

Business responsibility and effectuation in internationalized SMEs

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Abstract

Sustainability is a global trend that requires balancing environmental, social, and financial concerns. Issues related to social and environmental responsibility have attracted growing research interest in the research domains on small businesses and large multinational companies, but they are yet to be explored in the context of internationalized small and medium-sized enterprises (SMEs), which experience the liabilities of foreignness and smallness but whose share of and impact on the world economy are growing. This study connects entrepreneurial decision-making with business responsibility and explores the effects of effectual decision-making logic on responsible business practices (RBPs) and their outcomes in the context of internationalized SMEs.

The empirical part of the study was based on the survey data from a sample of 179 Finnish SMEs. The results obtained via linear regression modeling showed that a more pronounced effectual logic can lead to more RBPs in internationalized SMEs. The RBPs, in turn, were found to have a positive impact on the competitive performance of these SMEs, thus serving as mediators. This study contributes to the literature on responsible decision-making in both the research areas of internationalization of SMEs and small business responsibility.

Keywords: Responsible Business Practices, Small- and medium-sized enterprises, Internationalization, Effectuation

INTRODUCTION

Internationalization and the growing concerns about business responsibility are two of the main trends in the business world today. Firms are under increasing pressure to internationalize their activities as a vehicle for growing revenue and profit. They are simultaneously called upon to contribute to the public good by means of environmental and social responsibility. However, the relationship between environmental performance and financial performance has been found to be ambiguous and context-dependent (Albertini, 2013), which calls for more elaboration on the contexts and relationships under which entrepreneurship and the environment not only co-exist, but also where entrepreneurship can benefit the environment globally. Research on international business has tended to explore the business responsibility issues, often referred to as corporate social responsibility (CSR), almost squarely and primarily in the context of large multinational corporations (Pisani et al., 2017) neglecting the fact that small- and medium-sized enterprises (SMEs), entrepreneurial as they are, are also increasingly driven to internationalize and, in doing so, to account for responsibility. This constitutes a gap for the international entrepreneurship (IE) research in particular.

Indeed, it is only recently that research shedding light on the link between international operations and environmental and social responsibility in SMEs has begun to emerge. In a recent study, Ayuso and Navarrete-Báez (2018) found that international and entrepreneurial orientations may influence SMEs' likelihood to engage in sustainable development. A few existing studies on these topics have also suggested that SMEs' proactive environmental strategies positively influence their export intensity and competitive performance (Martín-Tapia et al., 2010), and that social responsibility in SMEs can contribute to their international performance both directly and indirectly (Uzhegova et al., 2018). However, these studies have mostly explored the topic from the point of view of a firm's strategy and

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capabilities, and we have yet to outline how entrepreneurial decision-making is related to sustainable practices and development in international entrepreneurship. Extant research on responsible business conduct has proposed the ethical decision-making model (Schwartz, 2016) and developed a measurement scale for the managerial ethical profile (Casali, 2011) arguing that decision-making and business responsibility are interlinked but not considered the implications for international SMEs. In turn, IE research has been dealing with the outcomes of entrepreneurial decision-making for (often small) international organizations (Ahi et al., 2017; Galkina & Chetty, 2015), while not including the rising business responsibility concerns in their models. This constitutes an important omission in the literature, as the extant research has not assessed how responsibility activities and decision-making logic in IE are linked.

We have addressed these gaps in the literature on entrepreneurship and environment by examining the role of effectuation (Sarasvathy, 2001) in responsible business practices (RBPs) and their influence on competitive performance. We drew on two distinct streams to build our conceptual model. First, we took, as a point of departure, the research on SME internationalization and responsibility that both have demonstrated the importance of the owner–managers’ role in the decision-making (Child et al., 2017; Kiefhaber et al., 2018). In general, most of the studies that introduced effectuation into IE did so by linking both through a network perspective (Galkina & Chetty, 2015; Kujala & Törnroos, 2018; Laine & Galkina, 2017; Prashantham et al., 2019). The literature on small business responsibility has emphasized the importance of strategic planning (Avram & Kühne, 2008; Nejati et al., 2017), with scarce evidence that social enterprises practice effectuation (in this way overcoming the lack of resources) along with social responsibility, which is ingrained in owners’ personal beliefs about the purpose of the enterprise (Anderson et al., 2019).

There are three characteristics of entrepreneurial internationalization that make applying effectuation to the study of it distinct and specifically suitable: cross-border uncertainty, limited resources, and network dynamics. All three complicate the creation and development of international business even more than in a domestic environment (Sarasvathy et al., 2014). A comparison between domestic and internationalized SMEs has demonstrated that the latter are more innovative and their owners more growth-oriented (Spence et al., 2011). SMEs are also known to experience liabilities when operating internationally: the liability of foreignness arising from additional costs that a firm operating abroad incurs, such as firm-specific costs based on unfamiliarity with the host country culture and business practices (Zaheer, 1995), as well as the liability of newness arising from their inexperience and lack of an established track record (Karagozoglu & Lindell, 1998). For these reasons, conducting business internationally requires decision-making in an unstable and risky environment with limited resources, much more so than domestic-only SMEs are faced with. For SMEs, not only internationalization but also involvement in responsible practices are resource-demanding processes (Perez-Sanchez et al., 2003), and due to their inherent lack of resources, SMEs focusing on international operations may have to make trade-offs elsewhere (Vuorio et al., 2020). Summing up, internationalized SMEs provide an interesting research context for studying the outcomes of entrepreneurial decision-making, thus answering the recent call to follow the translation of effectuation into firm competitiveness (Chen et al., 2021).

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Considering this, our study sought to expand these research streams by exploring the approach of SMEs through an effectual rather than a strategic approach towards responsibility. We thus posited the following research question for this study: *What is the role of decision-making logic in explaining responsible business practices (RBPs¹) of SMEs?* By integrating the research on decision-making and on responsible business in SMEs, we hypothesized that effectuation and RBPs will have a positive effect on competitive performance outcomes and tested these predictions using a sample of 179 SMEs from Finland.

Our results contribute to the existing literature in several ways. First, to the best of our knowledge, our study is the first to follow the outcomes of effectuation on RBPs in the international SME context, which is more specific due to the greater uncertainty associated with international operations. Second, by examining the impact of RBPs on competitive performance, the results of our study highlight the importance of effectual decision-making logic and RBPs in organizational level outcomes. The remainder of this paper is organized as follows. We first present the theoretical background on effectual decision-making, international operations, and business responsibility, and build the hypotheses. We then describe the methodology, including data collection and data analysis, and how we tested the conceptual model of the study, and finally present the analyses' results. We conclude with a discussion of the implications and limitations of this study as well as propose future research avenues.

THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Business responsibility and entrepreneurial decision-making logic in SMEs

We start with the notion of CSR, which is important for firms regardless of their size. The view of business responsibility actions aimed and/or driven by other stakeholders, which are defined as groups or individuals with three attributes (power, legitimacy, and urgency) who affect or are affected by the achievement of the organization's objectives, and is in line with stakeholder theory. This stakeholder view is common for CSR studies but is rarely used in international business research: however, there is an exception – a study by Park and Ghauri (2015), which investigated the CSR drivers in small subsidiaries of multinational enterprises (MNE).

SMEs' responsibility as contrasted to that of MNEs has been found to be driven more by intrinsic/altruistic views of owner–managers and their moral commitment rather than by extrinsic/financial ones, this being especially prominent for social and environmental aspects (Looser & Wehrmeyer, 2016). The manager's commitment to RBPs is strongly rooted in individuals' own values and ethics (Lawrence et al., 2006) as well as decision-making and logic (Blombäck & Wigren-Kristoferson, 2014; Schwartz, 2016). With an assumption that decision-makers in SMEs are central to the start of all business activities (Hammann et al., 2009), the decisions taken by entrepreneurs can be extrapolated from the individual to the organizational level (Dincer & Dincer, 2013). In SMEs, responsibility-related activities tend to be

¹ With CSR often being an ill-defined concept with a wide array of definitions, in this study, we referred to RBPs, which we consider to be in line with CSR. We followed Ryan et al. (2010) in that RBPs is a more accurate term for SMEs, which accounts for different motivations for engagement with and methods of operationalizing business responsibility.

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informal and have a non-structured character (Lawrence et al., 2006; Santos, 2011). For example, in a study by Blombäck and Wigren-Kristoferson (2014, p. 304), one CEO opened up about company's RBPs towards the local community: "It's more a question of wanting to help, financially. I don't believe we gain so much from it. It's not something that, well, [it's] not a strategy that we have." Thus, to create opportunities instead of exploring them and to cope with the resource scarcity, entrepreneurs commonly utilize effectual logic (Read et al., 2009) instead of strategizing. Effectuation is a specific cognitive science-based logic of entrepreneurial expertise (Sarasvathy, 2001) that conceptually may be located under the larger umbrella of decision-making under uncertainty. The theory of effectuation is defined as the means-driven logic derived from the principles of experimentation and affordable loss, thus providing a useful lens through which to view entrepreneurial decision-making. According to Sarasvathy (2001, p. 245), effectuation can be defined as processes that "take a set of means as given and focus on selecting between possible effects that can be created with that set of means." Effectual entrepreneurship results in the board members or the owner-manager himself determining what the company does rather than what needs to be done and thus getting selected people on board (York et al., 2016). This is in contrast with causation, which is a more traditional view of strategic decision-making in which fixed plans are made to seek and predict how the future market environment will function. Thus, causation involves developing a strategy from that starting point (Sarasvathy, 2001). Sarasvathy (2008) noted that the role of effectuation is pronounced in environments with market environment uncertainty and for new ventures.

For the first decade after Sarasvathy's foundational article, the research was slow to follow it up and conduct empirical studies that would apply and test the theory of effectuation (see Perry et al., 2012). However, as Fisher (2012) noted, effectuation had arisen as an important perspective in the entrepreneurship domain. Since then, however, the role of effectual logic in the IE domain has also been found to be important (e.g. Sarasvathy et al., 2014) in entrepreneurial internationalization (Andersson, 2011; Kalinic et al., 2014). In addition, effectuation has been linked with the entrepreneurial identity in the organizations that pursue both environmental and commercial goals (York et al., 2016). Zhang and Swanson (2014), in their review on social entrepreneurship, proposed that, for a social enterprise to achieve sustainability, it must develop effectuation processes and effectual logic. Indeed, Dwivedi and Weerawardena (2018) have demonstrated that social entrepreneurs, when pursuing new ways of creating value for targeted stakeholders, actively scan the external environment and predict unexpected shocks under the uncertainty, thus employing effectual logic to utilize the existing resources optimally. Moreover, the effectuation process used by expert entrepreneurs can be an effective approach for the integration of responsibility in SMEs because of its simplicity, ease of implementation, and affinity towards financial loss minimization from failed initiatives, as compared with the predictive or causal approach (Grimm & Amatucci, 2013). We thus focused on entrepreneurial behavior in resource-constrained environments (Dwivedi & Weerawardena, 2018), which in this study were SMEs with international operations, and hypothesized the following:

H1. The higher the effectual logic in internationalized SMEs, the more they engage in responsible business practices.

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Competitive performance in internationalized SMEs

CSR is known to result in competitive advantages through, for instance, investor relations management, developing a reputation, or seeking win-win outcomes by energy saving and environmentally sound production practices to reduce cost and risk. Small business responsibility is known to lead to various improvements in different types of performance (Nejati et al., 2017) including a competitive one both directly and indirectly (Herrera Madueño et al., 2016; Martínez-Martínez et al., 2017). In these companies, CSR programs may both directly and indirectly (through innovation, learning orientation, and performance) affect the competitive advantage (Ratnawati et al., 2018). Turyakira et al. (2014) suggested a positive relationship of workforce-, society-, market- and environment-oriented CSR on the competitiveness of SME. However, international operations may add specificity to the context to study the effect of RBPs on firm competitiveness. CSR strategy tends to differ and lead to various outcomes, which vary between domestic-only companies and those with a global presence (i.e., MNEs). The greatest variation has been found in different CSR areas with most noticed in employees' relations and social and community involvement and the least found in environmental practices (Mijatovic & Stokic, 2010). In such a large international firm context, the commitment of resources to CSR may serve MNEs as an instrument for gaining trust and legitimacy, which both contribute to an improved market position (Hadjikhani et al., 2016). In addition, international geographic diversification increases social performance, which, in turn, positively impacts the reputation of MNEs (Aguilera-Caracuel et al., 2017). In view of the lack of evidence in SME context, in this study, we considered different RBPs to gain insights into their impact on internationalized SMEs' competitive performance. Hence, we posited:

H2. The higher the engagement in responsible business practices, the higher the competitive performance of internationalized SMEs.

Conceptual model

Strategic planning and orientation have been found to lead to a competitive advantage in SMEs achieved through RBPs (Avram & Kühne, 2008; Nejati et al., 2017); however, following a model suggested by Hammann et al. (2009), we would argue that decision-makers' logic leads to an increase of business responsibility resulting in the improvements of SME competitiveness. We tested the resulting theoretical model presented in Figure 1 in the context of internationalized SMEs.

(Figure 1 here)

METHODOLOGY

Sample and data collection

In order to test the hypotheses, we acquired a sample of internationally operating SMEs through an online survey from November 2017 to February 2018. We defined SMEs according to the definition by European Commission (2015) with an employee count being less than 250, and a turnover of fewer than 50 million euros or with a balance sheet total below 43 million euros. We chose Finland as the empirical context for the study because of the prevalence of SMEs that, due to the small domestic market, are often faced with the necessity to seek international growth (Nummela et al., 2014). Moreover, Finland has been found to be an appropriate context in which to study both effectuation

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(Galkina & Chetty, 2015) and SME's business responsibility (Lähdesmäki & Suutari, 2012; Uzhegova et al., 2018, 2019). We collected the empirical data in two phases. First, an initial sample of 1,000 firms listed in the Bisnode Selector database (see www.bisnode.com) was drawn up. This list included all exporting companies originating from Finland and provided a cross-sectional sample for drawing generalizations and controlling for specific industry sectors in the analysis. We then supplemented this list with a sample of firms from engineering and software industries, drawn from the Amadeus online database (see <https://amadeus.bvdinfo.com/>). In both phases, we delimited the sample specifically to SMEs. The initial contact to the sample firms was handled by four research assistants with background in business studies. They first contacted the firms via phone to ascertain that the firm and the potential respondent fit the criteria for the study (the most knowledgeable persons in internationally operating independent SMEs). To the firms that were reached, deemed to fit the criteria, and agreed to participate in the study, we sent the link to the online questionnaire in the Qualtrics service. The items in the survey were translated first from English to Finnish and then back-translated with the help of a professional language editor. The initial phone contact was followed up with the email reminders at two-week intervals to those firms which had agreed to participate, but had not responded. In order to ensure the representativeness of the data across time and an absence of biases between early and late respondents, we conducted *t*-tests among the key variables in the study.

Through this process, we reached a total of 1,821 SMEs. Of these, 1,387 were found valid, and 1,032 of those agreed to participate in the study. When the data collection was concluded, we had received a total of 365 responses (26% total response rate), indicating a sufficient response rate for an empirical entrepreneurship study (Rutherford et al., 2017) that can be considered typical in this field (cf. Newby et al., 2003). To test the hypotheses in this study, we then selected the responses that were fully or nearly fully (over 90%) filled out and that had full responses for the constructs used in this study (effectuation, responsible business practices, and the performance items). The final effective sample used to test the hypotheses included 179 firms in total, with an average age of 29 years, an employee headcount of 51, and an average start of internationalization of 11 years after the firm foundation, that operated mainly (99% of turnover) in business-to-business markets. Thus, the sample was considered representative to internationalizing Finnish SMEs in general (Kuivalainen et al., 2015).

Measures

We used a seven-point Likert scales (1 = "strongly disagree" to 7 = "strongly agree") to measure the key variables. In order to develop the measures, we conducted principal component analysis (PCA). The role of the PCA is to extract the information from a series of items measuring a given operationalized construct, and as a result, represent it as a set of orthogonal variables, known as principal components, through patterns of similarities of the observations (Abdi & Williams, 2010). In other words, the PCA of a data matrix "extracts the dominant patterns in the matrix in terms of a complementary set of score and loading plots" (Wold et al., 1987, p. 50). PCA was used here for data reduction and variable selection, two of the main goals of PCA (Wold et al., 1987).

For all the measures, we conducted PCA using a varimax rotation. The variables' items and their phrasing are presented in Appendix 1. We investigated convergent validity regarding the values of the average variance extracted (AVE), and all of them were greater than the minimum value of 0.5 proposed by Fornell & Larcker (1981). Internal

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consistency reliability was evaluated using the Cronbach's α , and all values except for effectuation were higher than the minimum 0.7 established by Nunnally (1978). The correlation coefficients and variance inflation factors (not tabulated, but all below 10, [Hill & Adkins, 2007]) did not indicate any issues with multicollinearity. Finally, since the central variables in our models were based on Likert scale items, we took measures to mitigate the threat of common method bias. In doing so, we sought to adhere to Podsakoff et al. (2012) and Chang et al. (2010). Namely, we included negatively worded items in the questionnaire and placed the different constructs within the large questionnaire (cf. Chang et al., 2010). We also conducted Harman's one factor and marker variable (Lindell & Whitney, 2001) tests to mitigate and concerns for *ex post* common method variance issues.

Effectuation

We adopted a measure for effectuation from (Chandler et al., 2011)(Chandler et al., 2011), which sees it as a multidimensional formative construct with three associated sub-dimensions: experimentation - EFF_EXP (EFF_1, EFF_3, EFF_4), affordable loss - EFF_AFL (EFF_5, EFF_6, EFF_7), and flexibility - EFF_FLEX (EFF_9, EFF_10, EFF_11). This typology is used in studies of decision-making in internationalized SMEs (Nummela et al., 2014).

RBPs

Depending on its specific motivations, a company may engage in RBPs, for example, to enhance customer appeal or mitigate risk, which leads to prioritization of one group of stakeholders over another (Nybakk & Panwar, 2015). Thus, the measure for RBPs in this study was a multidimensional construct adopted from Martínez-Martínez et al. (2017) and consisted of the following variables that represented RBPs aimed at different groups of the company's stakeholders: environment, employees, local community, and customers. The environmental practices measure had nine items that, in our study, loaded on two factors: those related to operational environmental practices ENVPR_OP (ENVPR_1, ENVPR_2, ENVPR_3, ENVPR_5) and those aimed at long-term commitment ENVPR_LONG (ENVPR_4, ENVPR_6, ENVPR_7, ENVPR_8, ENVPR_9). Employee- (EMPLPR), local community- (LCOMMPR), and customer- (CUSTPR) related practices each yielded a one-factor solution and consisted of six, five, and four items, respectively.

Competitive performance

SMEs that are privately held do not publicly disclose their financial data. For such firms, the use of subjective measures of performance, which correlate strongly with objective performance measures, is recommended (Dess & Robinson, 1984; Geringer & Hebert, 1989). Therefore, we used the performance ratings based on the perceptions of respondents which constitute perceived overall performance relative to competitors, which is a commonly used measure of overall effectiveness performance in international business research (Hult et al., 2008). As a result, out of 21 variables of competitive performance (CP), factor analysis yielded the four following factors related to different spheres of company operations: CP_PROMOTION (CP_11, CP_13, CP_14, CP_15), CP_PRODUCT (CP_5, CP_6, CP_7, CP_8), CP_QUALITY (CP_1, CP_2, CP_3, CP_4), and CP_PROCESS (CP_17, CP_18, CP_19).

Control variables

We controlled for firm age and firm size. Larger and older firms may be more resourceful in implementing RBPs (Wickert et al., 2016); moreover, as a company grows and becomes established, it has to implement policies,

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procedures, and routines (March et al., 1993), while younger and smaller firms are flexible and rapid in decision-making (Gassmann & Keupp, 2007). We measured *firm size* by the number of employees and *firm age* by the number of years since the founding date.

RESULTS AND DISCUSSION

Table 1 shows the means, standard deviations (*SDs*), and zero-order correlations of studied variables. The mean age of the firms in our sample was 29 years, and their size in terms of employees was relatively small with a mean of 50.

(Table 1 here)

We used linear regression modelling to test the main effects of effectuation and RBPs on competitive performance. The results of the regression analysis are presented in Tables 1–5. In model 1a–1e (Table 2), the five types of RBPs regressed on the control variables only. The effect of firm size was positive only on operational environmental RBPs, employees RBPs, and those related to the local community. As for firm age, it only showed a negative effect on the employee-related RBPs.

(Table 2 here)

In models 2a–2e (Table 3) we added effectuation variables. The effect of control variables remained the same and turned significant for long-term environmental RBPs, and the R^2 rose compared with models 1a–1e. Affordable loss negatively impacted local community practices, while experimentation and flexibility both had a positive effect on all RBPs except for environmental operational. Thus, H1 received partial support from the analysis.

(Table 3 here)

In the models 3a–3d (Table 4), the four types of competitive performance regressed on control variables, and no significant effect was found.

(Table 4 here)

In the last linear regression analysis for models 4a–4d (Table 5), we added RBPs. The results for control variables remained non-significant with a rise in R^2 for all the models. It was the only customer-related RBPs that positively affected all types of SMEs' competitive performance and local community RBPs that increased the competitive performance in the promotion. Therefore, H2 received support from the analysis.

(Table 5 here)

The resulting framework is presented in Figure 2.

(Figure 2 here)

Since the links among several effectuation variables, RBP variables, and competitive performance variables were positive, it was possible that a mediation effect would also exist. In order to verify this possibility, we conducted an additional *post hoc* analysis. Based on the direct regression and hypotheses testing results, we determined that a possible mediation could exist between effectuation flexibility and both local community and customer RBPs, as well

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as between chosen RBPs and competitive performance in promotion. For these purposes, multiple regression analyses were run to assess each component of the proposed mediation model (see Figure 3).

(Figure 3 here)

It was found that all but path c in Figure 3 were significant: path a1 (EFF_Flex – LCOMMPR) ($\beta = 0.2407, t = 2.2672, p < 0.05$), path b1 (LCOMMPR – CP_PROMOTION) ($\beta = 0.1459, t = 2.2957, p < 0.05$), path a2 (EFF_Flex – CUSTPR) ($\beta = 0.2739, t = 4.4551, p < 0.001$), path b2 (CUSTPR – CP_PROMOTION) ($\beta = 0.3721, t = 3.3909, p < 0.001$), and path c (EFF_Flex – CP_PROMOTION) ($\beta = 0.0144, t = 0.1556, p > 0.05$).

Next, multiple mediation analysis was conducted using the bootstrapping method with bias-corrected confident estimates, a 95% confidence interval of the indirect effects, and 5,000 bootstrap resamples (MacKinnon et al., 2004; Preacher & Hayes, 2008). Figure 4 displays the results of testing with the usage of PROCESS Macro Model 4 for SPSS software (see Appendix 2 for the full macro output) (Hayes, 2017). This procedure is used for testing for mediation in the studies of SME internationalization and effectuation (e.g., Lindstrand & Hånell, 2017; Zahoor & Al-Tabbaa, 2021) as well as responsibility in SMEs (Stekelorum et al., 2020a, 2020b).

(Figure 4 here)

As a result of testing, we found that the indirect effect from the bootstrap analysis was positive ($a \times b = 0.1370$), and significant as the intervals for the mediating effect contained no zero (0.0749–0.2098). In the indirect path, the interpretation was that a unit of increase in effectuation flexibility increased RBPs to the local community by 0.2407 units, and RBP to customers by 0.2739 units. In a similar vein, with effectuation flexibility staying constant, a unit increase in RBPs to the local community and a unit increase in RBPs to customers increased competitive performance in promotion by 0.1459 and 0.3721 units on a 0 to 1 scale, respectively. The direct effect, c' (0.0144), remained non-significant ($p = 0.8765$), meaning there was no direct effect of effectuation flexibility on competitive performance in promotion in this case. A finding of a statistically significant indirect effect indicated that the relationship between independent and dependent variables occurred through the mediator. Thus, the results of the mediation analysis confirmed the mediating role of RBPs to the local community in the relationship between effectuation flexibility and competitive performance in promotion, and since $a \times b$ is significant, and c' is non-significant, it is an indirect-only mediation (Zhao et al., 2010), or “full mediation.”

Discussion

The summary of the analyses above indicates that H1 received partial support from the analysis, as two out of three effectuation types had a positive effect and one, affordable loss, had a negative one. Internationalized SMEs are more exposed to the uncertainty that originates from the foreign markets they operate in, thus, applying effectual logic helps to overcome this uncertainty (Kalinic et al., 2014). However, the affordable loss principle of effectual logic, which is opposite to accounting for expected returns, leads to carelessness in risking and cautious monetary resource allocations, thus hindering the contributions to the responsibility towards the local community. Business experimentation applied to business models as a systematic approach of identifying, testing, and learning about sources of value creation is known to be an instrument for sustainability as it modifies the way the business is done

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(Bocken et al., 2016). Thus, our findings add to that literature by pointing out that effectual experimentation led to improvements in all but one RBP type. Flexibility as one of the advantages of SMEs has been considered in the studies of SME internationalization, which have discovered that SME top management's flexibility positively associates with the degree of internationalization (Segaro et al., 2014) and overall stimulates long-term success in international business by allowing the SMEs to coordinate and match resources in order to adjust their offerings and operations (Tolstoy, 2014). The flexibility of decision-making has not been considered in the context of small business responsibility, and our study provides evidence of a positive impact on the majority of responsible practices.

The two types of RBPs (related to local community and to customers) were found to positively affect competitive performance, and therefore supported H2, as well as mediating the relationship between effectuation flexibility and competitive performance in promotion. Liability of smallness, a known disadvantage that internationalizing SMEs face may not only serve as a barrier for the SMEs' operations, but, in turn, a limited number of employees can provide a close relationship to the community and allow organizations to keep in regular contact with the customers (Nejati et al., 2017). The local community is often a central stakeholder for SMEs which is in line with what Dincer and Dincer (2013, p. 184) stated: "while not minimizing the need for global activities, the small business executive is more focused on the needs of the local community." In this study, local community RBPs were found to positively affect competitive performance, particularly in the promotion. This is also in line with Lähdesmäki and Suutari (2012), showing that, when reciprocity between the SMEs and a local community exists, resource investments in the economic development and well-being of the locality and involvement in the local networks are considered by the owner-managers as essential resources and provide a competitive advantage for SMEs, including such non-financial benefits as positive reputation. Responsibility towards customers and employees, both groups being core stakeholders for SMEs (Martínez-Martínez et al., 2017), is found to lead to a better reputation by improving the image of the company as the one that cares not only about profits but also about non-financial good (Nejati et al., 2017). Another study by Hamman et al. (2009) named employees, customers, and society as the most important stakeholders who benefit the most from SME responsibility. However, out of those stakeholder groups in our study, only customer RBPs improved every aspect of competitive performance.

Regarding the mediating effect of RBPs towards important groups of the stakeholders, it is an interesting and a novel result that not all aspects of effectuation directly impact positively on a company's performance. In fact, a recent meta-analysis (Chen et al., 2021) demonstrated that effectuation is generally positively related to firm performance, which is especially true for older companies rather than new ventures, which is in line with the empirical findings of the present study, as in our data the average age of SMEs was 29 years. However, the mediation role of responsibility has been found in previous research on SMEs in the relationships between capabilities and competitive performance (Uzhegova et al., 2019), green organizational culture and green product innovation performance (Chang, 2015,) and entrepreneurial orientation and performance (Courrent et al., 2016).

CONCLUSION

In this study, we sought to link business responsibility and decision-making literature in explaining a notable area in the IE domain, the competitive performance of internationally operating SMEs. In doing so, we proposed and tested a set of relationships among effectuation, RBPs, and competitive performance, finding significant linkages between RBPs and the extent of effectual logic employed by the SMEs. To the best of our knowledge, this is the first study to empirically link effectual logic to sustainable practices in the international entrepreneurship domain. We will conclude by considering the theoretical contribution and the practical implications arising from this study as well as its limitations and potential for future research.

Theoretical and practical implications

This study contributes to the research in the IE domain on decision-making (Ahi et al., 2017; Galkina & Chetty, 2015), by establishing a conceptual connection between effectual decision-making and responsible business conduct of internationalized SMEs. Our findings of positive outcomes of effectually driven RBPs add to and expand on a previously found strategic approach towards responsibility in SMEs resulting in competitive advantages (Avram & Kühne, 2008; Nejati et al., 2017) by suggesting that effectual entrepreneurial decision-making, as opposed to often advocated “business case” for CSR, may drive SME’s involvement into business responsibility. We also expand the findings of (Martínez-Martínez et al. 2017) by following the predictors of each sub-dimension of RBP construct and their direct effects on different aspects of competitive performance. Moreover, we were able expand current knowledge contextually by following the SMEs with international operations.

Our study has implications for SME managers. As opposed to previous findings that emphasized strategic planning of RBPs and planned approaches, owner–managers should be able to act effectually under the uncertainty and pressure of external circumstances. They should pay attention to capturing and addressing the needs and expectations of different stakeholder groups both locally and internationally, with particular stress on the local community and customers. For policy makers, our findings imply that it is important to create truly entrepreneurial policies which presumably will result in greater responsible business conduct among SMEs. In order to promote entrepreneurship and responsibility, more emphasis should be placed on developing incentives and measures supporting not only the discovery but also the creation of entrepreneurial opportunities.

Limitations and future research

This study has some limitations. One of the limitations is the use of cross-sectional data to investigate cause-and-effect relationships. Longitudinal data should be used in future studies to better capture the dynamics of entrepreneurial processes; however, this clearly presents an opportunity for future research. Nevertheless, the results of this study also help open a path to new lines of research which will be of use to both academic and business communities. It would be important to undertake studies that are grounded in owner–managers’ cognitive patterns and specifically follow how different stakeholder groups are involved in a manager’s decision-making regarding RBPs. Effectuation is a highly context-dependent process with implications that are contingent on contextual factors at organizational, industrial, and institutional levels (Chen et al., 2021). Further investigation of the conditions of RBP mediation is desirable as well as following the possible differences in internationalized and domestic SMEs in this regard.

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addition, studying whether strategic orientations such as entrepreneurial orientation (cf. Beliaeva et al., 2020) influence the dynamics of SME responsibility and performance would help integrate the key SME streams of literature as explanatory factors of environmental and social responsibility among smaller companies. Moreover, when outlining the competitiveness and competitive advantage determinants in the SME context further, the role of effectual networks (Kerr & Coviello, 2019) should be elaborated on, especially since interorganizational networks have previously been found to impact competitiveness of SMEs (Capó-Vicedo et al., 2008). These dynamics could be explored through qualitative inquiry which could also distinguish between the intrinsic effectual and causal logics. Moreover, our sample has not differentiated between the timing and speed of internationalization; thus, following RBPs longitudinally along the internationalization process might provide the insights into the involvement of different stakeholders along the stages of internationalization.

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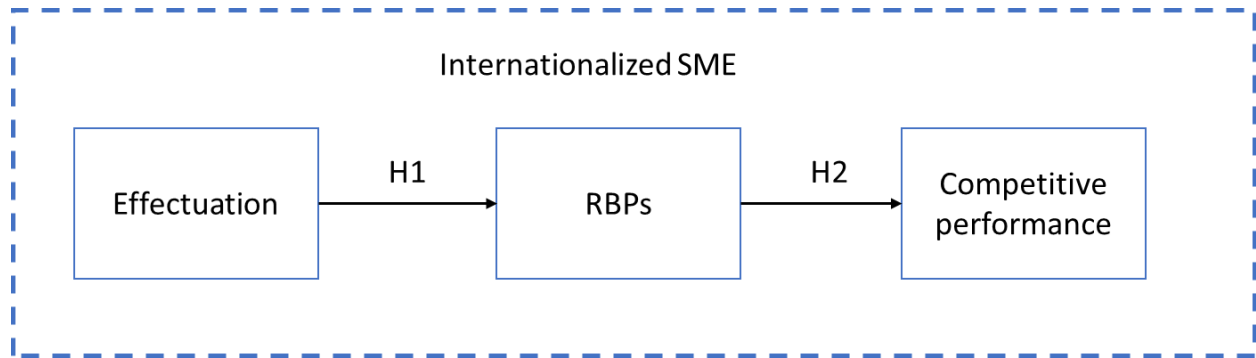


Figure 1. Conceptual model of this study.

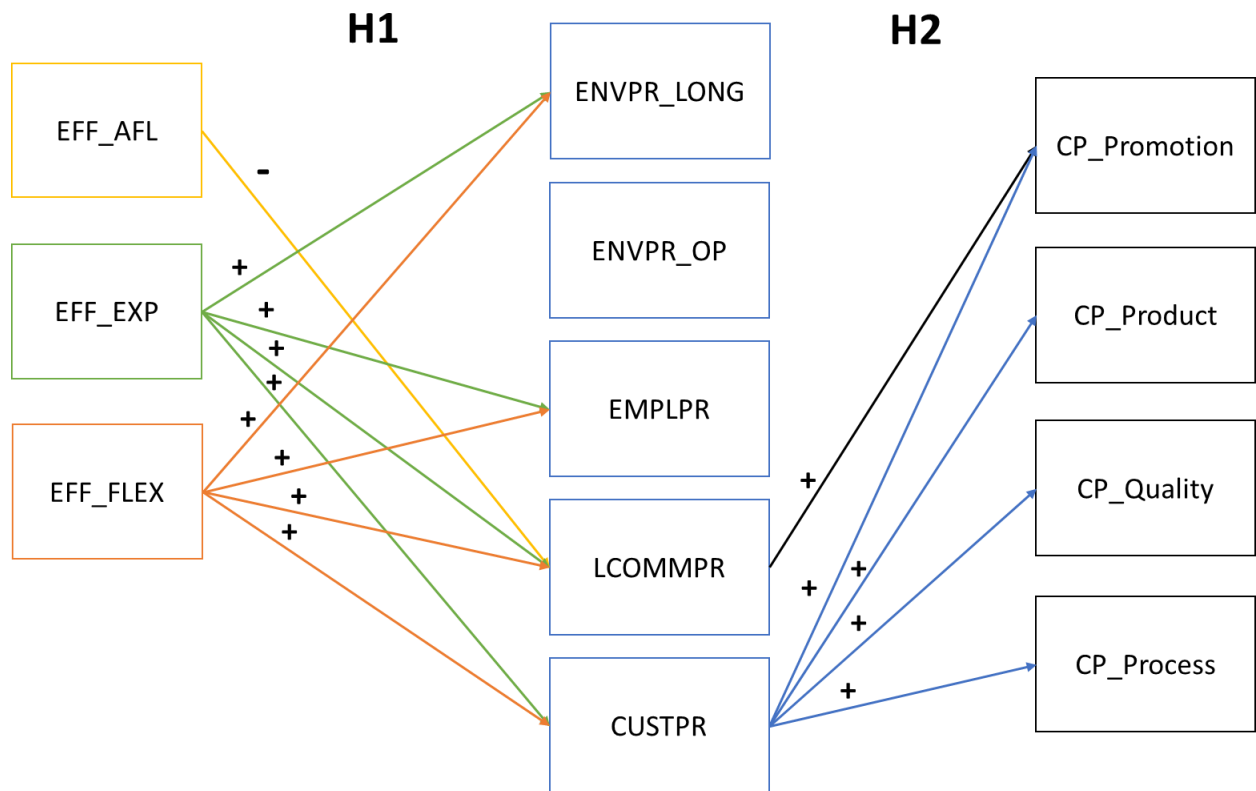


Figure 2. The results of linear regression modeling.

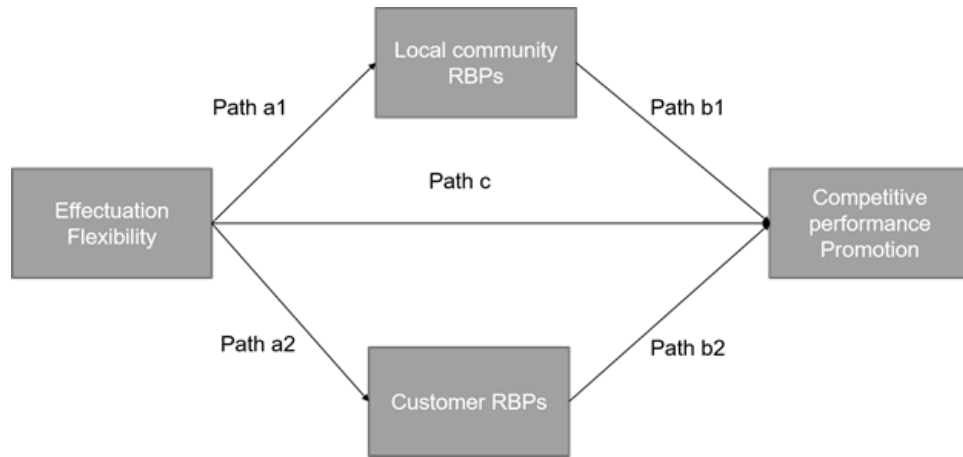


Figure 3 The proposed mediation model

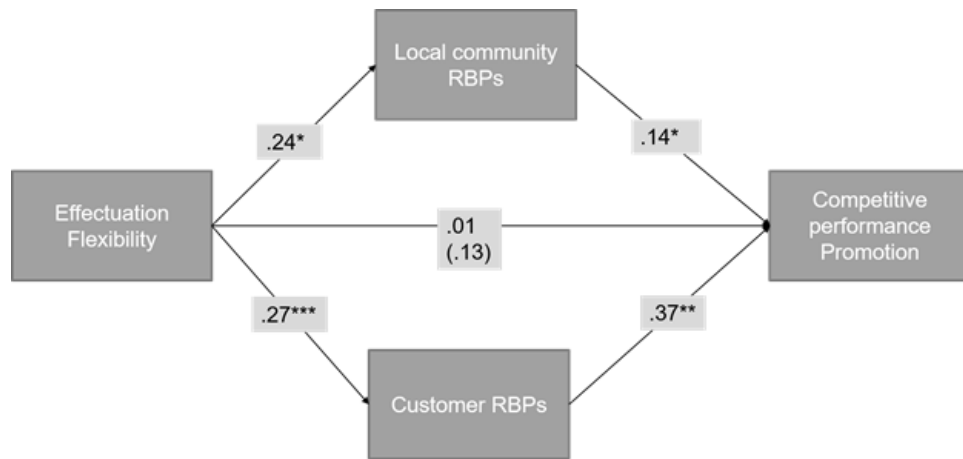


Figure 4. Testing for the indirect effect (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$)

Table 1. Descriptive statistics and correlations of key variables.

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 EFF_AFL	4,75	1,30	1													
2 EFF_EXP	4,30	1,26	,210*	1												
3 EFF_FLEX	5,22	,93	,242*	,162*	1											
4 ENVPR_LON G	5,26	1,12	,092	,149*	,205*	1										
5 ENVPR_OP	3,89	1,46	-,023	,069	,038	,505	1									
6 EMPLPR	5,54	1,02	,060	,312*	,368*	,423*	,244*	1								
7 LCOMMPR	4,22	1,34	,195*	,199*	,156*	,402*	,425*	,384*	1							
8 CUSTPR	6,23	,80	,106	,281*	,317*	,501*	,213*	,563*	,280*	1						
9 CP_Promotion	4,17	1,17	-,021	,309*	,122	,100	,045	,295*	,251*	,312*	1					
10 CP_Product	4,80	,99	-,023	,347*	,223*	,246*	,117	,330*	,242*	,342*	,513*	1				
11 CP_Quality	5,21	,99	,022	,271*	,160*	,203*	,112	,317*	,217*	,361*	,447*	,494*	1			
12 CP_Process	4,82	,96	,047	,153*	,176*	,293*	,132	,332*	,188*	,379*	,303*	,584*	,405*	1		
13 Firm age	29,22	19,96	,081	-,049	-,077	,111	,180*	-,123	,112	,001	,035	-,120	,013	-,028	1	
14 Firm size	50,99	46,97	,011	-,058	-,047	,170*	,301*	,109	,289*	-,014	,074	,000	-,042	-,007	,281*	1

*p<0.05, **p < 0.01

Table 2. Models 1a -1e: RBPs regress on control variables.

	Model 1a ENVPR_LONG		Model 1b ENVPR_OP		Model 1c EMPLPR		Model 1d LCOMMPR		Model 1e CUSTPR	
	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>
Control variables										
Firm age	,075	1,003	,113	1,567	-,165	2,235*	,043	,591	,019	,255
Firm size	,145	1,950	,265	3,684***	,148	2,000*	,272	3,774***	-,024	-,317
Model estimation										
R²	,033		,099		,036		,082		,001	
Adj. R²	,022		,090		,026		,073		-,010	
F	3,198*		10,430***		3,543*		8,574***		,067	

Table 3. Models 2a - 2e: RBPs regress on effectuation and control variables.

	Model 2a ENVPR_LONG		Model 2b ENVPR_OP		Model 2c EMPLPR		Model 2d LCOMMPR		Model 2e CUSTPR	
	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>
Independent variables										
EFF_AFL	,094	1,216	,006	,079	,082	1,170	-,227	-3,137**	,122	1,654
EFF_EXP	,155	2,044*	,082	1,091	,262	3,782***	,147	2,065*	,274	3,770***
EFF_FLEX	,165	2,146*	,041	,542	,310	4,418***	,217	3,005**	,260	3,546**
Control variables										
Firm age	,087	1,159	,099	1,322	-,145	-2,117*	,093	1,316	,072	1,002
Firm size	,152	2,030*	,286	3,829***	,179	2,621*	,275	3,905***	,026	,367
Model estimation										
R²	,102		,111		,248		,203		,180	
Adj. R²	,076		,085		,226		,179		,156	
F	3,885**		4,286**		11,315***		8,738***		,072***	

Table 4. Models 3a-3d: Competitive performance regress on control variables.

	Model 3a CP_PROMOTION		Model 3b CP_PRODUCT		Model 3c CP_QUALITY		Model 3d CP_PROCESS	
	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>
Control variables								
Firm age	,031	,400	-,118	-1,534	,023	,302	-,029	-,374
Firm size	,061	,789	,021	,279	-,059	-,768	-,005	-,059
Model estimation								
R²	,006		,013		,003		,001	
Adj. R²	,006		,002		-,008		-,010	
F	,503		1,183		,301		,082	

Table 5. Models 4a-4d: Competitive performance regress on RBPs.

Independent variables	Model 4a CP_PROMOTION		Model 4b CP_PRODUCT		Model 4c CP_QUALITY		Model 4d CP_PROCESS	
	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>	β	<i>t-value</i>
Independent variables								
ENVPR_LONG	-,115	-1,205	,081	,865	-,014	-,151	,108	1,150
ENVPR_OP	-,086	-,977	-,011	-,124	-,035	-,399	,033	,377
EMPLPR	,178	1,908	,125	1,354	,143	1,549	,142	1,553
LCOMMPR	,174	2,010*	,101	1,189	,138	1,614	,046	,545
CUSTPR	,223	2,371*	,214	2,302*	,253	2,707*	,229	2,466*
Control variables								
Firm age	,056	,740	-,137	-1,846	,022	,290	-,061	-,815
Firm size	,034	,444	-,057	-,741	-,096	-1,249	-,079	-1,037
Model estimation								
R²	,153		,177		,168		,187	
Adj. R²	,117		,143		,133		,153	
F	4,299***		5,142***		4,802***		5,434***	

Appendix 1

The Results of the PCA on Effectuation

Item	Component 1 (experimentation)	Component 2 (affordable loss)	Component 3 (flexibility)	Communality
We experimented with different products and/ or business models	0.80			0.65
The product/ service that we now provide is substantially different that we first imagined.	0.78			0.69
We tried a number of different approaches until we found a business model that worked.	0.76			0.60
We were careful not to commit more resources than we could afford to lose		0.81		0.73
We were careful not to risk more money that we were willing to lose with our initial idea.		0.87		0.80
We were careful not to risk so much money that the company would be in real trouble financially if things didn't work out		0.83		0.70
We adapted what we were doing to the resources we had.			0.75	0.59
We were flexible and took advantage for opportunities as they arose.			0.72	0.57
We avoided courses of action that restricted our flexibility and adaptability			0.73	0.60

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.71, Bartlett's Test of Sphericity $p < 0.01$, 65.9 % of total variation explained. Rotation Method: Varimax with Kaiser Normalization

The Results of the PCA on Environmental RBPs

Item	Component 1 ENVOP	Component 2 ENVLONG	Communality
minimises the environmental impact of its activities	0.80		0.66
designs products and packaging that can be reused, repaired or recycled	0.82		0.72
voluntarily exceeds legal environmental regulations	0.75		0.62
reuses and recycles materials	0.71		0.57
regularly conducts environmental audits		0.73	0.60
adopts measures for ecological design in products/services		0.73	0.59
implements programs to use alternative energy		0.85	0.76
implements programs to reduce water consumption.		0.84	0.73
makes investments to save energy		0.67	0.50

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.84, Bartlett's Test of Sphericity $p < 0.01$, 63.8 % of total variation explained. Rotation Method: Varimax with Kaiser Normalization

The Results of the PCA on Employee RBPs

Item	Component 1 Employee Engagement	Communality
employees' interests are taken into account in company decision-making	0.85	0.71
support employees who wish to continue or upgrade their education/training	0.89	0.80
help the employees find suitable work/life balance (flexible working hours)	0.79	0.63
recognizes the importance of stable employment for your employees and society (in the local area)	0.85	0.72
develop/Implement regular training programmes	0.77	0.60
assess employees work/labour environment on a regular basis	0.79	0.63

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.89, Bartlett's Test of Sphericity $p < 0.01$, 68.0 % of total variation explained. Rotation Method: Varimax with Kaiser Normalization

The Results of the PCA on Local community RBPs

Item	Component 1 Community Engagement	Communality
incorporates/includes local community interests in company decision making	0.78	0.61
support sports or cultural activities in the local community	0.80	0.63
maintain clear relations with local government authorities	0.78	0.60
considers itself to be part of the local community and therefore cares about its development/local impact or the improvement of the local infrastructure	0.87	0.75
support programmes for the disadvantaged	0.76	0.57

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.82, Bartlett's Test of Sphericity $p < 0.01$, 63.4 % of total variation explained. Rotation Method: Varimax with Kaiser Normalization

The Results of the PCA on Customer RBPs

Item	Component 1 Customer Engagement	Communality
meets its commitments with quality and fair price	0.85	0.72
inform customers about the proper use of their products and warnings of potential risks	0.79	0.62
take measures to prevent customer complaints	0.93	0.86
respond to customer complaints or inquiries	0.87	0.75

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.79, Bartlett's Test of Sphericity $p < 0.01$, 73.9 % of total variation explained. Rotation Method: Varimax with Kaiser Normalization

The Results of the PCA on Competitive performance

Item	Component 1 Promotion	Component 2 Product	Component 3 Quality	Component 4 Process	Communality
Compare your firm with your most important competitors relative to the following elements: (1=much worse than competitors, 7=much better than competitors): Customer Knowledge			0.67		0.64
Competitor knowledge			0.66		0.60
Customer satisfaction			0.82		0.74
Product/service quality			0.76		0.72
New product/service development		0.77			0.65
New production technology		0.82			0.73
Branding of product/service		0.70			0.71
Product positioning		0.59			0.63
Advertising	0.74				0.71
Internet use	0.77				0.65
Other promotion	0.86				0.79
Distribution	0.76				0.67
Production process				0.60	0.62
Sub-contracting				0.76	0.63
In-time delivery				0.67	0.63

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.84, Bartlett's Test of Sphericity $p < 0.01$, 67.3 % of total variation explained. Rotation Method: Varimax with Kaiser Normalization

Appendix 2 SPSS macro output

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.5.3 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2018). www.guilford.com/p/hayes3

Model : 4

Y : CPPROM

X : EFLEX

M1 : LCOMMPR

M2 : CUSTPR

Sample

Size: 185

OUTCOME VARIABLE:

LCOMMPR

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,1653	,0273	1,7900	5,1402	1,0000	183,0000	,0245

Model

	coeff	se	t	p	LLCI	ULCI
constant	2,9578	,5630	5,2534	,0000	1,8469	4,0686
EFLEX	,2407	,1061	2,2672	,0245	,0312	,4501

OUTCOME VARIABLE:

CUSTPR

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,3128	,0978	,6003	19,8482	1,0000	183,0000	,0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,7869	,3260	14,6820	,0000	4,1436	5,4302

EFLEX ,2739 ,0615 4,4551 ,0000 ,1526 ,3951

OUTCOME VARIABLE:

CPPROM

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,3517	,1237	1,2274	8,5166	3,0000	181,0000	,0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	1,1476	,6896	1,6642	,0978	-,2131	2,5084
EFLEX	,0144	,0928	,1556	,8765	-,1687	,1976
LCOMMPR	,1459	,0635	2,2957	,0228	,0205	,2713
CUSTPR	,3721	,1097	3,3909	,0009	,1556	,5886

***** DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
,0144	,0928	,1556	,8765	-,1687	,1976

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,1370	,0343	,0749	,2098
LCOMMPR	,0351	,0228	,0001	,0861
CUSTPR	,1019	,0348	,0426	,1795

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:

95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

----- END MATRIX -----