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Nurmi, Niina; Koroma, Johanna

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The emotional benefits and performance costs of building a psychologically safe language climate in MNCs

Niina Nurmi^{a,*}, Johanna Koroma^{b,1}

^a Aalto University School of Business, Ekonominaukio 1, 02150 Espoo, Finland

^b Aalto University School of Science, Maarintie 8, 02150 Espoo, Finland

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ABSTRACT

How employees cope with the requirement to work in a foreign language has received little scholarly attention. To narrow this gap, we conducted an ethnographic study at KONE and NOKIA, companies using English as a lingua franca. Results indicate that employees who are non-native lingua franca speakers may cope collectively with the language demands by building a psychologically safe language climate. Although benefitting them emotionally, psychologically safe language climate may simplify the lingua franca and, in turn, decrease innovative performance. Our findings contribute to research on language-coping mechanisms and psychological safety in adding language as a potential barrier to innovativeness.

1. Introduction

Most multinational corporations (MNCs) nowadays mandate English as a common company language, i.e., lingua franca, to facilitate international collaboration between employees who speak different native languages (Neeley, 2017). Unfortunately, many of these organizations have reported collapses of collaboration and losses in productivity after implementing the lingua-franca mandate (e.g., Griffith, 2002; Marschan-Piekkari, Welch, & Welch, 1997; Neeley, Hinds, & Cramton, 2012; Hinds, Neeley, & Cramton, 2014). Studies in the field of international business point to a number of different causes of failure in multilingual collaboration, such as a perceived lack of trust (Goodall & Roberts, 2003; Tenzer, Pudielko, & Harzing, 2014), adverse subgroup dynamics (Hinds et al., 2014) and status imbalance between native and non-native lingua-franca speakers (Neeley & Dumas, 2016; Neeley, 2013; Vaara, Tienari, Piekkari, & Sääntti, 2005), as well as language-performance anxiety among non-native speakers (Neeley et al., 2012). Scholars have also observed that non-native speakers may start avoiding interactions in the lingua franca to alleviate language-related stress (Aichhorn and Puck, 2017; Harzing & Feely, 2008; Hinds et al., 2014; Marschan-Piekkari, Welch, & Welch, 1999; Neeley, 2013), refrain from inviting native speakers to meetings (Neeley et al., 2012), and even withdraw from global innovation projects (Hinds et al., 2014). Communication breaks down when non-native English speakers

become crippled by language-related stress, hence knowledge is not shared among global collaborators. Ultimately, the organization may miss out on new ideas and innovations, which multicultural teams are built to produce. Somewhat surprisingly, however, little attention has been paid in language research to how non-native speakers cope with lingua-franca demands and become less anxious in situations involving international collaboration. Our purpose in this study is to contribute to the literature on language-coping mechanisms by examining psychological coping processes among employees who are required to work in a foreign language.

Coping is defined as the effort to manage environmental demands that tax or exceed one's resources (Lazarus & Folkman, 1984). Effective coping mechanisms have been shown to "buffer" (protect) workers from the effects of stressful work demands, and to boost performance (e.g., De Rijk, Blanc, Schaufeli, & De Jonge, 1998; Searle & Lee, 2014). Most research on language-coping mechanisms has focused on managerial interventions to deal with the demands of multilingualism (e.g., Feely & Harzing, 2003; Harzing & Pudielko, 2013; Kassiss Henderson, 2005; Klitmøller, Schneider, & Jonsen, 2015; Sanden, 2016; Welch & Welch, 2015; 2018), such as measuring language skills in recruitment programs (e.g., Barner-Rasmussen, Ehrnrooth, Koveshnikov, & Mäkelä, 2014; Kankaanranta & Louhiala-Salminen, 2013; Welch & Welch, 2015), emphasizing lingua-franca fluency in performance evaluation (Neeley, 2017), and monitoring the effectiveness of language-

* Corresponding author at: Department of Management Studies, Aalto University School of Business, Postal address: PO Box 21210, FI-00076 AALTO, Finland.
E-mail addresses: niina.nurmi@aalto.fi (N. Nurmi), johanna.koroma@ttl.fi (J. Koroma).

¹ Present address: Finnish Institute of Occupational Health, Topeliuksenkatu 41 b, 00250 Helsinki, Finland.

management initiatives (Piekkari, Welch, & Welch, 2014). Far from buffering non-native English speakers' language-related stress, however, such management practices may further intensify employees' language-performance anxiety. Although few in number, some recent studies (e.g., Luring & Klitmøller, 2015; Tenzer & Pudelko, 2015) have investigated leadership strategies to mitigate the negative effects of language on non-native lingua-franca speakers. Tenzer and Pudelko (2015), for example, found that reducing the impact of language barriers, redirecting attention away from language barriers, and reducing the negative appraisal of language barriers could help to reduce negative language-related emotions among employees. Thus far, however, few studies have focused on how non-native speakers could support each other in coping with language demands, and could learn to feel less anxious in situations involving international collaboration. We change the focus from management-driven language-coping strategies to highlight employees' collective (bottom-up) efforts to reduce language-related stress in MNCs. Specifically, we address the following research questions: (1) How do non-native speakers cope with the demands of a lingua-franca mandate? (2) How does collective language coping influence employees' emotional and performance outcomes?

In line with Brannen and Mughan (2017) call for interdisciplinary research on language, we apply insights from the literature on psychological stress to shed further light on how non-native lingua-franca speakers manage language-related demands at work. According to the prominent theory of psychological stress and coping (Lazarus & Folkman, 1984), stress arises when a person appraises his or her resources as inadequate to deal with an encountered environmental demand. For example, a lack of language competency is shown to increase language-related stress among non-native lingua-franca speakers (e.g., Marschan-Piekkari, Welch, & Welch, 1999; Neeley, 2013; Tenzer & Pudelko, 2015). While psychological stress research has mainly examined coping as an individual phenomenon, recent scholarship has begun to address employees' collective efforts to build organizational-level resources enabling them to manage shared stressors (e.g., Afifi, 2015; Kuo, 2013; Rodríguez, Kozusznik, Peiró, & Tordera, 2019). Collective coping includes joint efforts by employees to prevent, eliminate, or reduce stressors, to re-interpret them, or to relieve their harmful effects (Rodríguez et al., 2019). These are bottom-up actions that tend to emerge in organizations through the imitating of behaviors that organizational members perceive to be effective. Our work aims to contribute to the burgeoning literature on collective coping by investigating the collective efforts of non-native lingua-franca speakers to manage language-related stress in multilingual organizations. In including this collective perspective, our study also contributes to earlier literature on language coping that has mainly focused on top-down management interventions or individual efforts to deal with language-related stress.

We conducted an ethnographic study to investigate language coping in two Finland-based MNCs, KONE and NOKIA, both of which designated English as the lingua franca decades ago. To our surprise, we found that lingua-franca mandates did *not* provoke feelings of stress or language-performance anxiety among the non-native English speakers (N = 92) we interviewed in these companies, which goes against previous findings from research conducted in other companies (e.g., Harzing & Feely, 2008; Neeley et al., 2012; Vaara et al., 2005). Instead, we found that, over the years, employees at KONE and NOKIA had created a *psychologically safe language climate* that supported non-native English speakers in their use of the lingua franca without feeling language-related stress. The construct of a *psychologically safe language climate* emerged from our data as employees' shared perceptions of a supportive communication climate in which people feel comfortable expressing themselves in a foreign language. Paradoxically, however, it turned out that building such a climate had unintended negative consequences related to innovative performance among R&D workers. We present a theoretical model, which is based on our findings and explains how employees' collective efforts to cope with the requirement to work

in a foreign language may affect emotional and performance outcomes.

Next, we review previous literature on psychological and language-related coping to anchor our study in the available research knowledge. We then describe our study sites and ethnographic research methods, present the findings and, and introduce our suggestive new theory on psychologically safe language climate and its effects on emotional and performance outcomes. Finally, we discuss the theoretical and managerial implications of our study, as well as the limitations, and suggest avenues for future research.

2. Theoretical background

2.1. Psychological stress and coping theory

To understand how people manage language-related stress it is necessary first to clarify the conceptualization of stress and how the psychological literature explains the coping process. Lazarus and Folkman's (1984) widely accepted theory on psychological stress and coping posits that stress is a transactional process between a person and the environmental demands he or she appraises as potentially personally threatening or harmful in terms of well-being or goal achievement. Coping is regarded as a moderating (buffering) variable that influences relationships between appraised environmental demands and outcomes when the person attempts to minimize the emotional and performance costs of stress (Hassard, Teoh, Visockaite, Dewe, & Cox, 2017; Wallace, Edwards, Arnold, Frazier, & Finch, 2009). It includes active problem-focused and passive emotion-focused strategies (Carver & Connor-Smith, 2010; Jex, Bliese, Buzzell, & Primeau, 2001). Recent reviews of coping research indicate that active problem-focused coping strategies aimed at reducing or altering the nature of workplace stressors are especially effective in managing work-related stress (LaMontagne, Keegel, Louie, Ostry, & Landsbergis, 2007; Shin et al., 2014). Emotion-focused coping, on the other hand, is claimed to be less functional at work as it purports to manage emotional distress by means of denial or avoidance behaviors, for example (Carver, Scheier, & Weintraub, 1989). Data from international business studies also support this view. Stahl and Caligiuri (2005), for example, found that problem-focused strategies (e.g., situation control and relationship building) were more effective than emotion-focused strategies (e.g., withdrawal and resignation) among expatriate managers dealing with work stress.

2.2. Language-coping mechanisms and their outcomes

Applied to language coping, Lazarus and Folkman's (1984) coping theory implies that rather than being passive agents, non-native English speakers are able to use different types of coping strategies to proactively influence the sources of language-related stress and regulate their negative emotions. Nevertheless, several empirical studies have shown that non-native speakers tend to resort to passive emotion-focused coping strategies by avoiding and withdrawing from interactions in the lingua franca if they experience foreign-language use as stressful (e.g., Aichhorn & Puck, 2017; Harzing & Feely, 2008; Luring & Klitmøller, 2015; Luring & Tange, 2010; Liu & Jackson, 2008; Marschan-Piekkari et al., 1999b; Neeley, 2013; Neeley et al., 2012; Sanden & Lønsmann, 2018; Śliwa & Johansson, 2014; Tenzer & Pudelko, 2015; Tenzer et al., 2014; Vaara et al., 2005). Hinds et al. (2014) call for caution and posit that individual workers' avoidance behaviors may be counter-productive in terms of collaboration because they could serve as "lightning rods" for conflicts in multilingual teams. Researchers also warn about vicious cycles of negative stereotyping, distrust, miscommunication, conflicts, and reduced knowledge sharing that may stem from communication avoidance (Harzing & Feely, 2008; Marschan-Piekkari et al., 1999a). Vaara et al. (2005) further demonstrated that resistance and avoidance coping among non-native speakers could contribute to their subordination in corporate power dynamics.

Although it has been shown that avoidance as a coping strategy is

detrimental to collaboration and performance in MNCs, few studies have investigated how non-native speakers could more actively support each other in dealing with language demands. One noteworthy example is Neeley et al. (2012) research in four MNCs, which showed that the emotional support and empathy of colleagues, as well as their acknowledgement of the effort when required to work in a foreign language, may help to make non-native speakers feel less threatened by a lingua-franca mandate. Any language help that fluent lingua-franca speakers can give to their less fluent colleagues (e.g., Harzing et al., 2011; Vaara et al., 2005; Sanden & Lönsman, 2018); Tietze, 2010) could also help buffer negative language-induced emotions. Drawing on their qualitative research on German-based MNCs, Tenzer and Pudelko (2015) also suggest that non-native speakers may experience fewer language-related negative emotions when their leaders moderate code-switching to native tongues among team members, allocate speaking time to linguistically less proficient workers, and foster understanding through frequent repetition. Together, these studies indicate that, instead of relying on their own individual coping, non-native speakers could benefit from collective efforts to cope with the shared demands of a lingua-franca mandate.

One gap in the extant research on coping is a lack of understanding of employees' collective coping mechanisms and their effects on individuals and performance. So far, scholars have predominantly focused on managerial interventions and individual-level strategies to deal with workplace stressors, such as the demands of multilingualism, and left collective language-coping as uncharted territory. We aim to narrow this gap by investigating non-native speakers' collective efforts to cope with the requirement to work in a foreign language, and the emotional and performance effects that follow.

2.3. Collective coping with language demands

Collective coping refers to uniform actions carried out by the whole organization, or by some of its members, aimed at preventing or mitigating the harmful effects of shared job demands (Kuo, 2013; Lämsäalmi, Peiro, & Kivimäki, 2000; Little, Kluemper, Nelson, & Gooty, 2011). Collective-coping efforts tend to be motivated by social goals, for example, ensuring employee well-being and maintaining interpersonal harmony in the organization (Kuo, 2013). Empirical evidence of collective coping is scarce, but what exists implies that organizational-level coping is especially relevant in work settings in which employees are confronted with the same job demands and work closely together in dealing with them. For example, Rodríguez et al. (2019) compared individual and collective coping strategies among school teachers and found that collective coping strategies (e.g., creating an open communication environment and promoting peer support) were more effective than individual strategies (e.g., acceptance, denial, positive reinterpretation) in dealing with shared job demands and reducing employee stress. In their qualitative study in an MNC context, Lämsäalmi et al. also found that employees' collective coping, including nurturing interpersonal relationships, avoiding social conflicts, and cultivating humor, formed a supportive organizational climate that the employees perceived to "function as a general medicine for a great variety of situations" and "relieve all kinds of tensions produced in everyday life" (2000: 594). These findings indicate that collective coping may form a shared perception of a supportive work environment that has a positive impact on employees' well-being and performance.

Language researchers have recently started to speculate on whether a supportive environment, such as a psychologically safe communication climate, could help to mitigate language-related stress and the detrimental effects of foreign-language processing (Neeley et al., 2012; Volk, Köhler, & Pudelko, 2014). Although the role of psychological safety in language coping has not been investigated thus far, numerous studies in the fields of psychology and management consistently show that psychological safety fosters innovative performance by removing perceptions of threat and fear, particularly when there is uncertainty

and a need for creativity and collaboration (see Frazier, Fainshmidt, Klinger, Pezeshkan, & Vracheva, 2017; Edmondson & Lei, 2014; Sanner & Bundeson, 2015, for recent reviews). The term psychological safety refers to an affective climate in which people feel free to express relevant thoughts, believing that if they make a mistake, others will not embarrass, reject, punish or think less of them for it (Edmondson, 2012). Given that most people feel the need to manage the risk and minimize the damage to their image, experienced psychological safety may help non-native lingua-franca speakers to relax their guard and to engage openly in knowledge sharing in global collaboration without the fear of being undervalued based on their language weaknesses. Laurant and Klitmøller (2015) found, for example, that organizational climates that are open to linguistic diversity among employees appear to foster performance by encouraging collaborators to accept each other's varying language-proficiency levels, vocabulary, and accents. Neeley et al. (2012) also found that if native English speakers empathized with non-native speakers in their struggle with lingua-franca demands it could diffuse tensions associated with uneven language proficiency by encouraging engagement and helpfulness. Consequently, they suggest that MNCs should invest in building a psychologically safe communication climate with a view to mitigating language-related stress among employees. However, prior research offers few insights into how to build a language-supportive climate and how it could affect work outcomes.

In this study, therefore, our aim was to shed light on language-coping processes in MNCs that mandate a lingua franca. Our inductive analysis enabled us to extend the theory related to coping and language in several ways. First, by virtue of having rich ethnographic data, we were able to identify the collective language-coping mechanisms among non-native speakers that foster a psychologically safe language climate. Our second contribution lies in the paradoxical performance effects of a psychologically safe language climate. Contrasting the unanimous scholarly perception of psychological safety as an enabler of innovative performance (Edmondson & Lei, 2014; Sanner & Bundeson, 2015), our study expands understanding of its counter-productive side effects in terms of hindering performance. Our findings point out how collective coping with lingua-franca demands among non-native speakers by (over)protecting each other's feelings may become counter-productive in terms of innovativeness.

3. Methods

Following the tradition of grounded theory (Straus & Corbin, 1998), we began with the broad objective to investigate collaboration in multinational innovation teams that link the MNC context to employee experiences and work outcomes. Our interest in the psychologically safe language climate as a specific construct developed only after several rounds of data analysis. Similarly, our focus on the characteristics of a lingua franca emerged from the data on collaboration and employee experiences. Finally, our analysis led us to focus on the performance effects of language demands in international teamwork. As these specific foci emerged, we followed the analysis using an abductive approach, in which we turned to the literature and refined the emerging theoretical ideas alongside increasingly detailed empirical analysis (Ketokivi & Mantere, 2010; Locke et al., 2008; Mantere & Ketokivi, 2013). This abductive, non-linear iteration process between our interview data and previous studies was the starting point for the theory development (Edmondson & Mcmanus, 2007).

3.1. Study sites

We conducted the study in the R&D organizations of two Finland-based MNCs, KONE and NOKIA Mobile Phones. Both companies initially conducted their business in Finnish and Swedish (the two official languages of Finland), and gradually adopted English as a shared language as they began to internationalize outside Scandinavia. The most

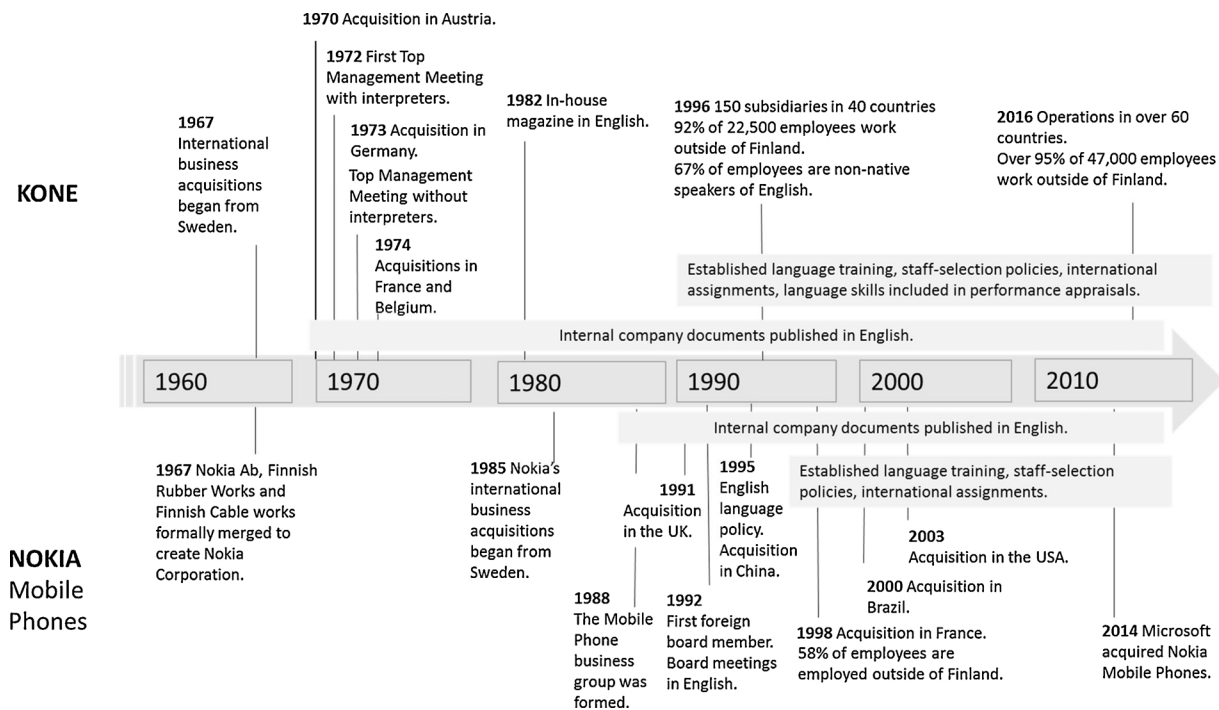


Fig. 1. Developments in adopting a common company language in KONE and NOKIA Mobile Phones from 1967 to 2019. (Ali-Yrkkö et al., 2000; KONE Corporation Annual Report, 1996; KONE Annual Report, 2014; Marschan-Piekkari et al., 1999a; Piekkari, Oxelheim et al., 2014, 2014b).

common internationalization pattern follows a gradual path along which companies start doing business in markets they know (Johanson & Vahlne, 1977), and in countries in which the culture and language are similar to their own (Piekkari, Oxelheim, & Randøy, 2014). Accordingly, KONE and NOKIA first started expanding to Nordic countries in which Swedish was spoken. Soon after that, they started to expand to English-speaking countries and other nations with a high level of English-language competence. Coinciding with these expansions, KONE started to use English as a lingua franca in the 1970s, and NOKIA in the 1990s. Later in the 1990s, both companies moved into non-English-speaking countries in Eastern Europe, for example, and extensively in Asian markets. Fig. 1 shows the phases of internationalization and the adoption of a common company language in KONE and NOKIA from the 1960s until 2019.

KONE Corporation is one of the global leaders in the manufacturing and supply of elevators and escalators, and automatic doors in buildings, as well as in modernization and maintenance services. KONE was a domestic company until the 1960s, when the acquisition of Swedish ASEA's elevator business with its Norwegian and Danish subsidiaries made it the market leader in Northern Europe. The company held its first international top management team meeting in Copenhagen in 1972, enlisting the help of simultaneous interpreters. After the meeting, the participants decided to hold the next one in English and without interpreters. At that point, it became essential for all managers to be able to communicate in English (Herlin, 2014; KONE Corporation, 2015; Marschan-Piekkari et al., 1999b). Adopting a common company language was never an official decision, it rather evolved based on practical needs. As a consequence, about two-thirds of KONE's personnel worldwide had to start operating in a non-native language practically overnight (Marschan-Piekkari et al., 1997). Following the acquisition of Westinghouse's European elevator business in 1974, hundreds of native English speakers joined KONE's multinational organization. The year 1998 saw a major advance in the company's internationalization when it opened a factory and expanded into China to have a presence in the biggest elevator and escalator market in the world. The expansion brought new demands regarding Chinese-language competence for expatriates and common-company-language

competence for Chinese staff. Currently, 17 percent of KONE employees work in China. Conversely, Finland as its country of origin accounts for only three percent of its global business, and less than five percent of its over 55,000 employees are Finnish (KONE Annual review, 2018). KONE's global virtual teams are cross-functional and work across geographical and language boundaries extending to Europe, Asia and America. To collaborate efficiently, these teams must overcome cultural and language barriers.

NOKIA Mobile Phones had its roots in the NOKIA Corporation, which was founded in 1865 as a pulp mill. Like many other Finnish companies, NOKIA started expanding from Scandinavian countries and then progressed to the UK and the rest of Europe. The company began to develop its mobile telecommunications sector in the 1980s, being among the first manufacturers of hand-held mobile phones with the introduction of the world's first car phone in 1982 (Nokia, 2017). Its foreign markets were quite similar to the domestic market. NOKIA started proactively to use English at the board level, long before recruiting its first foreign board member in 1992 (see Fig. 1; Piekkari, Oxelheim et al., 2014). In 1995, the decision was made to use English as the official business language of NOKIA. All documentation was in English, and English was used in official intra-company communication. By the beginning of the 2000s, NOKIA had become a world leader in mobile communications. Although most of its foreign acquisitions were based in English-speaking countries, it had operations in more than 50 countries and large growing markets in Asia. During the internationalization process, the company entered geographically dispersed markets with many dissimilarities, and had operations in 150 countries in Europe, the US, Asia, the Middle East and Africa (Rugman & Collinsson, 2009). After losing market share to Apple and Samsung, NOKIA started to shift its production to Asian countries.

3.2. Informants and data

We interviewed 92 non-native English speakers (34 at KONE and 59 at NOKIA) working in the companies' global R&D organizations. Having established trusting relationships with the respective Human Resources (HR) managements we gained extensive access to the organizations to

collect the data necessary for theory building (Eisenhardt & Graebner, 2007). Our main criteria in selecting the interviewees were that they (1) had a native language other than English and (2) belonged to at least one global team, whose members came from two or more national or cultural backgrounds. Most (82 of 92) of the R&D professionals we interviewed were employed on multiple project teams simultaneously. According to O'Leary, Mortensen, and Woolley (2011), multiple team membership is a typical work situation in contemporary R&D organizations. Our interviewees worked, on average, in 3.5 project teams. R&D managers had assigned them to interdisciplinary project teams, incorporating competences from one or more of the following disciplinary areas: engineering, design, and business. Depending on the phases and needs of the projects, new members joined, and a subset of existing members left the teams.

All the focal teams were geographically distributed and included members from other countries, including Belgium, Canada, China, France, Germany, India, Italy, Malaysia, Mexico, Netherlands, UK and USA. The globally distributed collaboration entailed the use of virtual meeting technologies, phone, email, and chat to communicate with distant team members. Face-to-face meetings with local team members were organized several times a week. All the observed project teams in both companies followed lingua-franca policies and used English in meetings in which the participants spoke different mother tongues. The meeting language was Finnish, their home-country language, only when all the participants were Finnish-speaking. All the documentation and emails were in English to enable distribution to a larger international audience.

As mentioned above, all our interviewees were non-native English speakers. Most (74 of 92) of them were Finnish, four were Indian, four Japanese, two Chinese, two Italian, two French, one Polish, one Spanish, one Romanian, and one Danish. Twenty-one of them were women, the mean age was 38.1 years, and their average work experience was 8.8 years, of which 7.4 years was on the global level. The interviewees used their native language, on average, for 36 percent of their working time, ranging from zero to 70 percent. They self-rated their proficiency in English as quite high, on average 8.03 (SD = 1.16) on a scale ranging from 0 = no proficiency to 10 = native-speaker proficiency. Disparities in language-proficiency levels were high in the focal R&D organizations, whose members had diverse national backgrounds and they spoke several different languages as their mother tongue. All informant names reported in this paper are pseudonyms to protect the anonymity.

We collected rich ethnographic data at KONE Corporation's Espoo headquarters and its Hyvinkää production plant, as well as at NOKIA Mobile Phones Espoo headquarters and its Tampere R&D unit. Our aim was to understand how non-native English speakers used the common company language in global collaboration, how they experienced this and dealt with the demands related to foreign-language usage. We used three data-collection techniques: (1) semi-structured interviews; (2) qualitative field observations; and (3) public documentation. The interviews were our main source of data. The observations and archival data were important triangulation sources. Both authors participated equally in the data collection.

3.2.1. Semi-structured interviews

We conducted semi-structured, in-depth interviews with each informant, either face-to-face in a meeting room in their office building or in a Skype call. The questions were open-ended to allow discussion and the emergence of unexpected issues. We aimed at building rapport and trust while eliciting information to encourage the informants to talk openly about their experiences and emotions related to their work. Questions asked in every interview covered the informant's current role, experiences in global teamwork, native language, self-evaluated English-language proficiency, and experience of working in English and in their native language. We also encouraged the informants to provide examples, illustrations, and narratives concerning their daily tasks,

related communication demands, team collaboration, and their experiences of these things. Example questions included: "How do you interact with your colleagues at different countries?" and "How do you experience working in English in this project?" We also posed grand tour questions (Spradley, 1979) such as "Could you describe the main things that have happened during this project since it has started until this day?" Grand tour questions allowed us to deepen the discussion with mini-tour questions (Spradley, 1979) to elicit details about specific events and informants' experiences of them. This interview approach was particularly effective in probing delicate topics such as the emotions and behaviors associated with lingua-franca demands. The interviews, which lasted 60–90 min, were recorded and fully transcribed. Native Finnish-speaking authors who used English as a second language interviewed all the Finnish participants in their native language, Finnish, and other participants in English.

3.2.2. Observation data

We also collected field observation data, spending 470 h shadowing the interviewed non-native English speakers in 564 meetings and communication situations as well as during other work activities. We wrote detailed observation notes during this shadowing. We went into the field to witness authentic work behaviors and communications. To build rapport, we told the informants in advance what the purpose of our observations was: our goal was to document in detail all the activities, behaviors, and interactions the informants engaged in during their working day so that we could better understand their experiences. More specifically, we observed them when they were working at their desks, when they were in face-to-face and on-line meetings and making conference calls, as well as in informal interactions during lunch and short coffee breaks. Work done in locations other than the main workplace or the employer's secondary office was not shadowed. When we were following the informants, we tried to influence their work and interactions as little as possible, avoiding asking questions during meetings and active work periods, for example. If we needed to clarify something we did so during the lunch and coffee breaks, or in the follow-up interviews. Like other ethnographers, we found that informants had relatively little trouble acting as if we were not there because of their high work demands that required their full focus, leaving little (if any) time to pay attention to us (see Becker, 1996).

3.3. Coding and analysis

Our method of analysis was inductive. We analyzed the observation field notes and coded the fully transcribed interviews, using Atlas.ti® software (Scientific Software Development GmbH, Berlin, Germany) for the qualitative data analysis. All the interviews were analyzed in the original language and, when necessary, we translated the Finnish quotations into English for inclusion in this article. We used our first-hand experience at the research sites in contextualizing the translations to convey the intended meaning in the original quotation (Chidlow, Plakoyiannaki, & Welch, 2014). Both authors participated equally in the coding of the data.

In the first exploratory coding stage, both authors read ten randomly picked interview transcripts and field notes and independently carried out an open-coding exercise: open coding is a descriptive process based on in vivo codes derived from the respondents' terminology (Gioia, Corley, & Hamilton, 2013). We then worked together to come up with a first-order coding scheme that both of us could use when working alone. We re-coded the sample of transcripts independently using the coding scheme and computed inter-rater reliability using Cohen (1960) Kappa, which was 0.87, indicating high levels of reliability. All disagreements were reconciled through discussion. What followed was an iterative process in which we individually coded interviews and field notes using the coding scheme and conferred regularly to see if the scheme worked and if it captured as much of the richness of the data as possible. We added new codes to the scheme as

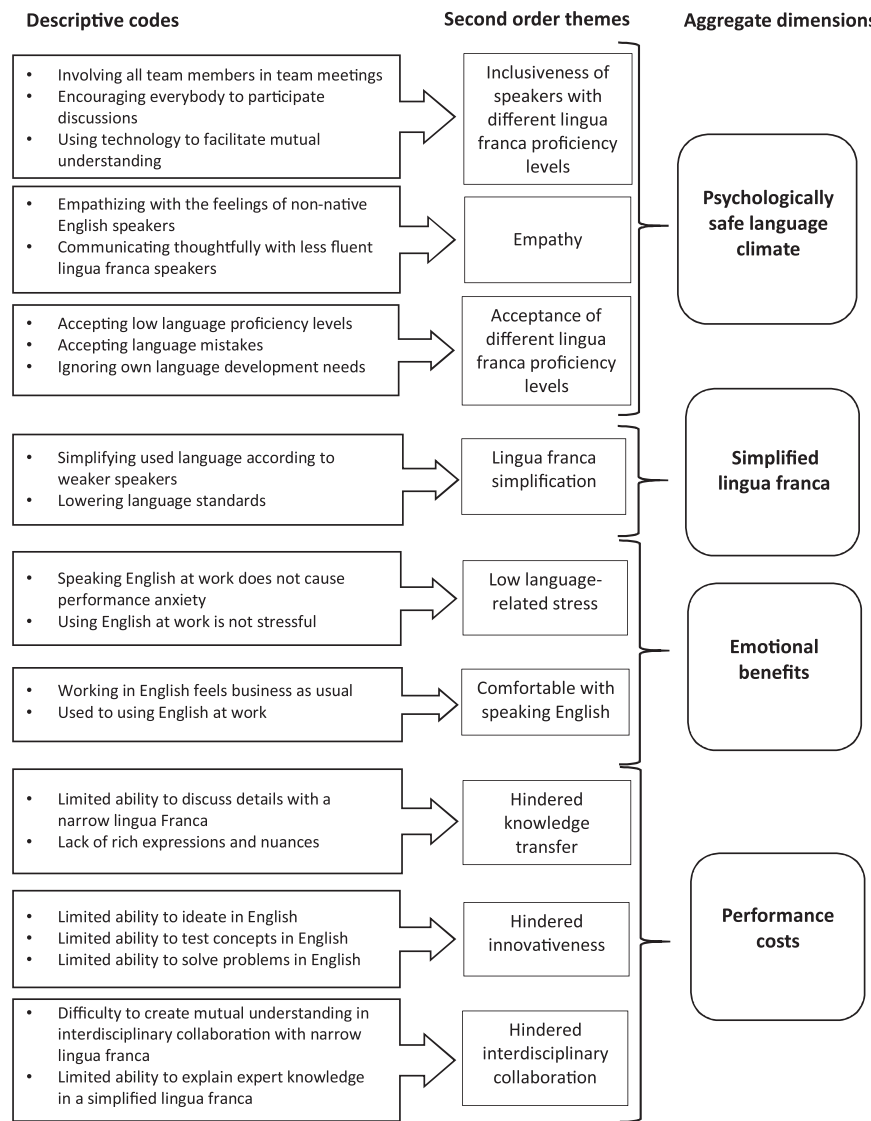


Fig. 2. Overview of the data structure.

we progressed, and subsequently recoded previous transcripts to incorporate the new codes.

After completing the open coding, we started looking for similarities and differences between the first-order codes. We looked specifically for the informants' experiences and perceptions when mandated to use English at work, at how English and native languages were used in collaboration, and how non-native English speakers coped with the requirement to use English as a lingua franca and supported each other. We subsequently began to identify non-native speakers' collective coping behaviors that buffered adverse emotions related to lingua-franca use, and we combined these first-order codes into second-order themes that allowed us to link broader categories. As a result, we detected the behaviors that formed the *psychologically safe language climates* in the KONE and NOKIA R&D organizations. We also found that psychologically safe language created emotional benefits experienced by the non-native English speakers (e.g., 'English is not a problem', 'low stress', 'low language-performance anxiety') but a simplified lingua franca (e.g., 'using simple technical language', 'lowering language standards') had performance costs (e.g., 'hindered knowledge transfer', 'hindered innovativeness', 'hindered interdisciplinary collaboration'). Fig. 2 depicts the data structure that emerged from the three-stage coding process.

4. An emergent model of a psychologically safe language climate and its consequences

Our informants talked extensively about language in global collaboration, and how non-native English speakers were treated in their organizations. Many described the communication climate as "language friendly" or psychologically "safe", explaining how non-native English speakers supported each other's lingua-franca usage. As a result, most of the non-native English speakers in both organizations under study felt comfortable speaking English at work even if they were less fluent in the language. We found it intriguing that although using English was "not a problem" for most of them personally, they still said that using the lingua franca hindered collaboration in their projects. Over the years, the lingua franca that non-native English speakers used at KONE and NOKIA had become more simplified, especially after the companies expanded to East European and Asian countries in which the English-language proficiency of R&D workers tended to be lower than in North and Western Europe. Language simplification had happened as a by-product of building a psychologically safe climate for non-native English speakers in the studied R&D organizations. We discovered that the narrow English language that KONE and NOKIA adopted as a lingua franca complicated the discussions and made it difficult to talk about unfamiliar issues in the interdisciplinary innovation teams comprising

members from various areas of technical expertise and with varying English-vocabulary resources. We explored this with the informants and propose a model of how building a *psychologically safe language climate* may support non-native speakers' use of the lingua franca, but at the same time curb the innovativeness of R&D work.

4.1. Collective coping enabling a psychologically safe language climate

Like many other MNCs, KONE and NOKIA invested heavily in language training during the decades of internationalization. We were told, however, that language challenges still hindered global collaboration in both companies. Yet, only a handful (9) of the interviewed non-native English speakers said that using English at work caused them stress or performance anxiety. Others felt that using English was comfortable due to the *psychologically safe language climate* that they had collectively developed to mitigate potential language-related stress and misunderstandings. More specifically, we found that the psychologically safe language climate was enabled by three collective language-coping mechanisms, *inclusiveness*, *empathy*, and *acceptance*, which aimed at supporting people from different linguistic backgrounds and with varying language-proficiency levels.

4.1.1. Inclusiveness

We observed in many (47 %, i.e., 265/564) of the meetings and communication situations that the non-native English speakers made explicit attempts to involve other project members in the discussions regardless of their language-proficiency levels by encouraging them and ensuring that they understood what was agreed upon. Our informants explained that the inclusiveness of experts in collaboration regardless of their language-proficiency levels indicated expertise-based appreciation, making non-native speakers less anxious about using English in meetings. One of the NOKIA R&D projects, for example, involved developing a solution with Japanese technology specialists whose English-language fluency was low. We noted that, regardless of the language difficulties the Japanese members brought to the interactions, highly fluent Finnish and Danish members still consistently invited them to join virtual project meetings and to visit Finland. The team used chat and translation technology intensively in the virtual meetings to encourage knowledge sharing and enhance understanding. The Danish team leader also traveled monthly to Japan to ensure a common understanding and smooth progress. As he explained:

These [Japanese] guys are top experts in their field and we need their input regardless of their bad language skills. ...We discuss a lot in writing and I have a great colleague in Japan, who can translate critical things for us when problems arise. (Nokia R&D, Danish team leader)

We also interviewed the Japanese members during their visit to Finland. One of them said that regardless of his limited English skills, he felt more comfortable communicating in English in Nokia than he had felt in his previous workplaces in Japan and Silicon Valley in the US. He also participated more actively in discussions and problem solving than before. As he said:

I [have] worked in a Japanese company before Nokia. I have also some experience from Silicon Valley in United States. I've always had difficulties in English but working at Nokia is easier. In United States, I didn't even try to solve problems in English. [Instead,] I [used to] compromise a lot or just leave it to boss. Here [in Nokia], feel more comfortable to talk [in] English. [We] discuss and discuss and try get shared conclusions even if it takes time. (Nokia R&D, Japanese team member)

Global interdisciplinary knowledge sharing was a priority in KONE's and NOKIA's R&D projects, and the employees made an effort to involve each relevant specialist and target-market expert in the collaboration. Jukka-Pekka, a R&D engineer from NOKIA, for example, explained that

developing products for Chinese markets was not possible without a local-market understanding. The necessary knowledge was acquired from Chinese team members in online meetings in which technology and strategies to ensure understanding and facilitate knowledge sharing were used. As Jukka-Pekka said:

How can Finnish engineers understand what people want in China? No, we can't. That's why we have Chinese team members in the project and their knowledge is so valuable for us. We just need to make sure that they share all that information with us over the language barriers and all. [...] Everybody is not equally fluent [in English] and we must make sure that everybody understands by asking questions, writing, and using simple language. Video is also important because when I see that somebody doesn't understand I can immediately react to that by specifying and repeating what I just said. (Nokia R&D, Finnish team member)

Many (63) of the 92 global workers we interviewed talked about leveraging technology in international team meetings to facilitate understanding and to make communication in the lingua franca more pleasant. KONE and NOKIA were among the first corporations in Finland to work in global virtual teams in the late 1990s. Including distant members in meetings via communications technology was everyday practice in their global project teams. Many also described the benefits of video and chat in helping those with weaker English-language skills to understand conversations. For example, Pirjo, a Finnish R&D testing engineer from NOKIA, described her communication with a Chinese team member whose English proficiency level was low:

Once I tried to explain the functionality of some test equipment to my Chinese colleague in [an online] meeting. He asked over and over again 'I'm sorry, could you please repeat', and I started feeling ashamed and suggested that we turn on the video because it's much easier to figure out what the other person is saying when you can see how he or she pronounces words in English. (Nokia R&D, Finnish team member)

Pirjo learned from this episode that video helped to foster collaboration with her Chinese colleagues and she continued using it in online meetings with low-fluency English speakers. Maria, a Finnish-native KONE engineer whose team members worked in Switzerland, similarly explained how they used video to facilitate mutual understanding:

We often have a video conference with the Swiss and it helps a lot. We can use gestures and facial expressions to emphasize something. It's much more efficient than just a phone call. (Kone R&D, Finnish team member)

Using technological means helped in terms of including all team members in meetings regardless of their geographical location and language-proficiency level. Inclusiveness, in turn, helped the non-native speakers to feel comfortable sharing knowledge in the lingua franca and to feel part of the collective communication flow.

4.1.2. Empathy

Another language-coping mechanism that helped to form a psychologically safe communication climate was demonstrating empathy for colleagues. Most (66/92) of our interviewees described an empathic understanding of the difficulties that non-native English speakers associated with the requirement to work in a foreign language. For example, Yamato, a Japanese NOKIA R&D team leader whose team included Finnish and Japanese workers, described how his team members empathized with each other's language challenges:

None of us speaks English as a first language, all of us probably as second or even third language, so we understand how hard it can be and that each person's English level is different. (Nokia R&D, Japanese team leader)

When these non-native English speakers empathized with each other's challenges related to working in a foreign language they tended to behave in ways that supported each other's smooth participation in discussions held in English. As an example, Marlana, a native Finnish KONE engineer, explained how members of her organization behaved sensitively in taking into consideration the language challenges facing non-native speakers, and supporting each other to overcome language-related tensions. She said:

We all [non-native English speakers] know how it feels when your brain is overloaded and even if you know what you want to say, you just can't say it in English. It feels awkward but it's not that big of a deal. It might just take a while to find the right words. (Kone R&D, Finnish team member)

We observed that non-native English speakers in both of the case organizations built a psychologically safe language climate by taking each other's feelings into account, and thereby, making communication in English feel more comfortable. When less fluent lingua-franca speakers stumbled, others helped them to find words, listened more carefully, and avoided causing offence. Pasi, a fluent non-native English speaker from NOKIA, for example, described how he tried to help less fluent colleagues to feel more comfortable when required to use the lingua franca:

I understand that not all our team members are equally linguistically talented, and I have noticed that if you ask repeatedly "sorry what did you say, what did you say", they may become even quieter ... maybe it makes them feel embarrassed. So, I just try to listen very carefully when they speak and try to guess what they mean. (Nokia R&D, Finnish team member)

In sum, empathizing and sharing experiences of how hard it can be to work in a foreign language, especially for less fluent English speakers, helped people to cope with the lingua-franca demands, thereby forming a psychologically safe language climate among non-native English speakers at KONE and NOKIA.

4.1.3. Acceptance

The third-language coping mechanism forming a psychologically safe language climate was the acceptance of non-native speakers' varying proficiency levels and language mistakes in meetings and other communication situations. We observed, for example, that grammatical errors were usually ignored and largely accepted in global team meetings as long as the speakers were able to make themselves understood. We were told in the interviews that ignoring language mistakes and accepting the use of "broken English" was a common strategy among non-native speakers for easing the pressure of lingua-franca requirements, and helped them to feel comfortable in sharing their expert knowledge in team meetings. As Massimo, a native Italian KONE engineer, explained, for example:

We try not to pay too much attention to these language issues, these fractions and gaps in language skills, because it's not easy for any of us who have to work in a foreign language. We try not to highlight the gaps but we take them into account, aiming at moving things forward smoothly and sensitively. (Kone R&D, Italian team member)

As a result, most (53/92) of the non-native English speakers we interviewed said that they were not afraid of making mistakes and losing professional credibility because of their imperfect English. Kimmo, a Finnish NOKIA engineer who was involved in a R&D project with members based in Switzerland, China and different cities in Finland, similarly described R&D workers' collective coping with the lingua-franca requirement thus: "Here everyone speaks English and accepts that it does not need to be perfect, just understandable." KONE employees similarly described how accepting the different language-proficiency levels eased the language-performance pressure in their organization. For example, Roberto, a native Italian KONE engineer,

described his experiences:

We accept each other's [English proficiency] levels. We don't try to force someone who is not proficient [in English] to give what they cannot do. We try not to fix the standard of the language, but to accept the level of simplicity that we have to work with. (Kone R&D, Italian team member)

The general acceptance of imperfect English made working in the lingua franca easy and relaxed for non-native English speakers at KONE and NOKIA. Proficiency in the lingua franca did not mean perfect grammar, an authentic accent, or extensive vocabulary: most of the non-native-English-speaking informants had learned the language at school. In order to avoid linguistic pressure, non-native speakers did not demand perfect English-language skills from each other. Sufficient lingua-franca proficiency in both companies rather meant being able to carry out tasks and getting the message across in global teams. Olli, a Finnish KONE R&D engineer who used English during 40 percent of his working time, is a prime example. He graded his English speaking and writing skills as high, overlooking his tendency to make occasional grammatical errors and even defining it as discipline-specific, "engineer like", language:

What makes it easy for me to speak English is that I don't care at all if my grammar is correct or not. I just care if I got my message through.... I would grade my speaking and writing skills in English as nine. It is very "engineer like", brief and to the point, but so far nobody has complained that it was incomprehensible. (Kone R&D, Finnish team member)

Overall, low language-proficiency standards made talking in English easy and painless for non-native English speakers in both companies under investigation.

4.2. The emotional benefits of a psychologically safe language climate

The three collective language-coping mechanisms (*inclusiveness*, *empathy*, and *acceptance*) that formed the psychologically safe language climate made the requirement to work in a foreign language less stressful for most (86/92) of the interviewed non-native speakers. Many of them explained that working with English as the lingua franca felt like "business as usual", and we observed that they felt comfortable speaking English with each other. As Sauli, a Finnish KONE R&D engineer who worked with team members from China and Switzerland, explained, for example, the psychologically safe language climate facilitated stress-free use of English in his organization:

It's not stressful to work in English in this kind of an environment where everybody knows how hard it is to work in a foreign language and accepts that your language skills don't have to be perfect as long as you get yourself understood. (Kone R&D, Finnish team member)

Similar comments were common at NOKIA. As Maria, a Finnish R&D engineer working with team members from Copenhagen, Germany, and the UK said, for example:

We don't take stress about the requirement to use English [as a lingua franca] or pay too much attention to language mistakes. It is more important that we have every [multilingual team] member around the same table, everyone can share their ideas, and something new begins to emerge. (Nokia R&D, Finnish team member)

Our observation data supported the notion that a psychologically safe language climate promotes stress-free use of the lingua franca among non-native speakers during meetings in English. There were no emotional (e.g., anxiety, irritability) or behavioral (e.g., withdrawal, nervous pacing) signs of stress: on the contrary, the participants seemed at ease, their bodies relaxed and comfortable (e.g., leaning back on their chairs). Regardless of the language used, the atmosphere and communication tended to be very casual: the participants joked and laughed a

lot and built up rapport by exchanging news and pleasantries at the beginning of the meetings. In such settings the non-native speakers did not avoid using English, which had become the natural choice of language at work.

However, nine of the interviewed R&D professionals admitted experiencing increased stress and language-performance anxiety in the presence of a native English speaker, which did not happen in interactions with non-native English speakers. These informants explained that native English speakers did not show as much empathy and acceptance as non-native speakers did. As a result, they found communicating in English with native speakers more demanding, and in particular they felt they were in a weaker position and unable to assert themselves in the negotiations. As Esa, a Finnish R&D manager at NOKIA, explained:

When all participants of a discussion are non-native English speakers, the situation I think is more equal, but, with American and British colleagues it is a bit like that you are an underdog at all times. Especially, if you have to negotiate on an issue; so, in those situations I am aware of my disadvantaged position and feel stressed. (Nokia R&D, Finnish manager)

Because the majority of the employees of the focal R&D organizations were non-native speakers, interactions with native English speakers were less common and mainly occurred in virtual meetings. We observed that, in the presence of a native speaker, non-native speakers were more withdrawn and less engaged than in meetings in which all participants were non-native speakers and the level of psychological safety was higher.

4.3. Simplification of the lingua franca

Empathizing with non-native speakers' difficulties in using the lingua franca and accepting large variation in language-proficiency levels fostered the development of a psychologically safe language climate, but at the same time it simplified and narrowed the scope of the language in common use. Esko, a KONE R&D veteran, had witnessed the use of English as a lingua franca at KONE over the previous 35 years, and he told us how the current trend to tone down language standards was diametrically opposed to earlier views on language proficiency:

Our English proficiency has deteriorated in the last 10–15 years in this company. We used to have quite many native English speakers working in R&D. They regularly corrected and propped up our [non-native English speakers'] language. They told us how native speakers would express things. I felt as if I learned something new almost every week. Now we have mostly non-native speakers from a variety of countries. Some of them speak very poor English, which decreases the overall level of the language we use. It is a pity but I realize it has happened in other companies as well. Lowering expectations regarding non-native speakers' use of language simplifies the language, and the vocabulary does not grow. (Kone R&D, Finnish team member)

Ari, who had worked in NOKIA R&D for fifteen years, also described a similar trend in the development of the corporate lingua franca in NOKIA:

Since the years when we started using more English than Finnish our language has become more like a mix of English and Finnish. [...] We have [also] developed our own simplified language we call Nokia English, which others might not even consider to be proper English. If I, for example, try to explain some work issue in English to my friends [not working at NOKIA] using our [Nokia English] language they don't understand me, even though I think I'm speaking "normal" English. (Nokia R&D, Finnish team leader)

Because non-native speakers empathized with and took account of

each other's feelings about the language demands, highly fluent non-native English speakers adapted their language use to make it simpler and easier for lower-fluency speakers to understand. They knew the hardship related to working in a foreign language and wanted to help their colleagues to cope, as Roberto from KONE R&D explained:

Some [less fluent English speakers] have to make more effort than others, and the more skilled people have to make the opposite effort to tune down their language and to be patient when they listen to people who lack fluency or smooth grammar. (Kone R&D, Italian team member)

Using simple sentence structures, basic words and clear pronunciation made it easier for less fluent English speakers to understand and participate in conversations, as Marko, an R&D engineer at KONE, explained:

You have to use very simple English and avoid using complex words or phrases because people don't necessarily understand them correctly. Our language has narrowed down and become very simplified technical language. It isn't comprehensive or versatile, but very simple so that people on all fluency levels can understand it in the same way and participate in the discussions. (Kone R&D, Finnish team member)

Adapting language use to the proficiency level of the weakest speakers was often explained as a protective, face-saving act. The tactics included using slower speech rates, asking more questions, and carefully articulating the words. Tom, for example, a KONE R&D engineer who had worked for years with Chinese colleagues, understood that learning English was difficult for many Chinese people and showed an empathic understanding of their effort. He said,

When you communicate with Chinese people you must, of course, keep it simple, ask enough questions and speak clearly, and remember that their own language makes it challenging for them to learn English. You should appreciate their efforts and be careful and thoughtful in your own communication. (Kone R&D, Finnish team member)

Overall, protecting the feelings of less fluent English speakers contributed to the formation of a psychologically safe language climate, but as a byproduct it turned the lingua franca used in KONE and NOKIA into "quite exact simplified English", as many of our informants remarked.

In contrast, however, we observed that, native English speakers did not try to simplify their language use in support of less fluent English speakers in the same way as most non-native speakers did. Many of the non-native English speakers, such as Sanna, a Finnish KONE R&D expert, described how native speakers tended to use language "too" broadly for everybody to understand. As she said:

Native English speakers have a broader vocabulary and a richer way of using the language. It's more difficult to understand British English speakers than non-native English speakers. (Kone R&D, Finnish team member)

Jan, a Finnish-native R&D engineer working for NOKIA also felt the same discomfort after 10 years of global work experience with both native and non-native English-speaking colleagues. As he said:

A native English speaker's language is actually really hard to understand due to the terms and sentence structures that they use. It requires extra effort. I really have to concentrate to understand what they mean. They don't use the same jargon that we non-natives practice here, this kind of simple technical English. (Nokia R&D, Finnish team member)

Because native English speakers at KONE and NOKIA R&D did not simplify their own language use their influence on the lingua-franca quality was enriching—although limited because the majority of

employees in the focal R&D organizations were non-native English speakers.

4.4. The performance costs of a psychologically safe language climate

From the outset, English was mandated as a lingua franca in KONE and NOKIA to facilitate knowledge sharing and global collaboration. However, many of our informants at KONE (23/34) and Nokia (19/59) complained that the simplified lingua franca they used was not rich enough for discussing technical details, ideating, testing ideas and solving problems in their global interdisciplinary teams. This problem threatened the performance of global R&D projects in both companies. For example, Pertti, a Finnish R&D engineer, described how the narrow use of the English language limited the extent to which they could test the functionality of new product features and create solutions in his KONE R&D team:

When we need to test [certain technical functions of our products] to further develop [their features], we don't have common English words for describing the sounds, effects, feelings, and experiences from the different technical points of view so that everybody would understand it in similar manner. (Kone R&D, Finnish team member)

When team members brought down the common-language level to that of the least fluent speaker, the lingua franca became too narrow to facilitate discussion about complex innovation tasks.

The negative effect of a simplified lingua franca on innovativeness became particularly evident in interdisciplinary collaboration when experts from different disciplinary backgrounds used it in their efforts to create mutual understanding. Matti, for example, the leader of a global R&D team in KONE, expressed his concern thus:

The greatest challenge of our [interdisciplinary] team is how to transfer knowledge between different technology-area experts. How to explain things so that everyone understands and how to understand them in English. (Kone R&D, Finnish team leader)

Although the innovation tasks in the studied R&D teams required diversity in terms of expertise, the simplified lingua franca seemed to limit the richness and depth of the discussions among experts from different technical areas, and was thus detrimental to innovativeness.

In an attempt to deal with the limitations of the simplified lingua franca, many of the teams we observed allowed their members to use their respective native languages to clarify the issues and decisions under discussion. This linguistic practice is referred to as "code-switching" in the literature on international business (Auer, 2002). Thus far, most researchers have denounced code-switching because it tends to create friction and frustration among those who are unable to follow the conversation (e.g., Hinds et al., 2014; Tenzer & Pudelko, 2015). According to our evidence, however, code-switching may facilitate the discussion of complex issues in teams in which language asymmetry is high, and ensure that facts are understood in each member's mother tongue. Stefano, an Italian KONE engineer, described the benefits of code-switching in his team thus:

When we are having discussions that are complex, I typically ask the guys [Finnish team members] to speak in Finnish because there is no need to constantly stay in English just for me. (Kone R&D, Italian team member)

Finnish KONE engineers explained that code-switching was an important practice in terms of ensuring that different technology experts were able to solve problems and to create a mutual understanding in their native language. As Pertti explained:

When we describe [different product characteristics] in Finnish, all the Finnish team members know immediately what we mean. But if we try to communicate those characteristics to our global colleagues, there are absolutely no words that everyone would understand

similarly, so we don't even try. (Kone R&D, Finnish team leader)

Similarly, R&D engineers in NOKIA complained that creative work and problem solving were not effective in interdisciplinary collaboration conducted in English. The technical features the NOKIA engineers developed in global projects required ideation, testing, and discussion about how the different solutions were experienced. The interviewed experts had difficulties agreeing about priorities in terms of product functionality, and in expressing professional opinions about emotions related to user experiences while using the simplified lingua franca. As Kaarle, a NOKIA R&D designer who worked with Finnish, Chinese, and American colleagues, explained, for example:

[The simplified Nokia] English is definitely a limitation when talking about emotions or wanting to express things properly and so on. (Nokia R&D, Finnish team member)

Ville, a NOKIA R&D Engineer who worked with Finnish, Chinese, and Indian colleagues, also explained that interdisciplinary collaboration was not as effective in English lingua franca as in one's native language:

We solve problems much faster, at a deeper level, and more efficiently in Finnish. ... We just prefer discussing the details in Finnish because our [Nokia] English is not very sensitive to subtle nuances. (Nokia R&D, Finnish team member)

Most teams that we observed used code-switching as a common and acceptable strategy to clarify complex matters. Once some of the members had clarified the issues in their native language, they briefly explained the results of their discussions to the others in English, as Antero, a NOKIA R&D engineer whose team consisted of four Finns and a Dutch national called Ernie, explained:

When somebody wants to discuss details or explain more specifically what he or she means we switch the language to Finnish and later translate a summary of the discussion for Ernie. We have agreed on this method together and Ernie is OK with it. (Nokia R&D, Finnish team member)

Many Finnish workers justified this practice in the interviews, explaining that code-switching benefitted the whole team by making communication faster and easier. As Markku, a Finnish KONE engineer who worked with Finnish and Chinese team members remarked, for example:

Sometimes it is just easier to quickly exchange ideas in Finnish than translate everything into English and then make sure that everybody understands it similarly. (Kone R&D, Finnish team member)

However, when we compared our observation field notes of the discussions the engineers had held in Finnish to the English translations they gave to others, we found that in many code-switching situations, notable parts of the discussion were not, in fact, translated into English. The usual practice was to translate only the key points, meaning that a lot of potentially important knowledge transfer among all team members did not happen. As a result, the richness and depth of team discussions suffered, harming innovativeness. Mikko, for example, a R&D engineer from NOKIA, explained how code-switching and the simplified lingua franca constituted barriers to innovativeness in his team:

When we started working with Chinese team members our innovativeness decreased quite a lot. Their English proficiency is low and ideating is not easy with them. Our Chinese team members whose English is less fluent do have great ideas but we have to let them express them in their native language and the most fluent English speaker, who is not necessarily a technology expert, translates them for us. So, you miss so much information in the translations that the results are not very good. (Nokia R&D, Finnish team member)

In sum, our analysis indicates that the R&D organizations we

studied could not capitalize on the new ideas and innovations their global projects were built to produce because over-empathizing non-native speakers' feelings and accepting inadequate language skills *simplified the lingua franca* and, in turn, prevented nuanced communication between team members. The simplicity of the common company language was thus detrimental to innovative performance in these global teams.

5. Discussion

5.1. Main findings

Our investigation into how non-native English speakers cope with the requirement to work in a foreign language revealed a set of collective language-coping mechanisms that we suggest form a psychologically safe language climate: (1) *inclusiveness* with respect to participants from different linguistic backgrounds and with varying fluency levels; (2) *empathy* with non-native lingua-franca speakers; and (3) *acceptance* of different language-proficiency levels. Moreover, our findings imply a paradox with regard to a psychologically safe language climate. On the one hand, we propose that all the three dimensions of a psychologically safe language climate buffer the stress-inducing effects of lingua-franca demands because they make using a foreign language at work less threatening and more manageable for individuals. Most of our interviewees explained that they felt comfortable speaking English at work even if they were less fluent in the language because psychologically safe language climate supported their use of the lingua franca.

On the other hand, we put forward the opposite argument in the case of innovative performance: we propose that two dimensions of a psychologically safe language climate, empathy and acceptance, may lead to lingua-franca simplification when poor language skills are accepted and collaborators adapt their language use to the proficiency level of the weakest speakers. Our data shows that when non-native speakers empathize less fluent speakers' hardship related to working in a foreign language, they tend to use simple sentence structures and basic words in order to help less fluent English speakers to understand and participate in conversations. As a result, our informants in both companies described how the English lingua franca had become simplified and not rich enough for discussing technical details, ideating, testing ideas and solving problems in their global teams. Therefore, our final proposition suggests that a simplified lingua franca may be detrimental to innovative performance because restricted language hinders effective knowledge transfer between multilingual team members.

These propositions are illustrated in our suggestive model (Fig. 3), which serves to explain our findings, prompt testable hypotheses, and enrich the existing literature on language coping.

It is noteworthy that a psychologically safe language climate was not, in and of itself, what hindered innovative performance in the global teams: our interview data implies that it was rather the simplified and narrow lingua franca that emerged as a byproduct of over-protecting less fluent speakers' feelings and accepting low language-proficiency levels in global teamwork. Because the non-native lingua-franca speakers understood the challenge of working in a foreign language from their own experiences, they tended to empathize with and support one another in coping with the difficulties by simplifying the lingua franca. Paradoxically, this hindered the execution of complicated innovation tasks. We did observe, however, that inclusiveness reduced the negative stress effects of language demands without leading to simplified lingua-franca use, particularly in teams that included native English speakers whose versatile language enriched the lingua franca. We also found that a psychologically safe language climate did not harm the teams' innovative performance when the members did not simplify their lingua franca, but rather leveraged technology such as translation solutions, video, and written communication to support knowledge sharing and mutual understanding. Our findings imply that a psychologically safe language climate does not harm innovativeness directly, but it may impede it through its simplifying effects on the lingua franca.

5.2. Theoretical implications

Our theoretical contribution resides in articulating how non-native lingua-franca speakers collectively cope with the requirement to work in a foreign language by building a psychologically safe language climate: what benefits accrue for workers, and what the potential costs are in terms of performance. Most of the non-native speakers we interviewed at KONE and NOKIA did not feel language-related stress because the psychologically safe language climate made working in English feel easy and comfortable. Nevertheless, as they explained, the simplified lingua franca inhibited innovative discussion on complex and new concepts. Our identification and articulation of this language-coping paradox bring important insights to the literature on coping and on psychological safety.

Our study makes four significant theoretical contributions. First, our findings extend the literature related to coping and language in applying psychological coping theory (Lazarus & Folkman, 1984) to a

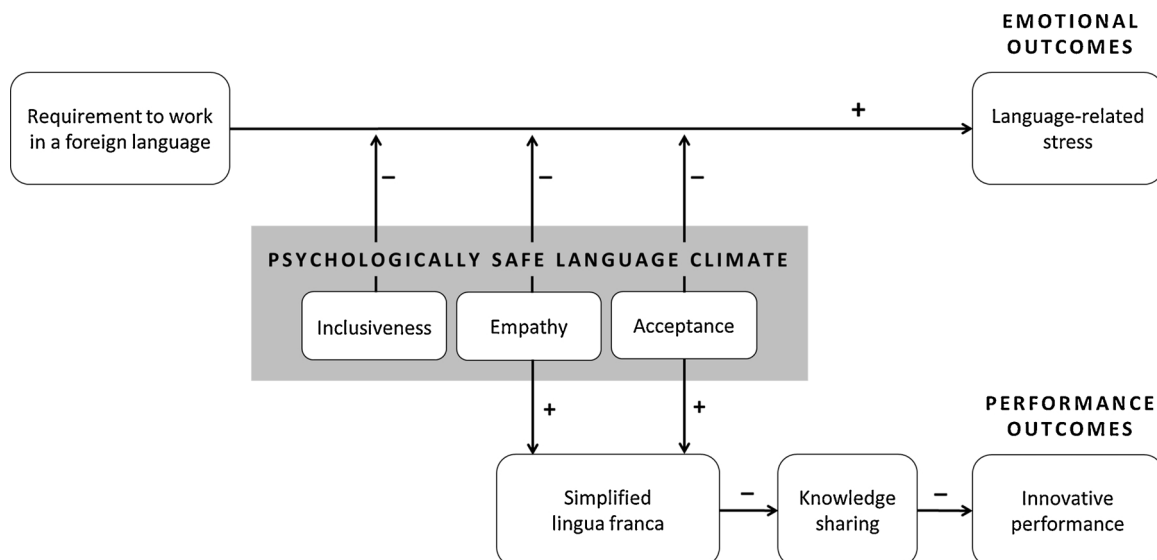


Fig. 3. A model of the effects of a psychologically safe language climate on language-related stress and innovative performance.

language context and clarifying the process of collective language coping in multilingual organizations. Whereas the majority of coping research has focused on personal strategies (e.g., Carver et al., 1989; Rioli & Savicki, 2010), the present study shows that the effectiveness of the coping process depends not only on the strategies of individuals, but also on the collective coping mechanisms used in the organization. This extends the traditional view of coping as a purely individual undertaking. We also show that collectively used coping strategies may encourage individuals to appraise an environmental demand (e.g., a requirement to work in a foreign language) as less threatening and more manageable, and thus less stressful. On the basis of these findings we posit that ignoring collective-coping options limits the drawing of sound conclusions about the stress processes of employees in settings in which exposure to demands is shared with others. Our findings are in line with the results of earlier research on language-related stress showing that non-native English speakers are more likely to experience it when native English speakers are present (e.g., Neeley et al., 2012; Hinds et al., 2014). We contribute to this literature in suggesting that a stress experience such as this may arise because native lingua-franca speakers do not participate in collective coping in the same way as most non-native speakers do. Our data further shows that those who normally considered themselves to be fluent English speakers felt particularly weak and vulnerable when psychological safety was low in the presence of native speakers, and they had to question their language resources. These results imply that on the emotional level, non-native speakers who often work with native English speakers may benefit the most from collective coping.

Second, we introduce the concept of a *psychologically safe language climate* as a collective coping resource among non-native lingua-franca speakers. On the basis of our findings we define this as employees' shared perception of a supportive communication climate in which people feel comfortable expressing themselves in a foreign language without fear of negative consequences for their self-image, status, or career. This organizational-level concept draws on the construct of psychological safety, defined as a shared belief that a team is safe in terms of interpersonal risk-taking (Edmondson, 1999), as well as on the notion of a psychologically safe communication climate characterized by support, openness, trust, mutual respect, and risk taking (Gibson & Gibbs, 2006). Research on psychological safety and supportive communication climates (Welsch & LaVan, 1981) has not thus far addressed the role of language. The notion of a psychologically safe language climate represents a separate dimension of a supportive communication climate in focusing on mechanisms that promote the comfortable use of the lingua franca in multilingual organizations.

Third, our findings contribute to the literature on psychological safety in revealing how over-protecting employees' feelings may weaken innovative performance in multilingual organizations. Although the dominant view in the literature on psychological safety predicts positive effects on innovation outcomes (e.g., Gibson & Gibbs, 2006; Edmondson & Mogelof, 2012), we suggest that this is overly simplistic and inconclusive. We argue that psychological safety does not always lead to high performance, and we present evidence indicating that creating a highly supportive communication environment by accepting lower levels of language proficiency and simplifying the lingua franca may, conversely, have a detrimental effect on work performance in innovation teams. Although the majority of earlier research implies that high levels of psychological safety have positive consequences among diverse teams (e.g., Bradley, Postlethwaite, Klotz, Hamdani, & Brown, 2012; Caruso & Woolley, 2008; Gibson & Gibbs, 2006; Kirkman, Cordery, Mathieu, Rosen, & Kukenberger, 2013; Leroy et al., 2012), the assumption is that every member of the team is equally capable of contributing high-quality ideas and inputs. However, this assumption does not hold in multilingual organizations, especially when workers have differing levels of lingua-franca proficiency that affect their ability to communicate knowledge and contribute to the task. Such language asymmetry represents disparity-type diversity (see Harrison & Klein,

2007), which by definition assumes unequal abilities to contribute to discussions. Multilingualism may thus create a condition in which psychological safety can produce unanticipated effects. This was particularly evident in interdisciplinary collaboration when experts from different backgrounds used the lingua franca differently. Our informants spoke extensively of their difficulties in creating a mutual understanding across disciplinary boundaries using a restricted common language. The use of interdisciplinary project teams as a key approach to R&D collaboration has increased significantly in recent decades (Van Der Vetg & Bunderson, 2005). The benefits of interdisciplinary teamwork materialize when experts from all relevant areas contribute to the decision-making, ideating, and other actions encompassing the full range of perspectives. The research thus far has not focused on the effects of language in interdisciplinary teamwork. Narrowing this gap, our findings imply that innovation work encourages inclusiveness among experts with different disciplinary backgrounds, but an innovation team may be unable to utilize diverse member inputs if the experts revert in their own subgroups based on their native or field-specific languages, or when the lingua-franca becomes oversimplified.

Finally, our findings add to the literature on Business English as a Lingua Franca (BELF) in showing the potential negative performance effects when non-native English speakers do not expect or encourage each other to strive for high fluency in English. Compared to "standard" English, BELF is "highly situation-specific, dynamic, idiosyncratic and, consequently, inherently tolerant of different varieties" (Kankaanranta & Louhiala-Salminen, 2013). Native-speaker proficiency is not normally expected of BELF users (see Charles, 2007). Both Charles and Marchan-Piekkari (2002) and Louhiala-Salminen and Kankaanranta (2012) emphasize, however, that a MNC's language competence is not confined to an individual's language skills. We echo their call for the development of organizational-level communication competence, incorporating attitudes and values and supported by interactional skills in MNCs. Language acts as a filter in the acquisition and assimilation of team members' explicit and tacit knowledge (Piekkari, Oxelheim et al., 2014), therefore the English proficiency of non-native speakers determines the amount and quality of knowledge that can be transferred between team members and utilized in innovation work (Hambrick, Davison, Snell, & Snow, 1998; Kassis Henderson, 2005). The faster and more effectively innovation workers can identify and assimilate externally generated knowledge and combine seemingly incongruous sets of information in a novel manner, the stronger will be the competitive advantages they are able to create (Zahra & George, 2002).

5.3. Managerial relevance

As a practical implication, we suggest that MNCs should provide training for global workers on how to rely on collective (bottom-up) language-coping options and thereby build a psychologically safe language climate as one of their socialization processes. Furthermore, in terms of managerial language interventions, we encourage MNCs to develop strategies and policies to facilitate inclusiveness among experts with different linguistic backgrounds, on the grounds that it was found to reduce the negative stress effects of language demands without leading to simplified lingua-franca use. This could be facilitated by means of HR policies, technologies, and collaboration practices. For example, providing translation systems and language training for non-native lingua-franca-speaking experts could enhance inclusiveness and their ability to share knowledge among interdisciplinary collaborators.

We also suggest using different technological means, such as chatting and video during virtual meetings to encourage knowledge sharing and to enhance understanding in multilingual collaboration. Echoing the findings of Klitmøller et al. (2015), we also encourage the leveraging of written communication media if language asymmetry among collaborators is high: technical functions such as spelling and grammar checkers allow low-proficiency speakers to improve their written

communication and to feel less anxious about their performance compared to their oral communication.

To strengthen inclusiveness in the language climate, we encourage consistent use of the lingua franca in global team meetings and at larger organizational events. However, when code-switching to respective native tongues is needed to ensure mutual understanding, we suggest that leaders should highlight the importance of translating all potentially important information to the other team members after the native-language discussions. We also recommend that the potential risks of code-switching for team dynamics would be acknowledged, as advised in the literature (e.g., Neeley et al., 2012). Excluding others from meetings or switching languages in the middle of discussions without common agreement on the practice tends to raise feelings of frustration and discouragement among collaborators. If code-switching is decided upon, it may be, as our data indicate, that translating all the important points covered in discussions held in native tongues will minimize the frustration and uncertainty among those who do not speak that specific language.

We also recommend mixing native and non-native speakers in global teams, even though the presence of a native English speaker may put pressure on members to speak flawless English (Neeley et al., 2012), thereby imposing more stress on non-native speakers. We observed at KONE and NOKIA that most native speakers of English did not try to simplify their language use in support of less fluent speakers in the same way as most non-native speakers did. Some of our interviewees acknowledged the value of the native speaker's rich vocabulary in developing the quality of the lingua franca and promoting innovativeness. To support the positive influence of native English speakers in R&D organizations, leaders should encourage them to show more empathy by acknowledging the hardship that non-native speakers face when required to work in a foreign language. Native English speakers should also be encouraged to help non-native speakers to develop their language skills, for example, by exposing them to rich English language in work interactions and making constructive suggestions to improve their oral and written communication.

Leaders should also highlight empathy as a code of ethics without simplifying the lingua franca. Given their potentially significant role in creating a psychologically safe communication environment, top managers should also make sure that middle managers are aware of the effects of their behaviors on employee experiences and the quality of the lingua franca. According to social cognitive theory (Bandura, 1986), it is possible to acquire behaviors and attitudes by observing and imitating others. Leaders are particularly powerful as models of behavioral styles in their organizations, and could therefore foster a safe language climate by actively promoting inclusiveness, empathy, and acceptance, and yet, ensure the rich use of the lingua franca. Research suggests that the social context in an organization creates powerful forces producing or constraining behavior. For example, Bowen and Ostroff (2004) refer to psychological climates as shared perceptions of how employees should behave, further suggesting that the more strongly management signals what goals "are most important and what employee behaviors are expected, supported, and rewarded relative to those goals, the more likely it is those goals will be achieved" (Bowen & Ostroff, 2004: 205). In the context of the language climate in MNCs, the literature implies that the stronger the signals managers send about valued behaviors and attitudes – both in their professional communication and in their personal behavior – the more likely are members of the organization to emulate and engage in similar behaviors (e.g., Mazmanian, Orlikowski, & Yates, 2013).

We suggest that the above language-management interventions should be included as part of a company language policy to facilitate a psychologically safe language climate that will not lead to simplification of the lingua franca but could support employee wellbeing and innovative performance.

5.4. Limitations and future research

Language may also have affected the quality of our own study. We interviewed our Finnish informants in Finnish, our native language, and interviewed those with other native languages in English, our second language. As Welch and Piekkari (2006) point out, the quality of interview data may be affected when non-native English speakers interview other non-native English speakers. The limitations include a lack of depth in the responses of the respondent, a reduced ability on the part of the interviewer to follow up, and less accurate transcriptions because of the various accents. Non-native language usage may also have affected our ability to build rapport and trust with our informants (Zhang & Guttormsen, 2016). Further, the low language proficiency of some of our informants may have exacerbated their need to avoid a loss of face (Harzing & Feely, 2008). For these reasons, our Finnish informants were in a better position than the others because communicating in their mother tongue allowed them to fully express themselves and to establish good rapport with us. Furthermore, we were able to interpret their statements in the interviews and in our analysis by means of cultural understanding. To address language issues in advance we conferred with KONE and NOKIA, as recommended by Chidlow et al. (2014), and were assured that the employees were proficient in English as a condition of their employment. We also used a transcriptionist skilled in deciphering accents.

Another limitation is that our sample is biased towards native Finnish speakers and people living in Finland who self-rated their English-language skills as high or moderate. All the low-fluency English speakers in our data were Japanese and Chinese. The Finnish education system supports the learning of foreign languages; hence English-language skills are generally relatively high among the Finnish population as a whole (European Commission, 2012). Most of our informants had always used English at work and had also studied in English. Moreover, both of the Finland-based MNCs had used English as a lingua franca for decades. Thus, high-level English proficiency and global work experience were personal coping resources that most of the participants had acquired first in formal education, then during their vocational or university studies, and after that at work. For them, English was a natural aspect of their work, and they emphasized English proficiency as a fundamental competence for being able to work in an MNC. Strong language skills may not protect workers from feeling stress, however, as Neeley (2013) suggests, explaining that many highly fluent non-native English speakers tend to contrast their English skills to native speakers' more sophisticated language abilities, and therefore experience language-performance anxiety. Although most of our informants did not experience language-related stress, many of them said that they were well aware of their language imperfections and felt relieved that grammatical mistakes were accepted in their organizations. As an indication of this, a psychologically safe language climate emerged from our data as an important collectively built coping resource, which helped to alleviate language-related stress among informants on all fluency levels. We predict that employees working in MNCs in which common language policies have been mandated more recently, as well as people living in countries in which there are few opportunities to practice English, would benefit even more from this type of collective coping. In fact, this is one possible explanation for the rather pessimistic results of existing studies on language-performance anxiety, many of which rely on samples from Asia or German-speaking countries in which English-language proficiency is generally lower than in Finland. These factors seem to play a considerable role in fostering language anxiety (Aichhorn & Puck, 2017). We suggest that future research should aim at enhancing our understanding of language-related emotions and coping across language abilities and cultures.

Research that quantitatively tests our model is a recommended next step. To assess its relevance more broadly we suggest including additional regions and nationalities in the study sample. Collecting data from a wide-ranging sample of organizations and conducting statistical

testing on the proposed model (Fig. 3) would help to confirm the relationship between a psychologically safe language climate and innovative performance through simplification of the lingua franca. This would also facilitate the identification of alternative mediating and moderating processes.

We also encourage further exploration of the effects of individual characteristics such as age and global work experience. Although our informants represented many different generations, our sample was too small to compare the different experiences of younger and older generations. Only six of the participants belonged to the generation that had entered the labor market before the development of information and communications technology and the wave of cross-border mergers in the 1990s. They reported the most problems with lingua-franca use in our data. We suspect that age may have an impact on non-native speakers' language proficiency, experiences, and collegial supportive behaviors. Future research should investigate how incoming generational cohorts with potentially higher English language skills will change communication climates in MNCs. We also have evidence that global work experience may affect the level of empathy and acceptance because prior experiences of dealing with lingua-franca requirements may make it easier to understand another person and result in empathic compassion for their plight. Our data also indicate that the key challenges of language management lie in the ways in which the lingua franca is used, and *not* in collective coping. Comparisons between age groups would thus be useful extensions of our research.

We have developed a model of employees' collective coping with the requirement to work in a foreign language that reveals how building a psychologically safe language climate affects employee emotions and performance. We hope that this model will guide future research on language management, and that its application will ultimately enhance innovativeness in MNCs.

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