

The Role of Interpersonal Conflict, Qualitative Job Insecurity and
Communication in Understanding Exhaustion in Chinese Employees
Working Abroad

Li Mu

Dissertation submitted as partial requirement for the conferral of MSc in Human Resources Management and Organizational Consulting

## Supervisor:

Professor Sílvia Silva, ISCTE Business School, Departamento de Recursos Humanos e Comportamento Organizacional -Spine-

The Role of Interpersonal Conflict, Qualitative Job Insecurity and Communication in Understanding Exhaustion in Chinese Employees Working Abroad

ISCTE ® Business School Instituto Universitário de Lisboa

Li Mu

## Acknowledgements

First of all, I would like to thank my supervisor, Professor Sílvia Silva, for giving me so much support during the research and writing of my master's dissertation. I would not have achieved this goal without her patience, advice and endless encouragement.

Secondly, I would like to give many thanks to Professor Shaozhuang Ma for his kind help in checking the translation of my questionnaire and his valuable comments during the questionnaire modification process.

Thirdly, I would like to thank Mr. Pedro Pires, one of the partners of Loyal advisory company who has given me suggestions during my dissertation improvement process.

I would also like to thank my parents for all the efforts they have made to support me in my studies and daily life.

Finally, many thanks to all of my friends who helped me with my dissertation.

1

# **Table of Contents**

Acknowledgements	I
Table of Contents	II
Index of Figures	III
Index of Tables	III
Abstract	IV
Resumo	V
Abbreviations	VI
I . Introduction	1
II . Literature Review	5
Overview of Burnout and the JD-R Model	5
Interpersonal Conflict with Burnout (Exhaustion)	12
Job Insecurity with Burnout (Exhaustion)	13
Communication as a Moderator	15
Overall Possible Contributions	17
III. Method	19
Participants	19
Procedure	21
Measures	22
IV. Results	24
V. Discussion	30
VI. Conclusions	37
References	38
Annexes	52

# **Index of Figures**

Figure 1. The job demands-resources model	7
Figure 2. Research model	5
Figure 3. Interaction effect of interpersonal conflict and communication in predicting exhaustion	
Index of Tables	
Table 1. Analysis of the gap between empirical studies	9
Table 2. Sociodemographic statistics of the sample	O
Table 3. Means, standard deviations and correlations between the variables 24	4
Table 4. Hierarchical multiple regression for moderator and interpersonal conflict in predicting exhaustion	5
Table 5. Hierarchical multiple regression for moderator and qualitative job insecurity in predicting exhaustion	

#### Abstract

Exhaustion is the most common symptom of burnout. Previous studies have found that job demands (i.e. interpersonal conflict and qualitative job insecurity) play an important role in explaining burnout of employees. In this study, we conducted a hierarchical linear regression to test the relationship between interpersonal conflict, qualitative job insecurity and communication (as a moderator) in predicting employees' exhaustion according to the JD-R model. Chinese workers (N=120) who work abroad participated in the online questionnaires. Results showed that interpersonal conflict was not a predictor of exhaustion for Chinese workers in this study; however, qualitative job insecurity and communication both had a positive relationship with exhaustion. Moreover, the results revealed that the interaction of interpersonal conflict and communication was significant. Possible implications for human resources management are provided afterwards.

Keywords: exhaustion, chinese, communication, JD-R model

JEL Classification System: O15 (Economic Development: Human Resources; Human

Development; Income Distribution; Migration) and Y4 (Dissertations)

#### Resumo

A exaustão é o sintoma mais comum de burnout. Estudos anteriores descobriram que as exigências do trabalho (ou seja, conflito interpessoal e insegurança no trabalho) desempenham um papel importante na explicação do burnout dos trabalhadores. Neste estudo testámos, através de regressões lineares hierárquicas, a relação entre conflito interpessoal, insegurança qualitativa do emprego e comunicação (como moderador) na predição da exaustão dos trabalhadores de acordo com o modelo JD-R . Trabalhadores chineses (N = 120), a trabalhar fora do seu país, participaram respondendo a um questionário on-line. Os resultados mostraram que o conflito interpessoal não é um preditor da exaustão para os trabalhadores chineses; no entanto, a insegurança qualitativa no trabalho e a comunicação tiveram uma relação positiva com o a exaustão. Além disso, os resultados revelaram que a interação entre conflito interpessoal e comunicação foi significativa. Possíveis implicações para a gestão de recursos humanos são apresentadas.

Palavras-chave: exaustão, chineses, comunicação, modelo JD-R

JEL Classification System: O15 (Economic Development: Human Resources; Human

Development; Income Distribution; Migration) and Y4 (Dissertations)

## Predictors of exhaustion in Chinese employees

# **Abbreviations**

JD-R Model Job Demands-Resources Model

BAT Burnout Assessment Tool

EC Energy Compass

SDGs Sustainable Development Goals

#### I. Introduction

In recent years, the role of immigrants as an important part of a country's demographics has attracted the public's attention. In particular, immigrants' potential for burnout has been brought to the forefront of immigrant studies(Figueiredo, Suleman, & Botelho, 2018; Salmela-Aro, Read, Minkkinen, Kinnunen, & Rimpelä, 2018). Thus, in the context of immigrants, studies about burnout are essential.

Burnout is a topic that has been highlighted and studied by many researchers. Recently, burnout has been included in an important diseases classification system by the World Health Organization. Burnout is defined as a 'prolonged psychological process that occurs in response to chronic workplace stress that has not been effectively managed' (Maslach, Schaufeli & Leiter, 2001, p. 399; WHO). In order to reduce the prevalence of burnout, several studies have revealed the important role of job demands and job resources in predicting burnout (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Bakker, Demerouti, & Verbeke, 2004; LePine & Rich, 2010; Alarcon, 2011; Schaufeli & Taris, 2014; Aronsson et al., 2017; Schaufeli, 2017). However, few studies have focused on burnout among Chinese immigrants.

According to a report on Chinese HNWIs overseas (2017), there are more than 33 million Chinese currently living overseas. The number of Chinese immigrants living in Portugal is increasing as well, and 82.6% of these people have become employees of local companies (Santos Neves, Miguel, Rocha-Trindade, Maria & Beatriz, 2008). Of the Chinese immigrants in Portugal, 29.6% are younger than 30 years old and 38.5% are between 31 and 40 years old (Oliveira Catarina Reis, 2003). Since the year 2017, the number of Chinese immigrants based in Portugal has risen to 23,197 (Immigration, Borders and Asylum Report, 2017). The South China Morning Post has reported that Portugal needs more immigrants to maintain a stable population. Therefore, the number of Chinese people in Portugal is likely to increase even further in the coming years (Gaspar, 2017). Because more and more Chinese

people in Portugal are looking for jobs, burnout among Chinese immigrants has to be given more attention.

Most immigrants are faced with a difficult work environment, which damages well-being and stimulates burnout. Some Chinese immigrants suffer from both physical and mental issues in the workplace. According to the fact sheets on SDGs, the percentage of people who have been exposed to mental health disorders has increased by 16% in the WHO European Region, and immigrants may be at greater risk of suffering from these problems.

Additionally, the public has little knowledge about mental disorders and psychology terminology (Jorm, 2000). People tend to be concerned only with physical health, not considering that mental health is an equally important dimension of 'health'. People who experience burnout at work suffer negative effects on their health, both physical and psychological. Burnout can also cause many changes in the body, such as emotional exhaustion and professional inefficacy (WHO), and it can eventually give rise to severe outcomes for both individuals and organisations. For instance, burnout causes psychological health problems, including deficiencies in the performance of professional activities at work, increasing mental dissonance and high-level exhaustion. From the perspective of organisations, burnout outcomes such as absenteeism and high turnover rates result in high costs for companies (Cordes & Dougherty, 1993).

According to the JD-R model (Schaufeli, 2017) and previous studies (Bakker, et al., 2004; Schaufeli, 2017), job demands may eventually contribute to burnout if the job demands are high and continuous in the workplace. Job resources, on the other hand, will foster greater work engagement. In our study, we aim to analyse the role of interpersonal conflict, job insecurity(qualitative job insecurity) and communication on affecting exhaustion of Chinese employees who work abroad.

Interpersonal conflict, one of the job demands (Bakker et al., 2014), has been suggested as an antecedent of burnout and a contributor to higher burnout levels

(Beheshtifar & Zare, 2013). For instance, in a study of secondary school teachers in Madrid, the results revealed that interpersonal relationships directly influence people's exhaustion (Rodríguez-Mantilla & Fernández-Díaz, 2017).

One aspect of diversity in the workplace is related to the workers' nationalities. In our study among Chinese immigrants, more immigrant means more diversity. Because, interpersonal conflict occurs more easily when there are more differences between individuals, more conflict will occur in the presence of more diversity (Barki & Hartwick, 2004). One Dutch study concluded that interpersonal conflict has a negative impact on burnout and could be a predictor for burnout (Demerouti, Le Blanc & Van Emmerik, 2010). Another study among Chinese employees in the aviation industry observed that interpersonal conflict has negative impacts on burnout. Nonetheless, there have been few studies on this topic conducted with Chinese immigrants. Thus, in this study, we explore the role of interpersonal conflict on burnout among Chinese immigrants.

Job insecurity, the other job demand, describes such situations in which immigrants are faced with detrimental working environments and cannot avoid flexible working contracts (Moyce & Schenker, 2018). Job insecurity is a common cause of burnout among immigrants in the workplace (Commander, Heitmueller & Tyson, 2006; Moyce & Schenker, 2018). A previous study of employees in Turkey observed that job insecurity had a positive influence on employees' burnout level (Aybas, Elmas & Dündar, 2018). Another study found that job insecurity was related to burnout among employees in Gauteng (Bosman, Rothmann & Buitendach, 2005). However, just a few studies have solely focused on the impacts of qualitative job insecurity on burnout, especially among Chinese immigrants. Thus, this study focuses on the impacts of qualitative job insecurity on Chinese immigrants' burnout.

Communication is a job resource that plays an important role in reducing the negative impacts of job demands. Some previous academic studies have investigated its moderating function. For instance, a study in the United States found that

communication could decrease employees' burnout level and buffer negative impacts of job demands on burnout (Kim & Lee, 2009; Jiang & Probst, 2014). As interpersonal conflict and qualitative job insecurity are job demands, there is evidence that communication may buffer negative impacts of interpersonal conflict and qualitative job insecurity on burnout. According to Cronin (1990), appropriate communication skills can help reduce people's burnout level. These studies have broadened our knowledge on the moderating relationship of communication and burnout. Nevertheless, there is still a lack of information on this topic among Chinese employees who work abroad. In addition, there have been no studies that combine interpersonal conflict, qualitative job insecurity and communication. Therefore, communication is added to this study as a moderator.

This study attempts to discover the impacts of interpersonal conflict and qualitative job insecurity on burnout and the moderating effect of communication on these job demands' impacts on burnout. Thus, firstly, we aim to explore the role of interpersonal conflict and qualitative job insecurity (predictors) on predicting employees' burnout. Secondly, we analyse the moderating role of communication of interpersonal conflict and qualitative job insecurity on burnout.

In the next chapter, the literature review is presented along with related concepts, definitions and a research gap analysis to support the hypotheses. Afterwards, the methodology and results are presented and demonstrated. Finally, we discuss the findings and look ahead to future research.

#### II. Literature review

### Overview of Burnout and the JD-R Model

Burnout is defined as a disorder associated with occupations when people have interactions with each other. It is a prolonged process of exhaustion and disinterest in one's work that contributes to negative outcomes in the workplace (Maslach, Schaufeli & Leiter, 2001). Burnout has three dimensions: exhaustion, depersonalisation and reduced personal accomplishment (Maslach, 1998). Exhaustion is considered the most obvious manifestation of burnout syndrome (Kim, 2018), and it occurs before depersonalisation and reduced personal accomplishment (Hobfoll, 1989; Hobfoll & Freedy, 1993). Moreover, exhaustion as one of the dimensions of burnout symptoms is the core and the most common symptom of burnout (Maslach et al., 2001; Cox, Tisserand & Taris, 2005); it refers to both emotional drain and physical overextension (Bianchi, Schonfeld, & Laurent, 2015). Therefore, exhaustion as a symptom of sub-scale for measuring burnout is used in the present study.

Several contributions have been made in the literature in order to understand and explain how burnout develops. The first contributes came from the Stress and Job Design Literature. In 1979, Karasek introduced the demand-control model that is considered a classic and influential model. In the demand-control model, Karasek discussed the relationship and interaction between job demand and decision attitude (one of the elements of job resources) (Karasek, 1979). Karasek found that high job demand and low control cause stress. Later, Hackman and Oldham(1980) suggested the job characteristics model, which includes core job characteristics (e.g. feedback from employer, skill variety, etc.). In 1996, the effort-reward imbalance model was announced, which includes an examination of the specific variable of reward and its relation with the effort invested by the worker. This model emphasized that stress would develop when the person invested high effort and received low rewards. More recently, the comprehensive JD-R theory has been improved by Schaufeli and Bakker.

The JD-R model has become the most popular and cited model among many researchers (Schaufeli & Taris, 2014).

There are some similarities and differences between the JD-R model and the aforementioned earlier models for predicting well-being. As for similarities, all the models introduce the role of job demands and resources in affecting burnout. As for differences, the JD-R model is more comprehensive compared to the earlier models for predicting well-being. As can be seen in Figure 1, the JD-R model has two distinct psychological processes. In the first health impairment process, high job demands normally lead to burnout and negative outcomes, such as turnover intention for the organisation and mental problems for individuals. While in the motivational process, abundant job resources are positively related with work engagement, people feel engaged and have an excellent performance at work, fostering a positive outcome. Job resources buffer the negative impacts of the job demands on burnout and also contribute to positive work engagement and lead to positive outcomes as well (Baker, Demerouti & Euwema, 2005; Schaufeli & Taris, 2014; Schaufeli, 2017). The study of Baker et al. (2005) also proved that job demands had a weaker relationship or no relationship with burnout in cases where job resources were available at work. Additionally, it was observed that during an intervention process, only abundant job resources could contribute to the work engagement. Moreover, the JD-R model is more flexible for testing any job demands and job resources under any work settings that will influence employees' health and well-being. In addition, the JD-R model is more heuristic for exploring 'how' different job characteristics can influence one's well-being (Schaufeli & Taris, 2014). Therefore, the JD-R model can pave the way for inspiring people to predict burnout and improve their well-being in their personal lives or within an organisation, aiming to explain burnout but also engagement and the consequences for health and performance (Schaufeli & Taris, 2014).

In the JD-R model, job demands include negative 'characteristics' that one will have to fulfil in the workplace (Schaufeli,2017), i.e. 'Those physical, social, or

organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs' (Demerouti, Bakker, Nachreiner & Schaufeli, 2001, p. 501). Such examples are work overload, interpersonal conflict and emotional demands, which can eventually contribute to burnout if the job demands are high and continuous in the workplace (Schaufeli & Taris, 2014; Schaufeli, 2017). Job resources, on the other hand, are the 'factors' which are positive. 'Those physical, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands and the associated physiological and psychological costs; (c) stimulate personal growth and development' (Demerouti et al., 2001, p. 501); examples are support from different levels (co-workers, supervisors or social), team effectiveness and personal resources (Schaufeli & Taris, 2014).

In a more specific scope within the JD-R model, some variables could be seen as moderators to decrease the negative impacts of the job demands or to increase positive outcomes via job resources (Bakker & Demerouti, 2007; Auh, Menguc, Spyropoulou & Wang, 2016). In a study of Chinese service employees (Auh, et al., 2016), researchers found that customer service feedback (job resource) buffered the positive effects of closely monitoring burnout.

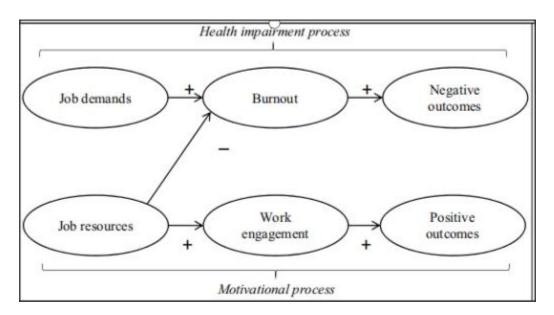


Figure 1. Job demands-resources model

According to prior meta-analysis of the JD-R model and burnout, job demands, job resources, organisational attitudes and measures are all associated with each dimension of burnout (exhaustion, depersonalisation, and reduced personal accomplishment) (Alarcon,2011). Job demands such as negative work environment affect burnout; characteristics of a negative work environment include low social support, low reward, high workload and job insecurity (Aronsson et al., 2017). Job resources such as autonomy, job control, supervisor and co-worker support, feedback, opportunity for development and participation in decision making may reduce burnout levels (Crawford, LePine & Rich, 2010).

This study focuses on the exhaustion of Chinese employees. In previous studies with Chinese samples, most employees who had problems with well-being worked in the service industry or other emotionally demanding industries. Others worked in industries with negative work environments. The occupations of Chinese employees include nurses (Wang, Liu, Zou, Hao & Wu, 2017), manufacturing workers or managers (Huo & Boxall, 2017), secondary school teachers (Liu & Cheung, 2015), coal miners (Li & Wang, 2009) and flight attendants (Yang, Johnson, Zhang, Spector & Xu, 2013). Job resources (e.g. rewards, support from supervisors and co-workers, leadership, personal resources) have been found to be positively related to work engagement and negatively related to burnout (Law & Sun, 2014; Wang, Huang & You, 2016; Wang et al., 2017; Huo & Boxall, 2017). Job demands such as work load, interpersonal conflict, emotional demands and work-home conflict were related to burnout (Yang et al., 2013; Li, Jiang, Yao & Li, 2013; Liu & Cheung, 2015).

In recent years, some studies focused on Chinese immigrant workers have found that most Chinese immigrants worked in the informal economy sector at small and family-owned firms, restaurants, tourist stores, laundries and clothing stores (Oliveira Catarina Reis, 2003). Most of them experienced high work demands, long working hours, low pay and negative working conditions, leading to burnout (Schaufeli, 2017; Moyce & Schenker, 2018).

We selected empirical studies mainly from recent years (Table 1) to gain insight into the possible gap between empirical studies.

Table 1: Overview of selected empirical studies on job demands and resources as burnout predictors.

		European (6 studies), North		
		American(1 study), South		Chinese
		American (2 studies) &		(12 studies)
		Australian (1 study)		
Variables covered		Authors		Authors
Work Overload	√	Bakker, Demerouti & and Verbeke (2004); Hakanen, Seppälä & Peeters (2017)	√	Jiang, Wang & Crawford (2008)
Interpersonal Conflict	<b>√</b>	Jaramillo, Mulki & Boles (2011)	<b>√</b>	Yang, Johnson, Zhang, Spector & Xu(2013)
Emotional Demands	√	Bakker, Demerouti & Verbeke (2004); Hakanen, Seppälä & Peeters (2017)	√	Li, Jiang, Yao & Li (2013)
Workplace Bullying	<b>√</b>	McGregor, Magee, Caputi & Iverson (2016)	<b>√</b>	Li & Zhang (2010)
Time Pressure	<b>√</b>	McGregor, Magee, Caputi & Iverson (2016)	<b>√</b>	Jamal (2005)
Work-Home	<b>√</b>	Bakker, Demerouti & Verbeke (2004); van	<b>√</b>	Liu & Cheung (2015)

Conflict		Zoonen, Verhoeven &			
		Vliegenthart (2017)			
Payment	√	Aronsson et al. (2017)	√	Qiao & Wilmar (2011); Huo & Boxall (2017); Wang, Liu, Zou, Hao & Wu (2017)	
Support (supervisor, co-workers)	√	Bakker, Demerouti & Verbeke (2004); McGregor, Magee, Caputi & Iverson (2016)	√	Huo & Boxall (2017)	
Leadership	√	McGregor, Magee, Caputi & Iverson (2016)	√	Jiang, Law & Sun, (2014); Liu & Cheung (2015)	
Personal Resources	√	Corso de Zúñiga,  Moreno-Jiménez,  Garrosa, Blanco-Donoso  & Carmona-Cobo (2019)	√	Wang, Huang & You (2016)	
Autonomy	√	Bakker, Demerouti & Verbeke (2004)	√	Jin, Sun, Jiang, Wang & Wen (2018)	
Qualitative Job Insecurity	0	Callea, Lo Presti, Mauno & Urbini (2019)	0	0	
Communication	<b>√</b>	Kim,&Lee(2009) van Zoonen,Verhoeven & Vliegenthart (2017)	X	X	

Note: "\" means variables have been already studied; "\times" means variables have not been studied; "\" means variables have been included in a few of the empirical studies.

The chosen empirical studies in Table 1 are from Europe, Australia, North and South America and China. As for the studies with non-Chinese participants, it can be seen in the study of Bakker et al. (2004) that the three variables (workload, emotional demands and work-home conflict) were found to have been associated with in-role performance, leading to burnout. The job resources in Bakker's study are autonomy, possibilities development and social support. These resources all have an effect on engagement and extra-role performance. A study conducted in Peru with private school teachers found that personal resources (e.g. hardiness) mediated the relationship between job resources and engagement and had a negative association with burnout (Corso de Zúñiga, Moreno-Jiménez, Garrosa, Blanco-Donoso & Carmona-Cobo, 2019). A study of Finnish dentists conducted by Hakanen, Seppälä & Peeters (2017) found the moderating role of job crafting in affecting burnout and also found that work overload and emotional dissonance would lead to burnout. As for the study of working Australians conducted by McGregor, Magee, Caputi & Iverson (2016), job demands included workplace bullying, time pressure and work-family conflict; these variables were indirectly related to burnout with lower job resources (leadership). Job resources such as leadership and social support were indirectly related to work engagement. A study of employees working for various organisations concluded that efficient communication was related to work engagement; however, too much communication (social techniques) could trigger work-life conflict and lead to burnout (van Zoonen, Verhoeven & Vliegenthart, 2017). A study of Italian employees of small- and medium-sized enterprises (Callea, Lo Presti, Mauno & Urbini, 2019) found that qualitative job insecurity could affect well-being. Meanwhile, according to a study with employees from various Lithuanian organizations, qualitative job insecurity had effects on job satisfaction and organisational commitment (Urbanaviciute, Lazauskaite-Zabielske, Vander Elst,

Bagdziuniene & De Witte, 2015). The Chinese studies and the studies from Europe, North America, South America and Australia concerned largely the same variables. However, only a few studies have studied the role of communication with Chinese employees working abroad, and few studies have included qualitative job insecurity with employees (Chinese or otherwise), especially Chinese immigrants. A study with Chinese immigrants discussed only quantitative job insecurity (Qiao & Wilmar, 2011), not qualitative job insecurity. To sum up, there are few studies that have combined the variables of interpersonal conflict (JD), communication (moderator) and qualitative job insecurity (JD). In addition, few studies have covered Chinese employees working abroad.

## **Interpersonal Conflict with Burnout (Exhaustion)**

Interpersonal conflict is one of the job demands that makes people feel stressed and leads to exhaustion (Beheshtifar & Zare, 2013; Schaufeli & Taris, 2014; Schaufeli, 2017). Interpersonal conflict is defined as a process in which an individual or a group frustrates or tries to frustrate one another to attain a goal (Beheshtifar & Zare, 2013). Thus, in a diverse workplace, differences in behaviour, attitudes, values, etc. may be more likely lead to interpersonal conflict (Elsayed-Elkhouly, 1996, cited in Beheshtifar & Zare, 2013). In interpersonal conflict, people may experience disagreements, negative emotions or interference between different individuals. These negative consequences can contribute to severe outcomes both in individuals (psychological and physical outcomes) or organisations (e.g., turnover intention, absenteeism) (Barki & Hartwick, 2004; Le Blanc, Jonge & Schaufeli, 2008). If no resolutions are undertaken to cope with interpersonal conflict, employees will experience burnout.

Nowadays, several studies have taken a close look at interpersonal conflict and burnout. Exhaustion is one of the major components that explains burnout. Thus, in this study, we choose to use exhaustion to measure burnout. Some empirical studies about interpersonal conflict and burnout have been conducted. For instance, a study conducted with a Dutch sample of seven secondary schools found that interpersonal conflict had a negative effect on burnout and was the starting point for prevention of negative outcomes (Demerouti et al., 2010). Jaramillo, Mulki and Boles (2011) conducted a study with a South American sample of salespeople in the private financial sector, and this study found that interpersonal conflict was helpful in explaining job burnout (e.g. turnover intention), along with the variables of role stress and work overload. According to another study conducted with a Chinese sample in the aviation industry, a factor defined as interpersonal unfairness has negative impacts on burnout in the workplace (Yang et al., 2013). Thus, we expect that interpersonal conflict will be positively related to burnout of Chinese employees. Therefore, we set the following hypothesis:

H1: Interpersonal conflict (JD) will have a positive association with burnout (exhaustion).

## **Job Insecurity with Burnout (Exhaustion)**

Job insecurity is also a chronic stressor that influences burnout and work engagement; this influence has been observed in several studies in Europe (László et al., 2010). Job insecurity is defined as anxiety over losing one's job in the future (De Witte, Vander Elst & De Cuyper, 2015). Job insecurity is based on one's subjective perception and understanding of the possibility of losing the job (De Witte et al., 2015). In addition, job insecurity indicates a discrepancy between the current job and the threat of losing the job in the future (De Witte et al., 2015). There are two types of job insecurity: quantitative and qualitative. Quantitative job insecurity refers only to the threat of losing one's job (De Witte et al., 2015), whereas qualitative job insecurity refers to the worries over losing the values and the quality of the job. In other words, qualitative job insecurity measures the threats of losing the job's characteristics, such as salary, working conditions, career opportunities and support

of supervisors and co-workers (Urbanavičiūtė, Bagdžiūnienė, Lazauskaitė-Zabielskė, Elst & De Witte, 2015). Both types of job insecurity can have effects on psychological and physical health over time, contributing to burnout and physical problems (De Witte, Pienaar & De Cuyper, 2016). Employees may feel stressed and anxious when they are concerned about possibly losing their job. If these feelings persist, burnout will occur. Although both types of job insecurity have very important consequences for workers' well-being, research has largely neglected the idea of qualitative job insecurity (De Witte et al., 2010). People will be faced with qualitative job insecurity before they actually lose their job, thus, qualitative job insecurity comes first to quantitative job insecurity. Qualitative job insecurity is also important for a company to predict employees' well-being (Callea, Lo Presti, Mauno & Urbini, 2019). Thus, we focus on the qualitative perspective of job insecurity in this study.

Some previous studies have already shown the important role of job insecurity in predicting burnout. A study conducted with a Belgian sample in the banking sector has shown that job insecurity (i.e. qualitative job insecurity and quantitative job insecurity) was related to poor well-being, such as job dissatisfaction and burnout (De Witte et al., 2010). Another study conducted with teachers in Izmir Buca District have found that qualitative job insecurity was related to exhaustion (Çetin & Turan, 2013). A study with a Chinese sample also showed that job insecurity was negatively associated with job satisfaction and psychological health (Cheng & Chan, 2008).

It is known that the majority of immigrant workers are exposed not only to physical stressors but also to psychologically stressful work environments. For instance, immigrants receive lower salaries, work longer hours and face difficult working conditions; many of them even work in an environment that can contribute to health problems (Moyce & Schenker, 2018). Other immigrants may also contend with abuse and harassment (Figueiredo, et, al.,2018). Because the population of Chinese immigrants is increasing so rapidly, most of them have little choice when seeking employment. Chinese immigrants mostly work in restaurants, factories and other family-owned/privately owned companies. As these sectors are more likely to

have bad working conditions and low salary (Oliveira Catarina Reis, 2003; Moyce & Schenker, 2018), Chinese workers who work in these sectors may experience qualitative job insecurity, which triggers the occurrence of exhaustion in the workplace. Therefore, we expect the second hypothesis:

H2: Qualitative job insecurity (JD) will be positively associated with burnout (exhaustion).

### **Communication as a Moderator**

Communication, defined as a two-way process and an exchange of meaning (Solomon Anaeto, Olufemi Onabajo & James Osiyesi, 2012), is a major factor in the performance of employees. Communication, as one of the job resources with various forms, has the potential to reduce burnout, according to several empirical studies (Ter Hoeven, van Zoonen & Fonner, 2016; Estévez-Mujica & Quintane, 2018). The better communication is, the better impact it will have on performance. When employees have good communication with their supervisors, co-workers or subordinates, they may feel more satisfied at work. Meanwhile, when people have efficient and effective communication in the workplace, they can develop more skills and work-related knowledge, making them less anxious and stressed (Albrecht & Adelman, 1987; Kim & Lee, 2009). All of these things can help to reduce burnout.

Previous studies about communication have also revealed its moderating role on different predictors of burnout. For instance, a study conducted with social workers in California argues that good supervisory communication will buffer the negative effects of role stress on burnout. With good communication, employees have more opportunities to transmit their feelings and opinions to their supervisors and co-workers, leading to job satisfaction and less burnout (Kim & Lee, 2009). To improve employees' health, communication should facilitate cooperation between 'lower job demands' and 'abundant job resources'.

Good communication can have positive impacts on burnout in the presence of interpersonal conflict (Adu, Muah, Sanda & Sarfo, 2015). Interpersonal conflict occurs when there are misunderstandings, different mindsets or different alternatives towards one specific issue; communication could offer an opportunity for workers involved in the conflict to share information. In addition, it is a useful tool to resolve misunderstandings between workers as much as possible, thus achieving the goal of job satisfaction and reducing people's stress even when they are involved in a conflict (Goris, 2007). Therefore, especially within different culture groups, setting an efficient communication channel is very important to engaging employees. Efficient communication within different cultural groups and communication across cultural boundaries are essential. Organisations should also take measures to improve communication as much as they can to prevent their employees from experiencing job insecurity (Callea, Urbini & Chirumbolo, 2016).

Therefore, communication buffers the negative effects of interpersonal conflict on burnout. Thus, we set the hypothesis as below:

H3: Communication will moderate the relation between interpersonal conflict and burnout(exhaustion). Specifically, it is expected that communication will buffer the negative impacts of interpersonal conflict on burnout(exhaustion).

As suggested before, qualitative job insecurity is a predictor of burnout. In the qualitative perspective of job insecurity, employees are concerned about working conditions, especially payment, the possibility of development in the future and support in the workplace. Once people believe or feel that they are going to lose such job features, mental health problems are likely to occur. Continuous uncertainty regarding working conditions contributes to burnout (Hellgren et al., 1999). According to Bulutlar and Kamasak (2008), efficient communication can diminish the occurrence of doubt and reduce exhaustion. When people have good communication channels through which they can deal with the doubts and worries of their job, work stress and exhaustion related job insecurity will be eased. Another

empirical study among employees in the northwestern and southwestern United States (Jiang & Probst, 2014) found that good communication buffers the negative effects of job insecurity (qualitative job insecurity), so organisations should provide a channel for employees to discuss their salary and working conditions when they feel insecure. Doing so will provide people of different cultural backgrounds with mutual understanding and help people diminish contradictions (Robertovich, Vasilyevna & Nikolaevich, 2017); people will become less exhausted. Another study conducted by Jorfi and Jorfi (2011) found that among group managers, effective communication is positively related to better strategic alignment in organisations. Therefore, to some extent, communication is a factor which can unite supervisors, employees and organisation strategies, improving the level of alignment and making employees more engaged (Thamhain, 1992; Qiao & Wilmar, 2011)

Thus, we expect that communication also buffers the negative effects of qualitative job insecurity on employees' burnout. The hypothesis is as below:

H4: Communication will moderate the relation between qualitative job insecurity and burnout(exhaustion). Specifically, it is expected that communication will buffer the negative impacts of qualitative job insecurity on burnout(exhaustion).

### **Overall Possible Contributions**

Firstly, this study contributes to the literature by covering Chinese immigrants. As we know from the studies conducted with Chinese people in Table 1, few of these studies were focused on Chinese immigrants. Thus, we will focus on Chinese employees who work abroad in this study. Secondly, we will try to include different business sectors that Chinese employees work in. Studies in Table 1 have tapped into the service industry, which includes high job demands both physical and psychological. Various occupations include nurses, blue-collar workers, police officers, teachers and lean production workers. However, people in other working sectors might also be exposed to detrimental factors that cause burnout and become

disengaged. Thirdly, we study the joint effects of communication, interpersonal conflict and qualitative job insecurity on burnout among Chinese employees who work abroad. Several studies have universally examined job resources such as remuneration, top management support and leadership and job demands, including work overload, work-family role and interpersonal unfairness. However, few studies have combined communication, qualitative job insecurity and interpersonal conflict with a Chinese sample. Moreover, some strategies which can possibly increase engagement and reduce burnout level will be discussed later in the discussion section.

#### III. Methods

## **Participants**

The sample consists of 120 Chinese employees who work abroad. The proportion of men and women in the sample is the same: 50% of the sample is men and 50% is women. The ages range from 20 years old to over 50 years old; the majority are between 31–40 years old (35.8%). Thirty percent of the participants are 20–30 years old and 24.2% of the sample is 41–50 years old. Only a few of the participants (5%) were over 50 years old. As for the education level, 41.7% of the participants have a high school education, followed by a bachelor's degree (20.8%) and a technical school education (19.2%). While the participants work in different sectors, most of them work in the hospitality sector (45.8%). Most of them (59.20%) are clerks or services/sales workers. In terms of the ownership of the enterprises, 60.8% of the enterprises are privately owned and 29.2% of the enterprises are family-owned.

Seventy percent of the participants have a permanent working contract. Most of the participants have low seniority: 40.80% of them have worked less than two years, and the other 40.80% have been with their company for two to five years. Only 7.50% of the participants have been with their company for over 10 years.

Table 2: Sociodemographic statistics of the sample (more detailed information can be seen in the appendix).

Variables	Answers	Frequency
O 1	Male	50%
Gender	Female	50%
	20-30 Years Old	30%
	31-40 Years Old	35.80%
Age	41-50 Years Old	24.20%
	Over 50 Years Old	10%
	Below High School Education (e.g. Primary School Education, etc.)	5.80%
	High School Education	41.70%
Education Level	Technical School Education*	19.20%
	Bachelor's degree	20.80%
	Others	12.50%
	Retail, wholesale and repair	12.50%
Economic Sector	Hospitality	45.80%
	Others	41.70%
	Clerk/services and sales worker	59.20%
Occupation	Others	40.80%
Ownership of Enterprise	Family-owned	29.20%

(Organisation)	Privately owned	60.80%
	Others	10%
Seniority	Less than 2 Years	40.80%
	2–5 Years	40.80%
Semonty	6–10 Years	10.80%
	Over 10 Years	7.50%
Work Contract Type	Temporary	30%
Work Contract Type	Permanent	70%

Note: Technical school education is different from a bachelor's degree (usually a technical school education prepares people for a specific career in the future).

## **Procedure**

This study is a quantitative correlational research. Chinese employees who work abroad were invited to participate in this study via email or WeChat using the convenience sampling (Sedgwick, 2013) method. The original version of this questionnaire was in English. With the supervision of Professor Shaozhuang Ma and Professor Sílvia Silva, the original English version was translated into Chinese.

In order to analyse the well-being of Chinese employees, we selected for the sociodemographic characteristics that are concerned with the scope of our research.

In launching this survey, we avoided the period of official holidays (e.g. Christmas, New Year's, Easter, etc.) to collect the data more efficiently.

This questionnaire was distributed on the platform SurveyMonkey. In total, 120 responses were collected. All answers were completed. The data of the responses were collected anonymously over two months and were only used in this research.

The collected results were first analysed for reliability, mean, standard deviation and correlations between each other. Second, control variables such as gender, seniority and type of working contract, which may have effects on burnout, were selected for analysis. As for testing the hypotheses, simple linear regression analysis was conducted between the predictors (interpersonal conflict and qualitative job insecurity) and burnout. Afterwards, the moderator of communication was inserted into the model by first centering the variable and then running the linear regression analysis (Field, 2009; Aiken, West & Reno, 1991). In order to identify the effects of communication on the relation between predictors (interpersonal conflict and qualitative job insecurity) and exhaustion, low and high communication level were assumed separately at the end whilst running the analysis. Additionally, Process Macro was used to confirm the moderation results and to develop the moderation figure. All the analysis was done with the IBM SPSS Statistics software (Version 22).

### Measures

**Exhaustion.** In order to measure exhaustion, a subscale from the Burnout Assessment Tool (BAT) was used. BAT was developed by KU Leuven in coordination with Schaufeli (Schaufeli, De Witte, & Desart, 2019). As explained before, according to Maslach et al. (2001) and Cox, Tisserand & Taris, (2005), exhaustion is the core and most common burnout symptom. Thus, we selected this subscale from BAT. Moreover, compared with other burnout inventory surveys (for instance, MBI), BAT has fewer limitations and is easier for participants to answer (Kristensen, Borritz, Villadsen & Christensen, 2005). We selected one sub-scale exhaustion from BAT, an example of which is, 'At work, I feel mentally exhausted'. All items were scored on a five-point scale (1=Never to 5=Always). The Cronbach's alpha was 0.89.

Communication. Communication was measured with one scale from Energy Compass. A 3-item scale was used for measuring communication, according to the Job Demands-Resources Questionnaire (Schaufeli, 2015; Schaufeli, 2017). An

example item is, 'I am sufficiently informed about the developments within my organization'. Each item was measured on a five-point scale (1=Completely Disagree to 5=Completely agree). The Cronbach's alpha was 0.71.

**Interpersonal Conflict.** Interpersonal conflict was also measured with one scale from Energy Compass. An example item is, 'Do you have a personal conflict with someone at work?' Each item was scored on a five-format likert scale ranging from 1=Never to 5=Always. The Cronbach's alpha was 0.74.

Qualitative Job Insecurity. Qualitative job insecurity was measured on a 4-item qualitative scale (De Witte & De Cuyper, in progress) which aims to assess the threat of losing the valued characteristics of a job (Hellgren, Sverke & Isaksson, 1999). A study conducted by Van den Broeck, Sulea, Elst, Fischmann, Iliescu & De Witte (2014) and a study conducted by Urbanavičiūtė, Bagdžiūnienė, et al. (2015) used this scale to measure qualitative job insecurity in their studies. An example of an item is, 'I think my job will change for the worse'. All items were scored on a five-point scale (1=Totally to 5=Totally agree). The Cronbach's alpha was 0.88.

**Control variables.** In this study, one should pay attention to the sociodemographic variables that may affects exhaustion. The chosen variables were gender (0=male, 1=female), type of working contract (1=temporary, 2=permanent) and seniority (1=less than 2 years, 2=2-5 years, 3=6-10 years, 4=over 10 years). In previous studies, gender, type of working contract and seniority were related to burnout symptoms (Domínguez Alonso, López Castedo & Iglesias Vaqueiro, 2017). However, after analysing the three control variables, we found that gender and type of working contract were not significantly associated with exhaustion; only seniority was significantly associated with exhaustion. Therefore, in this study, seniority was selected for being controlled in the subsequent analysis.

## IV. Results

Means, standard deviations and correlations for all the studied variables are shown in Table 3. One can see that qualitative job insecurity and interpersonal conflict are both positively associated with exhaustion (r=.71, p < .001; r=.19, p < .05). The results also show that communication is significantly and negatively associated with exhaustion (r= -.53, p < .001), qualitative job insecurity (r= -.49, p < .001) and interpersonal conflict (r= -.20, p < .05). The control variable seniority has correlations with the other variables of communication (r=.41, p < .001), qualitative job insecurity (r= -.48, p< .001), interpersonal conflict (r= -.20, p< .05) and exhaustion (r= -.46, p< .001).

Table 3. Means, standard deviations and correlations between the variables (N=120).

Variable	Mean	Std. Dev.	1	2	3	4	5
1.Communication	3.50	,70	-				_
2.Qualitative Job Insecurity	2.80	,87	49***	-			
3.Interpersonal Conflict	2.76	,52	20*	.28**	-		
4.Exhaustion	2.76	,69	53***	.71***	.19*	-	
5.Seniority	1.85	,90	.41***	48***	20*	46***	-

Note: N=120. \*p < .05; \*\*p < .01; \*\*\*p < .001

## **Test of Hypotheses**

The hypotheses were tested using hierarchical linear regressions (Baron & Kenny, 1986; Raudenbush & Bryk, 2002).

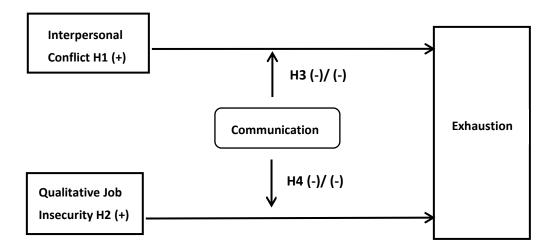


Figure 2: Research model.

For testing H1 and H3, hierarchical multiple regressions were conducted, and the control variable seniority was inserted in the model at Step 1. According to the recommendations of Baron & Kenny(1986), Aiken, West & Reno (1991) and Raudenbush & Bryk (2002), after transforming interpersonal conflict and communication (moderator) into Z scores, these two variables were inserted in the model at Step 2. Finally, to identify the interaction between communication (moderator) and interpersonal conflict (predictor) in explaining exhaustion, their interaction term was inserted at Step 3. Afterwards, SPSS Process macro(Hayes,2012) designed by Preacher and his colleagues (2012) was used to confirm the moderation results. The repetition of the analysis with the SPSS macro was done because it covers the recommended bootstrapping methods and provides the significance of conditional indirect effects at different values of the moderator variable. For a better interpretation of the results, the macro was also used to create the moderation plot. The conventional procedure was used for simple slopes estimation (see Figure 3) at one standard deviation above and below the mean of the communication variable and

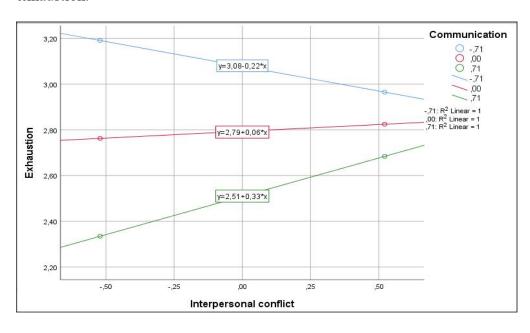
later Process Macro was used to confirm the results. The results are presented in the table 4 and figure 3.

Table 4. Hierarchical multiple regression for moderator and interpersonal conflict in predicting exhaustion.

		Exhaustion						
	Step	o 1	Step	2	Step 3			
	β	t	β	t	β	t		
Seniority	46***	-5.63	29**	-3.45	25**	-3.19		
Interpersonal Conflict			.05	.60	.05	.62		
Communication			40***	-4.81	41***	-5.29		
Interpersonal Conflict Communication	and				.28***	3.98		
$\Delta R^2$	.20***		.33***		.40***			

Notes: p < 0.05; p < 0.01; p < 0.01; p < 0.01

Figure 3. Interaction effect of interpersonal conflict and communication in predicting exhaustion.



According to the results, we found that interpersonal conflict is not associated with exhaustion when controlling for seniority ( $\beta$ =,05, p>.05). Thus, the result does not support H1 in this study, meaning that interpersonal conflict is not a predictor of exhaustion Chinese employees who work in abroad. However, communication(moderator) is associated with exhaustion ( $\beta$ =-,40, p<.001): the more communication companies have, the less exhausted employees will be. The interaction between interpersonal conflict and communication is significant ( $\beta$ =.28, p <.001). The results of the PROCESS Macro(Hays, 2012) also support the interaction when controlling for the seniority (t=3.98, p<.001). The results reveal that the slope of the relationship between lower interpersonal conflict and lower exhaustion was relatively strong (and positive) for individuals that perceived higher (more positive) communication (simple slope =,71, t= 2,8379, p<.01). Furthermore, the results reveal that the slope of the relationship between lower interpersonal conflict and lower exhaustion was relatively strong (and positive) for individuals that perceived higher (more positive) communication (simple slope =,71, t= 2,8379, p<.01). However, there was an unexpected result of a positive relation between higher interpersonal conflict and higher exhaustion when communication was also higher. This could because, employees have more communication with colleagues and have a good channel to communicate with organizations but at the same time, more interpersonal conflict will increase along with communication. Moreover, once people have been suffered from severe interpersonal conflict at work, it will be difficult to reduce exhaustion. The results also revealed that the slope was relatively weak for individuals perceiving lower (less positive) communication (simple slope =-,71, t =-1,83, p=,07). Overall, the model can explain 40% of Chinese employees' exhaustion variance ( $\Delta R^2$ =.40; p<.001). Thus, this result supports H3, which predicted that communication could moderate the relationship between interpersonal conflict and exhaustion when interpersonal conflict is not significant with exhaustion.

To test H2 and H4, we also conducted hierarchical multiple regressions. At Step 1, control variable of seniority was inserted. Then, Z scores of communication and

qualitative job insecurity were inserted in the mode at Step 2 (Aiken et al., 1991; Raudenbush & Bryk, 2002). At the end, the interaction between qualitative job insecurity and communication was inserted in the model at Step 3. Results are shown in Table 5.

Table 5. Hierarchical multiple regression for moderator and qualitative job insecurity in predicting exhaustion.

			Exhaustio	n		
	Step 1		Step 2		Step 3	
	β	t	β	t	β	t
Seniority	46***	-5.63	11	-1.48	11	-1.52
Qualitative Job Insecurity			.56***	7.36	.56***	7.34
Communication			21**	-2.89	20**	-2.75
Qualitative Job Insecurity and Communication					04	67
$\Delta~R^2$	.21***		.54***		.54***	

Notes: p < 0.05; p < 0.01; p < 0.01

Qualitative job insecurity is significantly related to exhaustion ( $\beta$ =,56, p<.001). Thus, H2 is supported. Communication is significantly associated with exhaustion as well ( $\beta$ =-,20, p<.01), but the interaction between qualitative job insecurity and communication is not significant in predicting exhaustion ( $\beta$ =-,04, p> 0.05). Therefore, H4 is not supported. The model explains approximately 54% of Chinese employees' exhaustion variance ( $\Delta$  R<sup>2</sup>=.54; p<.001) when qualitative job insecurity is a predictor.

To sum up, communication plays an important role in predicting exhaustion, and it can moderate the relationship between interpersonal conflict in predicting exhaustion once interpersonal conflict is not significant.

#### V. Discussion

# **Summary of Findings**

This study investigates whether interpersonal conflict, qualitative job insecurity and communication influence exhaustion. The results showed that interpersonal conflict is not a predictor of burnout. Qualitative job insecurity has been found to be positively related to exhaustion, but communication does not moderate the negative effects of qualitative job insecurity in the interaction of communication and exhaustion. However, in a two-way interaction of interpersonal conflict and communication, communication can have a positive effects in the interaction when interpersonal conflict is low. In addition, there is an unexpected finding that higher interpersonal conflict is positively related to higher exhaustion with higher communication.

In this study, we found that communication could have a positive impact on reducing exhaustion of Chinese employees in a direct way or in a moderating way. The results provide deeper insights on reducing Chinese immigrants' burnout. A large proportion of Chinese people work abroad, and most of them work in a smallor medium-sized company (Oliveira Catarina Reis, 2003); for instance, in this study, some participants work at a privately or family-owned company. The working conditions need to be improved as well (Moyce & Schenker, 2018). Chinese immigrants are vulnerable as they may have bad working conditions and they may lack communication channels. However, communication is one of the job resources that can have positive impacts on exhaustion. As Sharma & Bhatnagar (2017) pointed out, if there is open communication in a workplace, employees will be more engaged and the team climate will be more favourable, even if employees are under time pressure. Based on the observations in this study, communication can help to reduce the exhaustion level of Chinese workers. This result is in line with the previous studies which discovered that communication was negatively related to exhaustion (e.g. Ter Hoeven et al., 2016; Estévez-Mujica & Quintane, 2018). We also found that communication is a resource that employees can use to reduce exhaustion. While interpersonal conflict did not predict exhaustion, communication can buffer the negative impacts of interpersonal conflict and help explain exhaustion. These results partly align with previous studies that have argued that communication can buffer the negative impacts of interpersonal conflict on burnout (e.g. Adu et al., 2015). However, in our study, communication only buffers the negative impacts of interpersonal conflict on burnout when interpersonal conflict is low. However, its role in affecting qualitative job insecurity and exhaustion is not obvious, so the results cannot provide support for the hypothesis because employees may feel exhaustion once they have found out that they are losing their job features and employers may not find themselves responsible for bad working conditions, salary and so on. In sum, these findings have provided us with more knowledge concerning the impacts of communication on employees' burnout.

According to this study, we have also found that seniority is related to employees' exhaustion. Generally, seniority is negatively associated with exhaustion level. This means that people are less exhausted when they have higher seniority in the workplace. While this finding cannot be completely applied to all situations, seniority was found to be related to Chinese employees' exhaustion in this study when we tested the relationship between communication, interpersonal conflict and exhaustion.

Qualitative job insecurity is one type of job insecurity, which is defined as threats of losing one's job values and quality. Besides quantitative job insecurity solely focusing on real job loss (such as issues concerning employment and unemployment) (De Witte et al., 2015), qualitative job insecurity focuses on the job values and quality of one's job character, including getting support from supervisors and co-workers, salary or working conditions in the workplace (Urbanavičiūtė et al., 2015). As immigrants are in an unstable situation (Moyce & Schenker, 2018), companies themselves sometimes make many changes regarding the working conditions or salary. Employees are likely to experience long working hours, lower pay and bad working environments. Employees can be easily exposed to qualitative

job insecurity. Employees will become stressed, leading to exhaustion (Hellgren, Sverke & Isaksson, 1999) once they perceive that they have lost good working conditions or become worried about their current working conditions (Urbanavičiūtė et al., 2015). This study aims to discover the impacts of qualitative job insecurity on exhaustion, and the results show that qualitative job insecurity has negative impacts on exhaustion among Chinese employees. As some previous studies with Chinese samples have only investigated the negative impacts of qualitative job insecurity on predicting employees' exhaustion, this study contributes in finding the impacts of qualitative job insecurity on exhaustion.

Additionally, communication did not act in a moderating role towards qualitative job insecurity in this study. This means that when Chinese workers receive lower salaries or experience worsening working conditions, they will feel exhausted even if they have an efficient communication channel at work.

## **Theoretical Contributions**

First of all, we made efforts to find the impacts of interpersonal conflict and the other predictor of qualitative job insecurity on exhaustion. In this study, interpersonal conflict was found to be unrelated to exhaustion; in other words, it was not a predictor of exhaustion. Thus, the results did not match our expectations that employees would be exhausted when they experienced interpersonal conflict in the workplace. Moreover, these results are not in line with the previous studies showing that interpersonal conflict was related to exhaustion (e.g. Jaramillo et al., 2011; Beheshtifar & Zare, 2013; Schaufeli & Taris, 2014). Therefore, we cannot say that interpersonal conflict is positively associated with exhaustion based on our study.

As for testing the impacts of qualitative job insecurity on predicting exhaustion, we found that qualitative job insecurity was strongly related with exhaustion. For people who continuously have qualitative job insecurity, exhaustion will occur; this is the first contribution we made in this study. Qualitative job insecurity is confirmed

to be a predictor of employees' exhaustion. These findings are also in line with other previous studies which confirmed that qualitative job insecurity can influence employees' well-being and is positively related to burnout (e.g. Cheng & Chan, 2008; De Witte et al., 2010; Çetin & Turan, 2013). Thus, based on our study, qualitative job insecurity is specifically related to employees' exhaustion.

Additionally, besides analysing the impacts of the two predictors mentioned above (e.g. interpersonal conflict and qualitative job insecurity), we have also examined the variable of communication with regard to its moderating role on exhaustion.

The role of communication in predicting exhaustion has already been examined by some previous studies (e.g. Albrecht & Adelman, 1987; Kim & Lee, 2009; Ter Hoeven et al., 2016). Some of these studies have found that communication could moderate negative impacts of job demands (e.g. interpersonal conflict, role stress) and could have positive impacts on exhaustion (e.g. Kim & Lee, 2009; Adu et al., 2015). However, few studies have examined the impacts of communication on exhaustion among Chinese employees who work abroad. Based on the results of our study, we have found that communication could buffer the negative impact of interpersonal conflict on exhaustion, but only when interpersonal conflict is not a predictor of exhaustion. There is not a significant association between qualitative job insecurity and exhaustion, and communication can function as one of the job resources capable of reducing exhaustion.

In sum, qualitative job insecurity can still be added to the framework which is negatively related to Chinese employees' exhaustion. When employees are under the perception of having qualitative job insecurity, they can experience exhaustion. Additionally, we can contribute knowledge about the role of the variable of communication to the literature: communication can moderate the negative impact of interpersonal conflict and help to reduce exhaustion among Chinese employees.

## **Practical Implications**

Some practical implications about qualitative job insecurity and communication should be noted. First, the objective of this study was to discover the influence of two predictors (interpersonal conflict and qualitative job insecurity) on employees' exhaustion. Eventually, we found that only qualitative job insecurity could have a negative impact on exhaustion. Qualitative job insecurity can lead to negative consequences for both individuals and organisations. It can also lead to job dissatisfaction and burnout for individuals and turnover intention for organisations (Çetin & Turan, 2013). Therefore, to reduce burnout in employees, qualitative job insecurity must be taken into consideration. Organizations could have career planning management for employees once they might feel insecure about the working conditions or other characteristics of the job in the future. Additionally, organisations could also facilitate discussions between different groups and employees so that employees can discuss their anxiety and job expectations with their employers when employees worry about their job. To avoid exhaustion due to qualitative job insecurity, medication assurance and other professional support for employees' mental health should be implemented as well (Cetin & Turan, 2013).

Communication is the most obvious factor capable of reducing employees' exhaustion level, so it should be encouraged. As the entire immigrant environment is difficult to change, raising the awareness of employers becomes the top priority. Most Chinese workers work in private or family-owned businesses, and the features of these kinds of businesses are more personal. Generally, the behaviour and language of employers is directly related to employees' exhaustion (Jiang, Law & Sun, 2014; Hoert, Herd & Hambrick, 2018). Thus, in order to reduce or avoid employees' burnout, employers should take their own behaviours into consideration. For instance, employers should facilitate communication between employees and employers and provide sufficient support to employees, including appropriate training at work and wellness training. Also, because it is the employees themselves who absorb information from outside and from internal communication between

employers and co-workers that matters, the openness and effectiveness of communication channels are very important within an organisation. Thus, employers and organisations should take measures for adopting the use of communication technology. These technologies include internal networks, smart phones and laptops. Ter Hoeven et al. (2016) confirmed that effectiveness and accessibility of CTU (communication technology use) can reduce employees' burnout and make communication more efficient and flexible. Finally, employees should be self-aware and make an effort to improve their own communication skills (Cronin, 1990) so they can better maintain a positive mood in the workplace.

#### **Limitations and Future Research**

There are some limitations in this study. First, this study is a cross-sectional study conducted at a point of time, so it cannot test the causal relations between the predictors, the moderator and burnout (Machin & Campbell, 2005). In order to explore the causal relationship between the predictors, the moderator and exhaustion, a longitudinal study should be conducted.

Second, the data collected via the questionnaires are self-reported and thus subject to the bias of social desirability (Podsakoff, MacKenzie, Lee & Podsakoff, 2003), meaning that participants may have given answers in line with the expectations of society. Prior to filling out the questionnaire, we informed the participants of their confidentiality and anonymity. Thus, in future studies, researchers should always make certain that all answers will be confidential and anonymous. Additionally, more objective data should be used.

Third, according to the same scales format (Likert scales) for measuring different variables, participants may have given the same answers for some of the variables (Podsakoff et al., 2003). Thus, to avoid this kind of deficiency in the future, different scale formats should be used for the variables.

Fourth, this study concerns only Chinese employees who work abroad, and the variables in our questionnaire are more related to people belonging to this group (e.g. company's year of establishment, ownership of the company and type of working contract). Thus, the findings of this study may not be applicable to other groups.

### VI. Conclusions

In this study, the scope of our research is focused on finding possible predictors and moderators which can have impacts on reducing employees' exhaustion. In sum, in the current context of Chinese immigrants, communication was found to be the most influential variable to predict Chinese employees' exhaustion. In addition, qualitative job insecurity as a predictor helps explain employees' exhaustion to some extent.

Among Chinese employees, effective and efficient communication can help reduce exhaustion and lead to job satisfaction (Kim & Lee, 2009). Thus, it benefits both individuals and organisations.

On the other hand, qualitative job insecurity can have negative effects on exhaustion if employees feel they are continuously losing job features; however, people with high seniority may not be affected that much.

Therefore, individuals and organisations should take communication and qualitative job insecurity into consideration both in daily life and in the workplace. More research should be done specifically focusing immigrant workers, from different nationalities, once these are particularly vulnerable workers.

#### References

Adu, I., Muah, P., Sanda, M., & Sarfo, F. (2015). The role of conflict management in improving relationships at work: the moderating effect of communication. *Journal of Emerging Trends in Economics and Management Sciences*. 6. 367-376.

Agence France-Presse. (2018). Welcome to Portugal, the European country desperate for migrants because its population is shrinking. *South China Morning Post*, July 2018. [Online]. Available at

https://www.scmp.com/news/world/europe/article/2153400/welcome-portugal-european-country-desperate-migrants-because-its

Aiken, L. S., West, S. G., & Reno, R. R. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, Calif: Sage Publications.

Alarcon, G. M. (2011). A Meta-Analysis of Burnout with Job Demands, Resources, and Attitudes. *Journal of Vocational Behavior*, 79(2), 549–562. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ937226&site=e host-live&scope=site

Alagaraja, M., & Shuck, B. (2015). Exploring organizational alignment-employee engagement linkages and impact on individual performance: A conceptual model. *Human Resource Development Review*, *14*(1), 17–37. Retrieved from https://doi.org/10.1177/1534484314549455

Albrecht, T. L., & Adelman, M. B. (1987). Communicating Social Support. Newbury Park, CA: Sage.

American Psychical Association. [n.d.]. How stress affects your health. Available at https://www.apa.org/helpcenter/stress

Anikst, J. (2016). Q&A. Rotman Management, 90-93.

Aronsson, G., Theorell, T., Grape, T., Hammarström, A., Hogstedt, C., Marteinsdottir, I., ... Hall, C. (2017). A systematic review including meta-analysis of work environment and burnout symptoms. *BMC Public Health*, 17(1), 264. Retrieved from https://doi.org/10.1186/s12889-017-4153-7

Aula P., & Siira, K. (2007). Towards social complexity view on conflict, communication and leadership, in Hazy, J.K., Goldstein, J.A., and Lichtenstein, B.B. (eds.) Complex Systems Leadership Theory. Boston, MA: ISCE Publishing, pp. 367-384.

Aybas, M., & Elmas, S., & Dündar, G. (2018). Job Insecurity and Burnout: The Moderating Role of Employability. Vol.7.

BAKA, Ł. (2015). Does job burnout mediate negative effects of job demands on mental and physical health in a group of teachers? Testing the energetic process of Job Demands-Resources model. *International Journal of Occupational Medicine &* 

Environmental Health, 28(2), 335–346. Retrieved from https://doi.org/10.13075/ijomeh.1896.00246

Bakker, A. B., & Demerouti, E. (2007). The job demands—resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309–328.

Baker, 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. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=20074791&site=e host-live&scope=site

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.

Balducci, C., Fraccaroli, F., & Schaufeli, W. B. (2010). Psychometric properties of the Italian version of the Utrecht Work Engagement Scale (UWES-9): A cross-cultural analysis. *European Journal of Psychological Assessment*, 26(2), 143–149. Retrieved from https://doi.org/10.1027/1015-5759/a000020

Barki, H., & Hartwick, J. (2004). Conceptualizing the Construct of Interpersonal Conflict. *International Journal of Conflict Management*, *15*(3), 216–244. Retrieved fromhttp://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.909.5368&rep=rep1&type=pdf

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.

Beheshtifar, M. & Zare, E., (2013). Interpersonal Conflict: A Substantial Factor to Organizational Failure. *International Journal of Academic Research in Business and Social Sciences* May 2013, Vol. 3, No. 5 ISSN: 2222-6990

Bianchi, R., Schonfeld, I. S., & Laurent, E. (2015). Burnout–depression overlap: A review. *Clinical Psychology Review*, *36*, 28–41. Retrieved from https://doi.org/10.1016/j.cpr.2015.01.004

Boonzaier, B., Ficker, B., & Rust, B. (2001). A review of research on the Job Characteristics Model and the attendant job diagnostic survey. *South African Journal of Business Management*, *32*(1), 11. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=5238223&site=eh ost-live&scope=site

Bosman, J., Rothmann, S., & Buitendach, J.H. (2005). Job insecurity, burnout and work engagement: The impact of positive and negative affectivity. *SA Journal of Industrial Psychology*, 31(4), 48-56

- Brenninkmeijer, V., Demerouti, E., le Blanc, P. M., & van Emmerik, I. J. H. (2010). Regulatory focus at work: The moderating role of regulatory focus in the job demands-resources model. *The Career Development International*, 15(7), 708-728. http://dx.doi.org/10.1108/13620431011094096
- Brough, P., Timms, C., Siu, O., Kalliath, T., O, D. M. P., Sit, C. H., ... Lu, C. (2013). Validation of the Job Demands-Resources model in cross-national samples: Cross-sectional and longitudinal predictions of psychological strain and work engagement. *Human Relations*, 66(10), 1311–1335.
- Brough, P., Timms, C., Siu, O., Kalliath, T., O'Driscoll, M. P., Sit, C. H., & ... Lu, C. (2013). Validation of the Job Demands-Resources model in cross-national samples: Cross-sectional and longitudinal predictions of psychological strain and work engagement. *Human Relations*, 66(10), 1311-1335. doi:10.1177/0018726712472915
- Bulutlar, F., and Kamaşak, R. (2008). The relationship between organizational communication and job satisfaction: An empirical study of blue collar workers. Dumlupınar Üniversitesi Sosyal Bilimler Dergisi. 22(2). pp. 129-141.
- Bustamante, L. H. U., Cerqueira, R. O., Leclerc, E., & Brietzke, E. (2018). Stress, trauma, and posttraumatic stress disorder in migrants: A comprehensive review. *Revista Brasileira de Psiquiatria*, 40(2), 220–225. Retrieved from https://doi.org/10.1590/1516-4446-2017-2290
- Callea, A., Lo Presti, A., Mauno, S., & Urbini, F. (2019). The associations of quantitative/qualitative job insecurity and well-being: The role of self-esteem. *International Journal of Stress Management*, *26*(1), 46–56. Retrieved from https://doi.org/10.1037/str0000091
- Callea, A., Urbini, F., & Chirumbolo, A. (2016). The mediating role of organizational identification in the relationship between qualitative job insecurity, OCB and job performance. *Journal of Management Development*, 35(6), 735–746. Retrieved from https://doi.org/10.1108/JMD-10-2015-0143
- Çetin, C., & Turan, N. (2013). The relationship between qualitative job insecurity and burnout. *European Journal of Research on Education*, Special Issue: Human Resource Management, 21-28. ISSN: 2147-6284. Retrieved from http://iassr.org/journal
- Cheng, G. H. L., & Chan, D. K. S. (2008). Who suffers more from job insecurity? A meta-analytic review. Applied Psychology: *An International Review*, 57(2), 272–303. doi: 10.1111/j.1464-0597.2007.00312.x.
- Chinese HNWIs overseas. (2017). Number of overseas Chinese people 2017, by continent. Statista. Available at
- https://www.statista.com/statistics/632850/chinese-nationals-number-overseas-by-continent/

Commander, S., Heitmueller, A., & Tyson, L. (2006). Migrating workers and jobs: A challenge to the European social model? IZA Discussion Paper No.1933

Cordes, C. L., & Dougherty, T. W. (1993). A Review and an integration of research on job burnout. *Academy of Management Review*, *18*(4), 621-656. doi:10.5465/AMR.1993.9402210153 (3)

Corso de Zúñiga, S., Moreno-Jiménez, B., Garrosa, E., Blanco-Donoso, L., & Carmona-Cobo, I. (2019). Personal resources and personal vulnerability factors at work: An application of the Job Demands-Resources model among teachers at private schools in Peru. *Current Psychology*, (Preprints), 1–12. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=44561188&site=ehost-live&scope=site

Cox, T., Tisserand, M., & Taris, T. (2005). Editorial: The conceptualization and measurement of burnout: Questions and directions. *Work & Stress*, 19(3), 187–191. Retrieved from https://doi.org/10.1080/02678370500387109

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834–848. Retrieved from https://doi.org/10.1037/a0019364

Cronin, M. (1990). Communication Techniques for Individual and Organizational Coping with Job Burnout. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED327896&lang=pt-pt&site=ehost-live&scope=site

Dawson, J. F. (2014). Moderation in management research: What, why, when and how. *Journal of Business and Psychology*, 29, 1-19.

De Witte, H., De Cuyper, N., Handaja, Y., Sverke, M., Näswall, K., & Hellgren, J. (2010). Associations Between Quantitative and Qualitative Job Insecurity and Well-Being: A Test in Belgian Banks. *International Studies of Management & Organization*, 40(1), 40–56. Retrieved from https://doi.org/10.2753/IMO0020-8825400103

De Witte, H., Pienaar, J., & De Cuyper, N. (2016). Review of 30 years of longitudinal studies on the association between job insecurity and health and well-being: Is there causal evidence? *Australian Psychologist*, *51*(1), 18–31. Retrieved from https://doi.org/10.1111/ap.12176

De Witte, H., Vander Elst, T., & De Cuyper, N. (2015). Job insecurity, health and well-being. In J. Vuori, R. Blonk, & R. H. Price (Eds.), *Sustainable working lives: Managing work transitions and health throughout the life course.* (pp. 109–128). New York, NY: Springer Science + Business Media. https://doi.org/10.1007/978-94-017-9798-6 7

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands resources model of burnout. *Journal of Applied Psychology*, 86, 499–512.

Domínguez Alonso, J., López Castedo, A., & Iglesias Vaqueiro, E. (2017). Prevalence of burnout syndrome in staff of juvenile facilities: Differences according to their socio-labour context. Acta Colombiana de Psicología, 20(2), 148–157. Retrievedfromhttp://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=20 18-14572-006&site=ehost-live&scope=site

Estévez-Mujica, C. P., & Quintane, E. (2018). E-mail communication patterns and job burnout. *PLoS ONE*, *13*(3), 1–25. Retrieved from https://doi.org/10.1371/journal.pone.0193966

Fact sheets on SDGs: health targets-Mental Health. (2018). World Health Organization Regional Office foe Europe. Denmark. Available at http://www.euro.who.int/\_\_data/assets/pdf\_file/0017/348011/Fact-sheet-SDG-Mental -health-UPDATE-02-05-2018.pdf?ua=1

Field, A. (2009). Discovering statistics using SPSS (3rd. Ed.) London: SAGE Publication Ltd. ISBN:978-1-84787-906-6. Available at https://faculty.psau.edu.sa/filedownload/doc-6-pdf-a46e10627f49a5333cdcd0b70079 0f8b-original.pdf

Figueiredo, M. da C., Suleman, F., & Botelho, M. do C. (2018). Workplace Abuse and Harassment: The Vulnerability of Informal and Migrant Domestic Workers in Portugal. *Social Policy and Society*, *17*(1), 65–85.

http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=44207739&site=ehost-live&scope=site

Gaspar, S. (2017). Chinese Migration to Portugal: Trends and Perspectives. *Journal of Chinese Overseas*, *13*(1), 48–69. Retrieved from https://doi.org/10.1163/17932548-12341343

Goris, J. R. (2007). Effects of satisfaction with communication on the relationship between individual-job congruence and job performance/satisfaction. *Journal of Management Development*, 26(8), 737–752. https://doi.org/10.1108/02621710710777255

Guidroz, A. M., Wang, M., & Perez, L. M. (2012). Developing a Model of Source-specific Interpersonal Conflict in Health Care. *Stress & Health: Journal of the International Society for the Investigation of Stress*, *28*(1), 69–79. https://doi.org/10.1002/smi.1405

H. Thamhain, H. (1992). Engineering management: Managing effectively in technology-based organizations, *New York: John Wiley & Sons*, cited in Jorfi. H.& Jorfi. S. (2011).

Hackman, J. R., & Oldham, G. R. (1980). Work redesign. *Reading*, Mass: Addison-Wesley.

Hayes, A. F. (2012). Process: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf

Hakanen, J., Seppälä, P., & Peeters, M. (2017). High Job Demands, Still Engaged and Not Burned Out? The Role of Job Crafting. *International Journal of Behavioral Medicine*, 24(4), 619–627. Retrieved from https://doi.org/10.1007/s12529-017-9638-3

Hobfoll, S. (1989). Conservation of resources: A new attempt at conceptualizing stress. *The American Psychologist*, 44, 513–524.

Hobfoll, S. E., & Shirom, A. (1993). Stress and burnout in the workplace: Conservation of resources. In R. T. Golembiewski (Ed.), *Handbook of organizational behavior* (pp. 41–61). New York, NY: Dekker

Hobfoll, S., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), Professional burnout: Recent developments in theory and research (pp. 115–133). Philadelphia, PA: Taylor & Francis.

Hellgren, J., Sverke, M., & Isaksson, K. (1999). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organizational Psychology*, 8(2), 179–195. Retrieved from https://doi.org/10.1080/135943299398311

Hellgren, J., Sverke, M., & Isaksson, K. (1999). A Two-dimensional Approach to Job Insecurity: Consequences for Employee Attitudes and Well-being, *European Journal of Work and Organizational* 

Psychology, 8:2, 179-195, DOI: 10.1080/135943299398311

Here to help. Wellness Module 2: Stress and well-being. Retrieved from https://www.heretohelp.bc.ca/sites/default/files/wellness-module-2-stress-and-well-being.pdf

Hoert, J., Herd, A. M., & Hambrick, M. (2018). The Role of Leadership Support for Health Promotion in Employee Wellness Program Participation, Perceived Job Stress, and Health Behaviors. *American Journal of Health Promotion*, 32(4), 1054–1061.

Hoert, J., Herd, A. M., & Hambrick, M. (2018). The Role of Leadership Support for Health Promotion in Employee Wellness Program Participation, Perceived Job Stress, and Health Behaviors. *American Journal of Health Promotion*, 32(4), 1054-1061. doi:10.1177/0890117116677798

Hu, Q., & Schaufeli, W. B. (2011). Job insecurity and remuneration in Chinese family-owned business workers. *The Career Development International*, *16*(1), 6–19. Retrieved from https://doi.org/10.1108/13620431111107784

- Hu, Q., Schaufeli, W. B., & Taris, T. W. (2013). Does equity mediate the effects of job demands and job resources on work outcomes? An extension of the job demands-resources model. *Career Development International*, 18(4), 357-376. doi:10.1108/CDI-12-2012-0126
- Hu, Q., Schaufeli, W. B., & Taris, T. W. (2016). Extending the job demands-resources model with guanxi exchange. *Journal of Managerial Psychology*, *31*(1), 127-140. doi:10.1108/JMP-04-2013-0102
- Hu, Q., Schaufeli, W. B., & Taris, T. W. (2017). How are changes in exposure to job demands and job resources related to burnout and engagement? A longitudinal study among Chinese nurses and police officers. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 33(5), 631–644. https://doi.org/10.1002/smi.2750
- Huo, M., & Boxall, P. (2017). Lean production and the well-being of the frontline manager: the job demands resources model as a diagnostic tool in Chinese manufacturing. *Asia Pacific Journal of Human Resources*, *55*(3), 280-297. doi:10.1111/1744-7941.12152

Immigration, borders and asylum report. (2017). Foreigners and Border Service. Portugal, Available at https://sefstat.sef.pt/Docs/Rifa2017.pdf

International Labour Organization. Workplace well-being. Retrieved from https://www.ilo.org/safework/areasofwork/workplace-health-promotion-and-well-being/WCMS 118396/lang--en/index.htm

International Standard Classification of Occupations (2012). International Labour Organization Office, Geneva.

International Standard Industrial Classification of All Economic Activities Revision 4(2008), ST/ESA/STAT/SER.M/4/Rev.4 UNITED NATIONS PUBLICATION Sales No. E.08.XVII.25 ISBN: 978-92-1-161518-0

Jaramillo, F., Mulki, J. P., & Boles, J. S. (2011). Workplace Stressors, Job Attitude, and Job Behaviors: Is Interpersonal Conflict the Missing Link? *Journal of Personal Selling & Sales Management*, *31*(3), 339–356. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=63700722&site=e host-live&scope=site

Jamal, M. (2005). Personal and organizational outcomes related to job stress and Type-A behavior: a study of Canadian and Chinese employees. *Stress and Health (Formerly Stress Medicine)*, *21*(2), 129–137. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=7042765&site=e host-live&scope=site

Jiang, J. Y., Law, K. S., & Sun, J. J. M. (2014). Leader-Member Relationship and Burnout: The Moderating Role of Leader Integrity. 领导一成员关系与下属工作倦怠: 领导正直的调解作用. *Management & Organization Review*, *10*(2), 223–247.

- Jiang, L., & Probst, T. M. (2014). Organizational communication: A buffer in times of job insecurity? *Economic & Industrial Democracy*, *35*(3), 557–579. Retrieved from https://doi.org/10.1177/0143831X13489356
- Jorfi, H., & Jorfi, S. (2011). Communication Effectiveness mediates the relationship between Emotional Intelligence and Strategic Alignment. *International Conference on Sociality and Economics Development* IPEDR vol.10. IACSIT Press, Singapore
- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *The British Journal of Psychiatry*, *177*396-401. doi:10.1192/bjp.177.5.396 (1)
- Jin, X., Sun, I. Y., Jiang, S., Wang, Y., & Wen, S. (2018). The Impact of Job Characteristics on Burnout Among Chinese Correctional Workers. *International Journal of Offender Therapy and Comparative Criminology*, 62(2), 551–570. https://doi.org/10.1177/0306624X16648419
- Karasek, R. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285–306.
- Kim, H., & Lee, S.Y. (2009) Supervisory Communication, Burnout, and Turnover Intention Among Social Workers in Health Care Settings, Social Work in Health Care, 48:4, 364-385, DOI: 10.1080/00981380802598499
- Kim, Y. Y. (2018). Understanding depression: Volume 2. Clinical manifestations, diagnosis and treatment. Singapore: Springer. Retrieved from https://doi.org/10.1007/978-981-10-6577-4
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19(3), 192–207. Retrieved from https://doi.org/10.1080/02678370500297720
- László, K. D., Pikhart, H., Kopp, M. S., Bobak, M., Pajak, A., Malyutina, S., ... Marmot, M. (2010). Job insecurity and health: A study of 16 European countries. *Social Science & Medicine*, 70(6), 867–874. https://doi.org/10.1016/j.socscimed.2009.11.022
- Le Blanc, P., Jonge, J. de, & Schaufeli, W. (2008). Job stress and occupational health. In N. Chmiel (Ed.), *An introduction to work and organizational psychology: A European perspective., 2nd ed.* (pp. 119–147). Malden: Blackwell Publishing. Retrieved from
- http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2007-09171-006 &site=ehost-live&scope=site
- Li, F., Jiang, L., Yao, X., & Li, Y. (2013). Job demands, job resources and safety outcomes: The roles of emotional exhaustion and safety compliance. *Accident Analysis and Prevention*, *51*, 243–251.

- Li, J., Hung, R., Shen, H., & Gao, L. (2014). Job demands-resources model of nurses' job burnout. *Chinese Journal of Clinical Psychology*, 22(5), 881-884.
- Li, J., Wang, K.-Y., & Crawford, J. (2008). Burnout and Organizational Factors: A Study of Chinese Nurses in China. *International Employment Relations Review*, 14(1), 1–13. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=36875702&site=e host-live&scope=site

- Li, N.-W., & Wang, X.-F. (2009). The job demands-resources model of coal miners job burnout. *Chinese Mental Health Journal*, *23*(7), 515–520. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2009-11637-008 & site=ehost-live&scope=site
- Li, Y.-X., & Zhang, L. (2010). Relationship of workplace bullying with job burnout, job satisfaction and health in nurses. *Chinese Mental Health Journal*, 24(8), 625–628. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2010-18465-013 &site=ehost-live&scope=site

Liu, H., & Cheung, F. M. (2015). The role of work-family role integration in a job demands-resources model among Chinese secondary school teachers. *Asian Journal of Social Psychology*, *18*(4), 288–298. https://doi.org/10.1111/ajsp.12103

Machin, D., & Campbell, M. J. (2005). Cross-sectional and longitudinal studies. *Design of studies for medical research.* John Wiley &Sons Ltd. ISBN 0 470 84495 7

Maricuţoiu, L. P., Sava, F. A., & Butta, O. (2016). The effectiveness of controlled interventions on employees' burnout: A meta-analysis. *Journal of Occupational & Organizational Psychology*, 89(1), 1-27. doi:10.1111/joop.12099

Maslach C. (1998). A multidimensional theory of burnout. In Theories of Organizational Stress, ed. CL Cooper, pp. 68–85. Oxford, UK: Oxford Univ. Press

Maslach, C., & Jackson, S. E. (1986). Maslach Burnout Inventory manual[2nd.]. Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397. 2

McGregor, A., Magee, C. A., Caputi, P., & Iverson, D. (2016). A job demands-resources approach to presenteeism. Career Development International, 21(4), 402–418. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=39887143&site=ehost-live&scope=site

McShane, SL. and MAV, Glinow. (2008). Organizational Behaviour Fourth Edition. New York, NY: McGraw-Hill

Moyce, S. C., & Schenker, M. (2018). Migrant Workers and Their Occupational Health and Safety. *Annual Review of Public Health*, *39*351-365. doi:10.1146/annurev-publhealth-040617-013714

Muszyńska, K. (2018). A concept for measuring effectiveness of communication in project teams. *Journal of Economics & Management*, *33*(3), 63–79. Retrieved from https://doi.org/10.22367/jem.2018.33.04

Mutambudzi, M., Siegrist, J., Meyer, J. D., & Li, J. (2018). Association between effort-reward imbalance and self-reported diabetes mellitus in older U.S. workers. *Journal of Psychosomatic Research*, *104*, 61–64. Retrieved from https://doi.org/10.1016/j.jpsychores.2017.11.008

Nielsen, K., Nielsen, M. B., Ogbonnaya, C., Känsälä, M., Saari, E., & Isaksson, K. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work & Stress*, *31*(2), 101–120. Retrieved from https://doi.org/10.1080/02678373.2017.1304463

Number of Chinese people living overseas. (2017). The Statistics Portal. Available at https://statista.com/632850/chinese-nationals-number-overseas-by-continent/

Oliveira Catarina Reis (2003). Immigrants' Entrepreneurial Opportunities: The case of the Chinese in Portugal, Special Issue on Economic Growth and Innovation in Multicultural Environments.

Pate, U., and Sharafa, D. (2015), Cross-cultural communication, peace education and development in Nigeria. *The Online Journal of Communication*, Volume 1, Issue 1. Available online

https://www.researchgate.net/publication/275027035\_CROSS\_CULTURAL\_COM MUNICATIONS PEACE EDUCATION AND DEVELOPMENT IN NIGERIA

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879. https://doi.org/10.1037/0021-9010.88.5.879

Population, Instituto Nacional de Estatística. (2007). Foreign population with legal status of residence (No.) by place of residence (NUTS-2002) and Nationality. Retrieved 2009-03-18

Powell, T. C. (1992). Organizational alignment as competitive advantage. *Strategic Management Journal*, 13, 119-134.

Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference. (19-22 June, 1946). New York: World Health Organization. Available from: http://www.who.int/suggestions/faq/en/. Accessed March 21, 2017

Qiao, H., & Wilmar B. S. (2011). Job insecurity and remuneration in Chinese family-owned business workers. *Career Development International*, 16(1), 6-19.

Rahim, M. A. (2016). Reducing Job Burnout through Effective Conflict Management Strategy. *Current Topics in Management*, *18*, 201–212. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=119768342&site=ehost-live&scope=site

Raudenbush, S. W., & Bryk, A. S. (2002). Hierarchical Linear Models: Applications and Data Analysis Methods 2nd. Thousand Oaks, CA: Sage.

Robertovich, G. A., Vasilyevna, P. N., & Nikolaevich, R. I. (2017). Innovative Activity in the Formation of Cross-Cultural Communication and Self-Study Skills in the Pedagogical Higher Educational Establishment. *Journal of History, Culture & Art Research / Tarih Kültür ve Sanat Arastirmalari Dergisi*, 6(4), 381–391. Retrieved from https://doi.org/10.7596/taksad.v6i4.1182

Rodríguez-Mantilla, J. M., & Fernández-Díaz, M. J. (2017). The effect of interpersonal relationships on burnout syndrome in Secondary Education teachers. *Psicothema*, *29*(3), 370–377.Retrieved from https://doi.org/10.7334/psicothema2016.309

Salmela-Aro, K., Read, S., Minkkinen, J., Kinnunen, J. M., & Rimpelä, A. (2018). Immigrant status, gender, and school burnout in Finnish lower secondary school students: A longitudinal study. *International Journal of Behavioral Development*, 42(2), 225–236. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=44755431&lang=pt-pt&site=ehost-live&scope=site

Santos Neves, M., & Rocha-Trindade, M. B. (October 2008), "Diasporas and globalisation – The Chinese Business Community in Portugal and the integration of China into the world economy", in OLIVEIRA, Catarina Reis and RATH, Jan (eds.), Migrações Journal - Special Issue on Immigrant Entrepreneurship, October 2008, n. 3, Lisbon: ACIDI, pp. 155-179. Retrieved from https://www.om.acm.gov.pt/documents/58428/183863/Migr3\_Sec2\_Art3\_EN.pdf/9a 33bc73-996b-43f7-b26c-b888af1e3f9f

Schaufeli, W. B. (2017). Applying the Job Demands-Resources model: A 'how to' guide to measuring and tackling work engagement and burnout. *Organizational Dynamics*, 46(2), 120-132.

Schaufeli, W. B., & Bakker, A. B. (2003). Test manual for the Utrecht Work Engagement Scale. Unpublished manuscript, Utrecht University, the Netherlands. Retrieved from http://www.schaufeli.com

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315.

Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. F. Bauer & O. Hämmig (Eds.), Bridging occupational, organizational and public health: A transdisciplinary approach (pp. 43-68). New York, NY, US: Springer Science & Business Media.

Schaufeli, W. B., Shimazu, A., Hakanen, J., Salanova, M., & De Witte, H. (2017). An Ultra-Short Measure for Work Engagement: The UWES-3 validation across five countries. *European Journal of Psychological Assessment*. Retrieved from https://doi.org/10.1027/1015-5759/a000430

Schaufeli, W.B., De Witte, H. & Desart, S. (2019). Manual Burnout Assessment Tool (BAT). KU Leuven, Belgium: Unpublished internal report.

Sedgwick, P. (2013). Convenience sampling. *BMJ 2013;347:f6304* doi: 10.1136/bmj.f6304

Sharma, A., & Bhatnagar, J. (2017). Emergence of team engagement under time pressure: role of team leader and team climate. *Team Performance Management*, 23(3), 171–185. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=42646927&site=ehost-live&scope=site

Shuck, B., & Wollard, K. (2010). Employee Engagement and HRD: A Seminal Review of the Foundations. *Human Resource Development Review* 9(1) 89–110

Solomon, G. A., Olufemi, S. O., and James, B. O. (2012), Models and Theories of Communication. African Renaissance Incorporated, Maryland, USA.

Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology*, *3*(4), 356–367. https://doi.org/10.1037/1076-8998.3.4.356

Statistics Portugal (2017). Well-being index. Retrieved from https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine indbemestar

Stavroula, L., Griffiths, A., Cox, T. (2003). Work Organization and Stress: Systematic problem approaches for employers, managers and trade union representatives. Geneva: World Health Organization. Retrieved from https://www.who.int/occupational health/publications/en/oehstress.pdf

Ter Hoeven, C. L., van Zoonen, W., & Fonner, K. L. (2016). The practical paradox of technology: The influence of communication technology use on employee burnout and engagement. *Communication Monographs*, 83(2), 239–263. Retrieved from https://doi.org/10.1080/03637751.2015.1133920

The world health report (2001). Mental Health: New Understanding, New Hope. World Health Organization, Geneva, Switzerland

Tuckey, M. R., Bakker, A. B., & Dollard, M. F. (2012). Empowering leaders optimize working conditions for engagement: A multilevel study. *Journal of Occupational Health Psychology*, *17*(1), 15–27.

Urbanavičiūtė, I., Bagdžiūnienė, D., Lazauskaitė-Zabielskė, J., Elst, T. V., & De Witte, H. (2015). The Role of Career Factors in Qualitative and Quantitative Job Insecurity: A Study in Different Organizational Contexts. *International Journal of Psychology: A Biopsychosocial Approach / Tarptautinis Psichologijos Zurnalas: Biopsichosocialinis Poziuris*, (16), 23–45. Retrieved from https://doi.org/10.7220/2345-024X.16.2

Urbanaviciute, I., Lazauskaite-Zabielske, J., Vander Elst, T., Bagdziuniene, D., & De Witte, H. (2015). Qualitative job insecurity, job satisfaction, and organizational commitment: The mediating role of control perceptions. *Psihologia Resurselor Umane Revista Asociației de Psihologie Indusstrială Şi Organizațională*, 13(2), 217–231. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2016-10834-007 &site=ehost-live&scope=site

Van den Broeck, A., Sulea, C., Elst, T. V., Fischmann, G., Iliescu, D., & De Witte, H. (2014). The mediating role of psychological needs in the relation between qualitative job insecurity and counterproductive work behavior. *The Career Development International*, 19(5), 526–547. Retrieved from https://doi.org/10.1108/CDI-05-2013-0063

van Zoonen, W., Verhoeven, J. W. M., & Vliegenthart, R. (2017). Understanding the consequences of public social media use for work. *European Management Journal*, 35(5), 595–605. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=42727709&site=ehost-live&scope=site

Gudykunst, W. B. (1995). "Anxiety/uncertainty management (AUM) theory: Current status", In R. L. Wiseman (Ed.), Intercultural communication theory Thousand Oaks, CA: Sage, pp. 8-58.

Gudykunst, W. B. (1993) "Toward a theory of effective interpersonal and intergroup communication: An anxiety/uncertainty management perspective", In R. L. Wiseman, & J. Koester (Eds.), Intercultural communication competence. Newbury Park: CA: Sage, pp. 33-71.

Wang, X., Liu, L., Zou, F., Hao, J., & Wu, H. (2017). Associations of Occupational Stressors, Perceived Organizational Support, and Psychological Capital with Work Engagement among Chinese Female Nurses. *Biomed Research International*, 1-11. doi:10.1155/2017/5284628

- Wang, Y., Huang, J., & You, X. (2016). Personal resources influence job demands, resources, and burnout: A one-year, three-wave longitudinal study. *Social Behavior And Personality*, 44(2), 247-258. doi:10.2224/sbp.2016.44.2.247
- Wong, Y., & Wong, Y. (2013). Workplace guanxi and employee commitment to supervisor in Chinese international joint ventures. *Journal of Chinese Human Resource Management*, 4(1), 39-57. doi:10.1108/JCHRM-01-2013-0003
- Wu, T., Hu, C., & Yang, C. (2013). Abusive Supervision and Workload Demands from Supervisors: Exploring Two Types of Supervisor-related Stressors and their Association with Strain. *Stress & Health: Journal of the International Society for the Investigation of Stress*, 29(3), 190–198. Retrieved from https://doi.org/10.1002/smi.2440
- Wu, W., Liu, Y., Lu, & Xie, X. (2012). The Chinese indigenous psychological capital and career well-being. *Acta Psychologica Sinica*, 44(10), 1349-1370. doi:10.3724/SP.J.1041.2012.01349
- Yang, L.-Q., Johnson, R.E., Zhang, X., Spector, P.E., & Xu, S.(2013). Relations of Interpersonal Unfairness with Counterproductive Work Behavior: The Moderating Role of Employee Self-Identity. *Journal of Business and Psychology* 28(2), pp. 189-202
- Yang, H., Ming, Y., Ma, J. H., & Huo, R. M. (2017). How Do Servant Leaders Promote Engagement? A Bottom-Up Perspective of Job Crafting. *Social Behavior & Personality: An International Journal*, 45(11), 1815–1827. Retrieved from https://doi.org/10.2224/sbp.6704
- Yeh, W.-Y., Cheng, Y., & Chen, C.-J. (2009). Social patterns of pay systems and their associations with psychosocial job characteristics and burnout among paid employees in Taiwan. *Social Science & Medicine*, 68(8), 1407–1415. Retrieved from https://doi.org/10.1016/j.socscimed.2009.01.031
- Zulch, B. G. (2014). Communication: The foundation of project management. Procedia Technology, 16, 1000-1009. doi: 10.1016/j.protcy.2014.10.054
- Zweber, Z. M., Henning, R. A., & Magley, V. J. (2016). A practical scale for Multi-Faceted Organizational Health Climate Assessment. *Journal of Occupational Health Psychology*, 21(2), 250-259. doi:10.1037/a0039895

# Annexes

Annex 1. Predictors of burnout

Predictors of Burnout	Empirical Studies	Empirical Studies	
Variables (job demands-)	All Samples	Chinese Sample	
Work Overload	Bakker, Demerouti & Verbeke (2004); Hakanen, Seppälä & Peeters (2017)	Jiang, Wang & Crawford (2008)	
Interpersonal Unfairness	Jaramillo, Mulki & Boles (2011)	Yang, Johnson, Zhang, Spector & Xu (2013)	
Emotional Demands	Bakker, Demerouti & Verbeke (2004); Hakanen, Seppälä & Peeters (2017)	Li, Jiang, Yao & Li (2013)	
Workplace Bullying	McGregor, Magee, Caputi & Iverson (2016)	Li & Zhang(2010)	
Time Pressure	McGregor, Magee, Caputi & Iverson (2016)	Jamal (2005)	
Work-Home Conflict	Bakker, Demerouti & Verbeke (2004); van Zoonen, Verhoeven & Vliegenthart (2017)	Liu & Cheung (2015)	
Variables (job resources+)	)		
Payment	Aronsson et al. (2017)	Qiao & Wilmar (2011); Huo & Boxall (2017); Wang, Liu, Zou, Hao & Wu (2017)	
Support (from supervisors co-workers)	Bakker, Demerouti & Verbeke (2004); McGregor, Magee, Caputi & Iverson (2016)	Huo & Boxall (2017)	
Leadership	McGregor, Magee, Caputi & Iverson (2016)	Jiang, Law & Sun, (2014); Liu & Cheung (2015)	
Personal Resources	Corso de Zúñiga, Moreno-Jiménez, Garrosa,	Wang, Huang & You	

	Blanco-Donoso & Carmona-Cobo (2019)	(2016)
Autonomy	Bakker, Demerouti & Verbeke (2004)	e Jin, Sun, Jiang, Wang & Wen (2018)
Qualitative Job Insecurity	Callea, Lo Presti, Mauno & Urbini (2019)	0
Communication	Kim,&Lee(2009) van Zoonen, Verhoeven & Vliegenthart (2017)	×

Note: 'x' means variables have not been studied; 'o' means variables have been included in a few of the empirical studies.

Annex 2. Sociodemographic statistics of the sample

Variables	Answer	Frequency
	Male	50%
Gender	Female	50%
Age	20–30 Years Old	30%
	31–40 Years Old	35.80%
	41–50 Years Old	24.20%
	Over 50 Years Old	10%
Education level	Below High School Education (e.g. Primar School Education, etc.)	<sup>Ty</sup> 5.80%
	High School Education (12 years)	41.70%
	Technical School Education*	19.20%
	Bachelor's Degree	20.80%
	Master's Degree	7.50%

	Doctorate Degree	5%
	Manufacturing	3.30%
	Construction	4.20%
	Retail, wholesale and repair	12.50%
	Hospitality	45.80%
	Banking, real estate and financial services	2.50%
Economic Sector	Transportation, storage and distribution	11.70%
	Commercial services	8.30%
	Education	9.20%
	Healthcare, social services and law enforcement	1.70%
	Arts, entertainment, recreation and sports	0.80%
	Elementary Occupation	13.30%
	Craft or trades worker	3.30%
Occupation	Clerk/services and sales worker	59.20%
Occupation	Technician	6.70%
	Professional	7.50%
	Manager	10%
	Family-owned	29.20%
Ownership of Enterprise	Privately owned	60.80%
(Organisation)	Government-owned	6.70%
	Foreign capital enterprise	3.30%
	Less Than 2 Years	40.80%
Soniority	2–5 Years	40.80%
Seniority	6–10 Years	10.80%
	Over 10 Years	7.50%

# Predictors of exhaustion in Chinese employees

Work Type		Temporary	30%
		Permanent	70%

Note: \*Technical school education is different from a Bachelor's degree education; a technical school education usually prepares people for a specific career in the future.