeholder perspectives and societal demands. Each component of the developed instrument is now described and compared to Carroll's model in order to establish the instrument's theoretical foundation and discuss similarities and differences.

Carroll's conceptualization is consistent with the Philanthropic Oriented factor developed within this study, embracing similar items to prior measurement instruments. The factor covers how businesses give back to society, not just financially, but also via the use of their workforce and by setting an example for other businesses, as all good corporate citizens should. Carroll's conceptualization of the CSR pyramid comprises the following: It is critical to conduct business in a way congruent to society's altruistic and philanthropic expectations. It is further vital to assist the fine and performing arts. It is critical for managers and employees to engage in volunteer and charitable events in their local communities. It is critical to support private and public educational institutions, and it is critical to contribute to projects that improve the community's "quality of life" Carroll 1991a, p. 41). This complements the new instrument declarations, which include the following: [Firm] adds value to the community, [Firm] is accountable for its performance, and [Firm] gives back to society.

The Products & Services factor is comparable to Carroll's economic factor in that enterprises must offer products and/or services in order to generate profit, which is necessary for their own survival, but the perspective has shifted to a stakeholder looking into the firm from the outside, rather than the management looking out of the firm. However, one criticism leveled at Carroll's economic component is that the assessment instruments produced from his model include questions such as 'Attempts to maximize profit from its activity' (Salmones et al. 2005). However, given the asymmetry of information, it is unclear whether a consumer would have adequate expertise to answer this or related inquiries about economic performance, which results in the "erratic, mindless responses or reactions characterized by social desirability" described by Alvarado-Herrera et al. (2017). However, by shifting the focus to the products and services offered, statements such as [Firm] ensures customer satisfaction with its products and services, as well as [Firm] provides a pleasant consumer experience become much more tangible to stakeholders who may be unaware of the business's day-to-day operations. Thus, this change of perspective means that more stakeholders would have sufficient information to evaluate the statements to at least some extent.

The merging of the Legal and Ethical components within the developed instrument, when compared to Carroll's model, is unsurprising, given there has been a lessening of the gap between the legal and ethical dimensions in the literature. This has been suggested to be because what is deemed ethical has become increasingly ingrained in legislation (Visser 2005). What constitutes ethical behavior varies by culture and ethnic origin (Hur and Kim 2017). There has been an increasing understanding that religion has an impact on corporate behavior, including business ethics (Du et al. 2016). Western ethics are influenced by philosophers such as Aristotle, whilst Eastern ethics are influenced by philosophers such as Confucius (Farooq et al. 2014). While these philosophers share some concepts and values, they also have disagreements about what constitutes ethical behavior. However, it appears from this research that the fundamental principles of ethical business practices are widely acknowledged in the two countries examined. There is room for an investigation into the extent to which similar ethical behaviors extend and are sought by stakeholders in various cultures worldwide.

The Environmental Oriented element devised in this study adds a new dimension to the CSR and Corporate Citizenship models, including Carroll's pyramid of CSR. According to Moorthy et al. (2017), numerous studies employ Carroll's discretionary [or philanthropic] responsibilities and then separately measure the environmental component. Thus, including this feature in the model is both necessary and opportune in order to address this critique of Carroll's widely used model. While practitioners have embraced the ESG model (Environmental, Social, and Governance), these issues have often been overlooked in academia due to their qualitative character (Halme et al. 2018). This could be due to the absence of environmental and social considerations in academic models, i.e., Carroll. Thus, the practitioner perspective validates the inclusion of this component in the proposed measurement instrument for Perceived Corporate Citizenship.

The discussion thus far suggests that the instrument developed in this study complements existing models, most notably the Pyramid of CSR developed by Carroll, but also addresses several criticisms and provides a contemporary adaption on Carroll's aging model. However, an element of Carroll's model that is outside the scope of this study is the pyramid shape the model consists of. The shape of a pyramid comes from the weighting assigned by Carroll, namely 4 for economic, 3 for legal, 2 for ethical, and 1 for philanthropic, with each element stacked upon the prior (Pinkston & Carroll, 1996). However, without further empirical studies, the weightings for the elements derived in the present study of philanthropic oriented, products & services, legal & ethical and, environmental oriented, are unclear. The pyramid shape may well be lost as it is unlikely stakeholder groups such as customers and community members will place such emphasis upon the economic, i.e., products & services.

The conversation proceeds with an evaluation of the measurement instrument's applicability.

#### 4.2 Methodological implications

While it was possible to minimize and refine the number of statements in the measurement instrument statistically, it was determined that this was not necessary. This is because the measurement instrument is meant for use by a variety of stakeholder groups and thus includes a broader range of statements, which should mitigate the risk of information asymmetry. With a higher number of statements available, some customization can be accomplished by omitting statements that particular stakeholder groups may lack the necessary expertise to answer appropriately. Thus, the probability of "erratic, mindless answers or behaviors characterized by social desirability" is diminished (Alvarado-Herrera et al., 2017). This does mean that the instrument will need to be validated in additional scenarios, such as study 2, where established group validity is utilized to determine which stakeholder groups have access to which information.

Additionally, there is a chance that information asymmetry changes by industry for different clients. This is in response to participant comments that indicated they preferred to answer questions regarding retail companies because they have more experience interacting with them. This is evident within studies 3 and 4, in both Malaysia and the United Kingdom. This also facilitates the retention of a larger number of assertions, allowing the instrument to be adapted to certain sectors. While it was outside the scope of this research to examine the disparities between industries, it does highlight how one-size-fits-all measurement tools may not be the most appropriate method of measurement.

Furthermore, the usage of BIDR is critical for the future use of not only this instrument but maybe all instruments pertaining to social responsibility. This is because socially desirable responses are indicative of information asymmetry; when stakeholders lack sufficient information to respond objectively, they begin to respond how they believe they should respond. This is demonstrated in Study 2 when customers are likely to have the least knowledge or information available to them due to their occasional interactions with the organization, and hence socially desirable responses exhibited minor but substantial connections. This section of the discussion raises more issues than it answers and necessitates additional research to determine definitely whether this proposition holds true for other measurements.

Nomological Validity is defined as the degree to which predictions from a theoretical network containing the concept under scrutiny are confirmed (Netemeyer et al. 2003). This means that a measure is nomologically valid if it behaves as expected with respect to another construct to which it is theoretically related (Donia, Tetrault Sirsly, & Ronen, 2017). Within this study, nomological validity was used within studies 2, 3, and 4. Whilst within study 2, each stakeholder group evaluated a construct that had been nomologically linked to Corporate Citizenship within the literature; this composed just a small proportion of the extensive nomological network that exists for Corporate Citizenship. Likewise, within studies 3 and 4, only one stakeholder group was evaluated upon one nomologically linked construct. So, within this study, four different constructs have been confirmed for their nomological validity and have appeared to add complexity to the study, but this is just a small part of the vast nomological network that exists. The implication for methodology here is that to fully validate a measurement instrument, it needs to be used with an extensive range of different constructs to ensure the nomological network is complete and as was expected regarding the literature. This, however, may be why Carroll's model has been so popular for measurement, as it has been used in numerous contexts with many relationships tested and thus nomologically verified, even with the criticisms that have been offered within this paper and others.

Known group validity involves the measurement scales' ability to distinguish between groups of individuals who should score differently on particular traits (Netemeyer et al. 2003). Whilst the study attempted to use known group validity embedded within studies 2, 3, and 4, which appeared to add a lot of complexity to the study, this actually only consisted of only a small section of comparisons that could have been made. Within study 2, only three stakeholder groups were incorporated, which does not represent the entire stakeholder base of a firm, and even then, there may also be variation within stakeholder groups which could be compared along demographical lines or other aspects, i.e., large and small shareholders of a firm. Whilst in studies 3 and 4, only three industries were represented, and only one representative firm from the industry was selected for each country, thus again, although the study appears to incorporate great depth, this is a small subsection of the entire industrial representation globally. The implications for methodology from this study would be that whilst known group validity can be incorporated easily into many studies, perhaps it should not be used simply to look for a difference for validation but can be used strategically and holistically to construct a network similar to the nomological networks. For known group validity within the Corporate Citizenship and broader CSR context, all stakeholder groups (and sub-groups), industries, countries, and size of the organization are all likely to have variations on what is deemed [un]responsible business practice and thus could be compared against one another.

# 5 Conclusion

The findings of this study suggest a four-factor model consisting of Products & Services, Legal & Ethical Responsibilities, Environmentally Conscious, and Philanthropically Conscious. This created a measure of Perceived Corporate Citizenship that is both contemporary and relevant to stakeholders. This builds on previous work presented by Carroll's Pyramid of CSR and other models and addresses criticisms leveled at preceding models and measures of Corporate Citizenship and CSR. Thus, the issue of Corporate Citizenship assessment tools being constructed from an organizational perspective and not taking into account the knowledge of the various stakeholder groups asked to respond is somewhat rectified. The purpose of this study was to build a measurement instrument to evaluate Perceived Corporate Citizenship from the bottom-up before generalizing it for wider use. As a result, the instrument is adequately adapted for stakeholders who do not have access to all relevant information. While the measurement instrument requires further refinement, as it has been used in only four studies on seven different organizations, this paper shows good findings that may assist capture the subjective character of Perceived Corporate Citizenship. Measurement instruments must be regularly revised and adapted to reflect the dynamic and ever-changing nature of Corporate Citizenship and the broader CSR phenomena, reinforcing CSR as a dynamic and ever-changing phenomenon (Verbeke and Tung 2013).

## 5.1 Limitations

The study has a main limitation based around the novel measurement instrument's limited contextual use. Although four investigations were undertaken with an expanding contextual scope of application, the measurement instrument has not been deployed in a large number of situations, and so its generalizability cannot be assured.

## 5.2 Suggestions for future research

The critical component of the future study will be to continue to employ the measurement instrument in a variety of scenarios and to assess its performance. This also applies to the phenomenon's nomological network; the instrument should be used in conjunction with theoretically or empirically linked structures to verify that the instrument operates as predicted. Academics should validate, modify, and adapt the instrument as necessary to ensure an accurate assessment of Perceived Corporate Citizenship.

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Availability of data and material Considerations will be made whether to share data based on requests.

Code Availability Not applicable.

Data Availability Statement The data used in this study is not available elsewhere.

## Declarations

**Conflicts of interest/Competing interests** The authors have no conflicts of interest to declare that are relevant to the content of this article.

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# References

- Alvarado-Herrera, A., Bigne, E., Aldas-Manzano, J., Curras-Perez, R.: A Scale for Measuring Consumer Perceptions of Corporate Social Responsibility Following the Sustainable Development Paradigm. J. Bus. Ethics 140, 243–262 (2017a)
- Baden, D.: A reconstruction of Carroll's pyramid of corporate social responsibility for the 21st century. Int. J. Corp. Soc. Responsb. 1(1), 1 (2016)
- Baxter, P., Jack, S.: Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. Qualitative Rep. 13(4), 544–559 (2008)
- Bhattacharya, C.B., Sen, S.: Consumer-company identification: A framework for understanding consumers' relationships with companies. J. Mark. 67(2), 76–88 (2003)
- Boulding, K.E.: General Systems Theory-The Skeleton of Science. Manage. Sci. 2(3), 197–208 (1956)
- Buhanita, I.: Dimensions in CSR: an evaluation of current definitions. Jurnalism si comunicare **10**(4), 64–72 (2015)
- Carroll, A.B.: A Three-Dimensional Conceptual Model of Corporate Performance. Acad. Manage. Rev. 4(4), 497–505 (1979)
- Carroll, A.B.: Corporate Social Performance Measurement: A Commentary on Methods for Evaluating an Elusive Construct. In: Post, J.E. (ed.) Research in Corporate Social Performance and Policy: A Research Annual (Vol, 12, pp. 385–401. JAI Press, USA (1991a)

- Carroll, A.B.: The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders. Bus. Horiz. 34(4), 39–48 (1991b)
- Carroll, A.: Carroll's pyramid of CSR: taking another look. Int. J. Corp. Soc. Responsib. 1(3), 1-8 (2016)
- Dahlsrud, A.: How corporate social responsibility is defined: an analysis of 37 definitions. Corp. Social Responsib. Environ. Manage. **15**(1), 1–13 (2008)
- Dhanesh, G.S.: CSR as organization–employee relationship management strategy: A case study of socially responsible information technology companies in India. Manage. Communication Q. 28(1), 130–149 (2014)
- Donaldson, T., Preston, L.: The stakeholder theory of the modern corporation: Concepts, evidence, implications. Acad. Manage. Rev. 20, 65–91 (1995)
- Donia, M.B.L., Sirsly, T., C.-A., & Ronen, S.: Employee Attributions of Corporate Social Responsibility as Substantive or Symbolic: Validation of a Measure. Appl. Psychol. 66(1), 103–142 (2017)
- Du, X., Du, Y., Zeng, Q., Pei, H., Chang, Y.: Religious atmosphere, law enforcement, and corporate social responsibility: Evidence from China. Asia Pac. J. Manage. 33(1), 229–265 (2016)
- Durham, J., Tan, B.K., White, R.: Utilizing Mixed Research Methods to Develop a Quantitative Assessment Tool: An Example From Explosive Remnants of a War Clearance Program. J. Mixed Methods Res. 5(3), 212–226 (2011)
- Evans, W.R., Davis, W.D.: An examination of perceived corporate citizenship, job applicant attraction, and CSR work role definition. Bus. Soc. **50**(3), 456–471 (2011)
- Farooq, O., Payaud, M., Merunka, D., Valette-Florence, P.: The Impact of Corporate Social Responsibility on Organizational Commitment: Exploring Multiple Mediation Mechanisms. J. Bus. Ethics 125(4), 563–580 (2014)
- Fatma, M., Rahman, Z., Khan, I.: Multi-Item Stakeholder Based Scale to Measure CSR in the Banking Industry. Int. Strategic Manage. Rev. 2, 9–20 (2014)
- Fordham, A.E., Robinson, G.M.: Mapping meanings of corporate social responsibility an Australian case study. Int. J. Corp. Social Responsib. 3(14), 1–20 (2018)
- Freeman, R.E.: Strategic Management: A Stakeholder Perspective. Pitman, Boston (1984)
- Freeman, R.E.: Response: Divergent Stakeholder Theory. Acad. Manage. Rev. 24(2), 233–236 (1999)
- Gallagher, V.C., Hrivnak, M.W., Valcea, S., Mahoney, C.B., LaWong, D.: A comprehensive three-dimensional sustainability measure: The 'missing P' of 'people' a vital stakeholder in sustainable development. Corp. Social Responsib. Environ. Manage. 25(5), 772–787 (2018)
- Gold, A.H., Malhotra, A., Segars, A.H.: Knowledge management: An organizational capabilities perspective. J. Manage. Inform. Syst. 18(1), 185–214 (2001)
- Gupta, S., Agrawal, R.: Environmentally responsible consumption: Construct definition, scale development, and validation. Corp. Soc. Responsib. Environ. Manag. 25(4), 523–536 (2018)
- Hair, J.F., Howard, M.C., Nitzl, C.: Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. J. Bus. Res. 109, 101–100 (2020)
- Hair, J.F., Sarstedt, M.: Factors versus Composites: Guidelines for Choosing the Right Structural Equation Modeling Method. Project Manage. J. 50(6), 619–624 (2019)
- Hair, J.H.J., Black, W.C., Babin, B.J., Anderson, R.E.: Multivariate Data Analysis. Pearson Education Limited, Essex (2014)
- Halme, M., Rintamäki, J., Knudsen, J.S., Lankoski, L., Kuisma, M.: (2018). When Is There a Sustainability Case for CSR? Pathways to Environmental and Social Performance Improvements. Business & Society, 1–47
- Hansen, D., Dunford, B., Alge, B., Jackson, C.: Corporate Social Responsibility, Ethical Leadership, and Trust Propensity: A Multi-Experience Model of Perceived Ethical Climate. J. Bus. Ethics 137(4), 649– 662 (2016)
- Hart, C.M., Ritchie, T.D., Hepper, E.G., Gebaur, J.E.: (2015). The Balanced Inventory of Desirable Responding Short Form (BIDR-16). SAGE Open, October-December, 1–9
- Homer, S.T.: (2021) Perceived corporate citizenship: a scale development and validation study adopting a bottom-up approach. Qual. Quant. https://doi.org/10.1007/s11135-021-01184-w
- Hulland, J.: Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Studies. Strateg. Manag. J. 20, 195–204 (1999)
- Hur, W.-M., Kim, Y.: How does culture improve consumer engagement in CSR initiatives? The mediating role of motivational attributions. Corp. Social Responsib. Environ. Manage. 24(6), 620–633 (2017)
- Hur, W.-M., Moon, T.-W., Ko, S.-H.: How Employees' Perceptions of CSR Increase Employee Creativity: Mediating Mechanisms of Compassion at Work and Intrinsic Motivation. J. Bus. Ethics 153(3), 629–644 (2018)
- Idemudia, U.: Corporate social responsibility and developing countries: moving the critical CSR research agenda in Africa forward. Progress in Development Studies **11**(1), 1–18 (2011)

- Joo, J., Shin, M.M.: Building sustainable business ecosystems through customer participation: A lesson from South Korean cases. Asia Pac. Manage. Rev. 23, 1–11 (2018)
- Kim, S., Ji, Y.: Chinese Consumers' Expectations of Corporate Communication on CSR and Sustainability. Corp. Social Responsib. Environ. Manage. 24(6), 570–588 (2017)
- Kirsch, S.: Reverse anthropology: Indigenous analysis of social and environmental relations in New Guinea. Stanford University Press, Stanford (2006)
- Kline, R.B.: Convergence of structural equation modeling and multilevel modeling. In: Williams, M., Vogt, W.P. (eds.) The SAGE Handbook of Innovation in Social Research Methods. Sage (2011)
- Lane, A.B., Devin, B.: Operationalizing stakeholder engagement in CSR: A process approach. Corp. Social Responsib. Environ. Manage. 25(3), 267–280 (2018)
- Lozano, R., van Haartman, R.: Reinforcing the holistic perspective of sustainability: Analysis of the importance of sustainability drivers in organizations. Corp. Social Responsib. Environ. Manage. 24(4), 508– 522 (2018)
- Maignan, I., Ferrell, O.C.: Measuring Corporate Citizenship in Two Countries: The Case of the United States and France. J. Bus. Ethics 23, 283–297 (2000)
- Masoud, N.: How to win the battle of ideas in corporate social responsibility: the International Pyramid Model of CSR. Int. J. Corp. Soc. Responsib. 2(4), 1–22(2017)
- Maon, F., Lindgreen, A., Swaen, V.: Organizational Stages and Cultural Phases: A Critical Review and a Consolidative Model of Corporate Social Responsibility Development. Int. J. Manage. Rev. 12(1), 20–38 (2010)
- Martinez, P., Bosque, I.R.: CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. Int. J. Hospitality Manage. 35, 89–99 (2013)
- McLennan, S., Banks, G.: Reversing the lens: Why corporate social responsibility is not community development. Corp. Social Responsib. Environ. Manage. 26(1), 117–126 (2019)
- Mirvis, P., Googins, B.K.: Stages of Corporate Citizenship: A Developmental Framework. Calif. Manag. Rev. 48(2), 104–126 (2006)
- Moorthy, K., Na, S.A., Yee, C.W., Xian, C.Y., Jin, O.T., Mun, T.S., Shan, W.S.: Influence of corporate social responsibility in job pursuit intention among prospective employees in Malaysia. Int. J. Law Manage. 59(6), 1159–1180 (2017)
- Neron, P.-Y.: Rethinking the Ethics of Corporate Political Activities in a Post-Citizens United Era: Political Equality, Corporate Citizenship, and Market Failures. J. Bus. Ethics **136**, 715–728 (2016)
- Netemeyer, R.G., Bearden, W.O., Sharma, S.: Scaling Procedures: Issues and Applications. United States of America: Sage Publication, Inc (2003)
- O'Riordan, L., Fairbrass, J.: Managing CSR Stakeholder Engagement: A New Conceptual Framework. J. Bus. Ethics 125(1), 121–145 (2014)
- Park, E., Kim, K.J., Kwon, S.J.: Corporate social responsibility as a determinant of consumer loyalty: An examination of ethical standard, satisfaction, and trust. J. Bus. Res. 76, 8–13 (2017)
- Pinkston, T. S., & Carroll, A. B.: A Retrospective Examination of CSR Orientations: Have They Changed? J. Busi. Ethics 15(2), 199–206 (1996)
- Podsakoff, P.M., Organ, D.W.: Self-reports in organizational research: Problems and prospects. J. Manag. 12(4), 531–544 (1986)
- Rosas, S.R., Ridings, J.W.: The use of concept mapping in measurement development evaluation: Application and future directions. Eval. Program Plan. 60, 265–276 (2016)
- Roth, S., Valentinov, V., Heidingsfelder, M., Pérez-Valls, M.: CSR Beyond Economy and Society: A Postcapitalist Approach. J. Bus. Ethics 165, 411–423 (2018)
- Salmones, M. d. M. G. d. I., Crespo, A.H., Bosque, I.R. d. (2005). Influence of Corporate Social Responsibility on Loyalty and Valuation of Services. *Journal of Business Ethics*, 61, 369–385
- Salvado, M.F., Azevedo, S.G., Matias, J.C.O., Ferreira, L.M.: Proposal of a Sustainability Index for the Automotive Industry. Sustainability 7(2), 2113–2144 (2015)
- Schuberth, F., Henseler, J., Dijkstra, T.K.: Confirmatory Composite Analysis. Front. Psychol. 9, 1–14 (2018)
- Torugsa, N., O'Donohue, W., Hecker, R.: Capabilities, Proactive CSR and Financial Performance in SMEs: Empirical Evidence from an Australian Manufacturing Industry Sector. J. Bus. Ethics 109(4), 483–500 (2012)
- Trochim, W.M.K.: Pattern Matching, Validity, and Conceptualization in Program Evaluation. Eval. Rev. 9(5), 575–604 (1985)
- Verbeke, A., Tung, V.: The Future of Stakeholder Management Theory: A Temporal Perspective. J. Bus. Ethics 112, 529–543 (2013)
- Visser, W.: Revisiting Carroll's CSR pyramid: An African Perspective. In: Pedersen, E.R., Huniche, M. (eds.) Corporate Citizenship in developing countries:- new partnership perspectives, pp. 29–56. Copenhagen Business School Press, Copenhagen (2005)

Wang, Y.J., Tsai, Y.H., Lin, C.P.: Modeling the relationship between perceived corporate citizenship and organizational commitment considering organizational trust as a moderator. Bus. Ethics: Eur. Rev. 22(2), 218–233 (2013)

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