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Language Operative Capacity in Small and Medium-sized Enterprises

Ankita Tibrewal[1] · Ad de Jong[2] · Geoff Parkes[3] · Helene Tenzer[4] · Melissa Bel-Lahsen[4]

Abstract

Language-related IB research predominantly targets large MNCs, often overlooking the challenges that internationalizing SMEs face in effectively utilizing their limited language resources. To address this gap and assist SMEs in overcoming their unique language challenges, we develop a scale for language operative capacity (LOC), which measures a firm's capacity to deploy language resources most productively throughout its global operations. We validate this instrument with data from 417 SMEs and examine its impact on two critical internationalization metrics: export performance and international networking capability. Our study makes three key contributions to language-related IB research and capacity research. First, we provide a comprehensive and robust LOC instrument, incorporating distinctions between potential and realized capacity from the capacity literature. Second, we offer a deeper understanding of language as a multi-level phenomenon by highlighting the interaction between individual-level language skills and organizational-level capacities. Third, we extend the scarce language-related IB research on SMEs by offering a nuanced understanding of LOC as a strategic resource, by validating the LOC instrument in the context of internationalizing SMEs, and by demonstrating its explanatory power for essential internationalization metrics. Additionally, our research provides SMEs with an actionable tool to assess their linguistic capacities, develop their language resources and optimize the use of these language resources in international operations.

Keywords Language operative capacity · SMEs · Internationalization · Export performance · Networking capability · Scale development

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1 Introduction

Language-related research in international business (IB) has been growing dynamically over the past decade. IB scholars have refined their understanding of the core concept of language (Karhunen et al. 2018; Lecomte et al. 2018) and uncovered multifaceted effects of language on the individual, organizational and country level while grappling with the challenge of conceptualizing the impact of language theoretically (Brannen et al. 2017; Hornikx et al. 2023; Tenzer et al. 2017). With language now being recognized as a central construct in IB (Brannen and Mughan, 2017), we see a constant stream of qualitative, quantitative, and conceptual IB publications on language (for a recent review see Piekkari et al. 2022).

However, language-related IB research has focused predominantly on large multinational corporations (MNCs), with limited insight into language effects in small and medium-sized enterprises (SMEs). Early studies from the 1990s on the foreign language challenges encountered by internationalizing SMEs (Crick, 1999; Peel and Eckart, 1997) have hardly been followed up on, the work of Sui et al. (2015) and Foreman-Peck and Zhou (2015) representing notable exceptions. This neglect is surprising given the importance of SMEs not only for national economies, but also in international trade relations. Globally, SMEs represent up to 99.5% of firms (Asian Development Bank, 2022; Main, 2022) and make a significant contribution to the global economy and global trade (Hessels and Parker, 2013; Javalgi et al. 2011). In the EU, SMEs account for 46% of imports and 37% of exports (Eurostat, 2021). Whereas a small number of large MNCs commands over half of the trade volume, a fact that may explain the continued focus on large enterprises in IB, SMEs also constitute vital players for economic growth (Ayyagari et al. 2007).

The scarcity of language-related IB research on SMEs is also a theoretical lacuna, as SMEs possess distinct characteristics that differentiate them from MNCs, making them particularly susceptible to language challenges in international ventures. While SMEs are considered more dynamic with faster and more flexible decision-making processes (Paul et al. 2017), they are often more vulnerable compared to larger firms. These vulnerabilities include financial and legal underdevelopment (Beck et al. 2005), limited international management skills (Hennart et al. 2019), limited diversification, and limited resources and capabilities, such as human capital and skills (Hsu and Chen, 2000; Paul et al. 2017).

Language resources are particularly limited in SMEs. Both MNCs and SMEs can access external language resources, such as interpreters, translators (Angouri and Piekkari, 2018), and emerging AI-based translation technologies (NLLB Team, 2024). However, relying on language resources external to the organization is problematic due to difficulties in finding appropriate services, high costs (Visser, 1995), the risk of inaccurate second-hand information (Williams and Chaston, 2004), and the inability to share sensitive information with external providers (Welch et al. 2001). This reliance inhibits direct communication with the target market (Welch et al. 2001), maintaining a significant psychic distance and

posing a barrier to SME internationalization (Safari and Chetty, 2019). Therefore, internal language resources are critical for SME internationalization (Clavijo-Olmos, 2022; Kostić-Bobanović, Novak and Bobanović, 2016). These resources are essential for making informed internationalization decisions, accessing international business networks, and facilitating knowledge transfer (Niskavaara and Piekkari, 2023; Peltokorpi, 2017; Sui et al. 2015). However, internal language resources are very scarce in most SMEs. Unlike MNCs, SMEs often lack dedicated language management departments and typically have fewer employees with relevant foreign language skills. Consequently, language barriers pose a particularly significant challenge for internationalizing SMEs (Sui et al. 2015).

The scarce research on language in SME internationalization recommends SMEs to adopt language management strategies for entering foreign markets (Kostić-Bobanović, Novak and Bobanović, 2016), but it does not specify what these strategies should entail. Studies in the MNC context suggest analyzing a company's language needs to design effective language management tools (Sanden, 2016), but this approach does not address the core issue for SMEs – the scarcity of language resources. We propose that SMEs require a tool that supports them in developing the necessary language resources for international expansion and in deploying these resources most effectively. Such a tool would help SMEs overcome their unique language challenges in two critical ways: by narrowing the gap in language resources between SMEs and MNCs, and by optimizing the use of the limited language resources SMEs possess.

In developing this tool, we build upon the notion of corporate language capacity, which recent research has suggested to expand further (Zhao et al. 2021). Grounded in the capacity literature (e.g., Camison, 2005; Camison and Fores, 2010; Zahra and George, 2002) and the literature on language in international business (e.g., Barner-Rasmussen et al. 2014; Brannen et al. 2017; Reiche et al. 2015; Welch and Welch, 2008, 2018), our study advances the concept of *language operative capacity* (LOC) as a measure of a firm's capacity to deploy language resources most productively throughout its global operations. Such a measure is vital for resource-constrained SMEs, but can also assist larger organizations in optimizing their language strategies.

The LOC concept was pioneered by Welch and Welch (2018). It is frequently referenced in reviews of language-sensitive international business research and has guided a qualitative exploration of an MNC's language strategy (Zhao et al. 2021), but has not been examined in relation to SMEs nor quantitatively validated. Our study redefines LOC and its dimensions, making it applicable to the SME context and subjecting it to empirical testing. We validate the construct based on eight in-depth expert interviews and survey data from 417 British SMEs. Additionally, we probe the explanatory power of this instrument by testing the impact of LOC on the export performance and international networking capability of SMEs.

In developing this measurement, we advance language-related IB research and capacity research in three ways. First, we provide a comprehensive and robust instrument for LOC based on a systematic scale development process (Churchill, 1979; DeVellis, 1991; Netemeyer et al. 2003) and incorporating the distinction between potential and realized capacity from the capacity literature (Camison and

Fores, 2010; Vasudeva and Anand, 2011; Zahra and George, 2002). We demonstrate the predictive ability of this instrument for critical metrics in the internationalization of SMEs, thereby reinforcing the connection between language-related IB studies and organizational capacity research. Second, we contribute to a deeper understanding of language as a multi-level phenomenon by highlighting the interaction between individual-level language skills and organizational-level capacities. While the concept of LOC recognizes that linguistic competencies inherently lie within individual employees, it also emphasizes the active role of organizations in developing and effectively utilizing these individual competencies for internationalization purposes. This aligns with capacity research, which examines how individual competencies and organizational routines interact to form dynamic capacities. Third, our research heeds calls to extend the scarce language-related research on SMEs (Angouri and Piekkari, 2018; Sui et al. 2015; Tenzer et al. 2017). Specifically, we provide a deeper understanding of language capacity as a strategic resource for SMEs, validate the LOC instrument within the context of internationalizing SMEs, and probe its explanatory power for essential international performance metrics. Our study also holds high practical value, as it equips internationalizing SMEs with a tool to assess their linguistic capacities, providing a foundation for improvement and strategic decision-making. At an operational level LOC provides a practical predictive tool which allows firms to focus on specific activities in order to reduce uncertainty and give firms confidence on investment returns through expansion of international activities.

2 Theoretical Framework

2.1 Language Needs and Language Constraints of Internationalizing SMEs

Over the past two decades, research on language in IB has demonstrated the profound influence of language on firm performance in foreign markets. Linguistic distance between the language(s) spoken in a firm's headquarter country and those spoken in host countries has been found to determine, for example, the choice of foreign markets (Domurath et al. 2020; Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975; Kubíčková and Peprný, 2011; Serra et al. 2012; Welch et al. 2001), entry modes (Fernández-Ortiz and Lombardo, 2009; Leonidou and Katsikeas, 2010; Slangen, 2011; Welch et al. 2001), and financial performance in these markets (Golesorkhi et al. 2019). To overcome language barriers, organizations often prioritize recruiting employees with local language skills to facilitate communication (Enderwick and Akoorie, 1994; Yang et al. 2022). This language-sensitive recruitment strategy can increase international scaling (Dichtl et al. 1990; Kubíčková and Peprný, 2011; Mihailova, 2023) and positively affect market share (Domurath et al. 2020). Additionally, it may enhance knowledge transfer processes and expand the talent pool (Domurath et al. 2020; Peltokorpi, 2017) by bringing in human resources capable of mastering intercultural sensitivity and socio-cultural context linked to language (Vandermeeren, 2005). Moreover, local language skills help to improve communication with local authorities and

partners (Goodall and Roberts, 2003), enhance international opportunity recognition (Hurmerinta et al. 2015), and increase adaptability and agility under rapidly changing conditions in foreign markets (Ferraris et al. 2022). Language has also been identified as a source of trust and co-operation (Tenzer et al. 2014), which can shape team culture (Szkudlarek et al. 2020) and determine how successfully products, processes, and practices are transferred to foreign markets (Brannen, 2004).

Language-related research in international business has predominantly focused on large MNCs, neglecting the situation of SMEs. This is surprising considering the vital contribution of SMEs to economic growth (Ayyagari et al. 2007) and the crucial role of language in their internationalization (Niskavaara and Piekkari, 2023; Turunen and Numela, 2017). One possible explanation for this neglect might be that SMEs are more likely to service foreign markets through exports (Liñán et al. 2020), a market entry form, which is considered to have lower communication requirements compared to the equity-based market entries many MNCs pursue (Oldenski, 2012). Nonetheless, language has been acknowledged as a key export barrier, but its role in exporting has not been studied in detail (Kahiya, 2018). SMEs are likely to face greater language barriers in their export activities than MNCs due to their liability of smallness, which implies limited resources (Gassmann and Keupp, 2007), and their liabilities of foreignness, which implies unfamiliarity with the foreign market and with cultural, political, and economic differences (Zaheer, 1995). The limited linguistic resources of SMEs pose significant challenges in overcoming their liability of foreignness, underscoring the importance of developing language resources for successful internationalization (Freixanet and Renart, 2020).

Pioneering studies have highlighted the heavy impact of language on internationalizing SMEs. A recent literature review on language and SME internationalization (Niskavaara and Piekkari, 2023) identified language skills and native languages of management as key factors influencing SME internationalization (see also Fernández-Ortiz and Lombardo, 2009; Sui et al. 2015; Turunen and Nummela, 2017). These factors affect both the decision to export and export success (Foreman-Peck and Zhou, 2015; Peel and Eckart, 1997; Williams, 2011). In practice, many SMEs recognize the significance of language (Hagen et al. 2012). However, most SMEs do not make consistent use of existing language resources (Crick, 1999; European Language Resource Coordination, 2023; Sok and O'Cass, 2011), nor provide formal training to their employees (Kotey and Folker, 2007). Among other reasons, this may be due to the fact that IB research has provided little guidance regarding how internationalizing SMEs can efficiently manage foreign language requirements in their new international ventures, and optimally utilize their limited language resources.

While previous research has often examined language as a component of other constructs, such as cultural distance (López-Duarte and Vidal-Suárez, 2010), our study positions language as a core construct for SME internationalization. We go beyond prior studies that have explored SMEs' awareness of language benefits or described their language management strategies (Asasongtham and Wichadee, 2014; Bruen and Buckley, 2022; Incelli, 2008; Rižnar and Rybnicek, 2017) by delving into the theoretical foundations of language capacity. To address language as

a "critical management challenge for SMEs" (Niskavaara and Piekkari, 2023: 109) during internationalization, we advance the concept of language operative capacity (LOC).

2.2 Language Operative Capacity: A Means to Deploy Language Resources Productively

As internationalizing firms expand their geographic scope, they gain access to a diverse pool of global knowledge (Salomon and Jin, 2010). However, the ability to extract value from these multilingual knowledge sources is contingent upon the availability of language resources and their effective deployment (Welch and Welch, 2018). Considering that establishing a corporate language is not always a viable solution for effective communication and knowledge processing (Harzing and Feely, 2008; Piekkari et al. 2014; Tenzer et al. 2021), LOC becomes essential for companies to function as multilingual entities.

The concept of LOC has been pioneered by Welch and Welch (2018) and defined as "language resources that have been assembled in a form that the MNE [multinational enterprise] can apply, in a productive, context-relevant manner, as and when required throughout its global network" (Welch and Welch, 2018, pp. 855–856). Language resources take the form of language capital, defined as "the aggregate of relevant foreign language skills held by a company's employees" (Welch and Welch, 2008, p. 355). This includes individual employees' foreign language abilities as well as language-related technologies and systems used by the organization, such as translation software. To assemble this language capital into a productive capacity at the organizational level, it needs to be converted into LOC. To this purpose, language resources need to be deployed at the right place to ensure accessibility and at the right time to ensure timely responses to information requests in a suitable language (Welch and Welch, 2018).

By implementing such configurations, organizations can establish functional LOC. However, the organization can only truly benefit from its language investment when it moves beyond *utilizable* LOC (LOC potential) to actual *utilization* (Welch and Welch, 2018). While the development of LOC is driven by the organization, individual employees play a pivotal role in determining the extent to which they hide their language skills or effectively utilize them for the benefit of the organization (Welch and Welch, 2018). If managers and employees are equally motivated and prepared to manage language resources proactively, organizations can incentivize desirable behaviors, making the creation of LOC an interactive process between individual actions and organizational interventions. Focusing on this interplay between the individual and the organizational level, LOC highlights the multilevel nature of language effects in internationally active companies.

We build on the concept by Welch and Welch (2018), but go beyond their work in two important ways: First, Welch and Welch (2018) introduced LOC for MNCs, as evidenced in their very definition of the construct, which specifically refers to multinational enterprises. We redefine LOC in a way that the concept can be applied equally to the international activities of both SMEs and large multinational

corporations. Second, Welch and Welch (2018) did not empirically validate the LOC construct. Based on our reconceptualization of LOC, we will develop an instrument to measure LOC at an organizational level and test its explanatory power for essential international performance metrics of SMEs. Finally, we decided to use export performance and international networking capability as outcome variables, as export performance (e.g., Beleska-Spasova et al. 2012; Morgan et al. 2012; Wojcik and Ciszewska-Mlinaric, 2020) as well as international networking capability (Mu, 2013; Mu, Peng, and di Benedetto, 2017; Parida, Patel, Wincent, and Kohtamaki, 2016; Torkkeli, Kuivalainen, Saarenketo, Puumalainen, 2019) are regarded as impactful and established firm outcome measures in an international business context.

2.3 Conceptualization of LOC and its Dimensions

In developing a conceptualization of LOC suitable for SMEs, we will proceed in three steps. Firstly, we will draw upon existing capacity literature to outline the fundamental nature of LOC as an organizational capacity. Secondly, we will define individual motivation and preparedness as crucial factors that underpin the potential capacity of SMEs to utilize their language resources. Lastly, we will examine actual utilization as a key indicator of the realized capacity within SMEs.

2.3.1 Organizational Capacities

Organizations differ in their abilities to acquire and efficiently utilise resources, influenced by factors such as access, practices, and learning and connective capacity (Tsai, 2001; Welch and Welch, 2018). Organizational capacities are defined as processes which include locating, deploying and facilitating tools and activities and incorporating them into organizational processes (Chen and Huang, 2009; Welch and Welch, 2018). They have been shown to powerfully determine organizational performance criteria such as organizational learning (Andersson et al. 2016), knowledge sharing (Anh et al. 2006), and innovation performance (Tsai, 2001).

Researchers propose that organizational capacity reflects two aspects: the conditions that facilitate its development, referring to an organization's ability to develop this capacity, and its actual utilization, which pertains to an organization's ability to exploit this capacity to enhance organizational performance (Camison and Fores, 2010; Cohen and Levinthal, 1990; Jansen et al. 2005; Volberda et al. 2010). Based on these insights, we propose a conceptualization of LOC that comprises two essential elements: motivation and preparedness to utilize language resources as conditions that facilitate the development of LOC, and actual utilization of language within the organization to drive international performance improvement.

2.3.2 Motivation and Preparedness to Develop Language Resources

Welch and Welch (2018) emphasize that motivation and a preparedness to act are necessary for language capital to be converted into LOC. We contend that this holds

particularly true for the context of SMEs. Whereas large multinationals by design employ a multilingual workforce with a broad range of language skills (Peltokorpi and Vaara, 2014), SMEs, as much smaller entities, may or may not have foreign language capabilities at their disposal (Crick, 1999; European Language Resource Coordination, 2023; Gassmann and Keupp, 2007; Kotey and Folker, 2007; Sok and O'Cass, 2011). It is crucial for SME managers and employees to recognize the pervasiveness and persistence of language requirements for international performance and to be willing and prepared to allocate their limited resources towards developing language competencies within the organization for successful internationalization.

Motivation to develop language resources, as per our definition, encompasses the willingness to take charge and take voluntary dynamic, goal-directed, persistent and vigorous action that leads to the assembly of language resources and to making these resources utilizable in that they can contribute to organizational effectiveness. This also encompasses factors which influence the direction, intensity, and persistence of these actions (Kanfer et al. 2017; Minbaeva et al. 2003). For example, managers must ensure employees are motivated to develop their language skills as and when needed even if this involves additional effort and time (Welch and Welch, 2018). Motivation needs to be complemented with *preparedness* to develop language resources, which entails proactively maintaining attention to potential issues and barriers. This involves measuring and monitoring these factors, evaluating and analyzing outcomes related to language barriers and potential solutions, understanding limitations as well as implementing processes and mechanisms to acquire innovative ideas and perspectives that can contribute to organizational effectiveness (Shimizu and Hitt, 2004). For example, managers must be prepared to invest time and resources for development of language skills of relevant employees as a prerequisite for calling upon these resources when needed. We integrate these aspects into the concept of *Motivation and preparedness to develop language resources*.

2.3.3 Actual Utilization of Language Resources

Whereas motivation and preparedness to develop language resources represent the potential capacity of an organization, the actual utilization of language resources reflects the realized capacity (Zahra and George, 2002). In this regard, the ability of an organization to effectively utilize or exploit existing or developed language competencies for international performance constitutes our second dimension of LOC. We conceptualize utilization of language resources as language resources being persistently and vigorously deployed to address language barriers and issues related to language, and to make organizational outcomes and processes more effective (Shimizu and Hitt, 2004; Vasudeva and Anand, 2011; Wigfield and Eccles, 2000).

2.4 The Impact of LOC on SME Performance

As mentioned above, organizational capacities have been shown to influence a range of organizational performance criteria (Andersson et al. 2016; Apriliyanti and Alon, 2017; Kostopoulos et al. 2011; Tsai, 2001). In addition, language has been identified

as a predictor of trade flows (Dow and Karunaratna, 2006), market entry choices (Barrios and Benito-Ostolaza, 2008; Foreman-Peck and Wang, 2014; Piekkari et al. 2014), and performance in foreign markets (Clarke, 1999; Golesorkhi et al. 2019; Turnbull and Welham, 1985). Representing an organizational capacity centered on language, LOC can be expected to influence the performance of internationally active organizations. Specifically, we expect LOC to have a significant impact on SMEs' export performance and their capability to establish networks in foreign markets.

The influence of LOC on export performance is particularly relevant to explore, because exporting is a market entry strategy commonly preferred by SMEs (Liñán et al. 2020). The use of foreign languages by the organization as a whole or by individual employees was found to greatly benefit organizations in increasing their international sales, ensuring effective advertising abroad, enhancing their image among foreign consumers (Crick, 1999), and facilitating the coordination of international operations (Welch et al. 2001). In contrast, language skill deficiencies have been identified as one of the main barriers to exporting (Foreman-Peck and Wang, 2014). Consequently, significant effects of LOC on export orientation, export sales, as well as export profit and growth of SMEs may be expected.

Furthermore, language skills of individual employees were found to enable the formation of global networks (Johanson and Vahlne, 2009; Turunen and Nummela, 2017), as they increase opportunities for interaction in business relationships and foster the development of social capital, which is vital for building business networks (Hartmann and Herb, 2015; Medlin, 2004). Thus, we expect LOC to influence the networking capability of SMEs in international markets.

Based on existing studies, we expect LOC to influence SMEs' export performance through both the organization's and individual employees' use of foreign language. Additionally, we anticipate that LOC will impact SMEs' networking capability primarily through the foreign language use of key individuals. This highlights the interaction between the individual and organizational-level language use, emphasizing the crucial role that both levels play in leveraging LOC to enhance international performance.

In the following, we will develop a measurement scale for LOC based on the above conceptualization, empirically validate the concept and probe its explanatory power for the export orientation and international networking capability of SMEs.

3 Scale Development and Validation

We developed and validated a psychometrically sound multidimensional measurement scale to empirically ground and deepen our understanding of the construct of LOC. To develop a valid, reliable measurement instrument for LOC, we followed a two-stage, multi-item scale development approach (Kiratli et al. 2016; Rosenzweig and Roth, 2007; Walsh and Beatty, 2007). Figure 1 provides an overview of this methodological approach and outlines the different activities involved in these two stages.
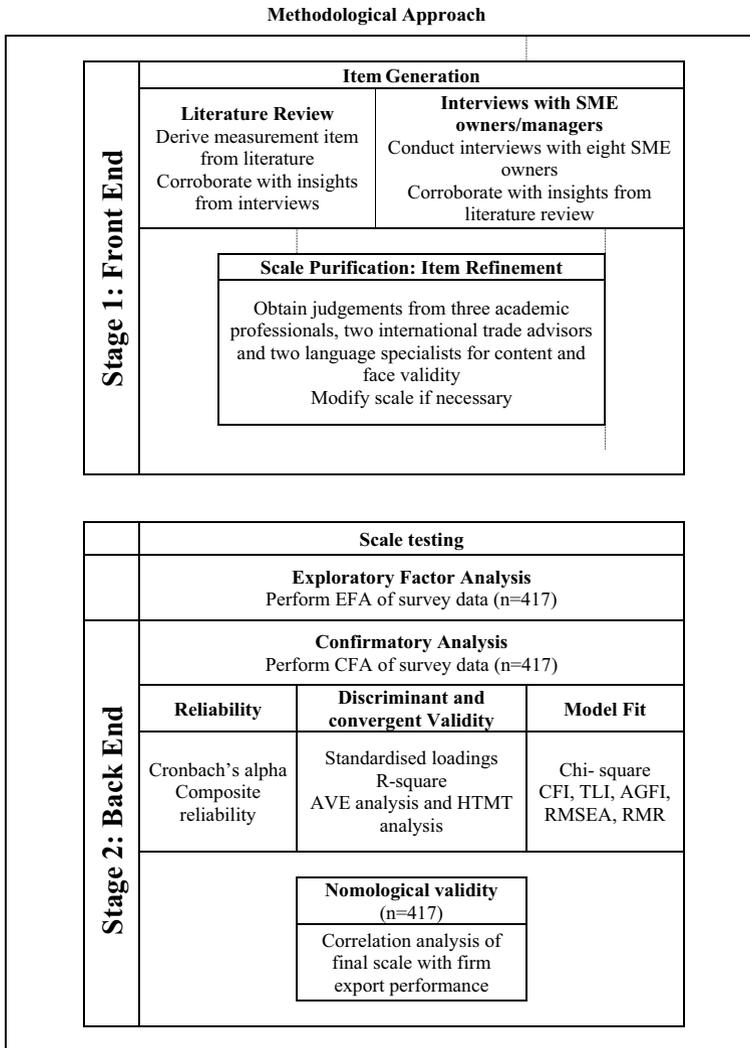
Methodological Approach

Item Generation	
Literature Review Derive measurement item from literature Corroborate with insights from interviews	**Interviews with SME owners/managers** Conduct interviews with eight SME owners Corroborate with insights from literature review

Scale Purification: Item Refinement

Obtain judgements from three academic professionals, two international trade advisors and two language specialists for content and face validity
Modify scale if necessary

(Stage 1: Front End)

Scale testing

Exploratory Factor Analysis
Perform EFA of survey data (n=417)

Confirmatory Analysis
Perform CFA of survey data (n=417)

Reliability	**Discriminant and convergent Validity**	**Model Fit**
Cronbach's alpha Composite reliability	Standardised loadings R-square AVE analysis and HTMT analysis	Chi- square CFI, TLI, AGFI, RMSEA, RMR

Nomological validity
(n=417)

Correlation analysis of final scale with firm export performance

(Stage 2: Back End)

Fig. 1 Methodological approach

3.1 Item Generation

During the first stage, our objective was to establish a conceptual groundwork for the LOC construct and generate a pool of measurement items that effectively represent and capture the concept of LOC (Churchill, 1979; De Vellis, 1991; Netemeyer et al. 2003). We initiated stage one with a thorough literature review with the purpose of generating initial themes. We grounded our study in two main streams of the literature: the capacity literature (e.g., Camison, 2005; Camison and Fores, 2010; Zahra and George, 2002) and the literature on language in

international business (e.g., Barner-Rasmussen et al. 2014; Brannen et al. 2017; Reiche et al. 2015; Welch and Welch, 2008, 2018). Within these streams we identified a broad array of themes, which enabled us to create initial items reflecting LOC (Edwards and Bagozzi, 2000).

Nonetheless, it was imperative to probe the validity of these themes, to probe whether each theme was consistent with the views of practitioners and to explore if additional themes might be relevant. To this end, we applied an open-ended elicitation procedure (Netemeyer et al. 1995). We conducted face-to-face semi-structured interviews with eight decision-makers (CXO level) from SMEs in the UK. We chose to focus on the UK, as English is the native language of most managers of SMEs from this region and English is often used as a lingua franca in international communication and collaboration (Neeley, 2017). This suggests that managers of UK SMEs may be less aware of foreign language needs for successful internationalization and may advance more easily in foreign markets with English than with other foreign languages. If our study demonstrates that even native English-speaking SME managers show awareness of LOC and acknowledge its effect on their operations, LOC could have even stronger implications for the internationalization of SMEs with other native languages. To capture common patterns and core themes in decision maker's views, we sampled for a maximum variety of industries (Patton, 2002), including interviewees from SMEs in manufacturing, engineering, services and the food and retail industries. In our purposive sampling, we sought out interviewees working within independent SMEs in the UK ranging from seven to 58 employees, which had prior exporting experience. Moreover, all interviewees had total work experience of more than ten years and held decision-making positions, including CEO, Managing Director or Sales and Operations Director in their respective companies. All interviewees were knowledgeable about organizational capacities of SMEs, actions involving the assembly and utilizability of language resources in SMEs, management of potential issues related to language, as well as the utilization of language resources. The selected interviewees thus had extensive knowledge about the research topic (Churchill, 1979) and represented the sample of exporters that we later targeted in

Table 1 Description of interviewees

Firm	Age	Gender	Designation	Industry experience (years)	Sector	No of employees
Company S1	58	M	Director	20	International HR	6
Company S2	46	M	Director	20	Engineering	40
Company S3	56	M	Managing director	32	UV lighting	7
Company S4	35	F	Director	17	Private small business	2
Company S5	–	M	CEO	14	Retail	58
Company S6	60	M	CEO	30	Agri-technology	4
Company S7	42	F	Managing Director	15	Food and Beverages	13
Company S8	31	M	Operations Director	14	Engineering	5

our survey (Rosenzweig and Roth, 2007). Information regarding the eight interviewees is presented in Table 1.

The semi-structured nature of our interview guideline ensured consistency in key questions which facilitated comparisons between informants, but also allowed for addressing and delving into significant yet unforeseen matters (Miles and Huberman, 1994; Myers, 2008). Aside from initial questions on participant background details including age, qualification, professional experience, and number of languages spoken, the interview was divided into two sections that were relevant for this study. In the first section, we explored informants' perception of the role of language in their exporting activities. In the second section, we discussed what has been done to address language needs. The interviews lasted between 40 and 75 min. Of the eight participants, six were males and two females.

Prompted to reflect on specific international markets or ventures of their SME, interviewees talked at length about their perceptions of the role language plays in internationalization. Common themes in the interview transcripts were identified following procedures for qualitative data analysis and interpretation proposed by Spiggle (1994). These broad themes included awareness of language challenges, linguistic competence, language training, willingness to invest in language resources, and utilization of language resources. Interviewees' awareness of language challenges, for example, became evident when they reported difficulties in conveying technical information due to language barriers or when they emphasized the need for language skills to target specific markets. This awareness of language challenges and recognition of the need to address these challenges in order to export and carry out international trade and business activities highlight the importance of LOC for SMEs' success.

While the sample size (n = 8) of our interviews is small, the focus of this qualitative step in our scale development process was to validate and supplement the knowledge base of LOC from our literature study. The interviews enabled us to refine construct definitions and item wording to ensure the formulation of the items aligned with terminologies used by practitioners, and helped us to identify additional items that merited consideration and had not been covered by the literature (Rosenzweig and Roth, 2007). Drawing from recurrent themes across the interviews, we added items LOC02, LOC03, LOC06 and LOC08 (see Table 2 for final wording) to the initial, literature-based item pool. In our analysis of potential measurement items, we engaged in iterative comparisons, aligning informant narratives with extant literature. Corroboration of the information gathered in the literature review with the information obtained from the interviewees resulted in a pool of 17 items across the two dimensions of LOC, namely motivation and preparedness to develop language resources and actual utilization of these resources.

3.2 Item Refinement

In refining the construct and its items, we engaged seven independent experts to assess both the content and face validity of our proposed items. This panel included three academics, two language experts, and two international trade

Table 2 List of items with sources and codes

LOC items	Source	Code
In our organisation, we are aware of complexities around languages when conducting international trade and business activities	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC01
In our organisation, we frequently make use of foreign languages for various activities, e.g. communication	Self- developed (interview)	LOC02
In our organisation, we have translated our product/service manuals, packaging materials or website into foreign languages for the use of our international customers	Self -developed (interview)	LOC03
In our organisation, we actively invest in resources with language awareness/ capabilities for our international market	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC04
In our organisation, we are aware of language challenges when exporting	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC05
In our organisation, we encourage people to learn and use our international customer's language for simple expressions, such as hello, thank you etc	Self -developed (interview)	LOC06
In our organisation, we hire people with multi-lingual exposure/experience to focus on exporting/ international trade	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC07
In our organisation, we have deputed, hired an employee with foreign language skills relevant to the customer to promote and manage the international market	Self -developed (interview)	LOC08
In our organisation, we promote endeavors/attitude towards learning and understanding an international customer's language	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC09
In our organisation, we seek to support/invest in services from experts/translation companies to overcome language barriers	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC10
In our organisation, we are encouraged to share our experiences, whether personal or professional, about exposure to different languages	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC11
Our organization publicly recognizes those who are knowledgeable and contribute towards language competencies	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC12
In our organisation, we understand the complexities that language differences can create in international markets	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC13

Table 2 (continued)

LOC items	Source	Code
In our organisation, we are open to people with different language capabilities and encourage and utilize their diversity to achieve our organizational objectives in international markets	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC14
In our organisation, we envision hindrance/disruption to our exporting/international trade when we/our representative are not able to manage local language complexities	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC15
In our organisation, we are committed to enriching language competence awareness to facilitate international trade/exporting	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC16
In our organisation, we openly share our thoughts/help each other with language/linguistic challenges	Self-developed and adapted from Camison and Fores (2010); Zahra and George (2002); Schneider et al. (2005); Welch and Welch (2018)	LOC17
Linguistic competence (LC) items		
In our organisation, we have people who can use everyday expressions and very basic phrases of foreign customer (market) language for e.g. Hello, Thank you, etc	Adapted from CEFR (CEFR, A1 level)	LC01
In our organisation, we have people with a good understanding of frequently used expressions who can communicate using simple vocabulary of foreign customer (market) language	Adapted from CEFR (CEFR, A2 level)	LC02
In our organisation, we have people who can understand, read and produce simple text on familiar/business topics in the foreign customer (market) language	Adapted from CEFR (CEFR, B1 Level)	LC03
Number of languages known (collectively) within the organisation	Self-developed	LO04
In general, my perception is that our foreign customers speak good enough English	Self-developed (Jenkins, 2017 and interviews)	LC05
Cultural intelligence (CI) items		
In our organisation, we have people who know the ways in which cultures around the world are different	Thomas et al. (2015)	CI01

Table 2 (continued)

LOC items	Source	Code
In our organisation, we have people who can share examples of cultural differences from personal experience, travel, education, work experience, reading, etc	Thomas et al. (2015)	CI02
In our organisation, we have people who enjoy talking with our international customers from different cultures	Thomas et al. (2015)	CI03
In our organisation, we have people who can try to understand our international customers from another culture by imagining how something looks from their perspective	Thomas et al. (2015)	CI04
In our organisation, we have people who can change their behaviour to suit our international customers and different cultural situations	Thomas et al. (2015)	CI05
In our organisation, we have people who can accept delays without becoming upset when in different cultural situations and with culturally different international customers	Thomas et al. (2015)	CI06
In our organisation, we have people who are aware of the cultural knowledge we use when interacting with international customers from another culture	Thomas et al. (2015)	CI06
In our organisation, we have people who are aware about the influence that culture has on their behavior and that of our international customers who are culturally different	Thomas et al. (2015)	CI07
In our organisation, we have people who are aware that we need to plan our course of action when in different cultural situations and with culturally different international customers	Thomas et al. (2015)	CI08

advisors from the British Chamber of commerce who were knowledgeable about the research topic (Churchill, 1979). These experts provided insightful feedback on the wording, relevance, and suitability of each item, prompting us to revise or clarify certain items based on their recommendations. For instance, the original wording of item LOC09, 'In our organisation, we promote behavior towards learning and understanding international customer language', was modified to 'In our organisation, we promote endeavors/attitudes towards learning and understanding an international customer's language' following suggestions from a language specialist. Finally, a pilot study of 12 respondents who were representative of the larger target sample were approached for pretesting the survey design (Fink, 2003; Willis, 2005). The findings of this pilot did not lead to any significant changes. Table 2 presents the final pool of 17 items, which we utilized in our subsequent survey. In addition, for the sake of completeness, we decided to also display the items of LC and CI scales. We used these two scales for establishing discriminant validity only, as such, these two scales are not the core of the paper. At the same time presenting these items alongside the newly-developed LOC scales allows for a direct comparison of the items of the LOC scale with the items of more established LC and CI scales showing the LOC is indeed distinctive in nature of these scales.

3.3 Scale Purification

For scale purification we conducted a web-based survey with owners, managing directors, CXO's level respondents from SMEs ranging in size from less than 10 employees to 250 employees (European Commission, 2020), across different sectors such as manufacturing (28%), information technology (14%), finance (8%), automotive (4%), retail (25%) and other (21%). The sample represents England 58%, London (England) 23%, Scotland 11%, Wales 6% and Northern Ireland 2%. This suggests that our sample can be considered representative of the population of UK SME exporters.

The total responses collected were 1325 on the day our survey closed. 68% of responses were less than 50% complete and were unsuitable for inclusion in the analysis. Additionally, after careful investigation of data, seven additional responses had to be deleted for reasons such as non-engagement, and non-responsiveness to the key construct itself, leaving us with total of 417 responses. From the 417 responses retained for analysis, a missing completely at random (MCAR) test was conducted. Less than 2% in all 417 cases and 0.375% of total values were incomplete. The obtained sample consisted of owners, managing directors, CXO's level respondents from SME's ranging in size from less than 10 employees to 250 employees, across different sectors such as manufacturing (28%), information technology (14%), finance (8%), automotive (4%), retail (25%) and other (21%). Also, the sample represents England 58%, London (England) 23%, Scotland 11%, Wales 6% and Northern Ireland 2% to obtain wider participation across UK. This suggests that our sample can be considered representative of the population of UK SME exporters.

Table 3 EFA summary (n = 417)

Language operative capacity (n = 417)		Coefficients		Communalities
		LOCm	LOCu	
Motivation and preparedness (LOCm)				
LOC01	In our organisation, we are aware of complexities around languages when conducting international trade and business activities	0.853		0.586
LOC05	In our organisation, we are aware of language challenges when exporting	0.680		0.441
LOC06	In our organisation, we encourage people to learn and use our international customer's language for simple expressions such as hello, thank you etc	0.579		0.567
LOC09	In our organisation, we promote endeavors/attitude towards learning and understanding an international customer's language	0.432		0.595
LOC11	In our organisation, we are encouraged to share our experiences whether personal or professional about exposure to different languages	0.498		0.475
LOC13	In our organisation, we understand the complexities that language differences can create in international markets	0.806		0.548
LOC14	In our organisation, we are open to people with different language capabilities and encourage and utilize their diversity to achieve our organisation objectives in international markets	0.573		0.479
LOC17	In our organisation, we openly share our thoughts/help each other with language/linguistic challenges	0.701		0.551
Utilisation of language resources (LOCu)				
LOC02	In our organisation, we frequently make use of foreign languages for various activities for e.g. communication		0.749	0.620
LOC03	In our organisation, we have translated our product/service manuals, packaging materials, or website in foreign languages for the use of our international customers		0.643	0.483
LOC04	In our organisation, we actively invest in resources with language awareness/ capabilities for our international market		0.770	0.666
LOC07	In our organisation, we hire people with multi- lingual exposure/experience to focus on exporting/ international trade		0.845	0.660
LOC08	In our organisation, we have deputed, hired an employee with foreign language skills relevant to the customer to promote and manage the international market		0.961	0.710

Table 3 (continued)

Language operative capacity (n = 417)

	Coefficients		Communalities
	LOCm	LOCu	
LOC10 In our organisation, we seek to support/ invest in services from experts/translation companies to overcome language barriers		0.710	0.495
LOC15 In our organisation, we envision hindrance/disruption to our exporting/international trade when we/our representative are not able to manage local language complexities		0.516	0.379
LOC16 In our organisation, we are committed to enriching language competence awareness to facilitate international trade/exporting		0.558	0.771
LOC12 Our organisation publicly recognises those who are knowledgeable and contribute towards language competencies		0.463	0.581
Eigen value	1.298	9.115	
Percentage of variance explained	5.109	56.107	
Cronbach's alpha			0.948

3.4 Scale Testing: Exploratory and Confirmatory Factor Analysis

Stage Two aimed at assessing the scale validity by means of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Table 3 presents the results of the EFA, which was performed on responses to items. The items were subjected to maximum likelihood exploratory factor analysis with oblique rotation (promax). Only items with factor loadings greater than 0.50 on their focal dimensions and not higher than 0.25 on other factors were retained. Six different factors ($\chi 2(72) = 166.18$; $p < 0.001$) were identified containing 17 items in total, which were then used in the subsequent analyses. The Cronbach alphas of the measures of the six dimensions were high, ranging from 0.89 to 0.92. The six factors accounted for 77.6% of total variance and each factor explained at least 5% of total variance, indicating strong factors (Hair et al. 2009; Netemeyer et al. 2003).

In addition, a CFA was conducted to confirm the assessment of the scale dimensionality and to verify the construct validity of the LOC measures (see Table 4). A two-factor CFA was performed on the 17 items using Mplus software (Muthén and Muthén, 1998–2012). The model exhibited a satisfactory goodness-of-fit (Hu and Bentler, 1999): $\chi 2$ (df) = 399.825 (118); p = 0.00; CFI = 0.9366; TLI = 0.926; RMSEA = 0.076; SRMR = 0.042. Scale composite reliability exceeded the cut-off level of 0.70, and variance extracted exceeded 0.50 for each of the two dimensions (Hair et al. 2009). All standardized item-to-factor loadings exceeded 0.60 (Hair et al. 2009) demonstrating adequate convergent validity. These results show sound reliability and consistent structure for the 17-item LOC scale. The mean scores and standard deviations of each dimension are detailed in Table 5. In addition, discriminant validity of the two dimensions of LOC was examined. First, we assessed the change in χ^2 by fixing the covariance path between the two dimensions to one in our structural model. This resulted in a significant decrease of the χ^2 value-based model fit. Hence, the two dimensions can be discriminated, yielding evidence for discriminant validity (Anderson and Gerbing, 1988). Second, our findings revealed that 1 does not reside within the confidence interval of the correlation between the two dimensions, which implies that we can speak of discriminant validity (Anderson and Gerbing, 1988).

Subsequently, a second-order reflective-formative factor model was tested (Becker et al. 2012) We introduced a second-order factor to collect the two specific first-order dimensions of LOC under one higher-order representation. The goodness of-fit measures of this second-order factor model display a better fit ($\chi 2$ (df) = 416.269 (133); p = 0.00; CFI = 0.946; TLI = 0.938; RMSEA = 0.071; SRMR = 0.05) compared to the first-order model, demonstrating that the first-order factors can be represented in a more parsimonious way at a higher level of abstraction. In addition, the target coefficient between the first-order and the second-order models (TC = $\chi 2$ of the baseline model/$\chi 2$ of the alternative model) (Marsh and Hocevar, 1985) was above the recommended threshold of 0.90 (i.e., TC = (399.825/416.269) = 0.960) showing the superiority of the second-order model in representing the data. Furthermore, the values in Table 4 show the parameter estimates of the completely standardized solution. In addition, the LOC dimensions clearly showed evidence of discriminant validity. First, fixing the covariance path between the two dimensions

Table 4 Confirmatory factor analyses

Items/factors	Confirmatory first-order factor analysis	Higher-order reflective-formative confirmatory analysis		Higher-order reflective-reflective confirmatory analysis	
	First-order factor loadings	First-order factor loadings	Higher-order factor loadings	First-order factor loadings	Higher-order factor loadings
Motivation and preparedness (CR AVE)	(.89; .51)	(.89;.55)		(.94;.65)	
LOC01	.723	.721		.884	
LOC05	.641	.639		.746	
LOC06	.767	.765		.827	
LOC09	.772	.769		.811	
LOC011	.696	.703		.767	
LOC013	.696	.692		.800	
LOC014	.685	.688		.771	
LOC017	.745	.749		.828	
Utilization (CR AVE)	(.92; .58)	(.92;.58)		(.94;.63)	
LOC02	.791	.790		.853	
LOC03	.701	.713		.736	
LOC04	.815	.807		.841	
LOC07	.790	.795		.822	
LOC08	.801	.801		.841	
LOC10	.702	.702		.741	
LOC12	.755	.756		.767	
LOC15	.619	.625		.650	
LOC16	.837	.832		.841	

Table 4 (continued)

Items/factors	Confirmatory first-order factor analysis	Higher-order reflective-formative confirmatory analysis		Higher-order reflective-reflective confirmatory analysis	
	First-order factor loadings	First-order factor loadings	Higher-order factor loadings	First-order factor loadings	Higher-order factor loadings
F1			.314		.445
F2			.677		.576
Observations	417	417		417	
Factor correlation	.865	.865			
χ² (df)	399.825 (118)	416.269 (133)		811.607 (119)	
Comparative fit index	.936	.946		.842	
Tucker-Lewis index	.926	.938		.819	
RMSEA	.076	.071		.118	
SRMSR	.042	.041		.291	

Table 5 Predictive and discriminant validity (N = 417)

Predictive validity	Mean	SD	LOC	NC	ExP
LOC	3.647	0.7848	**0.749**		
Networking capability (NC)	3.766	0.8771	0.588	**0.859**	
Export performance (ExP)	3.432	0.5254	0.539	0.431	**0.826**
Discriminant validity	Mean	SD	LOC	LC	CI
LOC	3.647	0.7848	**0.749**		
Linguistic competence (LC)	3.617	1.1128	0.675	**0.827**	
Cultural intelligence (CI)	4.060	0.6114	0.628	0.497	**0.745**

Note: The square root of the average variance extracted is on the diagonal

Significance of bold values is to make clear that the numbers on the diagonal stand for something different than the off-diagonal numbers

to one in led to a significant decrease of the χ^2 value-based model fit (Anderson and Gerbing, 1988). Second, our findings showed that 1 does not reside within the confidence interval of the correlation between the two dimensions (Anderson and Gerbing, 1988).

Finally, as an alternative model, a second-order reflective-reflective factor model was tested. This second-order factor also reflects the two specific first-order dimensions of LOC under one higher-order representation. The goodness-of-fit measures of this second-order factor model were less favorable ($\chi2$ (df) = 811.607 (119); p = 0.00; CFI = 0.842; TLI = 0.819; RMSEA = 0.118; SRMR = 0.291) compared to the higher-order reflective-formative factor model. In addition, the target coefficient between the first-order and the second-order models (TC = $\chi2$ of the baseline model/$\chi2$ of the alternative model) (Marsh and Hocevar, 1985) was below the recommended threshold of 0.90 (i.e., TC = 399.825/811.607 = 0.453) showing that this alternative second-order model is not superior in representing the data compared to the first-order model. Table 4 shows the parameter estimates of the completely standardized solution.

3.5 Predictive Validity

To test predictive ability, we assessed whether the LOC construct was positively associated with relevant outcome variables. Consistent with the view that firms' distinct ability to develop and utilize capabilities is linked to performance (Andersson et al. 2016; Slater, et al, 2006), we expect that higher levels of LOC within a firm correspond with better international performance outcomes. We, therefore, in the same survey also asked the 417 respondents about their perception of their organization export performance (export sales, growth and profit) (Cadogan et al. 2009; Sousa and Novello, 2014) and networking capability on multi- item Likert scales (1 = strongly disagree to 5 = strongly disagree) (Peng and Luo, 2000; Park and Luo, 2001; Luo et al. 2008). Networking capability refers to initiating, developing and terminating business networks within an international business context (Mitrega et al.

2012; 2017). Prior research has shown that networking capability is an important SME outcome and significantly correlates with other outcomes that are relevant in an international business context, including: new venture performance (Mu, 2013), product development (Mu et al. 2017), foreign market entry in small firms (Karami and Tang, 2019), international expansion (Torkkeli et al. 2012) and sales growth in small firms (Parida et al. 2016). We utilized the networking capability measure – three items – (Peng and Luo 2000; Park and Luo 2001; Luo et al. 2008) to measure networking capability in international markets with a focus on the networking role of managers in SMEs with regard to export buyer/customer firms, foreign supplier firms, and expert competitor firms. The results of Table 5 indicate that LOC positively correlates with both export performance (r = 0.588, p < 0.001) and networking capability (r = 0.539, p < 0.001). Hence, we can conclude that LOC constitutes a reliable, valid scale for predicting international performance outcomes of SMEs.

Finally, *it is also important to examine whether the LOC scale is different from related constructs, like linguistic competence (LC) (*Hurmerinta et al. 2015*) and cultural intelligence (Thomas* et al*. 2015). T*he shared variance between these constructs was less than the average variance extracted for any pair, and the levels of the AVE for each of the three constructs is greater than the squared correlation involving the constructs (Fornell and Larcker, 1981), indicating that the LOC measure turns out to be a separate construct that is clearly distinctive from these related measures (Churchill and Iacobucci, 2002).

4 Discussion

4.1 Theoretical Implications

Our study makes its main theoretical contributions to language-related IB research and capacity research, which we advance in three ways: 1) by introducing a comprehensive and robust measurement instrument for LOC, 2) by highlighting the multilevel nature of language, and 3) by advancing research on language in internationalizing SMEs.

First, our study develops a valid, reliable and practicable measurement instrument for LOC at the organizational level, which enriches the concept of LOC with new elements and empirically grounds and deepens our understanding of LOC. Based on a systematic scale development process as outlined by Churchill (1979), DeVellis (1991), and Netemeyer et al. (2003), and incorporating the distinction between potential and realized capacity from the capacity literature (e.g., Camison and Fores, 2010; Vasudeva and Anand, 2011; Zahra and George, 2002), we identify several dimensions represented by key indicators. For one, we identify key indicators of an organization's motivation and preparedness to allocate their finite resources to the development of language skills, crucial for successful international operations. This motivation and preparedness to develop language resources, indicative of an organization's *potential* for LOC, involves recognizing the complexities and challenges associated with language in export contexts. It includes promoting the learning and application of languages spoken by international customers, fostering a culture of

understanding and empathy towards language diversity, and encouraging the sharing of language exposure experiences. Additionally, it involves appreciating employees' diverse linguistic skills and encouraging them to leverage this diversity in achieving organizational goals, as well as actively supporting efforts to overcome language-related obstacles. Furthermore, we identify indicators reflecting an organization's actual usage of their language resources, a measure of their *realized* LOC. This involves practices such as frequent use of foreign languages, translating materials, such as product or service manuals, hiring individuals with multilingual abilities or language skills pertinent to target markets, and anticipating challenges arising from local language intricacies.

Our study empirically demonstrates the predictive ability of the LOC scale for two critical metrics in the internationalization of SMEs: export performance and networking capabilities. Thus, our research not only enriches the LOC construct by making it quantifiable but also underscores its significance for future research on language in international organizations. In doing so, we further reinforce the connection between language-related IB studies and organizational capacity research. While previous research by Piekkari et al. (2013) and Peltokorpi (2017) has explored the relationship between translation behavior, a shared language in MNCs and the organization's *absorptive* capacity, our work contributes to the capacity literature with a comprehensive and robust measure of language operative capacity.

Second, our study sheds light on the interaction between individual-level language skills and organizational-level capacities, thereby answering calls to better account for the multi-level nature of language in international organizations (Brannen et al. 2017; Piekkari et al. 2014; Tenzer et al. 2017). While the majority of language-focused studies in IB focus on a single level of analysis, predominantly the individual level, our research takes a more comprehensive approach. We explore how the language skills of individual employees, collectively forming an organization's language resources, are transformed into LOC, an organizational-level capacity. This transformation occurs when an organization identifies its available language resources, proactively develops them, and strategically deploys them at the right place and time to facilitate international operations. We hope that this multi-level approach will inspire further research into bottom-up processes, studying, for example, how the language-related thoughts, emotions, and behaviors of individuals impact group-level or organizational-level outcomes, such as conflict resolution, learning processes, and overall organizational climate. Additionally, there is a fertile ground for research into top-down effects, examining, for instance, how organizational policies and practices around language influence individual employee outcomes, including their job performance, career progression, job satisfaction, and overall well-being. This approach opens avenues for a richer understanding of the reciprocal influence between individual and organizational language dynamics.

Finally, our research significantly extends the limited language-related research on SMEs by providing a deeper understanding of language capacity as a strategic resource for SMEs. Previous studies have mostly examined whether SMEs recognize the importance of foreign languages for business and how this awareness impacts their exports, or identified the language management systems and strategies SMEs employ when they acknowledge these benefits (e.g., Asasongtham and Wichadee,

2014; Bruen and Buckley, 2022; Incelli, 2008; Rižnar and Rybnicek, 2017). Our study supports the emerging literature emphasizing the importance of language resources and their skillful management in SME internationalization (Angouri and Piekkari, 2018; Sui et al. 2015). Rather than merely identifying language barriers and awareness among SMEs, however, we advance language-sensitive SME research by delving into the theoretical underpinnings of language capacity. We connect language-related SME research with capacity research, distinguishing between *potential* and *realized* LOC. Our LOC scale includes specific areas where SMEs can identify and address gaps in their language resources, along with methods to enhance the utilization of these resources. This offers a more comprehensive model than previous studies, explaining how language resources can be systematically developed and leveraged for SME internationalization benefits. Our study takes additional steps by empirically validating the LOC instrument within the context of internationalizing SMEs and probing its explanatory power for essential international performance metrics. While previous research struggled to measure the impact of SMEs' behavior regarding foreign language skills and use (Incelli, 2008), we provide robust evidence that developing and optimizing language resources can significantly enhance an SME's export performance and international networking capability. Given the limited resources available to most SMEs (Hsu and Chen, 2000; Paul et al. 2017), our LOC measure offers a practical framework for these enterprises to effectively leverage their language resources.

4.2 Managerial Implications

This approach provides actionable insights for SMEs striving to navigate the complexities of international markets through optimized use of their language capabilities. Our results also have implications for every organization involved in the supply of foreign language services including translation companies, software suppliers and educational institutions. Importantly the result of this quantitative study also provides substantive evidence for policy makers to justify investment in foreign language capability throughout society, including schools, universities and business.

For businesses we demonstrated the importance of LOC for the internationalization success of SMEs, pinpointing its impact on export performance in terms of export orientation, export sales, profit and growth. Furthermore, our findings illuminate how LOC enhances international networking capacities, extending beyond customers in foreign markets to other vital stakeholder groups such as government agencies, competitors, and business partners. This implies a powerful call to action–not only for internationalizing SMEs, but for any internationally active corporations–to prioritize the development of language resources within the organization and their strategic deployment to enhance internationalization success.

Having identified and validated the constitutive elements of LOC, we provide internationally active companies with a practical self-assessment tool to take stock of and improve their linguistic capabilities. This tool allows organizations to assess their motivation and preparedness in cultivating language resources and allows them to evaluate their actual utilization of these resources for international activities. On

this basis, organizations can design targeted measures to externally acquire language resources or develop them in-house and to deploy these resources optimally. Our analysis of managerial drivers of LOC suggests a shift from reactive stances to proactive strategies in developing language resources. Such strategies may encompass recruitment of linguistically skilled individuals, provision of language training and investments in external translation and interpreting services. They may also involve encouraging employees to use translation tools based on generative AI. AI tools integrated into platforms such as Zoom and Microsoft Teams now enable users to generate live captions and real-time translations in various languages during video calls (Zoom, 2024). Chatbots like ChatGPT can draft messages and documents in multiple languages based on user prompts (Stokel-Walker and Van Noorden, 2023), and AI tools such as Microsoft Copilot can generate project reports in selected languages based on users' meeting transcripts, emails, and chat histories (Microsoft, 2023). If SMEs help their employees overcome anxiety towards these rapidly evolving technologies (Zhan et al. 2023) and train them in AI literacy (Ng et al. 2021), these language tools may narrow the gap between the language resources of SMEs and large MNCs. However, this gap is unlikely to close entirely, as AI-generated translations perform unequally across different languages (Choudhury, 2023), are fraught by algorithmic bias (Sundar and Lee, 2022) and lack cross-cultural understanding (Tenzer et al. 2024). Moreover, the application of AI tools is mostly limited to virtual communication. Therefore, particularly for SMEs, which often operate with limited resources and potential linguistic deficiencies, it remains imperative to adopt a broad-based and long-term approach towards the development of language capacities.

At an operational level, LOC is a practical tool which allows the firm to focus on priorities and identify opportunities for competitive advantage and growth. A business owner or senior manager seeking international expansion can use LOC for example as a predictive tool, to audit current language skills, existing training programs, use of multilingual staff and identification of foreign networks. Using market intelligence, these can be benchmarked against competitors or "best-in-class" in comparable markets to optimize business planning. In a strategy sense, firms are inevitably faced with choices on how to grow; international expansion is one but there are others—acquisitions, new product development and innovation for example. In choosing the opportunity to grow via increased activity in international markets, LOC provides a practical tool to reduce uncertainty and give firms confidence in determining where to make investments in organizational capacities to maximize returns.

Although export promotion policies across the world, and specifically in the UK, have focused on product or service innovation (Turner et al. 2020), our research demonstrates the potential for improved international performance by addressing export capability generally within SMEs, in that the development of language capacity can enhance competitive advantage, specifically export performance directly, but also by influencing market orientation and the networking capability of SMEs.

This research also suggests the potential employability of individuals with language skills which has implications for the education sector. Hence, national-level policy-making bodies should prioritize language skills.

4.3 Limitations and Future Research

Our study provides interesting insights by analyzing LOC on the SME level and provides an actionable tool to assess and improve this capacity. However, a number of limitations, and hence opportunities for future research, should be mentioned.

First, the study was conducted in a particular geographical context–the UK. This means that the headquarter language of the SMEs in our sample was English, commonly acknowledged as the lingua franca of international business (Al-Naemi and Lee, 2020; Neeley, 2017; Neeley and Reiche, 2022; Nickerson, 2015). On the one hand, this might have lowered the need for foreign language skills in the internationalization process, giving us a conservative measure of LOC's impact on international performance metrics. On the other hand, anglophone SMEs might also have lower awareness of foreign language needs in host countries with a low or very low English proficiency index, yielding generally lower levels of LOC in our sample. It would be interesting to probe our LOC scale on multiple datasets from various countries in different language areas. Second, the LOC scale presented in our study focuses on assessing an organization's internal language resources, specifically the foreign language skills of its employees. We chose this focus because SMEs typically lag behind MNCs in terms of internal language resources. However, future research could expand our scale by incorporating an organization's motivation and preparedness to access external language resources, such as human translators or AI-based translation tools, as well as its proficiency in utilizing these resources for international expansion. Given the rapid development of translation tools based on generative AI, assessing AI operative capacity for multilingual business would be an innovative and highly relevant research avenue. Third, our study relied on qualitative evidence and quantitative self-reported measures, which may restrict the conclusions that can be drawn from the findings. Another limitation of this study is its single source of data. Since no identifying data was collected, it was not feasible to obtain second informant data from the same SMEs to validate the results nor to triangulate the self-reported questionnaire with publicly available financial data. However, future researchers could collect data from multiple respondents within a firm to facilitate inter-rater reliability and cross validation.

Additionally, in this study, we used subjective measures of SME performance through the questionnaire as a cost-effective way to gain information on practices (Singh et al. 2016; Wall et al. 2004) and there was not viable alternative. For many SMEs, there typically are no appropriate financial records (Wall et al. 2004). Subjective measures have been a popular method for assessing organizational performance in academic research (Camps and Luna-Arocas, 2012; Ndofor and Priem, 2011). When considering such perceptual measures, it is important to address the potential risks of using them. First, subjective performance measures may contain random error, for instance, if respondents recall figures incorrectly, guessing, or confusing the export performance period of interest with an earlier or later one (Wall et al. 2004). Second, subjective performance measures are more prone to common method bias than objective performance ones, leading to relationships between practices and performance that do not exist in reality. Such "common-method variance" bias is a risk when information on LOC and company performance outcomes is obtained

from the same respondent. This may be due to several reasons, like respondent's tendency to be positive (or negative), to use higher or lower answer categories on response scales, or for their appraisals of LOC to be colored by their financial performance appraisals (Singh et al. 2016; Wall et al. 2004). We therefore, strongly recommend future research to collect and use objective performance metrics next to subjective ones (Singh et al. 2016).

Our study opens a number of avenues for future researchers. First, we selected the SMEs for the development of LOC, but testing and adjusting the LOC scale for large, established companies can be an important research opportunity. Second, our scale could be refined through large multi-country samples. Third, it would be interesting to identify antecedents influencing the development of LOC and to test additional consequences of LOC. To understand potential boundary conditions of the construct, future studies could also investigate to which extent a company's degree of internationalization and diversity moderates the outcomes of LOC.

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Authors and Affiliations

Ankita Tibrewal[1] · Ad de Jong[2] · Geoff Parkes[3] · Helene Tenzer[4] · Melissa Bel-Lahsen[4]

✉ Ad de Jong
adj.marktg@cbs.dk

Ankita Tibrewal
ankita.tibrewal@dmu.ac.uk

Geoff Parkes
parkesgs@aston.ac.uk

Helene Tenzer
tenzer@lmu.de

Melissa Bel-Lahsen
melissa.brunner@lmu.de

[1] De Montfort University, Leicester, UK

[2] Copenhagen Business School, Frederiksberg, Denmark

[3] Aston University, Birmingham, UK

[4] LMU Munich School of Management, Munich, Germany