Enjoying or Refraining from Risk?

The Impact of Implicit Need for Achievement and Risk Perception on SME Internationalization

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Abstract

Purpose: This study explores how an entrepreneur’s implicit need for achievement and its risk reception contribute to internationalization performance.

Design: This study involves 176 Indonesian entrepreneurs. We use the Operant Motive Test (OMT) to assess the entrepreneur’s implicit needs and apply hierarchical Tobit regression to assess the interplay between implicit need for achievement, risk perception, and internationalization.

Finding: We show that an entrepreneur’s basic needs and risk perception play an essential role in SME internationalization. More specifically, we reveal a positive association between the entrepreneur’s need for achievement and SME internationalization. We also show a U-shaped relationship for the moderation effect of risk perception on this relationship. That is, for a high need for achievement motivated entrepreneurs, the level of internationalization is at the highest when risk perception is either very low or very high.

Originality/value: In this study, we argue that analyses at the entrepreneur’s individual level are indispensable to better understand firm internationalization. We argue that the role of psycho-cognitive characteristics of individuals (such as motivational dispositions) received too little attention, compared
to factors at the firm or environmental level. This study examines such personality aspects; that is, the implicit need for achievement and risk perception, impact SME internationalization.

**Keywords:** Internationalization, Implicit Need for Achievement, Risk Perception, SEM, Operant Motive Test (OMT).

**Paper type:** Research paper

1. **Introduction**

   Internationalization is a promising strategic option, both for small and large firms. It does not only allow a firm to expand its market, but also improves the firm’s domestic competitive position to gain revenue as well as profitability (Brouthers, Nakos, & Dimitratos, 2015; Johanson & Vahlne, 1977; McDougall & Oviatt, 2000). Next to such beneficial effects for the individual firm, internationalization is also advantageous for reducing unemployment (Al-Hyari, Al-Weshah, & Alnsour, 2012), resulting in nation-wide economic development (Cavusgil & Nevin, 1981; Da Rocha, Kury, & Monteiro, 2009; George, Wiklund, & Zahra, 2016). Therefore, scholars already studied firm internationalization for many decades. Even though past research mainly focussed on large well-established enterprises (Hitt, Hoskisson, & Kim, 1997), the internationalization of small and medium enterprises (SMEs) gained significant and increasing attention in the last decades (Child et al., 2017; Child & Hsieh, 2014; McDougall & Oviatt, 2000).

   Studies on SME internationalization are abundant. For example, differences in the SME’s social networks and consolidation, value-adding, and disruption capabilities (Pinho & Prange, 2016), structure, technology, and people (Lin, 1998), internal and external factors (Leonidou, 2004), and innovation (Dai, Maksimov, Gilbert, & Fernhaber, 2014; Shan, Song, & Ju, 2016) have been put forward as determinants of SME internationalization. Even though such studies shed light on the barriers of SME internationalization and considerable efforts have been undertaken to tackle these barriers and thus further stimulate SME internationalization (Al-
Hyari et al., 2012; Caianza, 2016; Cerrato, Crosato, & Depperu, 2016; Etemad, 2004; Leonidou, 2004), the contribution of SMEs to international trade is still rather low (WTO, 2016). This urges us to search for additional explanations to better understand SME internationalization. In this paper, we argue that for this, we need to consider the entrepreneur’s individual characteristics.

The reason that we focus on the individual level is twofold. First, the impact of the entrepreneur’s personality on firm functioning is higher in small and medium firms than in large firms (Brammer, Hoejmose, & Marchant, 2011; Child et al., 2017; Redmond, Walker, & Wang, 2008). It thus makes sense to take into account the entrepreneur’s personal characteristics in any study about SME internationalization. Second, and more importantly, even though research that focused on individual characteristics such as learning behavior (de Clercq, Sapienza, & Crijns, 2005), the entrepreneur’s competence (Chandler & Hanks, 1994; Dimitratos, Buck, Fletcher, & Li, 2016), cognition (Acedo & Florin, 2006; Acedo & Jones, 2007), personal drivers (Prange & Pinho, 2017), personality traits (Omri & Becuwe, 2014), and motivation (Dimitratos, Buck, et al., 2016), concluded that individual characteristics indeed play an important role in SME internationalization and performance, individual psychological characteristics (such as deep-level implicit motives) and their interplay with other individual characteristics (such as risk perception) have been largely overlooked (Ruzzier, Matlay, Hisrich, & Antoncic, 2006; Westhead, Wright, & Ucbasaran, 2001).

This is very unfortunate, in particular, because authors such as Frese and Gielnik (2014) argue that the entrepreneur’s psychological needs might influence SME internationalization. Indeed, they call for additional and more in-depth insights into the entrepreneur’s psychological needs to better understand the relation between the entrepreneur and international business performance. This need for additional studies about the entrepreneur’s psychological needs is also apparent in review studies in the international entrepreneurship domain, such as those from
Jones, Coviello, and Tang (2011), Knight and Liesch (2016), and Chen, Sousa, and He (2016), who all call for more insight into the relationship between an entrepreneur’s psychological needs and international entrepreneurship.

To answer such pleas, we build on implicit needs theory (McClelland, Koestner, & Weinberger, 1989) and examine the relationship between the entrepreneur’s implicit need for achievement and SME internationalization. Implicit Need for Achievement, from now on referred to as $n$Achievement\(^1\), is a deep-rooted motivation that energizes individuals to engage in challenging tasks to improve their performance or to improve their standards of excellence (McClelland, 1965a, 1985; Schultheiss & Brunstein, 2010). In addition, risk-taking behaviors strongly determine if and to what extent $n$Achievement motivated people will initiate and persist behavior (Pang, 2010), which is specifically relevant in an internationalization context, where risk is inextricably present (Acedo & Florin, 2006; Acedo & Jones, 2007; Johanson & Vahlne, 2009; Prange & Pinho, 2017). Therefore, in this study, we include both $n$Achievement and risk perception of internationalization and argue for an interaction effect between these constructs. Because in our study, risk perception of internationalization is defined as an individual and subjective (or, in other words, personal) concept, adding this variable allows us to understand the interplay of two individual characteristics of the entrepreneur on firm internationalization: $n$Achievement and risk perception (Muzychenko & Liesch, 2015; Sitkin & Weingart, 1995).

Overall, we focus on the entrepreneur’s $n$Achievement and risk perception for four reasons. First, $n$Achievement is a significant driver of entrepreneurial activity (Collins, Hanges, & Locke, 2004; McClelland, 1965a; Pang, 2010; Shane, Locke, & Collins, 2003). Its impact on

\(^1\) McClelland makes a clear distinction between implicit and explicit motives and refers to implicit motives as needs, abbreviated with a lower-case and an italic $n$ (McClelland et al, 1989). So far, the conceptual distinction between implicit and explicit motives is less pronounced in business and management research. Yet, because explicit and implicit motives are conceptually different and linked to different behavioral outcomes, we will follow the tradition in psychology and refer to implicit need for achievement as $n$Achievement.
SME internationalization, however, is largely unknown. We address this with our study. Second, because implicit motives, including nAchievement, are specifically good in predicting long-term behaviors (Schüler, Sheldon, & Fröhlich, 2010; Schultheiss & Brunstein, 2010), we expect that nAchievement impacts business decisions with long-term consequences such as internationalization. Third, the internationalization of SMEs is considered as a challenging task and achieved through a relatively-long term process (Chye Koh, 1996; Sagie & Elizur, 1999; Schultheiss, Wiemers, & Wolf, 2014). It thus makes sense to add both nAchievement (which is a psychological construct expected to impact such long-term processes), and risk perception (which defines how challenging the task is perceived) to the conceptual model. Fourth and finally, nAchievement is associated with risks and is channeled into the hope of success (HS) and fear of failure (FF) (Atkinson, 1957; Atkinson & Litwin, 1960). That is, a person’s inner hope for success stimulates the individual to take risks, to do everything that is needed to reach one’s personal goals whereas the person’s inner fear for failure withholds a person to take too much risk to safeguard the person’s previous accomplishments (Atkinson, 1957; Atkinson & Litwin, 1960; Clark, Teevan, & Ricciuti, 1956; de Charms & Dave, 1965). Again, because of the expected relationship between nAchievement’s sub-constructs with risk, and because studies from, e.g., Atkinson and colleagues indicate that implicit motives spontaneously direct entrepreneurs toward long-term effort-related and challenging tasks (such as, as we argue, internationalization), a focus on nAchievement and risk perception is appropriate in a study about SME internationalization.

With this study, we provide two overarching contributions to literature and practice. First, we introduce human needs in general and nAchievement in particular as a new determinant of SME internationalization, answering Frese and Gielnik’s (2014) and Acedo and Jones’s (2007) calls to explore personality aspects in internationalization research further. Indeed, by studying the psychological drivers of SME internationalization and the impact of
risk perception of internationalization, our insight may help entrepreneurs to develop or select specific internationalization strategies that fit their personality profile and risk assessment of the chosen internationalization strategy. Furthermore, policymakers might develop specific support programs (such as coaching trajectories) to optimize the internationalization process, which ultimately may add to the growth and profitability of both the firm and the country’s economic prosperity.

Our second contribution relates to our empirical setting. Research on SME internationalization is mostly focused on Western firms (Al-Hyari et al., 2012; Coviello & Jones, 2004; Leonidou, 2004; Rialp, Rialp, & Knight, 2005). Studies involving SMEs in developing countries are scarce and badly needed (Acs, Dana, & Jones, 2003), in particular, because active internationalization opportunity-seeking is related to the welfare of developing countries (Che Senik, Scott-Ladd, Entrekin, & Adham, 2011). To address the dearth of studies on SME internationalization in developing countries, we focus on Indonesia as our research setting. This economy grew considerably in the last couple of years, with a current GDP growth ranking 3rd among BRIC and G20 Countries, a Global Competitiveness Index that increased from 54 in 2007 to 41 in 2016, and an increase of the Ease of Doing Business Index from 129 in 2015 to 91 in 2017 (Indrawati, 2017). Its economy is expected to further grow in the future, and the government commits to support export strengthening programs to achieve this growth (World-Bank, 2018). Given that in 2015, Indonesia had around 700,000 SMEs which contributed for 22 percent to the Gross National Product (Japhta, 2016) and SME growth reaches up to 8.4 percent with 10.6 percent growth in investment value between 2011 and 2015 (Bappenas, 2016), our research may provide new insights into the psychological determinants that may further support the international growth of SMEs in an emerging Asian economy. By doing so, our research also allows us to answer the question whether western-based theories such as Motive Disposition Theory (MDT), can be applied with the same ease across the world.

2. Literature Review and Hypotheses

2.1. The Personality of the Entrepreneur

SMEs have a relatively informal and small organizational structure and are mostly managed by a single owner-manager (Bianchi & Noci, 1998; Rauch, Frese, & Utsch, 2005). As a result, the entrepreneur’s personality significantly affects SME behavior (Brammer et al., 2011; Redmond et al., 2008) and this to a greater extent than in large enterprises (Miller & Toulouse, 1986). Therefore, insights from the psychological aspects of the entrepreneur are needed to understand the relationship between entrepreneurs and business performance (Frese & Gielnik, 2014). Indeed, the entrepreneur’s personality characteristics such as skills, education, competencies, experiences, commitments, and strong internationalization motivations impact the decision to internationalize (Child & Hsieh, 2014), the internationalization process (Amorós, Basco, & Romaní, 2014; Bradley, McMullen, Artz, & Simiyu, 2012; Javalgi & Todd, 2011; Shane & Venkataraman, 2000; Unger, Rauch, Frese, & Rosenbusch, 2011), and internationalization performance (Child et al., 2017; Jones et al., 2011; Terjesen, Hessels, & Li, 2016).

Despite such initial evidence and on-going calls for more research on individual internationalization drivers (Acedo & Jones, 2007; Cavusgil & Nevin, 1981; Wiedersheim-Paul, Olson, & Welch, 1978), to date, studies explicitly exploring the relationship between the personality of the entrepreneur and SME internationalization are scarce (Jones et al., 2011; Knight & Liesch, 2016). For example, Wiedersheim-Paul et al. (1978) stress that at the start of the internationalization process, the personal characteristics of the decision-maker are relatively more important than the characteristics of the firm and its environment. In a subsequent study,
Cavusgil and Nevin (1981) show that the entrepreneur’s aspirations, expectations, and commitments account for a substantial portion of the variation in the firm’s internationalization process.

Such early studies inspired a small community of recent scholars to further investigate the impact of the entrepreneur’s individual characteristics on her/his internationalization efforts (Dimitratos, Buck, et al., 2016). Even though it has been suggested that the entrepreneur’s personality can address financial and organizational barriers hindering SME internationalization (Prange & Pinho, 2017), previous research did not widely explore, nor did it pay much attention to the entrepreneur’s psychological characteristic to better understand SME internationalization efforts (Jones et al., 2011; Knight & Liesch, 2016).

This gap in the literature limits our ability to understand why and how entrepreneurs achieve internationalization while overcoming various challenges associated with operating in multiple country contexts. To fill this gap, we theorize on the dynamics between a specific psychological construct; the implicit need for achievement (nAchievement) and SME internationalization. nAchievement proved to be related to entrepreneurial behavior, decision-making behavior, managerial ability, and business performance (McClelland, 1961, 1965a; Pang, 2010; Pang, Villacorta, Chin, & Morrison, 2009; Slabbinck et al., 2018; Winter, 2010).

Moreover, nAchievement is of particular interest in the context of SMEs because successful founder-managers in SMEs have distinctly different personality profiles than the successful managers of established, larger organizations (Ling, Zhao, & Baron, 2007). Indeed, successful SME owners are characterized by a relatively high level of nAchievement (Johnson, 1990; Unger, Rauch, Weis, & Frese, 2015). In a similar vein, McClelland (1965a) showed that nAchievement predicted both individual entrepreneurial activity and success, while nAchievement did not predict success in other career domains. Comparing entrepreneurs with corporate managers, Stewart Jr, Watson, Carland, and Carland (1999) showed that
entrepreneurs score significantly higher on \textit{n}Achievement than corporate managers. Finally, McClelland (1961) also provided evidence that societal-level \textit{n}Achievement predicted national entrepreneurial activity and Andrews (1967) found that college students scoring more highly in \textit{n}Achievement are more entrepreneurial than low scorers. More recently, a meta-analysis (Collins, Hanges, and Locke, 2004) supported this idea.

2.2. \textit{Human Needs and Internationalization}

Human needs theory does not only discuss the existence of personal motives but also distinguishes between explicit and implicit motives (McClelland et al., 1989). Explicit motives involve controlled or conscious information processing and propositional reasoning, while implicit motives concern automatic or non-conscious information processing (McClelland et al., 1989; Schultheiss & Brunstein, 2010; Slabbinck et al., 2018). Importantly, explicit and implicit motives operate independently from each other; each of them influencing different behaviors (Kollner & Schultheiss, 2014; Perugini, Richetin, & Zogmaister, 2010). That is, explicit motives predict immediate and short-term behavioral responses that are subject to conscious thoughts and deliberations including self-reflective appraisals, judgment of others, and deliberate choices, whereas implicit motives predict stable, long-term, and spontaneous effort-related task performance, (Perugini et al., 2010; Schüler et al., 2010; Schultheiss & Brunstein, 2010).

Human needs theory (McClelland, 1985; McClelland et al., 1989) assumes that people initiate and persist behavior that provides satisfaction as well as behavior that prevents dissatisfactions and disappointments. Basic human needs are formed in early life through (pre-linguistic) affection learning experience (Schultheiss & Kollner, 2014; Schultheiss & Schultheiss, 2014; Weinberger & McClelland, 1990). For example, if a toddler gets its own cutlery and is continuously stimulated to eat without any help, regardless of the mess (s)he
makes, (s)he is more likely to develop a high need to work and act independently (McClelland & Pilon, 1983). Hence, because of this positive affective learning experience, that person is in its later life more likely to react automatically and more favorably to the situation that calls upon her/his capacity to act and work autonomously (McClelland et al., 1989).

Because internationalization is a process or a decision with long-term consequences (Johanson & Vahlne, 1977) and because performance on the international market is largely effort-related, we focus on implicit motives rather than on explicit motives (Bernecker & Job, 2010; Schultheiss & Brunstein, 2001; Slabbinck, De Houwer, & Van Kenhove, 2011). Moreover, behavior that provides true satisfaction is mostly driven by the unconscious; implicit needs (Palmer, 1971; Schüler et al., 2010). In addition, previous studies almost exclusively based on explicit motives and drivers of internationalization (Dimitratos, Johnson, Plakoyiannaki, & Young, 2016; Shane et al., 2003). Because of a lack of consensus about the impact of such explicit measures on internationalization, research is ready to expand toward the examination of implicit antecedents.

As argued, in this paper, we focus on the implicit need for achievement ($n$Achievement) (McClelland et al., 1989; Schultheiss & Brunstein, 2010). $n$Achievement is a motivation that energizes individuals to engage in challenging tasks to improve their performance or to improve their standards of excellence (Ahmed, 1985; Litwin, 1966; McClelland, 1965a; Schultheiss & Brunstein, 2010; Touhey & Villemez, 1975). A vast number of studies showed that, compared to people with a low $n$Achievement, high $n$Achievement people show greater devotion to challenging tasks and report greater satisfaction after completion of these tasks. $n$Achievement also motivates people to work independently and to be responsible for their own performance (Atkinson & Litwin, 1960; de Charms & Carpenter, 1968; Litwin, 1966; McClelland, Atkinson, Clark, & Lowell, 1953; McClelland, Clark, Roby, & Atkinson, 1949).
Interestingly, \textit{n}Achievement has been linked to business performance and entrepreneurial activity in general (Collins, Locke, & Hanges, 2000) and consistently proved to be the determinant of entrepreneurial success in entrepreneurship literature (Chye Koh, 1996; Westhead, Ucbasaran, & Wright, 2005). For example, McClelland (1965a) shows that students high in \textit{n}Achievement are more likely to pursue an entrepreneurial occupation in the future, and Robinson, Huefner, and Hunt (1991) show that entrepreneurs have a higher level of \textit{n}Achievement compared to non-entrepreneurs.

Recently, Slabbinck et al. (2018) demonstrate that start-ups grow faster when achievement-motivated entrepreneurs manage them. Also, to master challenges such as internationalization; persistence and a strong desire to improve one standard of excellence are required, which fits well with \textit{n}Achievement motivated entrepreneurs (Atkinson & Litwin, 1960; Feather, 1963; McClelland, 1985; Pang, 2010). Furthermore, because internationalization is seen as a learning process that challenges entrepreneurs to discover, evaluate, and exploit business opportunities (Johanson & Vahlne, 1977; Kauppinen & Juho, 2012; Oviatt & McDougall, 2005), and entering the international market is followed by significant challenges (Shrader, Oviatt, & McDougall, 2000), we argue that scoring highly on \textit{n}Achievement plays a vital role in SME internationalization. Hence, we hypothesize:

\textbf{H1:} SMEs governed by high \textit{n}Achievement motivated entrepreneurs portray a higher level of internationalization.

2.3. \textit{Human Needs and Internationalization Risks}

Implicit motives do not operate in a vacuum. Personality psychologists have long argued that deliberative thoughts and considerations such as individual perceptions channel the expression of implicit motives such that both interact in the prediction of relevant outcome variables (Bing et al., 2007; Lang, Zettler, Ewen, & Hülsheger, 2012; Winter, John, Stewart,
Klohn, & Duncan, 1998). Thus, a high implicit motive is consequently most strongly expressed in behavior when the person also has a compatible level of functionally related deliberative thoughts and considerations.

The extent to which an entrepreneur perceives the internationalization of her/his SME as a risky business activity is most likely such a compatible deliberative process. Internationalization is an entrepreneurial act during which risk-taking dominates (McDougall & Oviatt, 2000). Because of the broadening of the business scope, especially across national borders, internationalization is characterized by higher levels of risk and uncertainty (Figueira de Lemos, Johanson, & Vahlne, 2011; Jones & Covielo, 2005; Oviatt & McDougall, 1994; Yamakawa, Peng, & Deeds, 2008). Due to their limited scale and resources, SMEs face liabilities of foreignness and experience difficulties in mitigating such internationalization risks (Oparaocha, 2015). Indeed, lack of knowledge, cultural differences, language barriers, differences in economic policies and regulation, and complex logistics processes are all sources of risk and uncertainty that are inherently connected to a business crossing geographical boundaries (Knight & Cavusgil, 2004; Ruzzier et al., 2006; Welch & Luostarinen, 1988). Acedo and Jones (2007) show that entrepreneurs with low-risk perceptions tend to expand their internationalization activities faster than entrepreneurs with high-risk perceptions.

Interestingly, risk-taking behavior is also linked to nAchievement (Ahmed, 1985; Atkinson, 1957; Brody, 1963; McClelland & Watson, 1973; Ryan, Tipu, & Zeffane, 2011). Sagie and Elizur (1999), for example, found that nAchievement motivated people are more willing to face risks and uncertain situations such as the establishment of new ventures. Risk perceptions of behaviors also strongly determine if and to what extent nAchievement motivated people will initiate and persist these behaviors (Pang, 2010). As explained earlier, achievement motivated people prefer challenging tasks (McClelland, 1985). An important nuance here is that challenging is not identical to risky.
More specifically, Expectancy-Value Theory (Atkinson, 1957; Cooper, 1983; Spangler, 1992) argues that nAchievement motivated people perceive tasks and behaviors that are associated with moderate risk levels as the most challenging. nAchievement motivated individuals will not engage in tasks with low perceived risks because the execution of these tasks will neither improve their skills nor their level of performance (Brunstein & Schmitt, 2004; Cooper, 1983). Similar reasoning holds for tasks and behaviors that are considered as very risky: If the perceived likelihood of failure is too high or if the task is considered as too difficult, the task is no longer challenging (de Charms & Dave, 1965; Nicholls, 1984) because the outcome of the task, i.e. failure, is highly predictable. Thus, the likelihood to learn something from these tasks is too low. So, tasks that are perceived as either not risky at all or too risky do not have the potential to satisfy nAchievement motivated persons. For them, tasks and behaviors with moderate perceived risk levels are most attractive (and challenging) as they maximize the chance to satisfy their needs (i.e. improving performance, better performance) (Pang, 2010).

This reasoning also implies that nAchievement motivated people are not attracted to tasks that are not challenging at all because the likelihood that they will learn something from such tasks is too limited, or because they are not convinced that the execution of these tasks will improve their performance level. A similar pattern can be observed in firms that consider international expansion (Burpitt & Rondinelli, 2000). That is, SMEs tend to enhance their international activities only when the decision-makers believe that internationalization will yield valuable results, not only in monetary value, but also in the acquisition of new skills, technologies, and organizational capabilities.

Tying these insights together, we expect an inverted U-shaped relation between nAchievement, the risk perception of internationalization, and SME internationalization. With this, we follow Freel (2005) who shows that a certain level of risk (i.e., neither too high, nor
too low) is needed to optimize SME performance. Accordingly, Dai et al. (2014) demonstrate an inverted U-shaped relationship between risk-taking behavior and the international scope of a firm, arguing that a moderate international scope is optimal for an SME. Tying our arguments together that highly nAchievement motivated entrepreneurs prefer moderate risks, and that they are more likely to portray higher levels of internationalization (see Hypothesis 1), we propose that specifically for highly nAchievement motivated entrepreneurs, the level of SME internationalization is at the highest level if their risk perception of internationalization is moderate rather than high or low. Hence,

**H2**: The risk perception of internationalization moderates the relation between the entrepreneur's nAchievement and firm internationalization. That is, specifically for highly nAchievement motivated entrepreneurs, the internationalization is at the highest level when the risk of internationalization is perceived as moderate.

3. **Data Collection, Measures, and Methods**

3.1. **Participants and Data collection**

In Indonesia, there are several definitions of an SME. According to Law n° 20/2008 about Micro, Small, and Medium-sized Enterprises, a small enterprise is defined as a company with annual sales between 300 and 2,500 million Rupiah. (i.e., between 20 and 160 thousand Euro), and annual net worth between 50 and 500 million Rupiah. (i.e., between 3.2 and 32 thousand Euro). A medium-sized enterprise is a company with annual sales between 2.5 and 50 billion Rupiah. (i.e., between 160 and 3,200 thousand Euro) and annual net worth between 0.5 and 10 billion Rupiah. (i.e., between 32 and 645 thousand Euro). The Bureau of Statistic in Indonesia (BPS) defines SMEs based on the number of employees; 5-19 employees is a small enterprise, and 20-99 employees a medium-sized enterprise. Finally, the Central Bank of The
Republic of Indonesia defines small and medium-sized enterprises as companies with a maximum asset of 600 million Rupiah, excluding land and building (i.e., 38 thousand Euro), and annual sales less than 1 billion Rupiah. (i.e., 65 thousand Euro). We tied all these prerequisites together, and only selected companies answering to the most ‘strict’ SME conditions, in the case that two different anchor points exist (e.g., annual sales). The reason is simple: given that we examine personality characteristics, it is important not to include large firms (see above). Thus, the stricter the definition of an SME, the better.

We recruited SMEs listed in the database of the Indonesian East Java Bureau of SME Affairs in 2017. We selected the province of East Java because of its relatively high economic growth (5.45 percent), compared to the national average (5.07 percent) in 2017 (BPS, 2018a, 2018b). In addition, East Java Province has relatively high export values. For instance, its Export value of non-oil and gas commodities is the highest amongst other provinces, contributing to ten percent of Indonesia’s economy (Kemendag, 2018).

The database consists of 627 SMEs that received incentives or participated in workshops or network events organized by the government in order to stimulate firm internationalization. Data collection consisted of three stages; first, we contacted all 627 SMEs to make sure that they were eligible and willing to participate in our study. Second, we scheduled an on-site visit to collect the data. Third, ten well-trained surveyors visited the SMEs for interviewing and data collection. To avoid miscommunication, the surveyors contacted the SMEs one week prior to the on-site visits.

We hired ten surveyors who work part-time at The Centre for Economics Policy Research (PPKE) of Faculty of Economics and Business Universitas Brawijaya. The data collection took place between April and September 2018. On average, one on-site visit took between 60-75 minutes, including the introduction, the interview, and breaks for minimizing fatigue (Olson, 2016; Rubin & Rubin, 2011). We opted for on-site data collection because this
ensured that the right person participated in the study and that the participants correctly interpreted the questions. Moreover, face-to-face data collection provides participants with the possibility to ask for clarification of the questions, which reduces ambiguity (Malhotra, Nunan, & Birks, 2017).

For the first phase of the data collection, we contacted 485 SMEs by phone and 142 SMEs by mail. We only mailed companies when their phone number was not mentioned on the contact list. We received 113 positive responses out of the 485 calls. From the 142 mails, 18 mails returned due to invalid or changed addresses, and 13 SMEs responded positively. This resulted in an overall response rate of 20.1 percent. This response rate is acceptable and in line with recent studies in emerging South-East Asian economies where participation in on-site data collection is relatively low and where a survey and research tradition is not-so-well established (Isobe, Makino, & Montgomery, 2000; Pangarkar, 2008; Pangarkar & Klein, 2004). Reasons for not participating were unmotivated rejections to participate (184 SMEs), the enterprises did not longer exist (78 SMEs), and no answer or reply after several trials (239 SMEs).

While the surveyors were on their trip to visit the participating companies, they were instructed to search for eligible companies that were not listed in the database of the East Java Bureau of SME Affairs. As such, we introduced snowball sampling, allowing us to increase the representativeness of our sample. In Indonesia, many SMEs are not listed because they do not formally register themselves and many of them do not attend government events (Mourougane, 2012). This snowball sampling strategy resulted in an additional 52 companies yielding a total sample of 178 SMEs. Out of these 178 positive responses, two participants requested to withdraw their data, resulted in a final sample of 176 cases.

To minimize respondent bias, we asked participants to only refer to their international activities in 2017, instructed them that there are no “right” or “wrong” answers, and assured them that personal identity would be protected and used for academic’s purposes only.
(Francioni, Musso, & Cioppi, 2015). To confirm that there are minimal differences between the sample that originates from database of the East Java Bureau of SME Affairs and the sample obtained through snowball sampling, we executed independent sample t-tests on their nAchievement (t= -.322, df 174, sig .748), level of internationalization (t= -1.968, df 174, sig .051), number of employee (t= -3.034, df 174, sig .003), profit (t= .446, df 161, sig .656), age of the entrepreneur (t= .646, df 174, sig .519), and gender (Chi$^2$= 0.040, sig .862). The results portray that the bias that may arise from the two groups we investigated is at a minimum level.

We also took procedural precautions to prevent common method bias. Even though we only use one source of information; the entrepreneurs, we used different formats to assess each variable; an open-ended question for the assessment of implicit nAchievement (the Operant Motive Test, see further), a five-point Likert scale to assess the risk perception of internationalization, and an open question for internationalization. Using different measurement formats reduces the likelihood of common method bias (Chang, van Witteloostuijn, & Eden, 2010). Moreover, we also instructed participants to take a short break during the survey to avoid fatigue. This also increased the temporal separation of items, reducing a participant’s tendency to use the previous answer for the next section (Podsakoff, MacKenzie, & Podsakoff, 2012).

3.2. Measures

3.2.1. Internationalization

Compared to other types of internationalization, such as equity entry modes (e.g., joint ventures and greenfield investments), export turns out to be the most attractive entry-mode for SMEs in developing countries because export is flexible, requires limited financial and human resources, and imposes relatively low risks to SMEs (Burgel & Murray, 2000; Pinho & Martins, 2010; Young, Hamill, Wheeler, & Davies, 1989). We use the firm’s foreign sales as a percentage of total sales (FSTS) (Cadogan, Diamantopoulos, & Siguaw, 2002; Reuber &
Fischer, 1997; Ruzzier, Antoncic, & Hisrich, 2007; Ruzzier et al., 2006; Ruzzier & Ruzzier, 2015) to assess the firm’s position in the internationalization. This approach is in line with Cadogan et al. (2002), Pangarkar (2008), Hsu, Chen, and Cheng (2013) and Prange and Bruyaka (2016). Because the government does not record the export performance of SMEs, FSTS is self-reported by the participants.

3.2.2. Risk Perception of Internationalization

Since our study aimed to explore individual difference variables, we used the risk perceptions of internationalization and not an objective measure. To assess the participant’s internationalization risk perception, we adopted Gripsrud’s (1990) scale. This scale was developed to measure the attitude of entrepreneurs toward the barriers of export activity, which strongly fits with the foreign sales activity outcome measure used in this study. The scale consists of ten items such as “A major obstacle to internationalize is the strong competition on foreign markets”, “Transportation cost is a major obstacle to internationalize”, and “The uncertainty about the international political environment is a major obstacle”. We adopted a 5-points Likert-scale (1 = strongly disagree; 5 = strongly agree). The scale’s internal consistency is satisfactory ($\alpha = 0.77$).

3.2.3. Implicit Need for Achievement

We used the Operant Motive Test (OMT: Kuhl and Scheffer (1999) and Kuhl, Scheffer, and Eichstaedt (2003) to assess the entrepreneur’s implicit need for achievement. To complete the OMT, participants received 15 schematic drawings (see Figure 1 for an example), one at a time, and were asked to write down in a short form (i.e. short sentence, keywords) their spontaneous associations to the following four questions; (1) What is important for the person
in this situation and what is the person doing?, (2) How does the person feel?, (3) Why does the person feel this way?, and (4) How does the story end?.

The OMT drawings are selected and validated in such a way that the responses are indicative of the participant’s inner, underlying motives. For example, if the drawing depicts a man climbing a mountain, the participant can either think that “reaching the top, not quitting” is important for the man in the drawing, or that “climbing the mountain faster than anyone else” is the main driver of that man. In the first case, the answer represents the need for achievement whereas in the latter case, the story instead represents another motive: The power motive (Kuhl & Scheffer, 1999).

Figure 1.
Example Drawing of OMT

Source: (Kuhl & Scheffer, 1999; Kuhl et al., 2003)

Three well-trained coders from Entrepreneurship Laboratory (Lab KWU) of Faculty of Economics and Business Universitas Brawijaya independently coded the responses using the OMT coding manual from Kuhl and Scheffer (1999). The manual provides strict guidelines on how answers need to be scored. That is, for nAchievement, each picture was scored 1 (one) if
the response contained strong references to any of the five themes that are indicative of the achievement motive and scored 0 (zero) if no reference to achievement was present. The five themes are ‘Experiencing flow while executing challenging task’, ‘Presence of an internal standard of excellence’, ‘Coping with failure’, ‘Pressure to reach a goal’, and ‘Fear of failure’. The inter-rater reliability amongst three coders was high ($\alpha = 0.97$). Extensive research on the OMT shows that OMT is a reliable and valid measurement for the implicit need for achievement (Baumann, Kaschel, & Kuhl, 2005; Baumann, Kazen, & Kuhl, 2010; Kazen & Kuhl, 2011; Kuhl et al., 2003; Scheffer, Kuhl, & Eichstaedt, 2003).

3.2.4. Control Variables

In order to have a deeper understanding of the relationship between implicit need for achievement, risk perception, and internationalization, we included several control variables suggested by prior studies. We included gender ($0 = \text{Male}, 1 = \text{Female}$) because Saeed, Yousaf, and Alharbi (2017) argued that female directors have a positive impact on the internationalization of the firm and Falkner and Hiebl (2015) found that male entrepreneurs show a greater interest toward risks. Age of participants, age of firms, size of firms, educational level and sector of industry (Acedo & Florin, 2006; Cavusgil & Naor, 1987; Coviello & Jones, 2004; Hsu et al., 2013; Wiklund & Shepherd, 2003) were included because these variables represent the experience of participants in taking up challenging business decision. The sector of the industry was included because each industry may have a different internationalization pattern. Because the majority of the SMEs in East Java is active in the art and handicraft sector, the sector of industry variable was treated as a dummy variable ($1 = \text{‘art and handicraft’; } 0 = \text{‘other’}$).
3.3. Method

Our dependent variable (FSTS) is denoted as a percentage of the sales that is exported to foreign countries. A considerable number of companies did not export anything of their production to foreign countries (n=98) and twenty companies exported their whole production (n=20). The export percentage of the other companies (n=58) was roughly continuously distributed between these boundaries (that is, 0 - 100%). Because the dependent variable is piled up at zero and one and because the estimated values should be bounded between zero and one, ordinary least square regressions are not well suited to test our hypotheses (Wooldridge, 2005). Given the specific distribution of our dependent variable, we applied the left and right-censored Tobit regression model. Tobit models are commonly used to study censored data and are more powerful than many other regression models in these cases (Saeed et al., 2017; Zhou, 2019). We performed a hierarchical Tobit procedure with robust standard errors involving a curvilinear effect of risk perception on the relationship between nAchievement and FSTS (Dawson, 2014).

The following regression equation was used to test the curvilinear effect of risk perception (Z) for nAchievement motivated entrepreneurs (X) on FSTS (Y):

Equation 1: \[ Y^* = \beta_0 + \beta_1 X + \beta_2 Z + \beta_3 Z^2 + \beta_4 XZ + \beta_5 X Z^2 + C_0. \]

To facilitate the interpretation of the parameter estimates, we mean-centered each predictor variable and this prior to the creation of the interaction and squared terms (Darlington & Hayes, 2016; Hayes, 2017). Gender, age of participants, age of firm, size of firm, educational level and sector of industry were entered as control variables (C in Equation 1). The independent variables were entered into the regression model in four successive steps. We first entered the control variables into the model (Model 0), followed by nAchievement and risk perception (Model 1), the linear interaction between risk perception and nAchievement (Model 2), and
finally, risk perception squared and the interaction between nAchievement and risk perception squared (Model 3). Value inflation factors (VIF) were all far below the recommended cut-off point of 5 (Hair, 2010; Hair, Black, Babin, Anderson, & Tatham, 2006), indicating that multicollinearity is not an issue.

4. Results

Table 1 presents the demographic characteristics of our participants. In our study, the art and handicraft sector dominates the population. This is consistent with the export data we obtained from the East Java Bureau of SME Affairs. Most of our participants had a middle to low educational background.

Table 1
Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>21</td>
<td>11.9</td>
</tr>
<tr>
<td>Junior High School</td>
<td>22</td>
<td>12.5</td>
</tr>
<tr>
<td>Senior High School</td>
<td>90</td>
<td>51.2</td>
</tr>
<tr>
<td>Bachelor</td>
<td>43</td>
<td>24.4</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>117</td>
<td>66.5</td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>33.5</td>
</tr>
<tr>
<td><strong>Industry sector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art and Handicraft</td>
<td>134</td>
<td>76.1</td>
</tr>
<tr>
<td>Others</td>
<td>42</td>
<td>23.9</td>
</tr>
<tr>
<td><strong>Age of the firm</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;11</td>
<td>44</td>
<td>25</td>
</tr>
<tr>
<td>11-20</td>
<td>65</td>
<td>37</td>
</tr>
<tr>
<td>21-30</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>31-40</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>&gt;40</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>&lt;31</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>31-40</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td><strong>Age of the owner</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50</td>
<td>75</td>
<td>42.5</td>
</tr>
<tr>
<td>51-60</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>&gt;60</td>
<td>15</td>
<td>8.5</td>
</tr>
<tr>
<td>5-10</td>
<td>64</td>
<td>36.4</td>
</tr>
<tr>
<td>10-20</td>
<td>78</td>
<td>44.4</td>
</tr>
<tr>
<td><strong>Size of the firm</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>31-40</td>
<td>3</td>
<td>1.7</td>
</tr>
<tr>
<td>&gt;40</td>
<td>15</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Table 2 shows the Pearson correlation between all variables. The positive and significant correlation between nAchievement and internationalization (FSTS) is consistent with the idea that nAchievement is positively associated with challenging tasks and entrepreneurial action
(McClelland, 1965a, 1965b, 1985; McClelland et al., 1953; Pang, 2010; Sagie & Elizur, 1999; Schultheiss & Brunstein, 2010). Furthermore, the risk perception of internationalization is not significantly correlated with FSTS.

Table 2
Descriptive and Correlation of Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of the firm</td>
<td>20.61</td>
<td>14.8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of the owner</td>
<td>46.38</td>
<td>11.1</td>
<td>0.441**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of the firm</td>
<td>16.94</td>
<td>18.19</td>
<td>-0.013</td>
<td>-0.075</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSTS</td>
<td>22.10</td>
<td>34.33</td>
<td>-0.035</td>
<td>-0.183*</td>
<td>0.297**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>nAchievement</td>
<td>5.06</td>
<td>1.922</td>
<td>0.124</td>
<td>-0.082</td>
<td>-0.000</td>
<td>0.190*</td>
<td>1</td>
</tr>
<tr>
<td>Risk Perception</td>
<td>3.368</td>
<td>0.638</td>
<td>-0.076</td>
<td>-0.029</td>
<td>-0.064</td>
<td>0.059</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Notes: FSTS (Foreign Sales as a percentage of Total Sales), nAchievement (Implicit Needs for Achievement).

Table 3 presents the results of the analysis involving the curvilinear interaction effects of risk perception on the relationship between nAchievement and FSTS. To control for possible confounding factors, we first regressed FSTS on all control variables. Model 0 shows that the age of the entrepreneur and firm size reached significance (see Table 3). We then entered the linear effects of nAchievement and risk perception in Model 1. Consistent with our previous discussion and the found correlations, Model 1 shows a significant, linear, and positive effect of nAchievement on FSTS. nAchievement, risk perception, and its linear interaction with risk perception were entered in Model 2. The positive and significant interaction term indicates that nAchievement and risk perception do interact in the entrepreneur's decision to internationalize. Finally, and most importantly, the curvilinear effect of risk perception on the relationship between nAchievement and FSTS were entered. Both the quadratic term of risk perception and
its interaction term with nAchievement are significant. However, and contrary to our expectations, both terms are positive.

Table 3.
Hierarchical Tobit Regressions of Risk Perception Moderation on nAchievement and FSTS

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE</th>
<th>Sig</th>
<th>B</th>
<th>SE</th>
<th>Sig</th>
<th>B</th>
<th>SE</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>23.87</td>
<td>45.886</td>
<td>.609</td>
<td>18.325</td>
<td>44.815</td>
<td>.689</td>
<td>29.165</td>
<td>44.660</td>
<td>.507</td>
</tr>
<tr>
<td>Age of Firm</td>
<td>.247</td>
<td>.557</td>
<td>.641</td>
<td>.009</td>
<td>.529</td>
<td>.986</td>
<td>.089</td>
<td>.490</td>
<td>.862</td>
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<tr>
<td>Age of Owner</td>
<td>-1.480</td>
<td>.682</td>
<td>.045</td>
<td>-1.255</td>
<td>.652</td>
<td>.084</td>
<td>-1.440</td>
<td>.661</td>
<td>.040</td>
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<tr>
<td>Size of Firm</td>
<td>1.150</td>
<td>.443</td>
<td>.001</td>
<td>1.152</td>
<td>.452</td>
<td>.001</td>
<td>1.155</td>
<td>.420</td>
<td>.000</td>
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<tr>
<td>Main Variables</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nAchievement</td>
<td>9.100</td>
<td>4.07</td>
<td>.014</td>
<td>8.238</td>
<td>3.866</td>
<td>.023</td>
<td>2.754</td>
<td>4.504</td>
<td>.553</td>
</tr>
<tr>
<td>nAchievement*RP</td>
<td>15.409</td>
<td>5.932</td>
<td>.003</td>
<td>16.827</td>
<td>5.014</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RP²</td>
<td>49.320</td>
<td>12.621</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nAchievement*RP²</td>
<td>12.159</td>
<td>5.99</td>
<td>.086</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model Fit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wald statistic</td>
<td>16.53 on 6 df</td>
<td>.017</td>
<td>21.58 on 8 df</td>
<td>.005</td>
<td>28.76 on 9 df</td>
<td>.000</td>
<td>39.83 on 11 df</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>-417.1 on 8 df</td>
<td>.005</td>
<td>-414 on 10 df</td>
<td>.002</td>
<td>-409.4 on 11 df</td>
<td>.000</td>
<td>-401.8 on 13 df</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>P (&gt; Chi)</td>
<td>n.a</td>
<td>.045</td>
<td>.002</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: FSTS (Foreign Sales as a percentage of Total Sales), nAchievement (Implicit Needs for Achievement) RP (Risk Perception of Internationalization).

To facilitate the interpretation of the complex interaction effect between risk perception and nAchievement on the FSTS, we plotted the curvilinear interaction for entrepreneurs who scored low (mean – 1 SD), moderate (mean), and high (mean + 1 SD) on nAchievement.
shown in Figure 2, different quadratic relations between risk perception and FSTS emerge for different levels of $n$Achievement. Contrary to our expectations, the FSTS seems to be the lowest when internationalization is associated with moderate risk levels and this especially for entrepreneurs who score high on $n$Achievement. To affirm whether our visual inspection is valid, we tested the curvilinear effects for different levels of $n$Achievement according to the procedure outlined by Dawson (2014). We estimated the curvilinear effects for three plotted levels of $n$Achievement. These results show that when $n$Achievement is low (mean – 1 SD), the curvature of risk perception does not differ significantly from 0 (low: $t =1.56$, $p < .05$) whereas the curvatures are significant and positive when $n$Achievement is medium (mean) or high (mean + 1 SD) (medium: $t = 3.91$, $p < .01$; high: $t = 3.59$, $p < .01$).

Figure 2.
FSTS as a function of $n$Achievement and Risk Perception
5. Discussion

The results of our study clearly indicate that the level of the entrepreneur’s nAchievement in combination with her/his perception of the internationalization risk impacts the company’s degree of internationalization. In line with McClelland (1965), Pang (2010), and Slabbinck et al. (2018), our result shows that implicit need for achievement is positively associated with a challenging task, such as internationalization; H1. Interestingly, our expectation (H2) about the inverted U-shaped moderating effect of risk perception of internationalization on the relationship between nAchievement and internationalization for highly nAchievement motivated entrepreneurs is not supported by our results. The results indicate that the highest level of internationalization is most likely achieved by a highly nAchievement motivated entrepreneur whose risk perception of internationalization is very high whereas the lowest level of internationalization is observed for entrepreneurs whose risk perception of internationalization is moderate. Notably, the high level of internationalization for nAchievement motivated entrepreneurs whose internationalization risk perception is high is somewhat opposed to Dai et al. (2014) and Freel (2005), who contend that the highest degree of internationalization is associated with a moderate level of risk.

Two alternative explanations may account for this unexpected result. First, the vast majority of SMEs in Indonesia sell their products for the international market through intermediaries such as traders, exporting companies, or trade houses (Tambunan, 2007). As a result, these SMEs do not have direct contact with foreign companies and markets. Hence, they may perceive their type of export, which is indirect export, as an activity with low risk. This may explain why, in our sample, nAchievement motivated entrepreneurs keep selling a lot of their products to the international market even though, in general, internationalization is perceived as a high-risk activity.
For the second alternative explanation, we rely on Atkinson and Litwin’s (1960) theory, which distinct \( n \)Achievement into Hope of Success (HS) and Fear of Failure (FF). HS and FF explain how \( n \)Achievement motivated individuals respond to risks (Pang, 2010). Atkinson and Litwin (1960) and Brody (1963) posit that an HS motivated entrepreneur tends to choose a task with a moderate level of risk and avoids a task with a too low and too high level of risk. This idea is in line with our \( n \)Achievement inverted U-shaped model. However, FF motivated individuals act oppositely to risks. Individuals motivated by FF do not mind to fail in a high-risk environment because they can blame the failure to external causes (Brockhaus, 1980). Specifically, FF motivated individuals are likely to avoid feelings of anxiety (Atkinson, 1957; Atkinson & Litwin, 1960; Clark et al., 1956; de Charms & Dave, 1965). This fear for anxiety may push people to tasks with either low or high level of risk, preventing them from engaging in tasks with a moderate level of risk. Logically, for low-risk tasks, odds for failure are low, so anxiety is not necessary. To the contrary, the odds for failure are the highest for high-risk tasks. Yet, no one will blame failure in these cases, so here as well, anxiety is not necessary as well.

For tasks with a moderate level of risk, feelings of anxiety are at the highest level. That is, a moderate risk task is doable, but failure is likely. This outcome uncertainty may prevent FF motivated people to engage in tasks with moderated perceived risk levels (Atkinson, 1957). Related to our study, it could be that our participants were mainly motivated by fear of failure. They sell internationally through indirect export because it is the best option to sustain their business. However, should their international business activity collapse, they may attribute this to the intermediate export company.

Given that our study is one of the first that has been conducted in South-East Asia, our results suggest that the findings of studies conducted in Western countries may also be valid for SMEs in developing countries in general and South-East Asian countries in particular. Moreover, our study also contributes to the International Entrepreneurship field by showing
that the implicit needs or motives of an entrepreneur (nAchievement) partially determine the internationalization process of their SMEs. Hence, we provide evidence that besides firm and environmental characteristics, also personality – and more specifically implicit motives – play a role in SME internationalization.

Our findings have several important implications. First, we show that the personality of the entrepreneur can best be considered in governmental and educational efforts to increase the level of internationalization of the firm. As an individual’s level of nAchievement is already formed early in life (McClelland & Pilon, 1983) and the level of education also affects the personality and behavior of the entrepreneur, governments may formulate an Achievement-oriented educational program that already starts at a very early age. Second, because our results yield different international behaviors for different types of entrepreneurs (e.g. high nAchievement entrepreneurs who perceive internationalization as either a risky or non-risky business activity) policy-makers could formulate tailor-made policies adapted to these different types.

Of course, every study has limitations. First, our sample is relatively small and limited to one country. More research on other and larger samples is needed to generalize our findings to other cultures. Moreover, because high-quality databases that include all SMEs in a specific region and/or monitor the performance and activities of these SMEs do not exist in most developing countries, we relied on self-reported measures of one specific index of internationalization, FSTS. Of course, future research may incorporate other indices of internationalization and, if available, rely on other objective data sources to assess the SME’s degree of internationalization. We generated our sample from two different sources due to a limitation of the government database. We also recruited a sample from non-listed SMEs to increase the sample representativeness and undertook several steps to ensure that our sample is free from sample selection bias: we have no significant difference between two sample sources.
in terms of independent and dependent variables used in our study and did not find any proof for sample differences in relation to our outcomes variable (Cuddeback, Wilson, Orme, & Combs-Orme, 2004; Deschacht & Goeman, 2015). Future research in developing countries with less-established database should be aware of this issue.

In a similar vein, we focused on $n$Achievement. We selected $n$Achievement because of its relevance for entrepreneurial research (Ahmed, 1985; McClelland, 1965a, 1965b; Palmer, 1971; Pang, 2010; Robinson et al., 1991; Sagie & Elizur, 1999). However, people are driven by three basic needs: The need for power, the need for affiliation, and the need for achievement (Schultheiss & Brunstein, 2010). Future researchers might examine the impact of the other two needs as well; the need for power and the need for affiliation. People driven by the need for power derives satisfaction from the ability to influence, control, or impress others (Fodor, 2010). Individuals with a high need for power are associated with effective leadership (McClelland & Burnham, 2008) and the behavior of ingratiating opposing opinions (Fodor, 2010), altruistic behavior (Hermans et al., 2017), and creativity (Fodor & Greenier, 1995). The need for affiliation is a motivation which energizes people to seek closeness, love, and to avoid conflicts with others (McClelland, 1985). Individuals with high $n$Affiliation have large social networks and commonly are good at creating, maintaining, and restoring social interaction (Koestner & McClelland, 1992). It is likely that different implicit motives may be linked to different types of internationalization. Besides exploring these other two basic needs as well, future research could also benefit from studying the different need for achievement categories; Hope of Success and Fear of Failure.

In addition, our study only focused on the (subjective) perception that an individual is associated with internationalization. Of course, exporting to or investing in some countries is (objectively) riskier than exporting to or investing in other countries. Hence, it would be worthwhile to include as well the objective risk levels of the destination countries in future
studies. More research on the interplay between the explicit and implicit motives of the entrepreneurs, their (subjective) assessment of risk that they associate with (different forms of) internationalization and the objective assessment of the (objective) risk profiles of the countries they export to, ideally in a cross-cultural perspective, would give valuable additional insights into the internationalization process of SMEs.

Finally, our study is cross-sectional in nature. Longitudinal research on the relationship between the psychological profile of entrepreneurs and the internationalization process of SMEs would be worthwhile to investigate as well. Our results show that the psychological characteristics of entrepreneurs are relevant for many studies on the internationalization process of SME and call for future researchers to explore this relationship further. In addition, we also encourage researchers to explore the role of psychological processes in a larger scope, for example, by investigating the differential impact of the personality of individuals in SMEs versus large companies.

6. Acknowledgement

We appreciate the constructive insights and suggestions from two anonymous reviewers. We thank to Petra Andries and Rudy Martens for the support and guidance. We also thank PPKE and Lab KWU Faculty of Economics and Business Universitas Brawijaya for the endless support during data collection. This research was fully funded by Indonesia Endowment Fund for Education (LPDP) (Contract PRJ-1748/LPDP.3/2016) and Universitas Brawijaya.

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