
How does stakeholder pressure influence CSR-practices? A construction industry model based on a European sample

Rafał Kowalczyk¹

Abstract

Stakeholder pressure is one of the most vital powers that determines CSR implementation and can provide organizations with the motivation to adopt corporate social responsibility (CSR) strategy, as the stakeholder theory claims. The current investigation is a replication of the author's (2019) study, which examined the same structure of relations based on a Polish sample. The essence of this replication is to find out whether CSR-practice is driven by 'stakeholder pressure' and 'CSR-company culture' varies when controlled by selected European countries or not. Namely, does a 'European model of CSR-practice' embedded in the European culture exist, or does it not exist (yet). Some earlier studies suggest that sociocultural context matters when it comes to CSR-practice. Therefore, this study aims to check how intensively a European cultural context affects organizational cultural context and stakeholder pressure when influencing CSR-practices in the construction industry by employing a sample composed of selected European countries. The author's (2019) model was then replicated based on a convenience sample composed of 282 cases from five European countries. The structural equation modeling method (SEM) was applied to analyze data and verify hypotheses. The findings confirmed that stakeholder pressure has the most substantial influence on CSR-practices. Moreover, although the current study proves that CSR-practice differs depending on the country of its implementation, it does not present all aspects of the potential differences. Further, deeper research is required to understand it better.

Keywords: *CSR-practice, CSR-culture, stakeholder pressure, project management, construction industry*

¹ Rafał Kowalczyk, Pomorskie Centrum Technologiczno Badawcze Sp. z o.o. PCTB, ul. Morska 521, 81-002 Gdynia, Poland, e-mail: rafal.kowalczyk@pctb.pl

This is an open access article under the CC BY license (<https://creativecommons.org/licenses/by/4.0/legalcode>)

1. Introduction

CSR-practice reflects the actual company's CSR actions and behaviors (Eisingerich & Rubera, 2010; He & Li, 2011). Kowalczyk (2019) and Kowalczyk and Kucharska (2019) used Polish and German samples to prove that stakeholder pressure has the most substantial influence on CSR-practices. They also hypothesized, by comparing their findings to Asian models (Yu & Choi, 2016) in which company culture was identified as a focal predictor of CSR-practice, that stakeholder pressure might be the vital power influencing CSR-practice, not only in Poland or Germany but also generally in Europe. Hence, the study aims to verify this assumption by replicating Kowalczyk's (2019) study on the European sample in an empirical manner. The rationale for this replication is to verify the obtained by Kowalczyk (2019) results of his study. The replication as a scientific activity is an integral part of scientific knowledge production. It generally increases confidence that the obtained earlier results exist. It is a valuable act, and more unexpected findings were presented.

Moreover, a replication enables to observe how findings may change between samples, and if it happens, replication provokes the question: why? So, a more in-depth understanding of the phenomenon is possible. So, this study aims to verify Kowalczyk's (2019) assumptions and to deliver the knowledge which allows to understand more in-depth the phenomenon of stakeholder pressure influence on CSR-practice in construction industry across Europe. Hence, the paper first presents the conceptual framework of the study. It then goes on to describe the methodology. The third part presents the findings and includes a discussion. Finally, the conclusion gives a summary of the work in light of its limitations.

2. Literature background

The environmental impact of the construction industry is modified by different agents (Alotabi et al., 2019). According to the stakeholder theory, the major factor that affects CSR implementation is stakeholder pressure (Yu & Choi, 2016). This pressure often stands behind a company's motivation to implement a corporate social responsibility (CSR) strategy (Clarkson, 1995). Leon (2017), McPherson (2019), and Phuong and Harima (2019) stressed the importance of cultural values for business activities. In their earlier works, Kucharska and Kowalczyk (2018) confirmed the substantial effect of national culture dimensions on CSR-practices. In 2007, Whelan noticed that CSR does not function without a certain sociocultural context and thus emphasized how important cultural setting is when studying CSR. Moreover, Bedford and Kucharska (2020) noted that company culture is always embedded in the

national culture. Therefore, multinational companies very often observe that even having developed a corporate culture, the cultures of national subsidiaries in some way differ one from another. Hence, on the one hand, national cultures determine companies' behaviors, while, on the other hand, European culture is a culture of nations that reflects shared values, beliefs, and behaviors. So, it is interesting to find out: how does the pressure of stakeholders influence the CSR culture of organizations and their practices in Poland and other European countries? Namely, does a common 'European model of CSR-practice' embedded in the European culture exist, or does it not exist (yet).

Drawing on findings by other researchers, this study focused on CSR-practices in selected European countries to determine how they are affected by stakeholder pressure and culture. This project provided an exciting opportunity to compare organizations in Poland (an example of a young EU country), and their level of social maturity when it comes to sustainability, with more advanced western countries. The construction industry in Europe has been undergoing a period of rapid development since 2014, and Poland has benefited greatly from this fact (KOF, 2017). The construction industry has been a focus of Kucharska and Kowalczyk's studies for quite some time now. They have been investigating the factors that affect project performance using the example of the Polish construction sector. In their studies, they proved the strong effect of company culture (a predictor) as well as trust and creativity (mediators) on the said project performance (2016a, 2016b). However, a topic that has not yet been properly examined is to what extent CSR-practice, stakeholder pressure, and culture affect the project performance of European companies. Kowalczyk (2019) and Kowalczyk and Kucharska (2019) used Polish and German samples to prove that stakeholder pressure has the most substantial influence on CSR-practices. Hence, the authors decided to adopt Kowalczyk's (2019) model of stakeholder pressure, culture, and CSR-practices to examine and understand the relationships within the construction projects in Europe.

2.1. CSR-practice and stakeholder pressure

By translating the theory of Corporate Social Responsibility into practice, an organization can "do well by doing good" (Falck & Hebllich, 2007). No company can afford to ignore the principles of CSR. According to Falck and Hebllich (2007), CSR is a voluntary commitment of a company to exceed the explicit and implicit obligations the state and society may have placed on it. Therefore, CSR promotes socially responsible behaviors in order to facilitate a requisite order concerning both legal and communal norms. What helps a company implement CSR strategy are different groups of interest called stakeholders who influence or are influenced by this organization. The



stakeholder group may include state institutions, various organizations, local communities, or individual persons (Freeman, 1984). The conditions that have to occur for CSR-practices to take place, as well as their consequences, are explained by Stakeholder theory (Clarkson, 1995). According to Story and Neves (2015), an organization that does not undertake CSR-practices and ignores stakeholders puts at risk its well-being. The construction industry, with its complex dependencies, is a good example of a two-way relationship between an organization and its many stakeholders. CSR-practices are oriented towards various stakeholder groups (Melo & Garrido-Morgado, 2012; Michelon, 2011) whose pressure on an organization can cause a permanent effect (Clarkson, 1995). In their works, You and Choi (2016) maintain that stakeholder pressure has a constructive impact on companies when it comes to the adoption of CSR-practices and creating a CSR-oriented culture. Kowalczyk (2019) proved that stakeholder pressure positively influences the CSR-culture and CSR-practice of organizations in Poland. The analysis of the body of literature presented up to this point resulted in formulating the following hypotheses:

H1: CSR-stakeholder pressure influences CSR-culture of an organization in a positive way.

H2: CSR-stakeholder pressure influences CSR-practices in a positive way.

2.2. CSR-oriented culture

The “social glue” that holds a company together is its organizational culture. It bonds people together and gives meaning to their corporate life; it enables them to share knowledge and improve their performance (Kucharska, 2017). CSR-oriented culture provides all employees with shared foundations, beliefs, and values that are identified with CSR (Linnenluecke & Griffiths, 2010). An employee’s values, norms, as well as beliefs, impact the way they view CSR (Quazi, 2003; Hur & Kim, 2017; Kucharska & Kowalczyk, 2018), e.g., switching the focus from the company’s needs to those of the stakeholders (Galbreath, 2010). A win-win strategy and contributing to the common good are the outcomes of an organizational culture that affects all operational practices and company performance that include CSR-practices and operations (Kalyar et al., 2013; Takahashi & Nakamura, 2005; You & Choi, 2016). Kowalczyk (2019) proved that CSR-culture positively influences the CSR-practice of organizations in Poland. Therefore, it is possible to hypothesize that also in the broader, European context:

H3: CSR-culture influences CSR-practices in a positive way.



2.3. Project performance

The way to manage the construction industry is primarily through projects. If a company operates efficiently, its projects bring about environmental change. There are many approaches to project management. The most popular methodologies have been designed by the Project Management Institute (PMI) and the Organization of Government Commerce (OGC). These include PRINCE2 and Project Management Body of Knowledge (PMBOK). Their goal is to deliver projects on time, in the proper scope, and on budget. The probability of effective project implementation, as a result of applying a particular project management methodology, is even greater as all of the above-listed approaches obligate their participants to preserve a continued business justification (PRINCE2, 2009). The success of a project is measured by its final performance, and in the case of the construction industry, it is a complete and ready-to-use physical structure such as a road, a building, or a bridge. The theme of professional and social competences that support the successful delivery of construction projects came up in the works of Omar and Fayek (2016). Kowalczyk (2019) proved that CSR-practice positively influences construction project performance in Poland. Drawing on these discoveries, the hypothesis has been developed as follows:

H4: CSR-practices influence project performance in a positive way.

Control variable

Based on Kowalczyk (2019) and Kowalczyk and Kucharska's (2019) findings, to achieve the aim of this work, the author decided to include "country" as a control variable of the study. The reason behind this was to explore not only the general difference between the results obtained by Kowalczyk (2019) and the current study, or the stakeholder pressure as the main influencing power of CSR-practice in Europe, but also to check directly how the "country" factor matters for CSR-practice. Hence, the hypothesis has been formulated as follows:

H5: The "country" factor influences CSR-practices.

Expected mediation

It is also necessary to verify the mediation of CSR-culture in the relationship between stakeholder pressure and CSR-practice observed by Kowalczyk (2019). Therefore, the hypothesis has been developed as follows:

CSR-pressure->CSR-culture->CSR-practice

Figure 3.2 summarizes all the theoretical assumptions listed above.

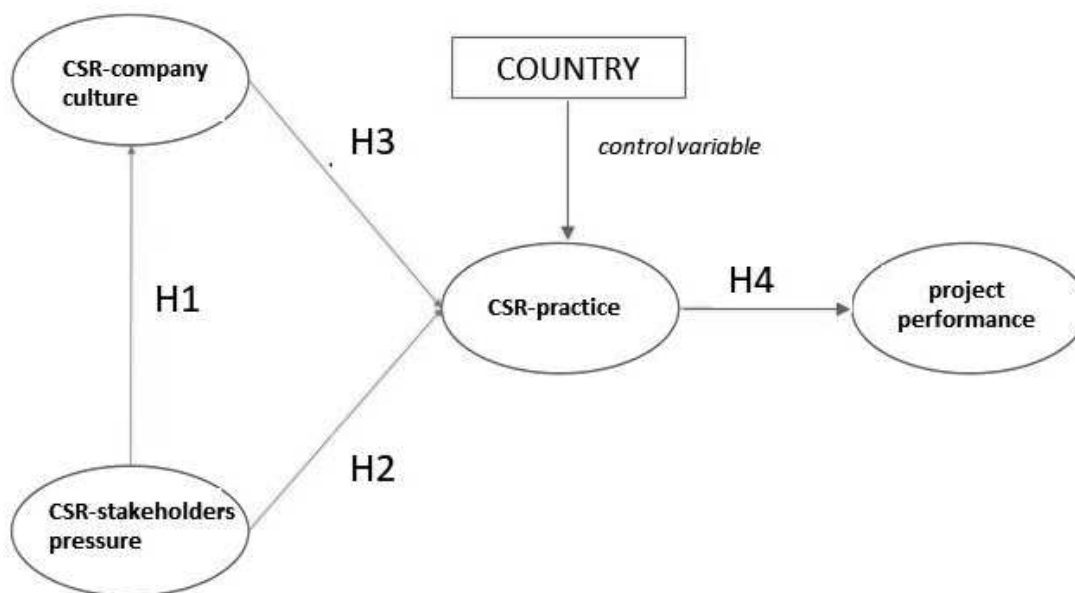


Figure 3.2. Conceptual framework – visualization

Source: Kowalczyk (2019).

3. Research approach and methods

To achieve the aim of this study, data were obtained electronically using a self-report questionnaire, mainly via emails addressed to HR departments in construction companies. Therefore, the method of sampling was convenience. Respondents answered questions adapted from validated measurement scales for all constructs included in the theoretical model. Appendix 1 lists the sources of the scales and statements, as well as reliabilities for each of the used constructs. Participants responded to statements based on a 7-point Likert scale using self-report questionnaires. To determine whether the respondents had the necessary knowledge to complete the questionnaire correctly, they had to have been working in the construction industry for more than one year and be familiar with the company's results at a general level during this period. Before undertaking the main survey, a pilot study was run to improve the flow and understanding of the statements. Data were collected between April and June 2019. In total, 282 valid cases were gathered across Europe, including France (20%), Great Britain (21%), the Netherlands (19%), Germany (20%), and Poland (20%). The sample was controlled to gather an equal number of cases from each country. Most respondents were men (96%) aged 26–35 (43%) or 36–45 (32%) who worked as team members (78%) in large-sized (39%) or medium-sized (28%) companies. The convenience method of sampling

was employed in this research. HR departments of construction companies were asked for help, and respondents answered voluntarily. The Kaiser–Meyer–Olkin (1974) test of the sample’s adequacy to the measured factors was applied, and the obtained result was 0.923, which is considered excellent. The total variance explained by the sample was 74%, which was also positive (Hair et al., 2010; Byrne, 2016). Harman’s single-factor test Podsakoff and Organ (1986) was applied. The obtained result was 48%; at less than 50%, the level of bias was considered acceptable. Structural equation modeling was used to analyze the data. Measurement and structural Confirmatory Factor Analysis (CFA) models were developed for the theoretical model shown in Figure 3.2, which were then estimated, and their goodness of fit was assessed. The maximum likelihood method (ML) was used to estimate the model. According to the CFA, the model in Figure 3.3 fits the data well.

The level of model reliability at 2.77 is a good result, with the reference point of ≤ 5 (Wheaton, 1977). The models fit the data at 0.80, based on the test of approximation average error RMSEA, meets the reference values ≤ 0.08 , after Stieger and Lind (1980). The results for the goodness of fit approached 1 (Bollen, 1986, 1989) and TLI = 0.924, CFI = 0.941. They confirm the assumed quality. The value of AVE (Average of Variance Extracted) is 0.5, which is acceptable (Hair et al., 2010). All the details of the tests are presented in Appendix 1. A goodness of fit value for the model came close to 1 (Bollen, 1986, 1989), which corroborates the quality mentioned earlier.

4. Results

Table 3.14 presents the summary of descriptive statistics and constructs the correlation matrix with the square root of the AVE on the diagonal to verify if used to the empirical model variables supercharged one another or not. It has been noted that stakeholder pressure supercharged CSR-practice a little bit. The correlation between these variables is quite high at 0.834, but squared AVE of CSRsp is only 0.01 lower than the noted correlation. Hence, the procedure of data analysis continued.



Table 3.14. Descriptive statistics and constructs correlation matrix with the square root of the AVE on the diagonal

Variable	Mean	SD	AVE	CR	Cronbach alpha	CSRsp	CSRc	CSRp	PP
CSRsp	5.19	1.07	0.69	0.86	0.867	0.833			
CSRc	5.18	1.13	0.67	0.86	0.855	0.790	0.816		
CSRp	5.34	1.04	0.60	0.82	0.848	0.834	0.810	0.774	
PP	5.33	1.09	0.59	0.81	0.810	0.680	0.645	0.766	0.768
country	n/a	n/a	n/a	n/a	n/a	.083	.065	.226	.18

Note: Abbreviations: CSRsp – CSR-stakeholder pressure; CSRc – CSR-company culture; CSRp – CSR-practice, PP – project performance; n/a – not applicable.

All the formulated hypotheses are confirmed (Table 3.15). The obtained results prove that stakeholder pressure has a strong significant impact on CSR-practice, and finally also on project performance in the construction industry in Europe. The mediated effect of CSR-oriented company culture on stakeholder pressure and CSR-practice also is confirmed. Moreover, the imputed control variable – the “country” influence on CSR-practice also obtained a significant result (Figure 3.3). It is worth highlighting that the obtained $R^2=.63$ result for the project performance variable means that the presented model explains the phenomena in 63%, which is good.

Table 3.15. Verification of hypotheses

Hypothesis	β	t-value	p-value	Hypotheses' verification
H1 CSR-stakeholder pressure influences CSR-culture in the company in a positive way.	0.79	10.88	***	supported
H2 CSR-stakeholder pressure influences CSR-practices in a positive way.	0.56	5.72	***	supported
H3 CSR-culture influences CSR-practices in a positive way.	0.36	3.80	***	supported
H4 CSR-practices influence project performance in a positive way.	0.79	10.17	***	supported
H5 Country factor influences CSR-practices.	.16	3.73	***	supported
Mediation analysis	Total effect	Direct effect	Indirect effect	Mediation observed
CSR-pressure->CSR-culture->CSR-practice	.84***	.55***	.28***	complementary mediation

Note: n = 282 cases, Chi-square = 197.218 CMIN/df = 2.77, df = 71, TLI = .924, CFI = .941, RMSEA = .080, CI (.066–.093) estimation standardized, ML, ***p < 0.001

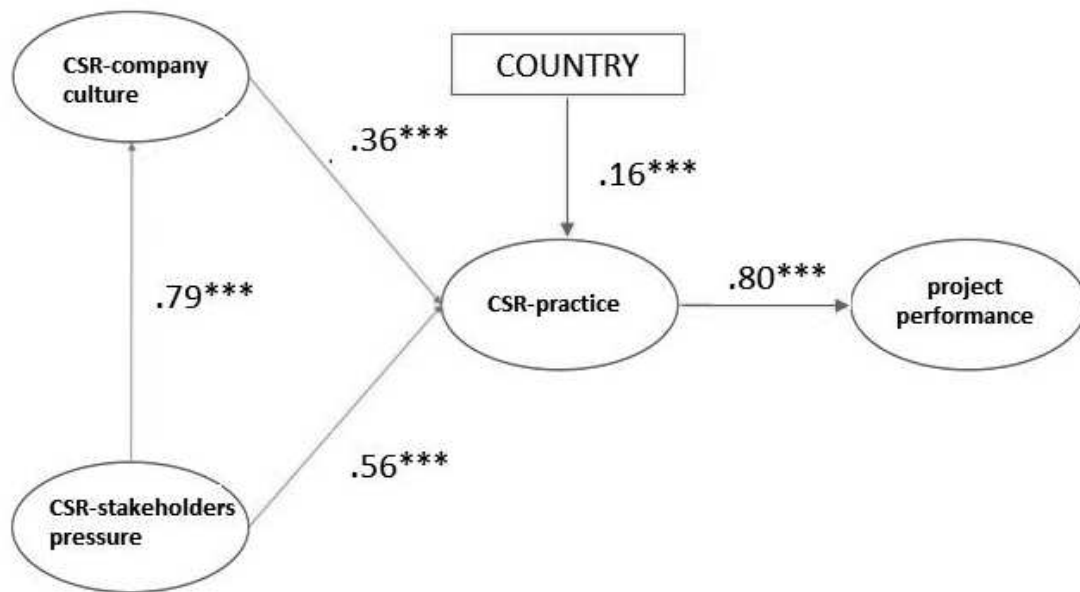


Figure 3.3. Results

Note: n = 282 cases, Chi-square = 197.218 $CMIN/df = 2.77$, $df = 71$, $TLI = .924$, $CFI = .941$, $RMSEA = .080$, $CI (.066-.093)$ estimation standardized, ML, $***p < 0.001$.

5. Discussion, limitation and further research

Generally, the results of this study confirm all the findings gathered by Kowalczyk (2019). Stakeholder pressure is a significant power of influence on CSR-practices, not only in Poland and Germany but also in other European countries, especially when facilitated by the company's culture. As was pointed out in the introduction to this paper, company culture plays an important role in the construction industry managed by projects, and mediates the relationship that takes place between environmental pressure and CSR-practices. The observed mediated effect of CSR-oriented company culture on stakeholder pressure and CSR-practice is even stronger than noted by Kowalczyk (2019). It has been confirmed that stakeholders put strong pressure on construction businesses across Europe to make them socially and environmentally responsible. CSR awareness is spread and increased by education, and mass media is gaining increased significance for "the better good" of all European societies. Sroka and Szanto (2018) pointed out that companies in central European countries today want to be perceived as ethical. This paper demonstrates that external stakeholder's power pressure helps profit-oriented organizations efficiently change their focus. The most noticeable result to emerge from the data shows a strong correlation between CSR-practice and project performance. However, it matches the level obtained by Kowalczyk (2019). We cannot argue that the construction industry has an impact on the



environment. As a result, it is not hard to imagine that the local community's disapproval and objections can entirely ruin a project's timeline, together with its budget, and the scope of planned works. Therefore, it is understandable that CSR-practices have an impact on the performance of a construction project in a significant way. Based on the obtained results, it may be concluded that it is a consistent phenomenon across Europe. The undisputed value of the achieved measures is that the $\beta=0.83$ (Poland), as well as $\beta=0.80$ (Europe), proves to us the power of CSR-practices. The main limitation of the study was choosing a non-random sampling method; however, it would be very difficult to obtain a European sample in any other way.

It is worth highlighting that the model presented in this study links CSR-practices and project performance in an uncomplicated way. The earlier conclusions of Kucharska and Kowalczyk (2018, 2016a, b) could lead to the conclusion that the relationships between CSR-practices and construction project performance are more intricate, chiefly because the project performance variable R^2 equals 0.63. This value indicates that 37% of other factors that could be important for project performance have not been properly taken into consideration by this study. This knowledge gap needs to be bridged and justifies further research. Another motivation for the continuation of the presented studies is included in the control variable "country" $\beta=0.16$ (***) , which confirms that the country factor matters for CSR-practice across Europe. However, the current study does not present all aspects of the potential differences. Further studies are required to understand it more in-depth.

6. Conclusion

The study sought to investigate critically how CSR-stakeholder pressure, CSR-company culture, and CSR-practices affect one another in the European construction industry. The findings of the research indicate that the most powerful factor that has an impact on CSR-practice is stakeholder pressure. Another conclusion is that there is a strong connection between CSR-practices and project performance. It proves that the construction industry, due to its environmentally invasive nature, simply must not withhold the implementation of CSR strategies, for the sake of its business' successful operation. The construction industry is a good example of a close-knit dependency between the success of a society and a business. To understand it better further in-depth studies are needed.

References

- Alotabi, A., Edum-Fotwe, F.T., & Price, A. (2019). Identification of social responsibility factors within mega construction projects. *International Journal of Engineering Management and Economics*, 13(1). <https://dspace.lboro.ac.uk/2134/36614>
- Bedford, D.A.D., & Kucharska, W. (2020). *Aligning Business and Information Strategies and Cultures*, IGI Global (in press).
- Bollen, K.A. (1986). Sample size and Bentler and Bonett's non-normed fit index. *Psychometrika*, 51(3), 375-377.
- Bollen, K.A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17(3), 303-316.
- Byrne, B. M. (2016). *Structural Equation Modeling with Amos*. New York, NY: Routledge.
- Eisingerich, A. B., & Rubera, G. (2010). Drivers of brand commitment: A cross-national investigation. *Journal of International Marketing*, 18(2), 64–79. <https://doi.org/10.1509/jimk.18.2.64>
- Falck, O., & Heblich, S. (2007). Corporate social responsibility: Doing well by doing good. *Business Horizons*, 50(3), 247-254. <https://doi.org/10.1016/j.bushor.2006.12.002>
- Freeman, R.E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- Gemino, A., Reich, B.H., & Sauer, C. (2015). Plans versus people: Comparing knowledge management approaches in IT-enabled business projects. *International Journal of Project Management*, 33(2), 299-310.
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate Data Analysis: A Global Perspective*. Upper Saddle River, NJ: Pearson.
- He, H., & Li, Y. (2011). The mediating effect of brand identification and the moderating effect of service quality. *Journal of Business Ethics*, 100(4), 673–688. <https://doi.org/10.1007/s10551-010-0703-y>
- Hur, W. M., & Kim, Y. (2017). How does culture improve consumer engagement in CSR initiatives? The mediating role of motivational attributions. *Corporate Social Responsibility and Environmental Management*, 24, 620–633. <https://doi.org/10.1002/csr.1432>
- Kaiser, H. (1974). An index of factor simplicity. *Psychometrika*, 39, 31–36. <https://doi.org/10.1007/BF02291575>
- Kalyar, N., Rafi, N., & Kalyar, A.N. (2013). Factors affecting corporate social responsibility: An empirical study. *Systems Research and Behavioral Science*, 30, 495–505.
- KOF. (2017). European construction industry is booming. Retrieved 18 October, 2018, from <https://www.kof.ethz.ch/en/news-and-events/media/press-releases/2017/11/europeanconstruction-industry-is-booming.html>
- Kowalczyk, R. (2019). Relationships between stakeholder pressure, culture, and CSR-practices in the context of project management in the

- construction industry in Poland. *Proceedings of the 33rd International Business Information Management Conference IBIMA*, Granada, Spain.
- Kowalczyk, R., & Kucharska, W. (2020). Corporate social responsibility practices incomes and outcomes: Stakeholders' pressure, culture, employee commitment, corporate reputation, and brand performance. Polish–German cross-country study. *Corporate Social Responsibility and Environmental Management* (ahead of print). <https://doi.org/10.1002/csr.1823>
- Kucharska, W. (2017). Relationships between trust and collaborative culture in the context of tacit knowledge sharing. *Journal of Entrepreneurship, Management and Innovation*, 13(4), 61-78. <https://doi.org/10.7341/20171344>
- Kucharska, W., & Kowalczyk, R. (2016a). Trust, collaborative culture and tacit knowledge sharing in project management – A relationship model. In *Proceedings of the 13th International Conference on Intellectual Capital, Knowledge Management and Organisational Learning*, 159-166.
- Kucharska, W., & Kowalczyk, R. (2016b). Tacit knowledge sharing and creativity: How to derive innovation from project teams?. In *Proceedings of the 11th European Conference on Innovation and Entrepreneurship*, 444-252.
- Kucharska, W., & Kowalczyk, R. (2020). How to achieve sustainability?– Employee's point of view on company's culture and CSR practice. *Corporate Social Responsibility and Environmental Management*, 26(2), 453-467. <https://doi.org/10.1002/csr.1696>
- Leon, R.D. (2017). Developing entrepreneurial skills. An educational and intercultural perspective. *Journal of Entrepreneurship, Management and Innovation*, 13(4), 97-121. <https://doi.org/10.7341/20171346>
- Linnenluecke, M. K., & Griffiths, A. (2010). Corporate sustainability and organizational culture. *Journal of World Business*, 45, 357–366.
- McPherson, M. (2019). Think non-ethnic, but act ethnic: Perspectives from South Asian entrepreneurs. *Journal of Entrepreneurship, Management and Innovation*, 15(2), 117-152. <https://doi.org/10.7341/20191525>
- Melo, T., & Garrido-Morgado, A. (2012). Corporate reputation: A combination of social responsibility and industry. *Corporate Social Responsibility and Environmental Management*, 19, 11–31. <https://doi.org/10.1002/csr.260>
- Michelon, G., Boesso, G., & Kumar, K. (2013). Examining the link between strategic corporate social responsibility and company performance: An analysis of the best corporate citizens. *Corporate Social Responsibility and Environmental Management*, 20, 81–94. <https://doi.org/10.1002/csr.1278>
- Omar, M.N., & Fayek, A.R. (2016). Modeling and evaluating construction project competencies and their relationship to project performance. *Automation in Construction*, 69, 115-130.
- Phuong, Q.D., & Harima, A. (2019). The impact of cultural values on Vietnamese ethnic entrepreneurs in Germany. *Journal of Entrepreneurship, Management and Innovation*, 15(2), 57-84. <https://doi.org/10.7341/20191524>

- Podsakoff, P. M., & Organ, D. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531–544. <https://doi.org/10.1177/014920638601200408>
- PRINCE2. (2009) TSO, Great Britain.
- Quazi, A.M. (2003). Identifying the determinants of corporate managers' perceived social obligations. *Management Decision*, 41, 822–831.
- Sroka, W., & Szanto, R. (2018). Corporate social responsibility and business ethics in controversial sectors: Analysis of research results. *Journal of Entrepreneurship, Management and Innovation*, 14(3), 111-126. <https://doi.org/10.7341/20181435>
- Steiger, J. H., & Lind, J. C. (1980). Statistically based tests for the number of common factors. In *Annual Meeting of the Psychometric Society* (p. 758). Iowa City, IA.
- Story, J., & Neves, P. (2015). When corporate social responsibility (CSR) increases performance: Exploring the role of intrinsic and extrinsic CSR attribution. *Business Ethics: A European Review*, 24(2), 111–124. <https://doi.org/10.1111/beer.12084>
- Takahashi, T., & Nakamura, M. (2005). Bureaucratization of environmental management and corporate greening: An empirical analysis of large manufacturing firms in Japan. *Corporate Social Responsibility and Environmental Management*, 12, 210–219.
- Wheaton, D. E., Muthen, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. *Sociological Methodology*, 8, 84–136.
- Whelan, G. (2007). Corporate social responsibility in Asia: A Confucian context. In S. May, G. Cheney, & J. Roper (Eds.), *The Debate over Corporate Social Responsibility* (pp. 105–118). New York: Oxford University Press.
- Yu, Y., & Choi, Y. (2016). Stakeholder pressure and CSR adoption: The mediating role of organizational culture for Chinese companies. *The Social Science Journal*, 53, 226-235. <https://doi.org/10.1016/j.soscij.2014.07.006>



Appendix

Appendix 1. Scales and their reliabilities

Construct	Scale	Reliability assessment
CSR-oriented culture Source: You and Choi (2016)	Employees have a strong degree of awareness of CSR-culture Our leader believes and values the adoption of CSR-culture Our organization is developing a strategy on CSR activities Our organization has a CSR-training program for employees	AVE = 0.67 CR = 0.85 Cronbach alpha = 0.855
CSR-pressure of stakeholders Source: You and Choi (2016)	Employees put pressure on us to maintain CSR-practices Customers put pressure on us to maintain CSR-practices Company owners put pressure on us to maintain CSR-practices Partners put pressure on us to maintain CSR-practices The government puts pressure on us to maintain CSR-practices	AVE = 0.69 CR = 0.86 Cronbach alpha = 0.867
CSR-practice Adapted from Eisingerich and Rubera (2010) He and Li (2011)	The organization is socially responsible My company cares about the local community It is important to act ethically The company cares about employees	AVE = 0.60 CR = 0.82 Cronbach alpha = 0.848
Project performance Source: Gemino et al. (2015), Babbie (2013)	I was informed that the Sponsor of the project was satisfied with the project results I was informed that the Sponsor of the project was satisfied with the project benefits I received feedback that the Sponsor of the project assessed the project positively	AVE = 0,59 CR = 0,81 Cronbach alpha = 0.810

Biographical note

Rafał Kowalczyk is the President of the Board of the Pomeranian Technology and Research Center. He is an author and co-author of several scientific publications in the field of CSR, project, and organizational management. Recently, his most important publications are *How to achieve sustainability? Employee's point of view on a company's culture and CSR practice*. *Corporate Social Responsibility and Environmental Management* (2019), *Corporate social responsibility practices incomes and outcomes: Stakeholders' pressure, culture, employee commitment, corporate reputation, and brand performance*. In addition, a Polish–German cross-country study. He has managed many construction projects and implementation projects, especially in the area of



the analysis and design of organizational structures, management system, innovative technologies, and quality systems in companies in the construction and energy industries.

Citation (APA Style)

Kowalczyk, R. (2020). How does stakeholder pressure influence CSR-practices? A construction industry model based on a European sample. In A. Ujwary-Gil & M. Gancarczyk (Eds.), *New Challenges in Economic Policy, Business, and Management* (pp. 319-333). Warsaw: Institute of Economics, Polish Academy of Sciences.