

**Approaching or Avoiding? Mechanisms of Host-Country Language Proficiency in Affecting
Virtual Work Adaptivity during COVID-19**

Ting Liu

Graduate School of Management, Kyoto University

Ya Xi Shen

Business School, Hunan University

Sijia Zhao

School of Economics and Management, Tongji University

Tomoki Sekiguchi

Graduate School of Management, Kyoto University

This is the post-print version of the article:

Liu, T., Shen, Y. X., Zhao, S., & Sekiguchi, T. (2023). Approaching or avoiding? Mechanisms of host-country language proficiency in affecting virtual work adaptivity during COVID-19. *The International Journal of Human Resource Management*, 1-28.

Approaching or Avoiding? Mechanisms of Host-Country Language Proficiency in Affecting Virtual Work Adaptivity during COVID-19

Abstract

The COVID-19 pandemic has forced expatriates in many organizations to do virtual work, while virtual communication is becoming a critical skill, especially for second-language speakers. We explore how expatriates with high and low levels of host-country language (HCL) proficiency use different mechanisms to improve their virtual work adaptivity during the COVID-19 pandemic. Drawing upon the Job Demands-Resources (JD-R) theory, we argue that expatriates with high HCL proficiency tend to adopt *approach crafting*, whereas expatriates with low HCL proficiency tend to use *avoidance crafting*. We further examine the role of language-related human resource (HR) practices in reducing the tendency of expatriates with low HCL proficiency to choose avoidance crafting. We tested our predictions using data collected from 994 expatriates working in eight countries during the COVID-19 virtual work period, and the results generally supported our hypotheses. Our study sheds light on the importance of HCL skills in influencing expatriates' job-crafting behavior and adaptivity in virtual work, and the significant role of language-related HR practices. Last, we offer practical insights into improving virtual work during a crisis in relation to employees' HCL and organizational support.

Keywords:

Host-country language; Job crafting; Language-related human resource practices; Virtual work adaptivity; JD-R theory

When the COVID-19 crisis arose, many organizations shifted abruptly to virtual work, which caused increased workplace complexity and uncertainty, making it difficult for employees to adapt. Employees needed to acquire new skills to adapt to the organizational changes and keep organizations operating successfully. Different types of employees often need different new skills. For expatriates, host-country language (HCL) proficiency became a critical skill for their adjustment in host countries during the pandemic (Piekkari, Tietze, Angouri, Meyer, & Vaara, 2021). HCL proficiency includes the ability to listen, speak, read, write, and comprehend the HCL, as well as familiarity with local nonverbal communication (Selmer & Luring, 2015). Because expatriates usually work in countries where the HCL is different from their first languages, they generally have limited literacy in the HCL (Zhang & Harzing, 2016). Therefore, expatriates' HCL proficiency may affect their communication with local people and their access to local information for the adaptation to the pandemic-related work changes (Piekkari et al., 2021). Although expatriates with low HCL proficiency might use nonverbal cues to compensate for the lack of language skills in a traditional face-to-face working context, the pandemic-related virtual work format brought higher demand for expatriates to have better abilities to process information and express themselves clearly through speaking and writing (Wang, Liu, Qian, & Parker, 2021; Caligiuri, De Cieri, Minbaeva, Verbeke, & Zimmermann, 2020), e.g., communication during the pandemic was often done via audio conferencing, which was very much based on the speaking and listening abilities of expatriates.

Along with the pandemic, communication aspects of organizations have changed tremendously, resulting in new work demands for employees (Chambel, Castanheira, & Santos, 2022). Many employees of multinational companies encounter language problems during virtual work (Presbitero, 2020). Companies often focus on strategy at the organizational level unfortunately leaving insufficient care to employees' individual demands (Kong & Belkin, 2021). Whether expatriates with language problems can adapt to the changing working environment during the pandemic depends more on their own abilities and initiative than organizational support. Therefore, the expatriate's willingness and ability for the self-adjustment at work play crucial roles in their adaptation process (Ren, Shaffer, Harrison, Fu, Fodchuk, 2014). In particular, job-crafting behaviors (i.e., shaping, forging, and changing an individual's job to

fulfill specific needs; Tims, Bakker, & Derks, 2012) may provide effective mechanisms for expatriates with different HCL proficiencies to adapt to the new virtual work situation. Because job crafting is a bottom-up process to respond to and initiate organizational changes (Sekiguchi, Li, & Hosomi, 2017), this current study highlights the expatriates' role of job-crafting behaviors as effective mechanisms for employees to adapt to the new virtual work format caused by the COVID-19 pandemic.

While prior studies show how organizations enhance expatriate adjustment in the host country (e.g., de Eccher & Duarte, 2018; Peltokorpi, 2008; Selmer, 2006; Selmer & Luring, 2015; Zhang & Harzing, 2016), little is known about what expatriates can do by themselves to facilitate their adaptation to the host country context. Proactive behaviors such as job crafting is a key for adaptivity when the work environment involves uncertainty and aspects of the job role cannot be formalized (Griffin et al., 2007). Adaptivity refers to how employees cope with, respond to, and support changes in the workplace (Griffin et al., 2007). Adaptivity places particular emphasis on the extent to which employees handle emergencies, crisis, and uncertain work situations (Pulakos, Arad, Donovan, & Plamondon, 2000). We use virtual work adaptivity to refer to the extent to which employees cope with changes and solve work-related problems in a virtual work situation (Carillo, Cachat-Rosset, Marsan, Saba, & Klarsfeld, 2021; Raghuram, Garud, Wiesenfeld, & Gupta, 2001).

The pandemic has made language an essential factor in the new virtual work format (Mangla, 2021), however, limited research has investigated how expatriates with different levels of HCL proficiency adapt and adjust to work changes (e.g., de Eccher & Duarte, 2018; Selmer & Luring, 2015). In particular, few studies have explored how individual initiatives (e.g., job-crafting behaviors) help expatriates with varying HCL proficiency to adapt to pandemic-related work changes. Additionally, the role of organizational practices, such as language-related human resource (HR) practices, in influencing expatriates' HCL proficiency-related job crafting and outcomes has been neglected. To address these research gaps, the present study aims to answer the following research questions: (1) Does expatriates' HCL proficiency influence their virtual work adaptivity during the COVID-19 pandemic? (2) How do expatriates with differing HCL proficiency adapt to virtual work through job-crafting mechanisms? (3)

How does organizational support, such as language-related HR practices, influence the job-crafting mechanisms of expatriates with differing HCL proficiency?

Using the Job Demands-Resources (JD-R) theory as an overarching theoretical framework (i.e., Bakker & Demerouti, 2007; Bakker, Demerouti, & Verbeke, 2004), we propose two mechanisms through which expatriates with different levels of HCL proficiency increase their virtual work adaptivity (Tims, Bakker, & Derks, 2012; Zhang & Parker, 2019). To begin, expatriates with high HCL proficiency, their HCL-related job resources exceed HCL-related job demands; thus, they are likely to use approach-crafting behaviors (i.e., proactive actions to seek positive work aspects) to make better use of their resources and increase their virtual work adaptivity. Next, expatriates with low HCL proficiency, their HCL-related job resources are below HCL-related job demands; thus, they tend to adopt avoidance-crafting behaviors (i.e., proactive actions to escape negative work aspects) to avoid excessive demands and adapt to virtual work. Furthermore, we argue that language-related HR practices in organizations provide additional resources to expatriates, especially those who need HCL-related support, which alters their job-crafting behaviors toward virtual work adaptivity.

Our research makes three important contributions. First, by studying HCL proficiency as a crucial job resource in managing job demands during the COVID-19, our work contributes to the international human resource management (IHRM) literature by bringing to light the importance of HCL proficiency in improving expatriates' virtual work adaptivity. Second, our study illustrates job-crafting behaviors as mediating mechanisms between expatriates' HCL proficiency and virtual work adaptivity. Therefore, it highlights self-initiated behaviors in increasing virtual work adaptivity. Specifically, we emphasize approach and avoidance crafting as different job-crafting behaviors to improve expatriates' virtual work adaptivity simultaneously. Third, we provide insights on the role of language-related HR practices in affecting job-crafting mechanisms, and we contribute to the literature on how organizational practices can assist bottom-up proactive work design (Bakker & Demerouti, 2007; Hornung, Rousseau, Glaser, Angerer, & Weigl, 2010).

THEORY AND HYPOTHESES

The JD-R theory states that there are two overarching categories of characteristics for each job: job demands and job resources (Tims, Derks & Bakker, 2016). Scholars have used the JD-R theory to explain how the relationship between job demands and job resources influence the degree of stressors in the workplace and the degree to which employees can initiate changes (Bakker & Demerouti, 2007; Tims & Bakker, 2010). Job demands represent characteristics of the job that require effort or skills associated with physiological or psychological costs (e.g., work pressure). Job resources refer to all aspects of a job that can facilitate the completion of tasks, reduce job demands, and stimulate personal development (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Bakker et al., 2004). Although job demands and job resources initiate two different processes, they may interactively affect employees' well-being and performance (Bakker, Demerouti & Sanz-Vergel, 2014). Job resources help employees to buffer the negative impact of job demands on the strain, so that employees with sufficient job resources can better cope with their job demands (e.g., Bakker, Demerouti & Euwema, 2005). Conversely, job demands amplify the significance of job resources on employees' problem-solving. For employees confronted with challenging job demands, their corresponding job resources become more salient and valuable in guiding their behaviors and fulfilling those demands (e.g., Hakanen, Bakker, & Demerouti, 2005).

For expatriates who work in a country where a different language is spoken, HCL proficiency is a key job resource to perform their jobs well. Existing research shows that high HCL proficiency enhances employees' shared knowledge (Harzing, Pudelko, & Reiche, 2016; Welch & Welch, 2008), trust (Tenzer, Pudelko, & Harzing, 2014), as well as power and status (Neeley & Dumas, 2016; Tenzer & Pudelko, 2017). Meanwhile, HCL proficiency is associated with various job demands, which are particularly related to expatriates' work- and non-work-related adjustments in the host country (e.g., Peltokorpi, 2008; Selmer, 2006; Selmer & Luring, 2015; Zhang & Harzing, 2016). For instance, as foreigners, expatriates must seek informational and emotional supports from host-country employees through virtual networking (Farh, Bartol, Shapiro, & Shin, 2010). An expatriate's HCL proficiency plays a crucial role in obtaining local information (Piekkari et al., 2021) and building relationships with host-country colleagues (Zhang & Harzing, 2016), which helps expatriates fulfill job demands.

The COVID-19 pandemic has created higher job demands for expatriates to obtain local information and build local relationships via virtual communication, which makes HCL proficiency a more valuable job resource than ever in fulfilling these demands (Piekkari et al., 2021). Expatriates have been mainly required to work from home during the pandemic; their adaptivity to the host country's working environment has been largely manifested in their adaptivity to virtual work. Virtual work generally has greater requirements for language and communication skills, especially within a multilingual working environment (Lockwood, 2015). Therefore, expatriates with sufficient language resources (i.e., high HCL proficiency) may be inclined to utilize their language advantage proactively to modify their work and address job demands (i.e., approach job crafting) to adjust to the host country's working context. Conversely, expatriates with insufficient language resources (i.e., low HCL proficiency) may seek to customize their jobs by actively reducing HCL communication (i.e., avoidance job crafting). In this way, they avoid hindering demands and then enhance their virtual work adaptivity.

According to the JD-R theory, job crafting is considered a way to achieve the balance between job resources and demands for a better adjustment to the working environment (Tims, Bakker, & Derks, 2012). In the current study, we explore how expatriates' HCL proficiency influences their virtual work adaptivity through different types of job crafting: approach and avoidance crafting. We also propose that language-related HR practices are crucial resources for employees, especially for those with low HCL proficiency. Figure 1 shows the proposed model.

Insert Figure 1 about here

Approach Crafting Mechanism

Job crafting refers to “the physical and cognitive changes individuals make in the task or relational boundaries of their work” (Wrzesniewski & Dutton, 2001:179). The concept has been studied from different perspectives, such as crafting orientations and crafting content (Zhang & Parker, 2019). The current study focuses on employees' initiative orientations during the pandemic. Thus, we focus on the

orientation perspective and explore employees' approach and avoidance orientations for job-crafting behaviors. Approach crafting refers to employees' job-crafting behaviors to seek the positive aspects of their work, which include approach resources crafting and approach demands crafting (Tims, Bakker, & Derks, 2012). Such behaviors increase individual resources and help employees seek more resources to attain their goals or to meet challenging demands (Zhang & Parker, 2019). Alternatively, avoidance crafting refers to employees' job-crafting behaviors to escape from the negative aspects of their work, which include avoiding resources crafting and avoiding demands crafting (Tims, Bakker, & Derks, 2012). Avoidance-crafting behaviors are protective behaviors, especially in the pandemic situation, because employees will engage in such behaviors to avoid hindering demands or jobs that lack resources owing to the profound negative impacts on well-being (Zhang & Parker, 2019).

According to the JD-R theory, job-crafting behavior can be interpreted as changes that employees make in their job demands and job resources, such as increasing job resources and decreasing hindering job demands (Tims & Bakker, 2010; Tims, Bakker, & Derks, 2012). As the JD-R theory suggests that employees with sufficient resources can better mitigate their daily job demands (Bakker & Demerouti, 2007; Bakker et al., 2003; Bakker et al., 2004), expatriates with high HCL proficiency have more available job resources to buffer the impacts of job demands that require communication owing to pandemic uncertainty. Because their HCL-related job resources exceed their job demands, they are not worried about the increasing communication demands brought by the pandemic, and they may proactively invest their HCL-related resources to gain new job resources (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014) and approach goals (i.e., approach crafting). For example, they may tend to use their language resources to obtain informational and emotional support and harmonious relationships with host-country employees (Farh et al., 2010; Zhang & Harzing, 2016; Zhang & Peltokorpi, 2016). Thus, we predict that expatriates with high HCL proficiency are more likely to use their HCL skills actively to change the task or relational boundaries of their work (i.e., approach job crafting) to attain their goals or meet challenging demands (i.e., approach crafting) during the COVID-19 pandemic.

Previous studies have shown that approach crafting exhibits positive effects on desirable outcomes (Bruning & Campion, 2018). For example, job resources gained through approach crafting can help employees overcome environmental change, reduce uncertainty, and adapt to new situations (Demerouti, Xanthopoulou, Petrou, & Karagkounis, 2017). In addition, by approaching resources, expatriates can expand their roles and abilities in managing the challenges that arose suddenly because of COVID-19, in turn enhancing their adaptivity to virtual work. Especially for expatriates high in HCL proficiency, challenging stressors stemming from the COVID-19 situation reinforce employee motivation through positive emotions and attitudes, in turn leading to employee involvement in tasks and opportunities for personal development and achievement (e.g., Podsakoff, Lepine, & Lepine, 2007). Thus, approaching challenges and taking on more responsibilities can improve employees' work engagement and task performance and facilitate employee adjustment (Amiot, Terry, Jimmieson, & Callan, 2006; Petrou, Demerouti, & Schaufeli, 2015).

In sum, during the COVID-19 pandemic, we expect expatriates with high HCL proficiency to leverage their HCL skills to achieve virtual work adaptivity through approach crafting. Thus, we predict:

Hypothesis 1a. HCL proficiency is positively related to approach crafting.

Hypothesis 1b. Approach crafting is positively related to virtual work adaptivity during the COVID-19 pandemic.

Hypothesis 1c. Approach crafting mediates the relationship between HCL proficiency and virtual work adaptivity during the COVID-19 pandemic.

Avoidance Crafting Mechanism

According to the JD-R theory, hindering job demands are stressful and may related to burnout because employees must invest more resources and expend significant effort to meet these demands (Schaufeli, Bakker, & Van Rhenen, 2009). In this situation, some employees tend to proactively avoid the hindering job demands by changing task and relational boundaries of the job (i.e., avoidance job crafting; Zhang & Parker, 2019). These avoidance job-crafting behaviors allow employees to restore their energy and concentrate on their core tasks. As a result, their level of burnout decreases and work engagement and

job satisfaction increase (Tims, Bakker, & Derks, 2013). During virtual work, most job procedures, information, and communication are nonphysical. For expatriates with low HCL proficiency, they are required exert greater effort to understand the HCL owing to the increased volume of text-based documents or notes in the virtual work format. Seeking help and support from other people is also an effort-consuming process. In this way, virtual work brings higher job demands to expatriates, especially regarding language utilization and communication (Presbitero, 2020). Therefore, expatriates with low HCL proficiency lack the job resources to adapt to pandemic-related virtual work demands. Because their job resources are insufficient to meet job demands, they tend to feel uncertain owing to not accessing relevant information in a crisis (Farh et al., 2010). The JD-R theory suggests that employees with depleted job resources are likely to experience stress and attempt to escape from job demands to avoid burnout (Bakker et al., 2004; Bakker et al., 2014). Thus, expatriates with low HCL proficiency are likely to avoid hindering job demands, including unnecessary or ambiguous tasks and relationships (i.e., avoidance crafting), to ensure their core tasks are not negatively affected by the changing virtual work context (Baltes, 1997). Therefore, expatriates with low HCL proficiency tend to avoid hindering job demands, which is related to avoidance crafting.

Although some scholars suggest that avoidance crafting may have a detrimental effect on work outcomes (Petrou et al., 2015; Salmela-Aro, Tolvanen, & Nurmi, 2009), we argue that reducing demands through avoidance crafting may benefit expatriates with low HCL proficiency during the pandemic. Job crafting is not inherently conducive or harmful to an organization. Rather, the outcome depends on the situation (Wrzesniewski & Dutton, 2001). Demerouti et al.'s (2017) study demonstrated that reducing demanding job aspects can preserve an individual's resources and enhance adaptivity in a changing environment. Compared with approach crafting, avoidance crafting is a cost-effective method for expatriates with low HCL proficiency to adapt to virtual work. Indeed, minimizing elements of the work environment that are emotionally, psychologically, or physically daunting (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012) is a positive tactic, especially for employees with limited job resources. Avoidance crafting also ameliorates feelings of incompetence, threat, and anxiety during the working

environment's change, thereby enhancing one's readiness to embrace future adaptivity (Terry & Jimmieson, 2003).

In sum, during the COVID-19 pandemic, we expect expatriates with low HCL proficiency to achieve virtual work adaptivity through avoidance crafting. Thus, we predict:

Hypothesis 2a. HCL proficiency is negatively related to avoidance crafting.

Hypothesis 2b. Avoidance crafting is positively related to virtual work adaptivity during the COVID-19 pandemic.

Hypothesis 2c. Avoidance crafting mediates the relationship between HCL proficiency and virtual work adaptivity during the COVID-19 pandemic.

The Moderating Role of Language-Related HR Practices

Language-related HR is a special HR practice that aims to help employees improve their language skills and access to language resources, thereby increasing employee effectiveness and supporting the overall operations of the organization. Language-related HR practices are usually reflected in three areas. First, multinational corporations are likely to select and recruit job candidates with the requisite language skills, e.g., English or HCL (Yamao & Sekiguchi, 2015). Second, companies with high language-related HR practices usually offer sustained language support and training (e.g., English language courses and teaching materials; Neely, 2011) to assist employees in a multilingual environment. They may also put pressure on employees (e.g., language exams, language course results) by linking employees' language skills with their job performance evaluation (Neeley, 2011), promotion (Yamao & Sekiguchi, 2015), workplace social network access (Welch & Welch, 2015), and even retention (Klitmøller & Bjerregaard, 2013). Third, an increasing number of organizations have increased investment and progressively adopted machine translation technologies and software (Hutchins, 2005), and even established translation departments to meet the diverse language demands of their employees (Piekkari, Welch, & Welch, 2014; Welch & Welch, 2015). In the COVID-19 pandemic, during which the original communication and working formats change significantly, such language-related HR practices are valuable organizational job resources for expatriates, allowing them to buffer job demands and adapt to uncertainty. These practices

help employees gain job resources (e.g., job-crafting resources through language skills) and increase employees' adaptability to the job-related demands, work, and turbulence (Federici, Boon, & Den Hartog, 2019).

During pandemic-related virtual work, when expatriates believe that their organization provides a high amount of language-related HR practices (e.g., the organization values HCL, provides HCL-related training, and considers HCL an important promotion/recruitment criterion), they perceive their HCL proficiency as valuable within the organization (Selmer & Luring, 2015). Therefore, expatriates with high HCL proficiency are more likely to emphasize their language resources and proactively convert their language resources into other work-related opportunities and resources to adapt to work changes. Conversely, when expatriates feel that language-related HR practices are not emphasized in their organization, they will perceive HCL proficiency as a less important resource in their virtual work and thereby have a lower motivation to redesign their jobs for pandemic work adaptivity. In this way, we propose that when language-related HR practices are emphasized, employees with greater HCL proficiency are likely to engage in approach crafting to increase their adaptivity to virtual work.

As discussed, avoidance crafting would help expatriates with low HCL proficiency adapt to the pandemic-related work environment. However, it may be a last resort for these expatriates in the absence of resources. They would have more options in adapting to virtual work if they had additional language resources. Therefore, we argue that language-related HR practices, as organizational resources, influence the relationship between expatriates' HCL proficiency and avoidance crafting in predicting their virtual work adaptivity. Language-related HR practices provide employees with language and cross-cultural training and thereby have greater meaning for expatriates with low HCL proficiency (Yamao & Sekiguchi, 2015). With sufficient language-related HR practices, the language resources of expatriates with low HCL proficiency will improve, and they will be less likely to consider some tasks and relationships unnecessary or avoid them in job redesign. Further, these expatriates will be more capable of adapting to virtual work through different mechanisms (e.g., approach crafting). Thus, we predict the following moderated mediation hypotheses.

Hypothesis 3a. The indirect effects of HCL proficiency and virtual work adaptivity via approach crafting are moderated by language-related HR practices, such that the indirect effect is stronger when the HR practices are present but weaker when the HR practices are absent.

Hypothesis 3b. The indirect effects of HCL proficiency and virtual work adaptivity via avoidance crafting are moderated by language-related HR practices, such that the indirect effect is weaker when HR practices are present but stronger when HR practices are absent.

METHODS

Participants and Procedure

We recruited a sample of full-time expatriates in eight countries (i.e., USA, UK, Japan, Vietnam, Brazil, Germany, Sweden, and Italy) through an international survey platform with access to cross-country data. Participants received survey invitations through online platforms and would receive small financial rewards for completing the survey. Referring to Harzing and Pudelko's (2013) study, we selected these eight countries based on the different English skills prevalent within them and the HCL's importance in business. Participants completed the survey in either English or their HCL. We followed Brislin's (1970) back-translation process to translate the original English survey into six HCL versions.

Data were collected in two waves with a two-week interval to reduce the possible effects of common method variance. Specifically, we measured HCL, language-related HR practices, and demographic information in the first-wave survey and measured approach crafting, avoidance crafting, and virtual work adaptivity in the second-wave survey. The final valid sample of 994 participants (82.8% response rate) included 543 men (54.6%) aged 18 to 63 years old ($M = 32.2$ years, $SD = 7.5$). We intentionally recruited participants from multiple industries (e.g., manufacturing, service, finance, and IT) in various countries (i.e., 110 from Brazil, 114 from Germany, 116 from Italy, 265 from Japan, 126 from Vietnam, 104 from Sweden, 87 from the UK, and 72 from the USA) to enhance the generalizability and effectiveness of the findings.

Measures

To ensure the measurements fit our COVID-19 study context, we slightly modified the question

statements, adding statements such as “During the epidemic virtual work period, I ...”¹ in front of items (except the HCL proficiency scale because it keeps consistent in the pandemic situation). All measurements were rated on a 7-point Likert-type scale (1 = *strongly disagree* to 7 = *strongly agree*), unless otherwise noted.

Host-country language proficiency. As our study explores how expatriates’ perceived language proficiency affects their job-crafting behaviors and virtual work adaptivity, we measured expatriates’ subjective language proficiency rather than their objective language proficiency. Therefore, we adopted the self-report approach, which existing studies commonly used to measure language proficiency (e.g., Kaushanskaya, Blumenfeld, & Marian, 2020; Marian, Blumenfeld, & Kaushanskaya, 2007).

HCL proficiency was measured using a 5-item scale adapted from Takeuchi, Yun, and Tesluk (2002). Participants were asked to indicate how confident they could understand, speak, read, and write the HCL. The original items noted by Takeuchi et al. (2002) were “I feel confident in (a) using English in general, (b) writing in English, (c) speaking English, (d) reading and understanding English, and (e) listening to English.” We accordingly revised the questions as, for example, “In general, I am proficient in the HCL (for example, Japanese).” This self-report scale was found to have high reliability and validity for assessing second language proficiency in the original study ($\alpha = 0.968$).

Approach crafting. We measured expatriates’ approach crafting with a 15-item scale adapted from Slemp and Vella-Brodrick (2013) and Demerouti and Peeters (2018). Sample items include, “During the pandemic virtual work period, I have made an effort to get to know people at work well (e.g., actively send greeting e-mails, have conversations with colleagues)” and “During the pandemic virtual work period, I have introduced new approaches to improve my work” ($\alpha = 0.854$).

Avoidance crafting. We measured expatriates’ avoidance crafting with a 10-item scale adapted

¹ Because the data collection was conducted at the beginning of the COVID-19 pandemic, when the words *pandemic* and *epidemic* were mixed-used, we used the word “epidemic” in the English questionnaire. According to the definition of the World Health Organization, it defined COVID-19 as a public *pandemic* on March 11, 2020. Thus, we suggest future research use the word *pandemic* in the scale as “During the pandemic virtual work period, I....” for a more accurate statement in measurement.

from Niessen, Weseler, and Kostova (2016) and Tims et al. (2012). Sample items include “During the pandemic virtual work period, I have usually limited the amount of time I spend with people I do not get along well with, and only contact them for things that are absolutely necessary” and “During the pandemic virtual work period, I have ensured that my work is mentally less intense” ($\alpha = 0.899$).

Language-related HR practices. We measured language-related HR practices with a four-item scale adapted from Yamao and Sekiguchi (2015). Sample items for expatriates working in Japan include, “My company offers support for foreign employees to learn Japanese” and “In my company, the Japanese proficiency level is a promotion criterion for foreign employees” ($\alpha = 0.806$).

Virtual Work Adaptivity. Virtual work adaptivity was measured via a nine-item scale adapted from Griffin and Parker (2007). A sample item is, “During the pandemic virtual work period, I have adapted well to changes in my core tasks” ($\alpha = 0.873$).

Control variables. Respondents’ demographic information, including gender, age, education level, work industry, and overseas work experience (OWP), was controlled in this research to minimize the potential influence of exogenous variables.

RESULTS

Measurement Equivalence

Because our surveys were conducted in eight countries using the local languages (i.e., the United States, the United Kingdom, Japan, Germany, Italy, Vietnam, Sweden, and Portugal), there is a necessity to illustrate the survey’s equivalence in the aforementioned eight countries. Following Vandenberg and Lance’s (2000) method, we conducted a series of multigroup confirmatory factor analyses (CFAs) to check the survey’s equivalence in the eight countries using AMOS software. First, we tested whether the basic model structure was invariant across countries (configural invariance). A multi-sample analysis with the unconstrained model was established, which showed an acceptable baseline model for the eight countries ($\chi^2[984] = 2014.610, p < 0.001$, incremental fit index (IFI) = 0.922, Tucker–Lewis index (TLI) = 0.902, confirmatory fit index (CFI) = 0.921, root mean square error of approximation (RMSEA) = 0.033). Then, we constrained factor loadings to equality across countries to assess whether

the relationships between the items and the latent constructs to which they are associated were similar across different countries. In the next step, we constrained measurement intercepts. We also used CFI to estimate differences between multigroup models. As the results shown in Table 1 suggest that $\Delta CFI \leq .01$, the null hypothesis of invariance should not be rejected (van Dick et al., 2018). The Chi-squared tests of the difference between the baseline model and measurement intercept constrained models revealed statistically nonsignificant values (baseline model and measurement intercept constrained model: $p = 0.299$). We found no significant differences in the answers of the eight countries. Thus, our model has a high applicability in these countries.

Insert Table 1 about here

Preliminary Analyses

Means, standard deviations, and correlations are presented in Table 2. HCL proficiency was related positively to approach crafting ($r = 0.243, p < 0.01$), language-related HR practices ($r = 0.424, p < 0.01$), and virtual work adaptivity ($r = 0.145, p < 0.01$) but negatively related to avoidance crafting ($r = -0.225, p < 0.01$). In addition, the correlations between job crafting and virtual work adaptivity were positively significant (for approach crafting, $r = 0.608, p < 0.01$, and for avoidance crafting, $r = 0.276, p < 0.01$). These results show preliminary support for our hypotheses.

Insert Table 2 about here

Prior to the hypothesis testing, CFAs were conducted to ensure the distinct factor structure of our five key variables: HCL proficiency, approach crafting, avoidance crafting, language-related HR practices, and virtual work adaptivity. In the hypothesized five-factor model, $\chi^2[123] = 611.155, p < 0.001$, relative fit index (RFI) = 0.941, TLI = 0.952, CFI = 0.961, RMSEA = 0.063, and the model was superior to three

alternative four-factor models, including a model in which HCL and language-related HR practices were set to load on a single factor ($\chi^2[128] = 2,066.750$, RFI = 0.807, TLI = 0.817, CFI = 0.847, RMSEA = 0.124); a model in which HCL and approach crafting were set to load on a single factor ($\chi^2[129] = 2,557.450$, RFI = 0.763, TLI = 0.772, CFI = 0.808, RMSEA = 0.138); a model in which HCL and avoidance crafting were set to load on a single factor ($\chi^2[129] = 1,873.658$, RFI = 0.826, TLI = 0.836, CFI = 0.862, RMSEA = 0.117); and a model in which approach and avoidance crafting were set to load on a single factor ($\chi^2[129] = 1,630.047$, RFI = 0.849, TLI = 0.859, CFI = 0.881, RMSEA = 0.108). These results support the validity of the measures used in this study.

Hypotheses Testing

We first conducted a series of multiple regression analyses. The results presented in Table 3 further provide preliminary support for our hypotheses.

Insert Table 3 about here

To further test the moderated mediating relationship between HCL proficiency and virtual work adaptivity, we conducted bootstrapping-based mediation tests using the PROCESS macro (Hayes, 2013) with a bias-corrected bootstrap of 5,000 resamples. All of the results are reported with 95% confidence intervals (CIs). The bootstrapped indirect effect is significant if the bias-corrected 95% CI excludes zero. Table 4 illustrates the PROCESS results. As shown in Table 4, HCL proficiency was associated positively with approach crafting ($\beta = 0.132$, $p < 0.001$) and negatively associated with avoidance crafting ($\beta = -0.097$, $p < 0.001$), supplying further evidence for H1a and H2a. The results also revealed that approach crafting ($\beta = 0.561$, $p < 0.001$) and avoidance crafting ($\beta = 0.090$, $p < 0.01$) were positively associated with virtual work adaptivity. These results provide additional support for Hypotheses 1b and 2b.

Because Hypotheses 1 and 2 propose that approach crafting (H1c) and avoidance crafting (H2c) mediate the effects of HCL proficiency on virtual work adaptivity, we used bootstrap estimates and constructed bias-corrected 95% CIs to test the indirect effect. The results indicate that HCL proficiency

had a significant indirect effect on virtual work adaptivity via the mediation of approach crafting (indirect effect = 0.074, SE = 0.010, 95% CI [0.054, 0.095]) and of avoidance crafting (indirect effect = -0.009, SE = 0.004, 95% CI [-0.016, -0.002]). H1c and H2c were further supported.

Insert Table 4 about here

Hypothesis 3 predicts moderated mediation relationships between HCL proficiency and virtual work adaptivity—that is, the indirect effect of HCL proficiency and virtual work adaptivity via approach crafting or avoidance crafting is moderated by language-related HR practices. As shown in Table 5, the degree of language-related HR practices at low, middle, and high levels was distinguished from values for the moderators at the mean and plus/minus one SD from the mean. The results showed that avoidance crafting played a mediating role with low, medium, and high levels of language-related HR practices. The intervals of the bootstrap tests were [-0.027, -0.003], [-0.020, -0.002], and [-0.015, -0.001], respectively, which do not contain 0. In addition, the index of the moderated mediation was 0.003, and the 95% CI did not contain zero [0.001, 0.006]. Therefore, Hypothesis 3b is supported. Furthermore, we conducted a simple slope analysis to explore the interaction of HCL proficiency and language-related HR practices on avoidance crafting. The results in Figure 2 demonstrate that when HR practice was low, the relationship between HCL proficiency and avoidance crafting was negative; this relationship was less negative when HR practice was at a higher level. Thus, Hypothesis 3a is further supported that the indirect effect of HCL proficiency and virtual work adaptivity via avoidance crafting is weaker when HR practices are present but stronger when HR practices are absent. At the same time, as shown in Table 5, the index of the moderated mediation of approach crafting was 0.013, and the 95% CI contains zero [-0.001, 0.027]. Hypothesis 3a is not supported.

Insert Table 5, Figure2 about here

DISCUSSION

The COVID-19 pandemic has changed the way expatriates work and communicate, creating a new feeling of workplace uncertainty. Expatriates are more severely affected by workplace changes during the COVID-19 pandemic than regular employees because of the dual challenge of HCL proficiency and virtual work. Guided by the JD-R theory and supported by our eight-country data collected during the COVID-19 pandemic, this study shows that HCL proficiency is essential for expatriates' virtual work and is crucial for IHRM of organizations to understand. HCL proficiency predicts how well expatriates adapt to the pandemic work environment and influences which approach- or avoidance-crafting behaviors expatriates use. Moreover, our study highlights the value of language-related HR practices as job resources for expatriates with low HCL proficiency.

Theoretical Contributions

Our study makes the following theoretical contributions. First, we make a contribution to the literature on language related research in IHRM by examining the language issue in multinational corporations using a new theoretical lens. Specifically, we applied the JD-R theory to understand that language (i.e., HCL skills) as a critical job resource can significantly enhance employees' work adaptivity during the pandemic situation. Previous literature has linked various resources (e.g., job characteristics, individual characteristics, and social context) to employees' job crafting (i.e., Rudolph, Katz, Lavigne, & Zacher, 2017) and work adaptivity (i.e., Wang, Demerouti, & Le Blanc, 2017). Yet, little attention has been paid to how language proficiency acts as an important resource to help multinational corporation employees alleviate the impact of job demands and adapt to work-related uncertainties during the pandemic involving work and communication formats (Piekkari et al., 2021). Using expatriates, our study showed that HCL had been an essential job resource for multinational corporation employees. Employees with more language resources can proactively use their language resource to craft their jobs and are generally better at adapting to organizational changes and virtual work demands during the pandemic (e.g., work overload caused by unaccustomed, pandemic-related virtual communication, emotional and physical demands, and changes in tasks). Therefore, we contribute to the IHRM literature by emphasizing

the significance of HCL in employee management of multinational corporations during the crisis and provide a better understanding of the JD-R theory under crisis situations from a language aspect.

Second, this study also contributes to the language related research in IHRM literature by not only revealing that HCL is a crucial resource for multinational corporation employees (e.g., expatriates) to adapt to a crisis, but also providing insights into the mechanisms (i.e., job-crafting behaviors) between HCL proficiency and virtual work adaptivity in the crisis situation. An employee's individual initiative is significant in the pandemic-adaptivity process because organizations would only focus on the key changes that can sustain business continuity and it would be difficult to cater to all employees' needs amid such rapid changes (Bano, Omar, & Ismail, 2021). Job-crafting behaviors enable expatriates to gain more resources and buffer changing job demands, thereby helping them to adapt better to changes by using their own abilities. Although previous research has touched upon the relationship between HCL and host-country adjustment (Selmer & Luring, 2015), our study is the first to explore the mediating role of job-crafting behaviors in this relationship. We contribute to a deeper understanding of why and how expatriates' HCL proficiency can positively affect their virtual work adaptivity and thereby help to advance language-related research in IHRM.

Third, this study contributes to the literature on job crafting by extending the understanding of avoidance crafting's positive facets. Previous studies mainly considered approach crafting as positive behaviors and avoidance crafting as negative or passive behaviors (i.e., Petrou et al., 2015). According to related JD-R research, high demands and low job resources significantly lead to maladjustment and burnout (Bakker et al., 2005). In this study, we challenged the existing conclusion that approach and avoidance crafting lead to opposite outcomes (Zhang & Parker, 2019; Rudolph et al., 2017) and theorized the positive effects of approach and avoidance job crafting in increasing expatriates' adaptivity to virtual work. Our findings indicate that approach-crafting behaviors predict better virtual work adaptivity for expatriates with high HCL proficiency because virtual work is highly related to language expression and manipulation ability. In contrast, avoidance crafting may help expatriates with low HCL proficiency avoid unnecessary relational interactions and job demands during the crisis effectively, thereby relieving

expatriates of language anxiety and allowing them to focus on the most critical work aspects.

Last, we introduced language-related HR practices as a top-down organizational initiative into our theoretical model. Our findings indicate that language-related HR practices provide more benefits or resources to expatriates with low HCL proficiency, which is consistent with Yamao and Sekiguchi's (2015) study. Multinational corporations with more language-related HR practices may provide ongoing language supports to expatriates with low HCL proficiency to help them overcome language barriers, for instance, by providing language training courses (Neeley, 2011) or adopting translation technologies (Hutchins, 2005). In addition, The HR department of multinational corporations may also associate expatriates' HCL proficiency to their job performance (Neeley, 2011), promotion (Yamao & Sekiguchi, 2015), local network access (Welch & Welch, 2015), and even retention (Klitmøller & Bjerregaard, 2013) to compel expatriates improve their HCL ability. By examining the moderating effect of language-related HR practices, our findings indicate that bottom-up and top-down processes are effective resources and work in an interactive manner in meeting job demands and promoting expatriates' virtual work adaptivity during the crisis.

Practical Implications

Our study provides practical implications for both employees and multinational corporations. From the perspective of employees, our findings shed light on the importance of learning HCL for expatriates, especially in a crisis situation. Some expatriates lack the motivation to learn an HCL under normal circumstances because they expect English to be a common language in the workplace (Zhang & Harzing, 2016). However, the COVID-19 crisis has emphasized the value of HCL in that most information will only be disseminated in the HCL (Piekkari et al., 2021). Our findings suggest that HCL skills, as a job resource, can significantly improve expatriates' adaptivity to pandemic-related organizational demands and changes, further emphasizing the importance and necessity of expatriates learning the HCL. Second, our study makes suggestions for expatriates with low HCL proficiency. Although they cannot adapt to the changes as easily as expatriates with high HCL proficiency can, they can still take action within their capabilities. Avoidance crafting does not mean casting off work engagement; rather, it is a smart way of

avoiding unnecessary work and relationships. Expatriates who struggle to learn the HCL can implement avoidance crafting, which will enable them to focus on the tasks in which they are skilled and adapt to sudden, crisis-related changes. Although our samples are from expatriates, the research model can be applied to employees in multinational corporations who are second-language speakers or have international assignments, such as inpatriates.

From an organizational perspective, our findings highlight that multinational corporations should stress the meaning of language in managing multinational employees, and in particular, understanding the importance of HCL proficiency in improving expatriates' virtual work adaptivity to a crisis. HR managers should not take it for granted that virtual work and face-to-face work have the same HCL requirements and should not ignore the difficulties expatriates may encounter in the new virtual working format. Although avoidance crafting can help expatriates with low HCL proficiency adapt to virtual work during a crisis, from an organizational perspective, employees' avoidance-crafting behavior increases the distance between expatriates and locals and is not conducive to organizational unity and development. Therefore, HR departments need to pay greater attention to practices that support expatriates with low HCL proficiency in adapting to the pandemic as follows.

First, HR departments should effectively implement language policies and practices to share beneficial information promptly and understandably with expatriates. For example, a native-language-translated document for expatriates with lower HCL proficiency will enable them to acquire essential information quickly, which leads to effective problem-solving. Second, HR departments should offer extra offline and/or online language-related support for expatriates with lower HCL proficiency. Companies without explicit language policies should add HCL skills as criteria for repatriating promotions and new expatriating assignments. Bridging the language gap through greater HR support for expatriates with insufficient initial language resources would increase employee potential, improve their engagement and virtual work adaptivity, and be a beneficial investment for the organization's development.

Limitations and Future Research Directions

Despite its important contributions, our study has several limitations that suggest further discussions

for future research. First, our measurements of key variables were self-reported. Although self-reported HCL proficiency was deemed appropriate in studying the nature of proactive crafting behavior in the current study, objective language proficiency measures may also be useful in examining the relationship between job crafting and virtual work adaptivity from different angles. Hence, we suggest that future studies could enrich the measures of language proficiency such that they include both subjective and objective assessments by utilizing language pedagogy. Moreover, language-related HR practices were reported by the expatriates instead of by HR managers. Despite language-related HR practices having a significant moderating effect on HCL proficiency and avoidance crafting in our study, we did not find a significant moderating effect of language-related HR practices on the relationship between HCL proficiency and approach crafting, perhaps owing to limitations in the existing measures or data sources. We suggest that future studies collect data from multiple sources, such as including the perspectives of HR departments and obtaining HR practice-related variables from HR managers. Second, we collected our data during the COVID-19 pandemic, and most companies had begun to implement virtual work. Thus, expatriates apparently experienced chaos and inability to adapt. We recommend further longitudinal research to track the changes regarding their approach and avoidance behaviors. Third, approach- and avoidance-crafting behaviors might be related to employees' personal attributes and experiences (i.e., Petrou, Demerouti, & Schaufeli, 2018). We suggest that future studies control for factors such as employees' individual tendencies and past experiences, such as their virtual work preferences and proficiency with virtual work/virtual communication toward their job, which are likely to influence on their work adaptability. Controlling for these factors would help us better understand the effect of approach- or avoidance-crafting tendencies. Last, expatriate adaptivity is the result of a combination of many factors, such as job knowledge, leadership style, and culture (Templer, 2010); language is one of the important factors. Though our paper is particularly interested in exploring whether and how HCL enhances expatriates' adaptivity under the pandemic-related virtual work context, researchers may also explore how language and other factors interact to affect the career success of expatriates in future research.

CONCLUSION

In this study, we developed and tested an alternative perspective of HCL proficiency as an antecedent affecting expatriates' job-crafting behaviors and virtual work adaptivity. We utilized approach crafting and avoidance crafting to explain the two mechanisms of HCL proficiency in expatriates' adaptivity to virtual work during the COVID-19 crisis. In addition, we found that language-related HR practices significantly moderate the relationship between HCL proficiency and expatriates' avoidance-crafting. Since this pandemic has and may continue to affect employees' work styles and the virtual workstyle, our study suggests that organizations and HR managers should provide additional language support for expatriates because non-native-speaking employees experience more difficulties when working virtually. Although the IHRM literature on language studies and job crafting is still emerging, we hope this study is the first step toward a comprehensive understanding of job crafting for the multicultural and multilingual environment in international business.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES

- Amiot, C. E., Terry, D. J., Jimmieson, N. L., & Callan, V. J. 2006. A longitudinal investigation of coping processes during a merger: Implications for job satisfaction and organizational identification. *Journal of Management*, 32(4): 552-574.
- Bakker, A. B., & Demerouti, E. 2007. The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3): 309-328.
- Bakker, A. B., & Demerouti, E. 2017. Job demands–resources theory: taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3): 273-285.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. 2005. Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(2): 170-180.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. 2014. Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1): 389-411.
- Bakker, A. B., Demerouti, E., & Verbeke, W. 2004. Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1): 83-104.
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. 2003. Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2): 341-356.
- Baltes, P. B. 1997. On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist*, 52(4): 366-380.
- Banoa, Y., Omar, S. S., & Ismail, F. 2021. Revitalising Organisations' Emergency Succession Planning in the Face of the Covid-19 Outbreak. *The European Journal of Social and Behavioural Sciences*, 3258-3268.
- Bordia, S., & Bordia, P. 2015. Employees' willingness to adopt a foreign functional language in multilingual organizations: The role of linguistic identity. *Journal of International Business Studies*, 46(4), 415-428.
- Brislin, R. W. 1970. Back-translation for cross-cultural research. *Journal of Cross Cultural Psychology*, 1(3): 185-216.
- Bruning, P. F., & Campion, M. A. 2018. A role-resource approach-avoidance model of job crafting: A

- multimethod integration and extension of job crafting theory. *Academy of Management Journal*, 61(2): 499-522.
- Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., & Zimmermann, A. 2020. International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. *Journal of International Business Studies*, 51(5): 697-713.
- Carillo, K., Cachat-Rosset, G., Marsan, J., Saba, T., & Klarsfeld, A. 2021. Adjusting to epidemic-induced telework: Empirical insights from teleworkers in France. *European Journal of Information Systems*, 30(1): 69-88.
- Chambel, M. J., Castanheira, F., & Santos, A. 2022. Teleworking in times of COVID-19: the role of Family-Supportive supervisor behaviors in workers' work-family management, exhaustion, and work engagement. *The International Journal of Human Resource Management*, 1-36.
- de Eccher, U., & Duarte, H. 2018. How images about emerging economies influence the willingness to accept expatriate assignments. *The International Journal of Human Resource Management*, 29(4): 637-663.
- Demerouti, E., & Peeters, M. C. 2018. Transmission of reduction-oriented crafting among colleagues: A diary study on the moderating role of working conditions. *Journal of Occupational and Organizational Psychology*, 91(2): 209-234.
- Demerouti, E., Xanthopoulou, D., Petrou, P., & Karagkounis, C. 2017. Does job crafting assist dealing with organizational changes due to austerity measures? Two studies among Greek employees. *European Journal of Work and Organizational Psychology*, 26(4): 574-589.
- Farh, C., Bartol, K., Shapiro, D., & Shin, J. 2010. Networking abroad: A process model of how expatriates form support ties to facilitate adjustment. *Academy of Management Review*, 35(3): 434-454.
- Federici, E., Boon, C., & Den Hartog, D. N. 2019. The moderating role of HR practices on the career adaptability-job crafting relationship: a study among employee-manager dyads. *The International Journal of Human Resource Management*, 32(6): 1339-1367.
- Griffin, M. A., Neal, A., & Parker, S. K. 2007. A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2): 327-347.
- Hakanen, J. J., Bakker, A. B., & Demerouti, E. 2005. How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sciences*, 113(6): 479-487.
- Halbesleben, J. R., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. 2014. Getting to the "COR" understanding the role of resources in conservation of resources theory. *Journal of Management*,

40(5): 1334-1364.

- Harzing, A. W., & Pudelko, M. 2013. Language competencies, policies and practices in multinational corporations: A comprehensive review and comparison of Anglophone, Asian, Continental European and Nordic MNCs. *Journal of World Business*, 48(1): 87-97.
- Harzing, A. W., Pudelko, M., & Reiche, B.S. 2016. The bridging role of expatriates and inpatriates in knowledge transfer in multinational corporations. *Human Resource Management*, 55(4): 679-695.
- Hayes, A. F. 2013. *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hobfoll, S. E. 2001. The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3): 337-421.
- Hornung, S., Rousseau, D. M., Glaser, J., Angerer, P., & Weigl, M. 2010. Beyond top-down and bottom-up work re-design: Customizing job content through idiosyncratic deals. *Journal of Organizational Behavior*, 31(2-3): 187-215.
- Hutchins, J. 2005. Current commercial machine translation systems and computer-based translation tools: Systems, types and their uses. *International Journal of Translation*, 17: 5-38.
- Kaushanskaya, M., Blumenfeld, H. K., & Marian, V. 2020. The language experience and proficiency questionnaire (leap-q): Ten years later. *Bilingualism: Language and Cognition*, 23(5): 945-950.
- Klitmøller, A., & Bjerregaard, T. 2013. Practice transfer in the MNC: An extended case study of local socio-economic strategies. In A. Klitmøller, *(Re)contextualizing cultural and linguistic boundaries in multinational corporations: A global ethnographic approach*: 108-133. Unpublished doctoral dissertation, Aarhus University, Denmark.
- Kong, D. T., & Belkin, L. Y. 2021. You don't care for me, so what's the point for me to care for your business? Negative implications of felt neglect by the employer for employee work meaning and citizenship behaviors amid the COVID-19 pandemic. *Journal of Business Ethics*, 1-16.
- Lockwood, J. 2015. Virtual team management: What is causing communication breakdown?. *Language and Intercultural Communication*, 15(1): 125-140.
- Mangla, N. 2021. Working in a pandemic and post-pandemic period—Cultural intelligence is the key. *International Journal of Cross Cultural Management*, 21(1): 53-69.
- Marian, V., Blumenfeld, H. K., & Kaushanskaya, M. 2007. The Language Experience and Proficiency Questionnaire (LEAP-Q): Assessing language profiles in bilinguals and multilinguals. *Journal of Speech, Language, and Hearing Research*, 50(4): 940-967.
- Neeley, T. 2011. *Language and globalization: "Englishnization" at Rakuten*. Case 9-412-002, Harvard

Business School, Boston.

- Neeley, T. B., & Dumas, T. L. 2016. Unearned status gain: Evidence from a global language mandate. *Academy of Management Journal*, 59(1): 14-43.
- Niessen, C., Weseler, D., & Kostova, P. 2016. When and why do individuals craft their jobs? The role of individual motivation and work characteristics for job crafting. *Human Relations*, 69(6): 1287-1313.
- Peltokorpi, V. 2008. Cross-cultural adjustment of expatriates in Japan. *The International Journal of Human Resource Management*, 19(9): 1588-1606.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. 2015. Job crafting in changing organizations: Antecedents and implications for exhaustion and performance. *Journal of Occupational Health Psychology*, 20(4): 470-480.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. 2018. Crafting the Change: The Role of Employee Job Crafting Behaviors for Successful Organizational Change. *Journal of Management*, 44(5): 1766-1792.
- Petrou, P., Demerouti, E., Peeters, M. C., Schaufeli, W. B., & Hetland, J. 2012. Crafting a job on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior*, 33(8): 1120-1141.
- Piekkari, R., Welch, D. E., & Welch, L. S. 2014. *Language in international business*. Cheltenham, England: Edward Elgar.
- Piekkari, R., Tietze, S., Angouri, J., Meyer, R., & Vaara, E. 2021. Can you speak Covid-19? Languages and social inequality in management studies. *Journal of Management Studies*, 58(2): 587-591.
- Podsakoff, N. P., Lepine, J. A., & Lepine, M. A. 2007. Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92(2): 438-454.
- Presbitero, A. 2020. Foreign language skill, anxiety, cultural intelligence and individual task performance in global virtual teams: A cognitive perspective. *Journal of International Management*, 26(2): 100729.
- Pudelko, M., & Tenzer, H. 2019. Boundaryless careers or career boundaries? The impact of language barriers on academic careers in international business schools. *Academy of Management Learning & Education*, 18(2): 213-240.
- Raghuram, S., Garud, R., Wiesenfeld, B., & Gupta, V. 2001. Factors contributing to virtual work adjustment. *Journal of Management*, 27(3): 383-405.

- Ren, H., Shaffer, M. A., Harrison, D. A., Fu, C., & Fodchuk, K. M. 2014. Reactive adjustment or proactive embedding? Multistudy, multiwave evidence for dual pathways to expatriate retention. *Personnel Psychology*, 67(1): 203-239.
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. 2017. Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior*, 102: 112-138.
- Salmela-Aro, K., Tolvanen, A., & Nurmi, J. E. 2009. Achievement strategies during university studies predict early career burnout and engagement. *Journal of Vocational Behavior*, 75(2): 162-172.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30: 893–917.
- Sekiguchi, T., Li, J., & Hosomi, M. 2017. Predicting job crafting from the socially embedded perspective: The interactive effect of job autonomy, social skill, and employee status. *Journal of Applied Behavioral Science*, 53(4): 470-497.
- Selmer, J. 2006. Language ability and adjustment: Western expatriates in China. *Thunderbird International Business Review*, 48(3): 347-368.
- Selmer, J., & Luring, J. 2015. Host country language ability and expatriate adjustment: The moderating effect of language difficulty. *The International Journal of Human Resource Management*, 26(3): 401-420.
- Slemp, G. R., & Vella-Brodrick, D. A. 2013. The Job Crafting Questionnaire: A new scale to measure the extent to which employees engage in job crafting. *International Journal of Wellbeing*, 3(2):126-146.
- Takeuchi, R., Yun, S., & Tesluk, P. E. 2002. An examination of crossover and spillover effects of spousal and expatriate cross-cultural adjustment on expatriate outcomes. *Journal of Applied Psychology*, 87(4): 655-666.
- Templer, K. J. 2010. Personal attributes of expatriate managers, subordinate ethnocentrism, and expatriate success: A host-country perspective. *The International Journal of Human Resource Management*, 21(10): 1754-1768.
- Tenzer, H., & Pudelko, M. 2017. The influence of language differences on power dynamics in multinational teams. *Journal of World Business*, 52(1): 45-61.
- Tenzer, H., Pudelko, M., & Harzing, A. W. 2014. The impact of language barriers on trust formation in multinational teams. *Journal of International Business Studies*, 45(5): 508-535.

- Terry, D. J., & Jimmieson, N. L. 2003. A stress and coping approach to organisational change: Evidence from three field studies. *Australian Psychologist*, 38(2): 92-101.
- Tims, M., & Bakker, A. B. 2010. Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, 36(2): 1-9.
- Tims, M., Bakker, A. B., & Derks, D. 2012. Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1): 173-186.
- Tims, M., Bakker, A. B., & Derks, D. 2013. The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology*, 18(2): 230.
- Tims, M., Derks, D., & Bakker, A. B. 2016. Job crafting and its relationships with person–job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior*, 92: 44-53.
- Vandenberg, R. J., & Lance, C. E. 2000. A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3(1): 4-70.
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. 2021. Achieving effective remote working during the COVID - 19 pandemic: A work design perspective. *Applied psychology*, 70(1): 16-59.
- Wang, H. J., Demerouti, E., & Le Blanc, P. 2017. Transformational leadership, adaptability, and job crafting: The moderating role of organizational identification. *Journal of Vocational Behavior*, 100: 185-195.
- Welch, D. E., & Welch, L. S. 2008. The importance of language in international knowledge transfer. *Management International Review*, 48(3): 339-360.
- Welch, D. E., & Welch, L. S. 2015. Developing multilingual capacity: A challenge for the multinational enterprise. *Journal of Management*, 44(3): 854-869.
- Wrzesniewski, A., & Dutton, J. E. 2001. Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2): 179-201.
- Yamao, S., & Sekiguchi, T. 2015. Employee commitment to corporate globalization: The role of English language proficiency and human resource practices. *Journal of World Business*, 50(1): 168-179.
- Zhang, F., & Parker, S. K. 2019. Reorienting job crafting research: A hierarchical structure of job crafting concepts and integrative review. *Journal of Organizational Behavior*, 40(2): 126-146.
- Zhang, L. E., & Harzing, A. W. 2016. From dilemmatic struggle to legitimized indifference: Expatriates' host country language learning and its impact on the expatriate-HCE relationship. *Journal of World Business*, 51(5): 774-786.
- Zhang, L. E., & Peltokorpi, V. 2016. Multifaceted effects of host country language proficiency in

expatriate cross-cultural adjustments: a qualitative study in China. *The International Journal of Human Resource Management*, 27(13):1448-1469.

Table 1 *Multigroup Equivalence Index*

Model	CMIN	Δ CMIN	DF	Δ DF	IFI	Δ IFI	TLI	Δ TLI	CFI	Δ CFI	RMSEA
Unconstrained	2014.61		984		0.922		0.902		0.921		0.033
Measurement weights	2130.376	115.766	1075	91	0.92	-0.002	0.908	0.006	0.919	-0.002	0.032
Measurement intercepts	2242.086	227.476	1201	217	0.92	-0.002	0.919	0.017	0.92	-0.001	0.03

Notes: CMIN = chi-square fit statistics; DF = degree of freedom; IFI = incremental fit index; TLI = Tucker–Lewis index; CFI = comparative fit index; RMSEA = root mean square error of approximation;

Table 2 *Descriptive Statistics and Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. HCL proficiency	4.820	1.595									
2. HR practices	4.509	1.377	0.424**								
3. Approach	4.936	0.824	0.243**	0.279**							
4. Avoidance	4.928	0.726	-0.225**	0.092**	0.357**						
5. Adaptivity	5.215	0.806	0.145**	0.146**	0.608**	0.276**					
6. Gender	1.450	0.498	0.027	-0.032	-0.057	-0.005	-0.033				
7. Age	32.280	7.546	0.008	0.007	-0.038	-0.106**	0.004	-0.104**			
8. Education	3.220	1.030	-0.023	-0.027	-0.017	-0.026	0.008	-0.081*	0.166**		
9. Industry	11.420	4.944	-0.017	-0.061	0.003	-0.063*	0.026	0.094**	0.011	0.019	
10. OWP	3.660	1.327	0.117**	0.018	-0.047	-0.161**	-0.028	-0.099**	0.535**	0.067*	-0.019

Notes: $n = 994$; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; gender: 1 = male, 2 = female; HCL proficiency = host country language proficiency; OWP = overseas work experience; *M* = mean; *SD* = standard deviation.

Table 3 Summary of Multiple Regressions

Variables	Approach crafting				Avoidance crafting				Virtual work adaptivity					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
Control variables														
Gender	-0.066*	-0.075*	-0.066*	-0.064*	-0.017	-0.010	0.000	0.003	-0.038	-0.043	0.002	0.002	-0.033	-0.040
Age	-0.020	-0.002	-0.008	-0.009	-0.025	-0.040	-0.047	-0.049	0.022	0.033	0.034	0.034	0.029	0.046
Education	-0.017	-0.012	-0.007	-0.010	-0.012	-0.016	-0.011	-0.016	0.004	0.007	0.014	0.014	0.007	0.012
Industry	0.009	0.013	0.024	0.025	-0.064*	-0.068**	-0.056	-0.055	0.028	0.031	0.023	0.023	0.046	0.053
OWP	-0.042	-0.083*	-0.072*	-0.074*	-0.150***	-0.116**	-0.104**	-0.108**	-0.043	-0.068	-0.017	-0.017	-0.001	-0.029
Independent variable														
HCL proficiency		0.255***	0.165***	-0.016		-0.213***	-0.308***	-0.599***		0.155***		0.000		0.225***
Mediators														
Approach crafting											0.609***	0.609***		
Avoidance crafting													0.282***	0.330***
Moderator														
HR practices			0.209***	0.017			0.221***	-0.088						
Interaction														
HCL proficiency × HR practices				0.322*				0.518**						
<i>R</i>	0.083	0.265	0.326	0.332	0.177	0.275	0.340	0.355	0.058	0.164	0.609	0.609	0.283	0.357
<i>R</i> ²	0.007	0.070	0.106	0.110	0.031	0.076	0.115	0.126	0.003	0.021	0.371	0.371	0.080	0.128
ΔR^2	0.007	0.064	0.036	0.004	0.031	0.044	0.040	0.011	0.003	0.024	0.368	0.000	0.077	82.470
ΔF	1.355	67.503	39.383	4.591	6.373	47.258	44.373	12.135	0.658	23.886	578.098	0.000	0.047	53.591

Notes: *n* = 994; **p* < 0.05, ***p* < 0.01, ****p* < 0.001; gender: 1 = male, 2 = female; HCL proficiency = host country language proficiency; OWP = overseas work experience. The regression coefficients in the table are all standardized regression coefficients.

Table 4 Results of PROCESS Analysis

	DV = Approach crafting				DV = Avoidance crafting				DV = Virtual work adaptivity			
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Gender	-0.124	0.052*	-0.106	0.051*	-0.014	-0.315**	0.004	0.044	-0.070	-1.359	0.001	0.016
Age	-0.000	0.004	-0.001	0.004*	-0.004	-1.091	-0.004	0.003	0.004	0.870	0.004	1.222
Education	-0.010	0.025	-0.008	0.025	-0.011	-0.501	-0.011	0.021	0.006	0.219	0.012	0.588
Industry	0.002	0.005	0.004	0.005	-0.010	-2.199	-0.008	0.004	0.005	0.980**	0.005	1.136
OWP	-0.051	0.023*	-0.046	0.022*	-0.063	-3.166**	-0.059	0.020**	-0.041	-1.802*	-0.007	-0.357
HCL	0.132	0.016***	0.098	0.018***	-0.097	-6.874***	-0.122	0.016***	0.078	4.887***	0.013	0.934
Approach											0.561	19.824***
Avoidance											0.090	2.790**
HR practice			0.124	0.020***			0.115	0.017***				
HCL×HR practice			0.024	0.011*			0.034	0.010***				
<i>R</i>	0.265		0.332		0.275		0.355		0.164		0.614	
<i>R</i> ²	0.070		0.110		0.076		0.126		0.027		0.376	
<i>F</i>	12.456		15.255		13.436		17.765		4.542		74.313	

Notes: *n* = 994; * *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001; gender: 1 = male, 2 = female; HCL proficiency = host country language proficiency; OWP = overseas work experience.

Table 5 Summary of Indirect Effects and Conditional Indirect Effects

		Effect	Boot SE	Boot LLCI	Boot ULCI
Indirect Effects					
Total indirect effects		0.065	0.012	0.042	0.089
Approach mediation effect		0.074	0.010	0.054	0.095
Avoidance mediation effect		-0.009	0.004	-0.016	-0.002
Conditional Indirect Effects					
Approach crafting	Moderated mediation index	0.013	0.007	-0.001	0.027
	M - 1 SD	0.037	0.013	0.012	0.063
	M	0.055	0.011	0.034	0.076
	M + 1 SD	0.073	0.016	0.043	0.105
Avoidance crafting	Moderated mediation index	0.003	0.002	0.001	0.006
	M - 1 SD	-0.015	0.006	-0.027	-0.003
	M	-0.011	0.005	-0.020	-0.002
	M + 1 SD	-0.007	0.004	-0.015	-0.001

Notes: *M* = mean; *SD* = standard deviation.

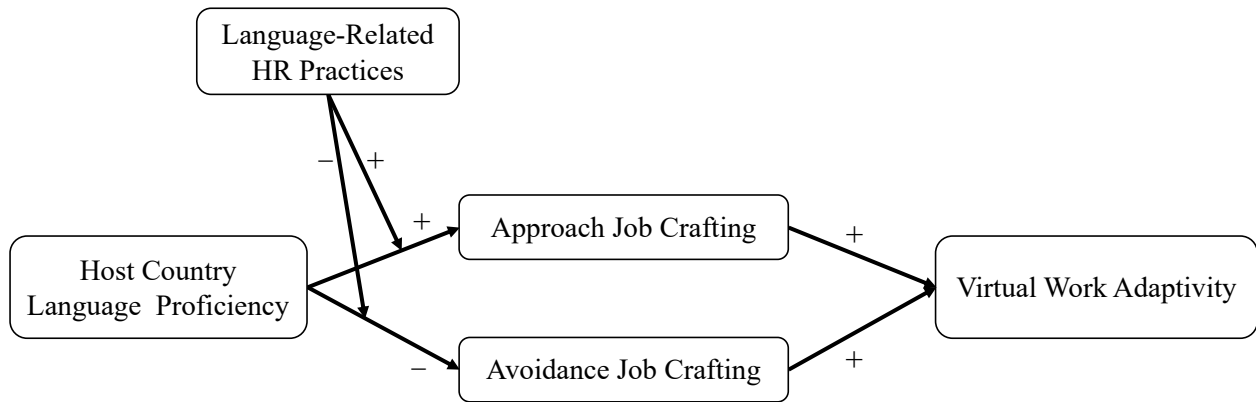


Figure 1. *The theoretical model of the current research*

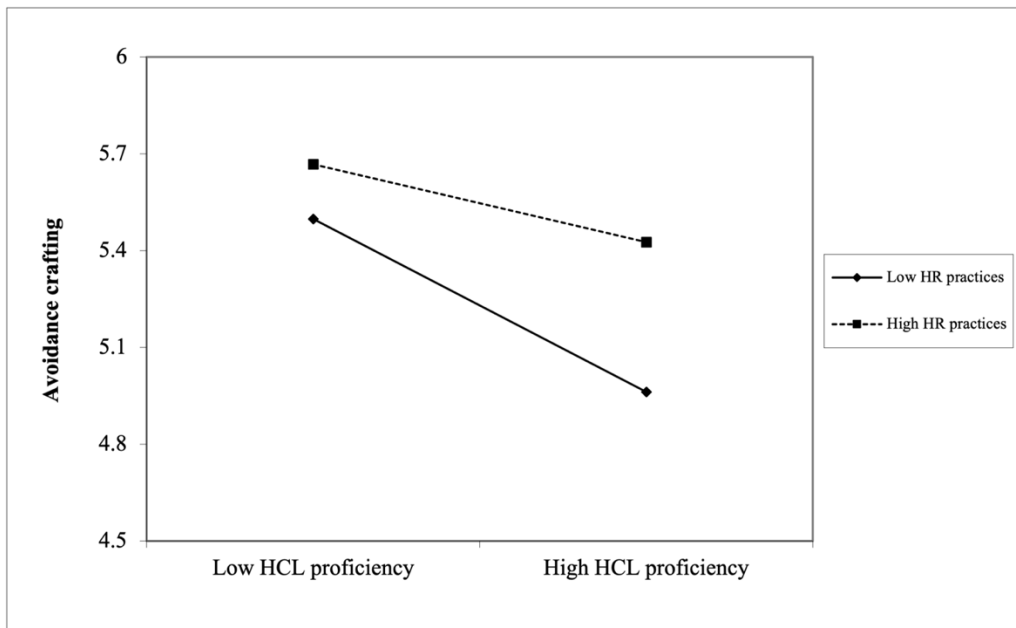


Figure 2. *Moderating effect of language-related HR practices on the relationship between HCL proficiency and avoidance crafting.*