

## **CEO Polychronicity and SME Internationalization**

### **ABSTRACT**

This study, leveraging the upper echelon and social network theories, explores the association between CEO's polychronicity and SMEs' international performance under the complete mediation effect of social networks. The paper explores this relationship under the moderation effect of CEO perceived time pressure and synchrony preference. The paper investigates a moderated mediating relationship, where CEO time pressure and synchrony preference moderate the relationship between social networks and SME international performance. The study is based on a sample of 186 UK firms. Findings of the study suggest that social network fully mediates the CEO polychronicity and firm international performance relationship. Furthermore, CEO perceived time pressure moderates the social network and SME international performance relationship such that it reduces the positive indirect association between CEO polychronicity and SME international performance. CEO synchrony preference, on the contrary, enhances the positive indirect association between CEO polychronicity and SME performance.

**Keywords:** CEO polychronicity, international performance, time pressure, social network, synchrony preference

## 1. Introduction

SMEs bear the liability of small size due to limited resources and capabilities, making a commitment to internationalization difficult. Despite resource constraints, some SMEs internationalize aggressively, overcoming internationalization challenges (Bruneel, Clarysse, & Autio, 2018; Thanos, Dimitratos, & Sapouna, 2017). Though scholars have explored several drivers of SME internationalization, the role of social networks has been explored to a more considerable extent in recent years (Díez-Vial & Montoro-Sánchez, 2020; Felzensztein, Ciravegna, Robson, & Amorós, 2015; Felzensztein, Deans, & Dana, 2019; Leppäaho, Chetty, & Dimitratos, 2018). The question remains: Why do some SMEs have better social network than others, an aspect that largely remains unexplored.

Microfoundations lens of international business literature emphasizes the understanding of internationalization phenomenon through micro-level variables, such as behavioral and cognitive traits of CEOs (Contractor, Foss, Kundu, & Lahiri, 2019). One of the most prominent microfoundations lenses is the upper echelons theory (Hambrick, 2007). Leveraging this theory, scholars have recently begun exploring CEOs' behavioral traits such as regulatory focus or big-five personality traits and their association with SMEs' internationalization decisions (Adomako, Opoku, & Frimpong, 2017; Anwar, Shah, & Khan, 2018).

Microfoundations lens is of particular relevance to exploring SMEs' internationalization phenomena, given that CEOs are critical decision-makers in SMEs. In this paper, we examine how CEOs' polychronicity (i.e., the ability to multitask) influences their social networking ability, where the significance of social networks in firms' internationalization is well established (Díez-Vial & Montoro-Sánchez, 2020; Leppäaho, Chetty, & Dimitratos, 2018; Manolova, Manev, &

Gyoshev, 2014). Specifically, we explore the indirect effect of CEO polychronicity and the mediating effect of CEOs' social networks on SMEs internationalization relationship.

Since CEOs have multiple role demands, socialization being one of them, they need to multitask (Fondas & Wiersema, 1997). However, polychronic CEOs are more effective in managing these multiple demands. Consequently, they are more likely to have social networks than monochronic CEOs (Bertolotti, Mattarelli, & Dukerich, 2019). Internationalization requires multiple streams of in-depth information, such as market- and institution-based information (Fletcher & Harris, 2012; Stoian, Rialp, & Dimitratos, 2017). With enriched international market information obtained from social networks, CEOs can also manage overseas partners and projects more effectively and earn more international market revenues (Riahi-Belkaoui, 1998).

Furthermore, although social networks may provide enriching information related to international markets, Hsu, Chen, and Cheng (2013), based on upper echelon and information processing theory, asserted, “CEO attributes that are associated with their information processing capability play an important role in the international operations of SMEs” (p. 4). This implies that the ability to benefit from social networks for internationalization depends on CEOs’ information processing ability.

We specifically explore two “temporal” (time) perspective related CEO traits as moderators of social network and international performance relationship, i.e., overall moderated mediated relationship, namely perceived time pressure (Maruping, Venkatesh, Thatcher, & Patel, 2015) and synchrony, i.e., flexible pacing style (Leroy, Shipp, Blount, & Licht, 2015; Sirén, Parida, Patel, & Wincent, 2019). CEOs' high perceived time pressure can decrease information utilized from social networks (Mann & Tan, 1993). As holistic information processing is not possible under high perceived time pressure, limited processing of available information from social networks would

imply lesser ability to earn revenues in international markets, hence diminished performance in international markets. For synchrony effect, if CEOs have low synchrony preferences, i.e., are unwilling to pace their activities and behavior in synchrony with social network members, their ability to utilize information from networks may decrease (Streufert & Streufert, 1981). Again, the lack of processing of holistic information on international markets may adversely impact international performance.

This study contributes to international business literature in several ways. Scholars, leveraging the microfoundation lens, have asserted that internationalization is a discovery journey guided by the “individual’s perceptions, experiences, know-how, and view of the future” (Stoian, Dimitratos, & Plakoyiannaki, 2018, p. 770). By exploring the indirect role of polychronic CEOs on SMEs ability to internationalize by virtue of their ability to have a better social network, our work mitigates the paucity of research situated at the microfoundational level as a determinant of the international performance of SMEs (Adomako, Opoku, & Frimpong, 2017; Andersson, Dasí, Mudambi, & Pedersen, 2016; Hsu, Chen, & Cheng, 2013). Extant research suggests SMEs having a more robust set of organizational capabilities helps them network and avail foreign market knowledge (Stoian, Dimitratos, & Plakoyianna, 2018). However, research exploring antecedents of this organizational capability is scant. Our research suggests that polychronic CEOs could lend to this organizational capability of social network forming ability, which results in favorable internationalization, therefore, establishing the mediating role of social networks in CEO’s polychronicity and international performance relationship.

Second, although researchers have explored the internationalization from the upper echelon perspective (Pergelova, Angulo-Ruiz, & Yordanova, 2018), the theory has been criticized for the black box effect, where the mechanism through which CEO traits influence strategic outcomes are

unexplained (Hambrick, 2007). By exploring the mediating impact of the social network, between CEO polychronicity and international performance relationship, we try to shine a light on the black box mechanism.

Furthermore, by extending implications of information processing theory to the temporal perspective of CEO traits, namely perceived time pressure and synchrony in internationalization literature, we explain how CEO perceived time pressure and synchrony preference influences social network and international performance relationship, thus asserting the moderated mediated relationship. These contributions occur in a research setting of entrepreneurial firms in the UK, whose national and international activities are essentially under-investigated.

This paper proceeds as follows. We first review the literature on micro-multinationals and CEO polychronicity and then present the hypotheses. The methods, data, and results sections follow the literature review section. Finally, we present discussion and managerial implications.

## **2. Theoretical framework and hypotheses development**

Literature exploring SMEs internationalization asserts that SMEs can gain advanced knowledge on international markets because of their social network, which helps them recognize new opportunities abroad and provide superior quality and more reliable information (Ellis, 2011; Musteen, Francis, & Datta, 2010). We assert that polychronic CEOs can have an indirect effect on SME international performance, as such CEOs are more likely to have social networks, which can enrich internationalization information (Masiello & Izzo, 2019; Musteen, Francis, & Datta, 2010) and hence increase international performance outcomes in an internationally competitive environment, as explained ahead.

### *2.1. Polychronicity*

Polychronicity reflects the extent to which individuals prefer to be involved simultaneously in more than one task and believe this preference is the best way of performing tasks (Bluedorn, 2002; Bluedorn, Kalliath, Strube, & Martin, 1999). Instead, polychronic individuals treat unscheduled tasks as equivalent to planned tasks (i.e., they readily accept any interruptions) (Bluedorn, Kaufman, & Lane, 1992; Cotte & Ratneshwar, 1999; Minzberg, 1973). For instance, unscheduled events, such as colleagues visiting without appointments, are viewed as “normal” by polychronic individuals (Bluedorn et al., 1999).

The literature depicts monochronics as individuals who prefer to complete one task before initiating another. They believe in planning and following schedules. Any disruptions to their plans cause negative feelings. They may delay certain tasks to focus on a particular ongoing activity (Kaufman-Scarborough & Lindquist, 1999b). Polychronic individuals, on the contrary, are good at multitasking and restructuring activities to accomplish their goals. They appear more flexible and spontaneous, and at work, and are more easily able to cope with pressure and uncertainty. Polychronicity was conceptualized on a continuum (Bluedorn et al., 1999), implying the more individuals prefer being engaged in and alternating among different tasks, the more they were polychronic.

In general, CEOs are at constant risk of interruption, making them revisit tasks again and again (Minzberg, 1973). Polychronic CEOs are less likely to perceive these interruptions as obstacles and more likely to perceive it as a working way. They rather enjoy multitasking (König, Oberacher, & Kleinmann, 2010; Poposki & Oswald, 2010) and can exhibit superior performance while committing fewer multitasking errors (Zhang, Goonetilleke, & Plocher, 2005) compared to

monochronics. Researchers have found polychronic individuals as effective negotiators when resolving different issues required integrative agreements (Tinsley, 2001).

## *2.2.Social Networks*

The fundamental tenet of social network theory is transferring information and knowledge to individuals due to their social contacts with other individuals, including personal ties with business professionals such as government organizations (Granovetter, 1973). Social network theory highlights the significance of affiliations and external links for the SMEs and personal connections and inter-organizational arrangements for SMEs' growth. Rather, a firm's networking perspective encourages social embeddedness with domestic and host organizations to foster expansion in international markets (Prashantham & Young, 2011; Zhou, Wu, & Luo, 2007).

## *2.3.Polychronic CEOs and social network*

Social networks provide several benefits to CEOs for enhancing internationalization performance. We assert that polychronic CEOs are more likely to benefit from such networks. As individuals require to engage in several interactive activities to manage businesses, some of these interactions are likely to be unplanned or unforeseen. Monochronic CEOs would shield themselves from such unplanned activities and hence risk losing important information from the network. Polychronic CEOs, on the contrary, when conducting multiple activities, are continually involved with others and interact with several people, hence, enhancing their social network and thus benefitting from them (Bertolotti, Mattarelli, & Dukerich, 2019).

Overall, as polychronic individuals are more likely to be available to others for emergent requests or unscheduled events than monochronics, they are more likely to have a better social network by interacting with multiple partners. Polychronic cultures develop around human relations. Hall (1976, p. 150) said, “Their (polychronic cultures) action chains are built around

human relations. To be too obsessional about achieving a work goal at the expense of getting along is considered aggressive, pushy and disruptive.” Polychronic CEOs are more likely to adapt to these cultural values and hence invest in social relations.

As devoting attention to people and allowing distractions and interruptions arising from interactions with them is a part of the skill set developed by polychronic CEOs, they can form interpersonal ties with several stakeholders such as trade bodies, regulatory authorities, suppliers, customers, etc. Consequently, they are more likely to access the information provided by such social networks, thus enabling them to stay ahead of the competition. Not only this, but polychronic individuals also become more friendly than pure professionals (Sanchez-Burks & Lee, 2007), which further enhances their ability to benefit from the social network. Hence, we hypothesize:

*Hypothesis 1 (H1): CEO polychronicity is positively associated with social networks.*

#### *2.4. Social networks as a mediator of polychronic CEO and international performance*

At its core, SME internationalization is an entrepreneurial strategy, which is influenced by opportunity recognition in the form of business leads and referrals or identification of latent needs of markets (Oviatt & McDougall, 2005). Preferably knowledge about internationalization opportunities remains a source of competitive advantage for firms (Grant, 1996; Karami & Tang, 2019). Thus, information and knowledge base provided by social networks can also help an SME to expedite its international business learning process while minimizing risks, thus resulting in more robust international market performance (Ruigrok & Wagner, 2003).

As polychronic CEOs benefit from social networks, they can exploit internationalization opportunities better and experience better international market performance. For instance, a polychronic CEO, by having a strong social network, might benefit from the timely, relevant, soft, and privileged information, not available to those who lack such networks (Souitaris & Maestro,



2010). The insights so obtained from social network members may help in reducing the uncertainty associated with international markets. Therefore, an SME with a polychronic CEO is more prepared than a monochronic CEO to combat host country competition, leverage international market knowledge, and experience favorable internationalization (Giachetti, Manzi, & Colapinto, 2019). On the contrary, due to their inability to form social networks, monochronic CEOs would lack access to critical internationalization information and experience less international market performance.

Extant literature suggests that social network facilitates international market performance (Masiello & Izzo, 2019; Presutti, Boari, & Fratocchi, 2016). This is because of social networks' information and resources that help firms capture more international markets, thus enhancing international markets' revenues (Zhou, Wu, & Luo, 2007). Overall, as we explained how polychronic CEOs could have better social networks, and extant research suggests how social networks enhance firms' international performance, combining these two assertions, we hypothesize:

*Hypothesis 2 (H2): Social networks fully mediate the relationship between polychronic CEOs and international market performance.*

### *2.5. Moderating role of synchrony preference and time pressure*

When firms enter international markets, managers must not just possess information (as provided by social networks). They should also have information-processing mechanisms that could help cope with international market complexity. CEOs may vary in their information processing capability depending on cognitive and social traits such as perceived time pressure and synchronizing with others (Lévesque & Stephan, 2020). Upper echelons theory also asserts that CEOs' cognitive perspectives influence their abilities to differentiate and integrate a complex

stream of information (Streufert & Streufert, 1981). In this context, we assert that though social networks could provide enriching information related to internationalization; however, the extent to which CEOs benefit from these networks is determined by two temporal perspectives, i.e., perceived time pressure and synchrony or flexible pacing behavior (Leroy et al., 2015; Sirén et al., 2019). We explain our assertions ahead.

### *2.6. Synchrony preference as a moderator of social network and international market performance relationship*

Synchrony preference refers to “individual’s tendency to be flexible in pacing their activities and work behavior in synchronization with others” (Leroy et al., 2015; p. 763). Also referred to as pacing style flexibility (Sirén et al., 2019), it influences how individuals temporarily adapt their behavior to others' presence. For instance, some people may prefer to finish a task ahead of the deadline, while others may like to push at the last minute. Individuals high on synchrony preference would be flexible to temporarily shift their pacing style of work completion in sync with others.

When CEOs leverage knowledge from social networks, its assessment, integration, and utilization can occur when CEOs pace their behavior with social networks' members, sharing knowledge. For example, if a social network member speaks slowly and CEO has a preference for fast listening or vice versa, then CEOs with high synchrony preference would adapt their pacing of listening to that of social network members. This results in effective communication and hence information processing by CEOs (O’Neill & Adya, 2007). On the contrary, CEOs low on synchrony preference may not be flexible to adapt their listening behavior with that of speakers' speed of speech. For instance, if CEOs low on synchrony are fast listeners, they may not be active

to listen to a social network member, speaking slowly. Consequently, CEOs with low synchrony preferences do not actively process information shared by social network members.

Thus, because of their ability to access and process information, CEOs with high synchrony preferences are more favorably positioned than CEOs with low synchrony preferences to make internationalization decisions. However, low synchrony preference may imply incongruity in work behaviors such as pacing style, which implies the inability to completely benefit from social networks (Meyer, 1994), resulting in diminished international markets performance. Hence, we hypothesize:

*Hypothesis 3a (H3a): CEO synchrony preference moderates the social network and international market performance relationship such that the indirect effect of CEO polychronicity on international market performance is higher when the CEO has high synchrony preference than low.*

### *2.7. Time pressure as a moderator of social network and international market performance relationship*

Time pressure refers to the degree to which an individual feels increasing costs of time or an impending deadline (Smith & Hayne, 1997). Time pressured individuals have a feeling of chronic hurriedness (Waller, Conte, Gibson, & Carpenter, 2001). They tend to work very fast and often feel constrained by time. Less time-pressured individuals, on the contrary, do not feel hurried nor push others to meet deadlines (Mohammed & Nadkarni, 2011).

Time pressure perceived by CEOs has implications for how social networks benefit SMEs enhance international market performance. Often accompanied with advanced modes of entry are *tacit* internationalization goals such as “knowledge development” or “competence transfer” that firms cannot attain under high perceived time pressure (Vermeulen & Barkema, 2002).

Moreover, time allocation theory suggests that individuals allocate less time under the influence of high perceived time pressure while comparing competing options (Becker, 1965). For internationalization, with higher perceived time pressure levels, rich information obtained by CEOs from social networks cannot be processed in-depth. For instance, internationalization requires the processing of more complex and detailed information on the host country's regulatory, competitive, and market environment (Mejri & Umemoto, 2010). However, CEOs with high perceived time pressure may not process complex information and hence may not earn optimal revenues from international markets.

Overall, when faced with high time pressure, CEOs may not engage with complete information utilization associated with internationalization, as provided by social networks. Consequently, internationalization performance suffers. Hence, we hypothesize:

*Hypothesis 3b (H3b): CEO's perceived time pressure negatively moderates social network and internationalization performance relationship such that the indirect effect of CEO polychronicity on internationalization performance via social network is lower when perceived time pressure is high than low.*

Figure 1 present our assertions diagrammatically.

-----

**Insert Figure 1 about here**

-----

### **3. Data and methods**

#### *3.1. Sample*

The focus of this paper is on SMEs from the UK. The present study's sample frame is the British Exporters Database, which contains information on those firms that actively pursue internationalization. The sample consisted of those firms which fit the following criteria: a) as CEOs were key decision-makers and had a more direct influence in SMEs, we focused on those UK-based SMEs having employees less than 250 and annual revenue less than 50 million Euros (European Commission, 2003), and b) provided the email ID of the CEO.

Following the guidelines provided by Malhotra, Nunan, and Birks (2017) and Tourangeau, Rips and Rasinski (2000), we developed a structured questionnaire. To check for the suitability of questionnaire items, we conducted a pilot study with six CEOs of SMEs who had different levels of internationalization experience. Employing semi-structured in-depth interviews, which, on average, were of 68 minutes, we obtained qualitative data. Following Braun and Clarke (2006) approach, we transcribed the qualitative interviews and content analyzed them. We used the CEOs' qualitative responses for revising the questionnaire according to the context of the study. Three international business, reach active staff members from a UK university were also interviewed to check the questionnaire's suitability and its items in the context of the present study.

Next, an invitation to participate in the survey email with the questionnaire's link was sent to 1,640 CEOs of qualifying SMEs, randomly selected from the British Exporters Database. We also sent the CEOs three reminder emails to participate in the study. A total of 215 CEOs responded (response rate of 13.1%) to the questionnaire. The response rate was consistent with past studies (Stoian, Rialp, & Dimitratos, 2017). Further, we eliminated the incomplete questionnaires, which resulted in a final sample size of 186 observations. SMEs entered international markets through

various entry modes, including exports, franchising/ licensing, subsidiaries/ strategic alliances, etc. Ninety-four firms entered international markets through export mode, while the remaining firms entered through non-export mode, representing eight two-digit SIC equivalent industries.

### *3.2. Common method bias*

Since studies employing single survey questionnaires suffer from common method bias, we took several steps to control for the same (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). First, CEOs received assurance of anonymity. Second, the order of the questions was randomized. Further, following the procedures employed to perform the Harman's test, a single-factor CFA was conducted, where all the observed variables were made to load in a single factor. For the single-factor model, we obtained an extremely poor fit (Chi-square/ df=13.43; RMSEA = 0.229; SRMR = 0.138; CFI= 0.557; TLI = 0.511), which further indicated the minimal influence of common method bias on observed variables (Podsakoff et al., 2003). Finally, in the survey questionnaire, several filler questions were also placed. According to Podsakoff et al. (2003) and Lindell and Whitney (2001), filler questions help achieve psychological separation. Taken together, all of these implied that common methods bias was not an issue in the study.

### *3.3. Non-response error*

We also checked for non-response bias. Armstrong and Overton (1977) recommend extrapolation procedures for detecting non-response bias. A series of t-tests employed to compare CEO's age, firm size, and industry who responded early with that of CEOs who responded in the middle and CEOs who responded in the later stages of data collection, did not report any significant differences. These indicated the absence of non-response error (Armstrong & Overton, 1977) in the present study.

### 3.4. Operationalization of variables

We used multi-item scales (obtained from extant literature) to measure the variables of interest like CEO polychronicity (independent variable), social network (mediating variable), CEO perceived time pressure, and CEO synchrony preference (moderator variables), and internationalization performance (dependent variable). We measured all the scale items, on a seven-point likert scale. Appendix 1 presents the scale items.

*Internationalization performance.* The dependent variable was operationalized using a three-item scale based on extant literature (Stoian, Rialp, & Dimitratos, 2017; Zhou, Wu, & Barnes, 2012; Zhou, Wu, & Luo, 2007). Three scale items were: “International profit over the past three years,” “International sales over the past three years,” and “International market share over the past three years.” The Cronbach’s alpha of the scale was 0.92.

*CEO polychronicity.* Using a four-item polychronicity scale (Chen, 2020; Kaufman, Lane, & Lindquist, 1991; Lee, Tan, & Hameed, 2005), we captured CEO polychronicity ( $\alpha = 0.81$ ). Sample of scale items was “I am comfortable doing several things at the same time,” and “When I sit down at my desk, I work on one task at a time.”

*Social network.* Using an eight-item scale (Tran & Adomako; 2020; Prashantham, 2011), we operationalized social network indicating if the CEO sought support from social networks. A sample item was, “I have extensive relationships with organizations.”

*CEO time pressure.* Time pressure was operationalized using a three-item scale ( $\alpha = 0.85$ ) adapted version of Semmer et al. (1999) and Urbach and Weigelt (2019). CEOs were asked to indicate the extent to which they experienced time pressure. A sample item was, “I often feel pressed for time.”

*CEO synchrony preference.* We adapted Leroy et al.'s (2015) four-item scale to measure the construct ( $\alpha = 0.91$ ). A sample item was, "I am good at adapting to other people's pace."

*Control variables.* Based on prior research, we controlled several firm-level variables, like firm size, slack, and firm age (Reuber & Fisher, 1997). *Firm size* was measured as the number of employees in a firm. *Slack* was measured using the two-item scale of Atuahene-Gima et al. (2005). *Firm age* was calculated as the natural logarithm of the total number of years since the time of the firm's inception. We also controlled for *CEO age* as its effect on international performance has been explored in the past literature. The natural logarithm of CEO age was taken to reduce skewness. We also controlled for market uncertainty and competitive intensity (Zhou, Wu, & Luo, 2007). *Competition intensity* was measured with the question "How competitive is the market of your main product/ industry?" (1=not competitive at all; 7=very competitive). For market uncertainty, the question used was "How would you perceive unpredictable factors influencing the market of your main product?" (1=few; 7=many).

### 3.5. Psychometric characteristics

To explore the reliability and validity of the focal constructs' multi-item scales, we conducted EFA and CFA (Bagozzi & Yi, 1988) using MPLUS 8. The Cronbach's alpha values of our focal constructs ranged between 0.84- 0.91, which was above the 0.70 cut-off suggested by Hair et al. (2006). Thus, the focal constructs were internally consistent. Next, following the Fornell and Larcker (1981) procedure, we calculated the average variance extracted (AVE) and the composite reliability for each of the focal constructs. The factor reliability of each of the focal construct was more than 0.60 (Bagozzi & Yi, 1988), providing evidence supporting convergent validity. Next, to assess discriminant validity, we compared the square root of AVEs of the constructs with the



interscale correlations. All the focal constructs had acceptable discriminant validity (i.e., the AVE square roots were greater than the interscale correlations).

#### 4. Results

The descriptive statistics and correlations of all the variables used in the study are presented in Table 1.

-----

**Insert Table 1 about here**

-----

To test our study hypotheses, we employed Structural Equation Modeling (SEM) using MPLUS 8.

*Main Effects.* Table 2 presents the results of SEMs. In Model 3 of Table 2, the beta coefficients of CEO polychronicity is positive and significant ( $\beta=0.35$ ,  $p<0.01$ ), with the dependent variable as a social network. Therefore, we receive evidence in support of the first hypothesis. Also, from Model 2 of Table 2, we can observe that the social network's beta coefficient was positive and significant ( $\beta=0.26$ ,  $p<0.01$ ), with the dependent variable as internationalization performance. This is consistent with extant literature where the social network was positively influencing a firm's internationalization.

-----

**Insert Table 2 about here**

-----

*Mediation Analysis.* To test the mediation effect (Hypotheses 2), we followed the procedure suggested by Hayes (2018), Preacher (2015), and Muthén and Muthén (2017), with a bootstrap

resample value of 5,000. In Table 3, Model 1, we summarize the standardized path coefficients of indirect, direct, and total effects. Social network was completely mediating the relationship between CEO polychronicity and international performance. This was because the estimated path coefficient for the indirect effects of CEO polychronicity and internationalization performance was statistically significant ( $\theta=0.091$ ; LCI=0.0850; UCI=0.1016) and the direct effect of CEO polychronicity on international performance was statistically insignificant ( $\theta =0.0785$ ; LCI =0.0577; UCI=0.0985). We thus find evidence in support of the second hypothesis.

*Moderated Mediation Analysis.* To test hypotheses 3a and 3b, we performed moderated-mediation analysis. We performed the moderated-mediation analysis in five steps. *First*, variables were mean-centered for the interaction effect. Then we included the control variables and main effects. Next, to avoid confounding of main and interaction effects, moderators' direct effects were also incorporated (Baron & Kenny, 1986; Irwin & McClelland, 2001). *Fourth*, moderated mediation was defined in the prototypic case, where there was no moderation of the effect of the independent on the dependent variable (Muller, Judd, & Yzerbyt, 2005). Finally, we ran separate models to assess the mediated moderation role of time pressure and synchrony preference (Gkorezis, Hatzithomas, & Petridou, 2011; Stock, Six, & Zacharias, 2013). In Table 4, we present the coefficient for the indirect effect of CEO polychronicity on international performance through social network for different levels of CEO synchrony preference and also for different levels of CEO time preference.

Hypothesis 3a stated that CEO polychronicity has a conditional indirect effect on internationalization performance through social network, where the mediation effect of social network is moderated by CEO synchrony preference, such that the indirect effect of CEO polychronicity on international performance is more positive when CEO synchrony preference is

high. From column 4 of Table 2, we can observe the beta coefficient of the interaction term of social network, and CEO synchrony preference on international performance was positive and significant ( $\beta=0.21$ ,  $p<0.01$ ). Column 1 of Table 4 suggests that the indirect effect of CEO polychronicity on international performance, mediated by social network, was less positive and statistically significant at a low level of CEO synchrony preference ( $\theta =0.3982$ ; LCI=0.3682; UCI=0.4281) than at an average level of CEO synchrony preference ( $\theta =0.4820$ ; LCI=0.4580; UCI=.5062) and a high level of CEO synchrony preference ( $\theta =0.5658$ ; LCI=0.5348; UCI=0.5968). Thus, we receive evidence in support of H3a.

Through hypothesis 3b, we speculated that CEO polychronicity has a conditional indirect effect on international performance through social network, where the mediation effect of social network is moderated by CEO time preference, such that the indirect effect of CEO polychronicity on international performance is less negative when the CEO time pressure is low. From column 5 of Table 2, we observe the interaction term of social network and CEO time pressure on international performance was negative and significant ( $\beta = -0.18$ ,  $p<0.001$ ).

Further, column 2 of Table 4 reveals that the indirect effect of CEO polychronicity on international performance was less negative and statistically significant at a low level of CEO time pressure ( $\theta =-0.1402$ ; LCI=-0.1762; UCI=-0.10424) than at an average level of CEO time pressure ( $\theta =-0.2340$ ; LCI=-0.2540; UCI=-0.2140) and a high level of CEO time pressure ( $\theta =-0.3279$ ; LCI=-0.3559; UCI=-0.2998). Thus, we receive evidence in support of H3b.

-----

**Insert Table 3 about here**

-----

-----  
**Insert Table 4 about here**  
-----

## **5. Discussion**

As SMEs have begun to enter international markets, scholars have warranted more research to explore drivers of SMEs' performance in international markets (Karami & Tang, 2019; Thanos, Dimitratos, & Sapouna, 2017). In this study, leveraging microfoundations lens and upper echelons theory, the specific research question under investigation is to determine which CEOs attributes influence their ability to form social networks and increase SMEs' international performance. We assert as polychronic CEOs have better multitasking ability, they form better social networks, which results in better international market performance, i.e., we propose a complete mediation model with social networks being a mediator. We also assess the boundary conditions under which the positive association between social networks and international performance is impacted. In this regard, we test the role of two temporal perspectives, i.e., time pressure and synchrony preference.

### *5.1. Theoretical implications*

Our study has several theoretical implications and contributions. Although CEOs' behavioral traits, such as regulatory focus, have begun to receive attention in the international business literature (Adomako, Opoku, & Frimpong, 2017), extant literature has not explored CEO polychronicity. Extending prior research on CEO polychronicity (Chen 2020; Souitaris & Maestro, 2010), this study shows that CEOs vary in the degree to which they prefer to engage in multiple tasks simultaneously and hence benefit from social networks, overall exerting significant indirect influence on SMEs ability to enhance its international performance. By investigating the

association between CEO polychronicity and SME international performance, we add to this micro-foundational lens of international business literature.

Recent research suggests that CEOs' polychronicity may affect firm outcomes only under certain contingency conditions (Chen, 2020). Our findings corroborate this research stream as we did not find evidence for partial mediation but full mediation effect of CEO polychronicity on SMEs' international performance through social networks. Our study provides preliminary evidence to the assertion that polychronic CEOs are an important facilitator of SMEs' capability to expand in international markets and enhance their international performance.

Second, the upper echelons theory has been criticized for the "black box" effect as there is a dearth of explanation on how CEO traits influence firm-level outcomes (Kraft & Bausch, 2016). In this context, scholars have recently begun to explore the mediating and moderated mediating mechanism to explain the path through which CEOs' traits influences firm outcomes, such as firm innovativeness (Stock, Groß, & Xin, 2019). We extend this stream of upper echelon literature and explore the underlying upper echelon and internationalization mechanisms. In this context, we explore social networks' role as a mediator and add to social network literature, where its antecedents have been explored relatively less (Karami & Tang, 2019). In the SMEs internationalization context, we explore the association between CEO traits, i.e., polychronicity and social network, thus extending implications of upper echelons theory on social networks and antecedents of social networks. Moreover, social networks' role as a mediator in a firm's internationalization and performance has been established (Zhou, Wu, & Luo, 2007). We extend its role as mediator in CEO traits and international performance relationship.

We also contribute to the information management view of internationalization (Dutot, Bergeron, & Raymond, 2014). The role of information and knowledge shared by social networks

in internationalization has focused on types of knowledge and source of knowledge, thus highlighting only information search and not information utilization (Stoian et al., 2018; Zhou et al., 2007). However, our findings suggest that CEOs' cognitive ability, i.e., perceived time pressure and synchrony, influences the extent of rich information as obtained from network sources is utilized for internationalization decisions.

Third, as we explore the contingency conditions under which social networks influence SMEs' international performance, we shine a light on the moderating effect of two vital time-related constructs: perceived time pressure and synchrony preference. Scholar experts on “time perspective” literature have emphasized the exploration of time management (time allocation, pacing) dimension in firm outcomes (Gamache & McNamara, 2019; Lévesque & Stephan, 2020; Shipp & Cole, 2015). Leveraging the time management dimension, we further explore the moderating impact of time pressure and CEOs' synchrony preference on social networks and SME internationalization relationship. Though time pressure has been explored significantly in the extant literature, it has been largely constrained to creativity literature (Ohly & Fritz, 2010). Our study extends the role of time pressure as a moderator in social network literature and reveals its negative outcome on social network and international performance relationship.

Furthermore, extant temporal research exploring the moderating influence of synchrony preference posits mixed findings. Some studies suggest a positive impact on work outcomes (Mohammed & Nadkarni, 2011), and others offering a negative effect (Sirén et al., 2019). Our findings add to this stream of temporal research and suggest that synchrony positively affects SMEs' social network and international performance relationship. This happens as with social networks, CEOs leverage information provided by social network members, where synchrony enhances information processing ability.

By integrating polychronicity (upper echelon) perspective with the social network (Masiello & Izzo, 2019) and temporal perspective (Chen & Nadkarni, 2017) in the study of SME internationalization, we provide new insights into the micro-multinational behavior and address calls for conducting research into the SME growth via internationalization (Deligianni, Voudouris, & Lioukas, 2015).

### *5.2. Managerial implications*

Our findings suggest that firms can improve their international performance if CEOs have low perceived time pressure and high ability to synchronize their pace of activities with social network members. CEOs, founders, and board of directors of SMEs may thus benefit from our research by encouraging CEOs to be more polychronic and encouraging them to pace their activities with social network members providing enriching internationalization information. The upper echelon team, including the board of directors, can recruit, train, coach, and council CEOs for being polychronic. Firms can conduct assessments of polychronicity for top executives' functioning, especially from an internationalization perspective, and can arrange for coaching for required behavioral traits. Leadership development institutes can use several interventions based on observations or interviewing techniques to make CEOs more polychronic. Alternatively, as firms seek to hire new CEOs, they should ensure that CEOs are polychronic if they want SMEs to enhance their international performance. Moreover, CEOs can also be coached to reduce perceived time pressure and have flexible synchrony preferences. These attributes would further enhance the ability to leverage information from social networks and hence internationalize through advanced entry mode.

### *5.3. Limitations and directions of future research*

Our study has certain limitations, which also opens avenues for future research. Polychronicity by few scholars is considered to be unproductive as it requires competing demands for cognitive resources, known as dual-task cost (Takeuchi, Yun, & Wong, 2011). This is because coordination is impaired in organization contexts where a high level of multitasking is practiced, resulting in a higher frequency of errors and worse decision making (Appelbaum, Marchionni, & Fernandez, 2008). Thus, more research is required to explore contingency factors that make CEOs take advantage of their polychronicity.

Furthermore, our study did not explicitly test the differences between different types of networks such as relational, structural, or cognitive a polychronic CEO would form. Still, this distinction holds promise for future management research since the differential effects of social network types are under-explored in the literature (Eiteneyer, Bendig, & Brettel, 2019). Third, as the study was conducted with UK SMEs, a comparative study could be conducted with emerging markets. Increasingly SMEs from emerging economies have become active in international markets, pushed by the limited opportunities in their home markets or growth prospects in foreign markets.

Then, this study is cross-sectional. Consequently, unlike in longitudinal study, we could not control reverse causality and endogeneity, which can have a role in upper echelon research (Chatterjee & Hambrick, 2007). Furthermore, although we assert the strategically important role of the CEO, the CEO-TMT interface cannot be ignored (Heyden et al., 2017). This is because decision making, even in SMEs, occurs in the presence of other TMT and senior executives. Rather, Simsek, Veiga, Lubatkin, and Dino (2005) asserted, “Researchers have not gained a good understanding of the nature of TMT processes,” and upper echelon literature also explains TMT



Faultline, CEO-TMT power dynamics in influencing firm outcomes. Possibly TMT dynamics could also shape the role of polychronic CEOs. Hence, we suggest that future research can focus on various CEO-TMT interfaces for determining firms' internationalization. Rather CEO-TMT polychronicity diversity could be a significant aspect to explore SMEs' international performance (Mohammed & Nadkarni, 2017). We also did not capture information on exactly which foreign markets did SMEs internationalized more, i.e., neighboring or distant countries. Future research could explore this aspect, as well.

## References

- Adomako, S., Opoku, R. A., & Frimpong, K. (2017). The moderating influence of competitive intensity on the relationship between CEOs' regulatory foci and SME internationalization. *Journal of International Management*, 23(3), 268–278.
- Andersson, U., Dasí, Á., Mudambi, R., & Pedersen, T. (2016). Technology, innovation and knowledge: The importance of ideas and international connectivity. *Journal of World Business*, 51(1), 153–162.
- Anwar, M., Shah, S. Z. A., & Khan, S. Z. (2018). The role of personality in SMEs internationalization: Empirical evidence. *Review of International Business and Strategy*, 28(2), 258–282.
- Appelbaum, S. H., Marchionni, A., & Fernandez, A. (2008). The multi-tasking paradox: Perceptions, problems and strategies. *Management Decision*, 46(9), 1313–1325.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396–402.
- Atuahene-Gima, K., Slater, S. F., & Olson, E. M. (2005). The contingent value of responsive and proactive market orientations for new product program performance. *Journal of Product Innovation Management*, 22(6), 464–482.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–82.
- Becker, G. S. (1965). A theory of the allocation of time. *The Economic Journal*, 75(299), 493–517.
- Bertolotti, F., Mattarelli, E., & Dukerich, J. (2019). The relationship between polychronicity and social networks: A mixed-methods study of research and development professionals. *Human Relations*, 72(10), 1595–1622.
- Bluedorn, A. C. (2002). *The human organization of time: Temporal realities and experience*. Stanford: Stanford University Press.
- Bluedorn, A. C., Kalliath, T. J., Strube, M. J., & Martin, G. D. (1999). Polychronicity and the inventory of polychronic values (IPV). *Journal of Managerial Psychology*, 14(3/4), 205–231.
- Bluedorn, A. C., Kaufman, C. F., & Lane, P. M. (1992). How many things do you like to do at once? An introduction to monochronic and polychronic time. *Academy of Management Perspectives*, 6(4), 17–26.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Bruneel, J., Clarysse, B., & Autio, E. (2018). The role of prior domestic experience and prior shared experience in young firm internationalization. *International Small Business Journal*, 36(3), 265–284.
- Chatterjee, A., & Hambrick, D. C. (2007). It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. *Administrative Science Quarterly*, 52(3), 351–386.
- Chen, J. (2020). A juggling act: CEO polychronicity and firm innovation. *The Leadership Quarterly*, 101380. <https://doi.org/10.1016/j.leaqua.2019.101380>

- Chen, J., & Nadkarni, S. (2017). It's about time! CEOs' temporal dispositions, temporal leadership, and corporate entrepreneurship. *Administrative Science Quarterly*, 62(1), 31–66.
- Contractor, F., Foss, N. J., Kundu, S., & Lahiri, S. (2019). Viewing global strategy through a microfoundations lens. *Global Strategy Journal*, 9(1), 3–18.
- Cotte, J., & Ratneshwar, S. (1999). Juggling and hopping: What does it mean to work polychronically? *Journal of Managerial Psychology*, 14(3/4), 184–205.
- Deligianni, I., Voudouris, I., & Lioukas, S. (2015). Growth paths of small technology firms: The effects of different knowledge types over time. *Journal of World Business*, 50(3), 491–504.
- Díez-Vial, I. & Montoro-Sánchez, A. (2020). International gatekeepers: How to integrate domestic networks and international relations. *International Business Review*, 29(6), 101751. <https://doi.org/10.1016/j.ibusrev.2020.101751>
- Dutot, V., Bergeron, F., & Raymond, L. (2014). Information management for the internationalization of SMEs: An exploratory study based on a strategic alignment perspective. *International Journal of Information Management*, 34(5), 672–681.
- Eiteneyer, N., Bendig, D., & Brettel, M. (2019). Social capital and the digital crowd: Involving backers to promote new product innovativeness. *Research Policy*, 48(8), 103744. <https://doi.org/10.1016/j.respol.2019.01.017>
- Ellis, P. (2011). Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalization. *Journal of International Business Studies*, 42(1), 99–127.
- European Commission. (2003). Commission recommendation of 6 May 2003, concerning the definition of micro, small and medium-sized enterprises (notified under document number C(2003) 1422) Official Journal of the European Union L 124/36. [available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:EN:PDF>]
- Felzensztein, C., Ciravegna, L., Robson, P., & Amorós, J. E. (2015). Networks, entrepreneurial orientation, and internationalization scope: Evidence from Chilean small and medium enterprises. *Journal of Small Business Management*, 53(Sup1), 145–160.
- Felzensztein, C., Deans, K. R., & Dana, L. P. (2019). Small firms in regional clusters: Local networks and internationalization in the Southern Hemisphere. *Journal of Small Business Management*, 57(2), 496–516.
- Fletcher, M., & Harris, S. (2012). Knowledge acquisition for the internationalization of the smaller firm: Content and sources. *International Business Review*, 21(4), 631–647.
- Fondas, N., & Wiersema, M. (1997). Changing of the guard: The influence of CEO socialization on strategic change. *Journal of Management Studies*, 34(4), 561–584.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equations models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50
- Gamache, D. L., & McNamara, G. (2019). Responding to bad press: How CEO temporal focus influences the sensitivity to negative media coverage of acquisitions. *Academy of Management Journal*, 62(3), 918–943.
- Giachetti, C., Manzi, G., & Colapinto, C. (2019). Entry mode degree of control, firm performance and host country institutional development: A meta-analysis. *Management International Review*, 59(1), 3–39.
- Gkorezis, P., Hatzithomas, L., & Petridou, E. (2011). The impact of leader's humor on employees' psychological empowerment: The moderating role of tenure. *Journal of Managerial Issues*, 23(1), 83–95.

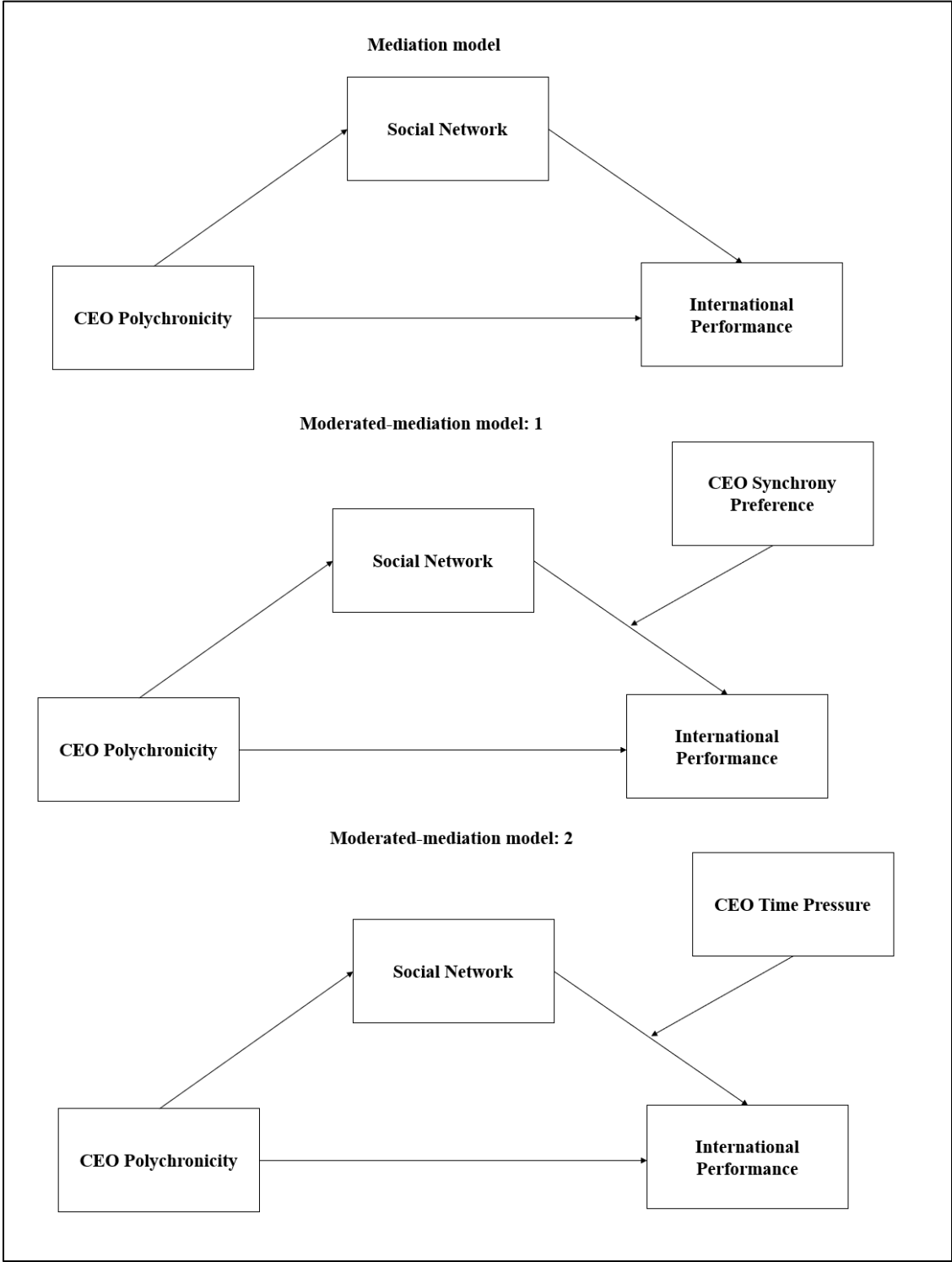
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109-122.
- Hair, J. F. Jr, Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2006). *Multivariate data analysis* (6th ed). Upper Saddle River NJ: Prentice Hall International.
- Hall, E. T. (1976). *Beyond culture*. Garden City NY: Doubleday
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management*, 32(2), 334-343.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: The Guilford Press.
- Heyden, M. L., Fourné, S. P., Koene, B. A., Werkman, R., & Ansari, S. (2017). Rethinking ‘top-down’ and ‘bottom-up’ roles of top and middle managers in organizational change: Implications for employee support. *Journal of Management Studies*, 54(7), 961-985.
- Hsu, W. T., Chen, H. L., & Cheng, C. Y. (2013). Internationalization and firm performance of SMEs: The moderating effects of CEO attributes. *Journal of World Business*, 48(1), 1-12.
- Irwin, J. R., & McClelland, G. H. (2001). Misleading heuristics and moderated multiple regression models. *Journal of Marketing Research*, 38(1), 100-109.
- Kaufman, C. F., Lane, P. M., & Lindquist, J. D. (1991). Exploring more than 24 hours a day: A preliminary investigation of polychronic time use. *Journal of Consumer Research*, 18(3), 392-401.
- Kaufman-Scarborough, C., & Lindquist, J. D. (1999b). Time management and polychronicity. *Journal of Managerial Psychology*, 14(3/4), 288-312.
- Karami, M., & Tang, J. (2019). Entrepreneurial orientation and SME international performance: The mediating role of networking capability and experiential learning. *International Small Business Journal*, 37(2), 105-124.
- König, C. J., Oberacher, L., & Kleinmann, M. (2010). Personal and situational determinants of multitasking at work. *Journal of Personnel Psychology*, 9(2), 99-103.
- Kraft, P., & Bausch, A. (2016). How do transformational leaders promote exploratory and exploitative innovation? Examining the black box through MASEM. *Journal of Product Innovation Management*, 33(6), 687-707.
- Lee, W., Tan, T. M., & Hameed, S. S. (2005). Polychronicity, the Internet, and the mass media: A Singapore study. *Journal of Computer-Mediated Communication*, 11(1), 300-316.
- Leppäaho, T., Chetty, S., & Dimitratos, P. (2018). Network embeddedness in the internationalization of biotechnology entrepreneurs. *Entrepreneurship & Regional Development*, 30(5-6), 562-584.
- Leroy, H., Anseel, F., Gardner, W. L., Gardner, W. L., & Sels, L. (2015). Authentic leadership, authentic followership, basic need satisfaction, and work role performance: A cross-level study. *Journal of Management*, 41(6), 1677-1697.
- Leroy, S., Shipp, A. J., Blount, S., & Licht, J. G. (2015). Synchrony preference: Why some people go with the flow and some don't. *Personnel Psychology*, 68(4), 759-809.
- Lévesque, M., & Stephan, U. (2020). It's time we talk about time in entrepreneurship. *Entrepreneurship Theory and Practice*, 44(2), 163-184.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114-112.

- Malhotra, N., Nunan, D., & Birks, D. (2017). *Marketing research: An applied approach* (Fifth Edition). Harlow, UK: Pearson Education Limited.
- Mann, L., & Tan, C. (1993). The hassled decision maker: The effects of perceived time pressure on information processing in decision making. *Australian Journal of Management* 18(2), 197-209.
- Manolova, T. S., Manev, I. M., & Gyoshev, B. S. (2014). Friends with money? Owner's financial network and new venture internationalization in a transition economy. *International Small Business Journal*, 32(8), 944–966.
- Maruping, L. M., Venkatesh, V., Thatcher, S. M., & Patel, P. C. (2015) Folding under pressure or rising to the occasion? Perceived time pressure and the moderating role of team temporal leadership. *Academy of Management Journal*, 58(5), 1313–1333.
- Masiello, B., & Izzo, F. (2019). Interpersonal social networks and internationalization of traditional SMEs. *Journal of Small Business Management*, 57(S2), 658-691.
- Mejri, K., & Umemoto, K. (2010). Small-and medium-sized enterprise internationalization: Towards the knowledge-based model. *Journal of International Entrepreneurship*, 8(2), 156–167.
- Meyer, G. W. (1994). Social information processing and social networks: A test of social influence mechanisms. *Human Relations*, 47(9), 1013–1047.
- Minzberg, H. (1973) *Ten managerial roles, leadership and management and personal management*. New York: Harper & Row.
- Mohammed, S., & Nadkarni, S. (2011). Temporal diversity and team performance: The moderating role of team temporal leadership. *Academy of Management Journal*, 54(3), 489–508.
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89(6), 852–863.
- Musteen, M., Francis, J., & Datta, D. K. (2010). The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business*, 45(3), 197–205.
- Muthén, L. K., & Muthén, B. (2017). *Mplus user's guide* (Eighth Edition). Los Angeles, CA: Muthén & Muthén.
- Ohly, S., & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity, and proactive behavior: A multi-level study. *Journal of Organizational Behavior*, 31(4), 543–565.
- O'Neill, B. S., & Adya, M. (2007). Knowledge sharing and the psychological contract. *Journal of Managerial Psychology*, 22(4), 411–436.
- Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory and Practice*, 29(5), 537–553.
- Pergelova, A., Angulo-Ruiz, F., & Yordanova, D. I. (2018). Gender and international entry mode. *International Small Business Journal*, 36(6), 662-685.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Poposki, E. M., & Oswald, F. L. (2010). The multitasking preference inventory: Toward an improved measure of individual differences in polychronicity. *Human Performance*, 23(3), 247–264.

- Prashantham, S. (2011). Social capital and Indian micromultinationals. *British Journal of Management*, 22(1), 4-20.
- Prashantham, S., & Young, S. (2011). Post-entry speed of international new ventures. *Entrepreneurship Theory and Practice*, 35(2), 275-292.
- Preacher, K. J. (2015). Advances in mediation analysis: A survey and synthesis of new developments. *Annual Review of Psychology*, 66, 825-52.
- Presutti, M., Boari, C., & Fratocchi, L. (2016). The evolution of inter-organisational social capital with foreign customers: Its direct and interactive effects on SMEs' foreign performance. *Journal of World Business*, 51(5), 760-773
- Reuber, A. R., & Fischer, E. (1997) The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies*, 28(4): 807-825.
- Riahi-Belkaoui, A. (1998). The effects of the degree of internationalization on firm performance. *International Business Review*, 7(3), 315-321.
- Ruigrok, W., & Wagner, H. (2003). Internationalization and performance: An organizational learning perspective. *MIR: Management International Review*, 43(1), 63-83.
- Sanchez-Burks, J., & Lee, F. (2007). Cultural psychology of workways. In: Kitayama S and Cohen D (eds) *Handbook of Cultural Psychology*. New York: The Guilford Press, pp. 346-369.
- Semmer, N., Zapf, D., & Dunckel, H. (1999). *Handbook of psychological job analysis. Instrument for stress-related task analysis* (Ed). Zürich, Switzerland: ISTA.
- Shipp, A. J., & Cole, M. S. (2015). Time in individual-level organizational studies: What is it, how is it used, and why isn't it exploited more often? *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 237-260.
- Simsek, Z., Veiga, J. F., Lubatkin, M. H., & Dino, R. N. (2005). Modeling the multilevel determinants of top management team behavioral integration. *Academy of Management Journal*, 48(1), 69-84.
- Sirén, C., Parida, V., Patel, P. C., & Wincent, J. (2019). Rushed and short on time: The negative effects of temporal planning and flexible pacing style on the entrepreneurial alertness-effectuation relationship. *Journal of Business Research*, 101, 555-560.
- Smith, C. A. P., & Hayne, S. C. (1997). Decision making under time pressure: an investigation of decision speed and decision quality of computer-supported groups. *Management Communication Quarterly*, 11(1), 97-126.
- Souitaris, V., & Maestro, B. M. (2010) Polychronicity in top management teams: The impact on strategic decision processes and performance of new technology ventures. *Strategic Management Journal*, 31(6): 652-678.
- Stock, R. M., Six, B., & Zacharias, N. A. (2013). Linking multiple layers of innovation-oriented corporate culture, product program innovativeness, and business performance: A contingency approach. *Journal of the Academy of Marketing Science*, 41(3), 283-99.
- Stock, R., Groß, M., & Xin, K. R. (2019). Will self-love take a fall? Effects of top executives' positive self-regard on firm innovativeness. *Journal of Product Innovation Management*, 36(1), 41-65.
- Stoian, M. C., Dimitratos, P., & Plakoyiannaki, E. (2018). SME internationalization beyond exporting: A knowledge-based perspective across managers and advisers. *Journal of World Business*, 53(5), 768-779.

- Stoian, M. C., Rialp, J., & Dimitratos, P. (2017). SME networks and international performance: Unveiling the significance of foreign market entry mode. *Journal of Small Business Management*, 55(1), 128–148.
- Streufert, S., & Streufert, S. C. (1981). *Stress and information search in complex decision making: Effects of load and time urgency* (No. TR-4). The Pennsylvania State University, College of Medicine, Hershey, Pennsylvania. <https://apps.dtic.mil/dtic/tr/fulltext/u2/a104007.pdf>
- Takeuchi, R., Yun, S., & Wong, K. F. E. (2011). Social influence of a coworker: A test of the effect of employee and coworker exchange ideologies on employees' exchange qualities. *Organizational Behavior and Human Decision Processes*, 115(2), 226–237.
- Thanos, I. C., Dimitratos, P., & Sapouna, P. (2017). The implications of international entrepreneurial orientation, politicization, and hostility upon SME international performance. *International Small Business Journal*, 35(4), 495–514.
- Tinsley, C. H. (2001). How negotiators get to yes: Predicting the constellation of strategies used across cultures to negotiate conflict. *Journal of Applied Psychology*, 86(4), 583–593.
- Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge UK: Cambridge University Press.
- Tran, M. D., & Adomako, S. (2020). How CEO social capital drives corporate social performance: The roles of stakeholders, and CEO tenure. *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.2092>
- Urbach, T., & Weigelt, O. (2019). Time pressure and proactive work behaviour: A week-level study on intraindividual fluctuations and reciprocal relationships. *Journal of Occupational and Organizational Psychology*, 92(4), 931–952.
- Vermeulen, F., & Barkema, H. (2002). Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal*, 23(7), 637–653.
- Waller, M. J., Conte, J. M., Gibson, C. B., & Carpenter, M. A. (2001). The effect of individual perceptions of deadlines on team performance. *Academy of Management Review*, 26(4): 586–600.
- Zhang, Y., Goonetilleke, R. S., Plocher, T., & Liang, S. F. M. (2005). Time-related behaviour in multitasking situations. *International Journal of Human-Computer Studies*, 62(4), 425–455.
- Zhou, L., Wu, A., & Barnes, B. R. (2012). The effects of early internationalization on performance outcomes in young international ventures: the mediating role of marketing capabilities. *Journal of International Marketing*, 20(4), 25–45.
- Zhou, L., Wu, W. P., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies*, 38(4), 673–690.

Figure 1. Mediation and moderated-mediation models





**Table 1. Correlations and descriptive statistics (n=186)**

Variables	1	2	3	4	5	6	7	8	9	10	11	
<b>International</b>												
<b>1</b>	<b>performance</b>	<b>0.79</b>										
	<b>CEO</b>											
<b>2</b>	<b>polychronicity</b>	0.22	<b>0.74</b>									
	<b>Social</b>											
<b>3</b>	<b>network</b>	0.27	0.54	<b>0.83</b>								
	<b>CEO time</b>	-										
<b>4</b>	<b>pressure</b>	0.09	-0.14	-0.18	<b>.71</b>							
	<b>CEO</b>											
	<b>synchrony</b>											
<b>5</b>	<b>preference</b>	0.11	0.28	0.24	-0.07	<b>0.70</b>						
<b>6</b>	<b>Firm size</b>	0.07	0.06	0.08	0.05	0.06	<b>n/a</b>					
<b>7</b>	<b>Slack</b>	0.06	0.003	0.11	-0.06	0.05	0.15	<b>0.52</b>				
<b>8</b>	<b>LnFirm age</b>	0.03	0.070	-0.01	0.1	0.08	0.17	0.14	<b>n/a</b>			
<b>9</b>	<b>Ln CEO age</b>	0.05	0.008	0.08	0.12	0.03	0.2	0.08	0.21	<b>n/a</b>		
	<b>Competitive</b>											
<b>10</b>	<b>intensity</b>	0.08	0.006	0.002	0.13	-0.08	0.07	0.09	0.05	<b>0.07</b>	<b>n/a</b>	
	<b>Market</b>											
<b>11</b>	<b>uncertainty</b>	0.04	0.02	0.1	0.08	0.09	0.003	0.12	0.001	<b>0.13</b>	<b>0.15</b>	<b>n/a</b>
	<b>Mean</b>	5.68	5.78	1.83	5.16	5.32	4.5	4.24	3.21	3.7	5.2	5.56
	<b>S.D.</b>	0.73	0.61	1.25	1.49	1.14	3.9	1.11	2.11	1.96	1.01	0.84

Notes: Diagonal elements in bold represent the square roots of the average variance extracted

r-0.145, p<0.10, r-0.15-0.18-p<0.05, r-0.19-0.23, p<0.01, 0.24-onwards, p<0.001,

**Table 2. Standardized parameters of Structural equation models (D.V.= International Performance) (n=186)**

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
<b>Control Variables</b>					
Firm size	0.05 (0.04)	0.06 (0.05)	0.07 (0.06)	0.07 (0.06)	0.08 (0.07)
Slack	0.08 (0.06)	0.10 (0.08)	0.11 (0.09)	0.11 (0.09)	0.13 (0.12)
Firm age	0.09 (0.10)	0.06 (0.08)	0.05 (0.07)	0.09 (0.10)	0.09 (0.10)
CEO age	-0.08 (0.03)	-0.07 (0.03)	-0.08 (0.03)	-0.09 (0.04)	-0.09 (0.04)
Competitive intensity	0.14 (0.07)	0.14 (0.07)	0.15 (0.08)	0.16 (0.09)	0.16 (0.09)
Market uncertainty	0.11 (0.05)	0.12 (0.06)	0.12 (0.06)	0.13 (0.07)	0.14 (0.08)
<b>Mediating Variable</b>					
Social network		0.26** (0.08)	0.27** (0.09)	0.27*** (0.09)	0.27*** (0.09)
<b>Independent Variables</b>					
CEO polychronicity			0.04 (0.03)	0.03 (0.02)	0.07 (0.05)
<b>Mediator as dependent variable</b>					
CEO polychronicity			0.35 *** (0.10)	0.32*** (0.09)	0.36*** (0.11)
<b>Interaction Terms</b>					
Social network * CEO synchrony preference				0.21*** (0.07)	
Social network *CEO time pressure					-0.18*** (0.06)
<b>Model Fit Information</b>					
	167/109=	191/155=	417/ 326 =	1173/798 =	1064/771 =
Chi-square/ df	1.53	1.23	1.28	1.47	1.38
RMSEA	0.05	0.03	0.03	0.05	0.04
SRMR	0.07	0.04	0.05	0.06	0.06
CFI	0.96	0.96	0.97	0.88	0.90
TLI	0.94	0.95	0.96	0.86	0.89
<b>Variance in Dependent Variable</b>					
R-Square	0.06	0.13	0.22	0.25	0.28

\* p < 0.10; \*\* p < 0.05; \*\*\* p < 0.01.

**Table 3. Test of Hypothesis (SEM-Based Bootstrapping; 5000 resamples)**

	<b>Standardized Parameter (SE)</b>
<b>H1:</b> CEO polychronicity ———▶ Social network	0.35*** (0.09)
<b>H2:</b> CEO polychronicity ———▶ Social network ———▶ International performance	
Total effect	0.161 (0.09)
Direct effect	0.07 (0.04)
Indirect effect	0.091 (0.028)
<b>H3a:</b> CEO polychronicity ———▶ Social network*CEO synchrony preference ————▶ International performance	0.21*** (0.07)
<b>H3b:</b> CEO polychronicity ———▶ Social network*CEO time pressure ————▶ International performance	-0.18*** (0.06)

SE= Standard Error; \* p < 0.10; \*\* p < 0.05; \*\*\* p < 0.01;

**Table 4. Indirect effects at different levels of moderators (Mediator: Social network)**

<b>Moderated-Mediation Model for Social networking as mediator and CEO synchrony preference as a moderator</b>		<b>Moderated-Mediation Model for Social network as mediator and CEO time pressure as a moderator</b>	
<b>(1)</b>		<b>(2)</b>	
CEO synchrony preference	[Indirect Effect ( $\theta$ ) (LCI/UCI)]	CEO time pressure	[Indirect Effect ( $\theta$ ) (LCI/UCI)]
Low (4.18)	0.3982(0.3682/0.4281)	Low (3.67)	-0.1402(-0.1762/-0.1042)
Medium (5.32)	0.4820 (0.4580/0.5062)	Medium (5.16)	-0.2340(-0.2540/-0.2140)
High (6.46)	0.5658(0.5348/0.5968)	High (6.65)	-0.3279(-0.3559/-0.2999)

**Appendix 1: Scale items of the constructs**

<b>Construct</b>	<b>Items</b>	<b>Source</b>	<b>Cronbach's alpha/CR</b>	<b>Seven-Point Likert Scale</b>
International Performance	International profit over the past three years	Stoian et al. (2017); Zhou et al. (2012); Zhou et al. (2007);	0.92/0.94	“1” indicated “much worse” to “7”, indicated” much better”
	International sales over the past three years			
	International market share over the past three years			
CEO polychronicity	I do not like to juggle several activities at the same	Chen (2020); Kaufman et al. (1991); Lee et al. (2005);	0.81/0.85	“1” indicated “strongly disagree” to “7”, indicated “strongly agree”
	People should not try to do many things at once			
	When I sit down at my desk, I work on one project at a time			
	I am comfortable doing several things at the same time.			
Social network	With respect to your (CEO) interorganizational networks indicate the extent to which the following is true:	Tran and Adomako (2020); Prashantham (2011);	0.92/0.97	“1” indicated “strongly disagree” to “7”, indicated “strongly agree”
	I have an intense formal or informal cooperation with other organizations			
	I strive to develop new contacts with organizations			
	These relationships are characterized by mutual trust			
	These relationships are characterized by high reciprocity			
	These relationships have ‘opened new doors’ for us			
	I have extensive relationships with organizations			
	I utilize these relationships in my business			
These relationships are characterized by close interactions				

<b>Construct</b>	<b>Items</b>	<b>Source</b>	<b>Cronbach's alpha/CR</b>	<b>Seven-Point Likert Scale</b>
CEO time pressure	I had to work faster than usual to get my work done	Semmer et al. (1999); Urbach and Weigelt (2019)	0.84/0.88	“1” indicated “never” to “7”, indicated “several times a day”
	I was pressed for time			
	I had to keep up with a high working pace			
CEO Synchrony Preference	I am flexible in how I pace myself so that I can adjust to other people.	Leroy et al. (2015)	0.86/0.90	“1” indicated “strongly disagree” to “7”, indicated “strongly agree”
	I am good at adapting to other people’s pace.			
	I tend to be very patient with other people.			
	I am willing to go with flow: I don’t need to be in charge of setting the pace of things.			