

INSTITUTO UNIVERSITÁRIO DE LISBOA



Yan Feng

Ph.D. in Management, specialization in Human Resources and Organizational Behavior

Supervisor:

Doctor Nelson Ramalho, Associate Professor, ISCTE – Instituto Universitário de Lisboa



BUSINESS SCHOOL

Department of Human Resources and Organizational Behavior

## Extending the cross-cultural grounds of HRM: Thinking styles and long-term orientation matter

Yan Feng

Ph.D. in Management, specialization in Human Resources and Organizational Behavior

### Jury:

Doctor Henrique Manuel Caetano Duarte, Associate Professor with Habilitation, ISCTE – Instituto Universitário de Lisboa (President of the Jury)

Doctor Francisco Esteves, Full Professor, Mid Sweden University

Doctor Jorge Gomes, Full Professor, ISEG – Universidade de Lisboa

Doctor Sara Ramos, Assistant Professor, ISCTE - Instituto Universitário de Lisboa

Doctor Nelson Ramalho, Associate Professor, ISCTE - Instituto Universitário de Lisboa

November, 2021

# SCL INSTITUTE INSTITUTE OF LISBON

Extending the cross-cultural grounds of HRM: Thinking styles and long-term orientation matter

Yan Feng

### Acknowledgements

The completion of this dissertation is a demanding but beautiful process, from the inception of the idea about the whole project to the final version of all studies. During this period, I cannot express enough thanks to many people, especially my supervisor Professor Nelson who provided the invaluable guidance throughout the whole research.

I would first like to thank my supervisor, Professor Nelson, without him, I could not reach the final step of my Ph.D. career. He taught and guided me more than I could give him credit here. I always appreciate that it is my luckiest to meet Professor Nelson and be supervised as his Ph.D. student. He is very rigorous and professional in academic research, also with high emotional intelligence, and the most admirable is his kindness and responsibility. When reference formats were inconsistent, he was saying "We need always pay attention to all details in the paper writing." When the research results were discouraging, he was saying "Don't worry. We will come up with new ideas and solutions are always more than problems." When the paper was rejected, he was saying "Cheer up. It is common to be rejected before final success. Our paper is sufficiently good and we have many opportunities."

I would also like to acknowledge my colleague Teresa, who has a great insight and expertise in methodology and helped me a lot in model testing. Concerning data collection, I am deeply grateful to all of those who answered the online questionnaires.

Also, a sincere thanks goes to professor Sílvia Silva who reviewed and gave feedback to my annual report, as well as those reviewers who credited and gave comments to my papers submitted. Their suggestions all pushed me to broaden my thinking and helped improve my study to a higher level.

Finally, I am most thankful to my family. Their financial and emotional support is my biggest motivation to study abroad for the Ph.D. degree.

This studying period would be one of my greatest assets in life. It will cast significant and irreplaceable light to my future research work and academic career.

The scent of a rose will always stay on the hand of the giver. 1 给人玫瑰,手有余香。

Chinese proverb

<sup>&</sup>lt;sup>1</sup> It's better and happier to be a giver than a taker.

### **Abstract**

Cross-cultural research has been gaining momentum ever since the last globalization period began 40 years ago, but its relevance is not smaller even if a deglobalization period ensues. This field of research produced a myriad of constructs and measures to gauge, mostly, cultural differences within organizations and HRM. However, deeper differences have been explored in psychological literature but have not yet found full use within HRM research. These differences pertain to the cognitive and affective processing styles. Such cognitive and affective differences are often outside the conscious scrutiny of individuals and, therefore, makes them critical in the human interaction processes, which are especially important for international HRM. This research gap motivates this study that builds on the expectation that such fundamental differences have not been duly accounted for, mostly because 1) cultural values differences have been dominating the comparative studies, 2) scholars have been working with a profusion of taxonomies that do not converge, and 3) the measures for empirical use have not been tested for autochthone bias.

To fill this research gap, this thesis proposes four empirical studies. The first study systematically reviews the literature on fundamental cross-cultural comparative differences in cognition, emotion, and axiology between West and China. Based on 326 valid articles it showed the main constructs to measure relevant differences in human interaction. The second study tests, with a Chinese sample of 254 individuals, the psychometric quality of dominant western measures for these constructs. It found some were usable, but others needed to be revised for such context. Targeting HRM, the third study addresses one of the constructs (temporal horizon) by testing its role as a boundary condition in a model linking HPWS to turnover intentions. With a sample of 430 individuals in China, findings show, at the light of expectancy-valence theory, that the temporal horizon (i.e. long term orientation) matters when designing HPWS intending to retain employees. The fourth study extends this focus by exploring a three-way interaction between individual profiles (cognitive styles and personal values) with an HR-related construct (participative safety) within healthcare organizations. This conditional moderated mediation model intended to explain medical service quality through organizational citizenship behaviors. With a sample of 293 healthcare professionals, findings showed analytical thinking crossed with long-term orientation enacted the effectiveness of HR practices favoring participative safety to increase medical service quality.

Findings show a need to converge on the relevant constructs and especially on designing universally valid measures. The affective dimension might be a promising venue for further development as BEQ could not be used in its current form. Findings evidenced that fundamental individual differences other than the cultural values (namely the cognitive style) are important for international HRM and interact in such a way that commonly used explanatory models in the West may not apply at all in other settings, such as China.

**Keywords:** human resources management, analytical thinking, long term orientation, turnover intention, medical service quality, China, West

JEL Classification System codes: M12, M14

### Resumo

A investigação intercultural tem vindo a ganhar impulso desde o último período de globalização iniciado há 40 anos, mas a sua relevância não é menor ainda que um período de desglobalização ocorra. Este campo de investigação produziu uma miríade de constructos e medidas para aferir, na sua maioria, as diferenças culturais dentro das organizações e a HRM. Contudo, as diferenças mais profundas foram exploradas na literatura psicológica, mas ainda não foram plenamente utilizadas na investigação da HRM. Estas diferenças são relativas aos estilos de processamento cognitivo e afetivo. Tais diferenças cognitivas e afetivas estão frequentemente fora do escrutínio consciente dos indivíduos e, portanto, tornam-nas críticas nos processos de interação humana, que são especialmente importantes para a GRH internacional. Esta lacuna de investigação motiva este estudo, que parte da expectativa de que tais diferenças fundamentais não têm sido devidamente tidas em conta, principalmente porque 1) as diferenças de valores culturais têm dominado os estudos comparativos, 2) os académicos têm trabalhado com uma profusão de taxonomias divergentes, e 3) as medidas de utilização empírica não foram testadas quanto ao viés autóctone.

Para preencher esta lacuna de investigação, esta tese propõe quatro estudos empíricos. O primeiro estudo revê sistematicamente a literatura sobre as diferenças comparativas transculturais de natureza cognitiva, emocional e axiológica entre o Ocidente e a China. Com base em 326 artigos válidos, mostrou os constructos principais para medir as diferenças relevantes na interação humana. O segundo estudo testa, com uma amostra chinesa de 254 indivíduos, a qualidade psicométrica das medidas ocidentais dominantes para estas construções. Verificou que algumas eram utilizáveis, mas outras precisavam de ser revistas para tal contexto. Visando a GRH, o terceiro estudo aborda um dos constructos (horizonte temporal) testando o seu papel como condição limite num modelo que liga a HPWS às intenções de saída. Com uma amostra de 430 indivíduos na China, os resultados mostram, à luz da teoria da expectativavalência, que o horizonte temporal (i.e, orientação a longo prazo) é importante para desenhar a HPWS com a intenção de reter empregados. O quarto estudo alarga este foco explorando uma interação de três vias entre perfis individuais (estilos cognitivos e valores pessoais) com um constructo relacionado com os RH (segurança participativa) dentro das organizações de saúde. Este modelo de mediação moderada condicional pretendeu explicar a qualidade do serviço médico através de comportamentos de cidadania organizacional. Com uma amostra de 293

profissionais de saúde, os resultados indicaram que um pensamento analítico cruzado com uma

orientação a longo prazo promove a eficácia das práticas de RH que favorecem a segurança

participativa assim melhorando a qualidade dos serviços médicos.

Os resultados mostram a necessidade de convergir quanto aos constructos relevantes e

especialmente quanto à conceção de medidas universalmente válidas. A dimensão afetiva

poderá ser um aspeto com desenvolvimento promissor, uma vez que o BEQ não poderia ser

utilizado na sua forma atual. Os resultados demonstram que as diferenças individuais

fundamentais que vão além dos valores culturais (nomeadamente o estilo cognitivo) são

importantes para a GRH internacional e interagem de tal forma que os modelos explicativos

habitualmente utilizados no Ocidente podem não se aplicar de todo noutros contextos, tais como

a China.

Palavras-chave: gestão de recursos humanos, pensamento analítico, orientação a longo prazo,

intenção de saída, qualidade do serviço médico, China, Ocidente

Códigos do Sistema de Classificação JEL: M12, M14

χi

### 摘要

自从 40 年前上一个全球化时期开始以来,跨文化研究的势头越来越猛,但即使接下来是一个非全球化时期,其相关性也不会小。这一领域的研究产生了无数的建构与度量方法,测量判定了大部分组织和人力资源管理中的文化差异。然而,更深层次的差异已经在心理学文献中得到了探讨,但在人力资源管理研究中还没有得到充分的应用。这些差异与认知和情感的处理方式有关。这种认知和情感上的差异往往处于个人有意识的范围之外,因此,这使得它们在人际互动过程中至关重要,尤其是对国际人力资源管理。这一研究空白促使本研究从预期出发,即这种基本的差异还没有获得适当的考虑,主要原因是: 1) 文化价值观的差异一直在比较研究中占主导地位; 2) 学者们一直在使用大量的分类法,而这些分类法并不趋同; 3) 用于实证的度量方法还没有测试是否存在自体偏向。

为了填补这一研究空白,本论文进行了四项实证研究。第一项研究系统地回顾了关于中西方认知、情感和价值观的跨文化基本比较差异的文献。基于 326 篇有效的文章,研究展示了测量人类互动相关性差异的主要且相关建构。第二项研究,收集了来自中国的 254 个人样本,检验了这些建构在西方占主导地位的测量方法的心理测量质量,结果表明有些是适合的,有些需要根据情况进行修改。第三项研究以人力资源管理为目标,通过测试在连接高绩效工作系统(HPWS)和离职意向模型中作为边界条件所起的作用,强调了其中一个建构,即,时间跨度。利用来自中国的 430 个样本进行研究,结果表明,基于期望-价值理论,在设计旨在留住员工的高绩效工作系统(HPWS)时,时间维度(比如,长期导向)有作用关系。第四项研究,通过探索医疗机构中个人特征(认知风格和个人价值观导向)与人力资源相关的建构(参与性安全)之间的三方互动,延展这个焦点。这个有条件的调节中介模型旨在通过组织公民行为来解释医疗服务质量。293 名医护人员的样本研究结果显示,分析性思维与长期导向相结合,使有利于参与性安全的人力资源实践对提高医疗服务质量出现影响有效性。

研究结果表明,有必要在相关的建构,特别是在设计普遍有效的衡量方法上达成共识。情感维度可能是一个有希望进一步发展的方面因为 BEQ 不能以其现有形式使用。研究结果表明,除文化价值观之外的基本个体差异(即认知风格)对国际人力资源管理非常重要,并且以这样的方式相互影响作用,在西方常用的解释模型可能完全不适用于其他环境,例如中国。

**关键词:** 人力资源管理,分析型思维,长期导向,离职意向,医疗服务质量,中国,西方 **JEL 分类系统代码:** M12, M14

### Contents

ACKNOWLEDGEMENTS	VI
ABSTRACT	VIII
RESUMO	x
摘要	xıı
LIST OF TABLES	xvı
LIST OF FIGURES	XVII
LIST OF ACRONYMS	XVIII
CHAPTER I: GENERAL INTRODUCTION	1
CHAPTER II: CROSS-CULTURAL FUNDAMENTAL DIFFERENCES BETWEEN WEST AND	CHINA: A SYSTEMATIC
LITERATURE REVIEW (STUDY 1)	13
Abstract	13
2.1. Introduction	
2.2. METHODS	
2.2.1 Search Strategy and Protocol	
2.2.2. Eligibility Criteria	
2.2.3. Record selection procedure	
2.2.4 Data analysis	19
2.3. RESULTS	
2.3.2. Construct identification	
2.3.3. Frequency	
2.3.4. Definition	
2.3.5. Comparison between Chinese and western	
2.4. DISCUSSION AND CONCLUSION	39
CHAPTER III: MEASURING THINKING STYLES, EMOTIONAL EXPRESSIVITY, AND VALU	ES: A PSYCHOMETRIC
TEST OF INSTRUMENTS IN CHINA (STUDY 2)	44
ABSTRACT	4.4
3.1. INTRODUCTION	
3.2. LITERATURE REVIEW	46
3.2.1 The development of thinking styles	46
3.2.2 Measure development: theory of mental self-government	48
3.2.3 Emotional domain: model of emotional expressivity	50
3.2.4 Measure development: emotional expressivity questionnaire	52
3.2.5 Value domain: value survey module (VSM)	53
3.3. METHODS	
3.3.1 Measurement	
3.3.2 Data collection and analysis	
3 3 3 Samples	55

3.4. RESULTS	
3.5 CONCLUSIONS AND DISCUSSION	57
CHAPTER IV: TEMPORAL FOUNDATIONS IN MANAGEMENT: THE CASE FOR	LONG TERM ORIENTATION AND
PERFORMANCE EXPECTATIONS IN HUMAN RESOURCE MANAGEMENT (STU	DY 3)62
ABSTRACT	62
4.1. INTRODUCTION	63
4.2. LITERATURE REVIEW	
4.2.1 Temporal dimension in management: Long term orientation and Expecta	
4.2.2 HPWS and turnover intention	
4.2.3 Performance expectations, HPWS, and turnover intention	
4.2.4 Bringing together expectations and LTO	70
4.3. METHOD	
4.3.2 Sample	72
4.3.3 Measures	72
4.3.4 Measurement model	74
4.3.5 Data analysis strategy	77
4.4. RESULTS	77
4.5. DISCUSSION AND CONCLUSION	
CHAPTER V: INCREASING MEDICAL SERVICE QUALITY THROUGH PARTICIPA	TIVE SAFETY AND CITIZENSHIP
BEHAVIORS: FITTING INDIVIDUAL PROFILES WITH ORGANIZATIONAL CONT	EXT (STUDY 4)89
	•
ABSTRACT	
5.1. INTRODUCTION	
5.2. LITERATURE REVIEW	
5.2.2. Organizational Citizenship Behavior	92
5.2.3. Long-term orientation and analytical thinking	94
5.3. METHOD	
5.3.1. Data analysis strategy	
5.3.2. Procedure and sample	96
5.3.3. Measures	96
5.3.4. Measurement model and common method bias	98
5.4. Results	100
5.5. DISCUSSION AND CONCLUSION	106
CHAPTER VI: GENERAL DISCUSSION OF RESULTS AND CONCLUSIONS	109
6.1 Main findings and theoretical implications	
6.2 Practical implications	
6.4 METHODOLOGICAL IMPLICATIONS.	
6.5 LIMITATIONS OF THE EMPIRICAL STUDIES	
6.6 DIRECTIONS FOR FURTHER RESEARCH	
REFERENCES	122
APPENDIX1 - REFERENCE LIST (ARTICLES FOR STUDY 1)	169

APPENDIX 2- SCALES USED IN THE EMPIRICAL STUDIES	195
APPENDIX 3 - SPSS OUTPUT FOR STUDY 3	202
APPENDIX 4- SPSS OUTPUT FOR STUDY 4	209

### LIST OF TABLES

TABLE 1. 1	PREVIEW OF THE EMPIRICAL STUDIES	10
TABLE 2. 1	FREQUENCIES PER COGNITIVE CONSTRUCT AND PER SAMPLE	29
TABLE 2. 2	FREQUENCIES PER EMOTIONAL CONSTRUCT AND PER SAMPLE	30
TABLE 2. 3	FREQUENCIES PER VALUE CONSTRUCT PER SAMPLE	31
TABLE 3. 1	THE CLASSIFICATION OF THINKING STYLE AKIN CONCEPTS	17
TABLE 4. 1	MEASUREMENT MODEL COMPARISON	76
TABLE 4. 2	DESCRIPTIVE AND BIVARIATE STATISTICS	78
TABLE 4. 3	MODEL SUMMARY FOR DEPENDENT VARIABLE TURNOVER INTENTION	30
TABLE 4. 4	LTO TRADITION CONDITIONAL MEDIATION FOR TURNOVER INTENTION	30
TABLE 4.5	LTO PLANNING CONDITIONAL MEDIATION FOR TURNOVER INTENTION	31
TABLE 5. 1	MEASUREMENT MODELS COMPARISON	99
TABLE 5. 2	DESCRIPTIVE AND BIVARIATE STATISTICS	00
TABLE 5. 3	RESULTS OF THE MODERATED MODERATED-MEDIATION MODEL(R2=.510)	)2
TABLE 5. 4	CONDITIONAL INDIRECT EFFECT OF PARTICIPATIVE SAFETY ON SERVICE QUALITY	)4

### LIST OF FIGURES

FIGURE 1. 1 MAPPING OF CO-CITATIONS ON COGNITIVE STYLE/THINKING STYLE	7
FIGURE 2. 1 DIAGRAM FOR DATA PROCESSING	19
FIGURE 3. 1 THE CHRONOLOGICAL EVOLUTION OF THINKING STYLE	47
FIGURE 4. 1 CONCEPTUAL MODEL	71
FIGURE 4. 2 THE MODERATION OF LTO PLANNING IN THE RELATIONSHIPS BETWEEN NON-FINANCIAL PERFORMANCE AND TURNOVER.	83
FIGURE 5. 1 CONCEPTUAL MODEL	
FIGURE 5. 2 GRAPHICAL MODERATED MODERATION EFFECT	105

### LIST OF ACRONYMS

AMO Ability, Motivation, Opportunity

AVE Average Variance Extracted

CFA Confirmatory Factor Analysis

CFI Comparative Fix Index

CMIN/DF Chi- Square/Degrees of Freedom Ratio

CR Composite Reliability

EVT Expectancy-Valence Theory

HR Human Resources

HRM Human Resources Management

HPWS High Performance Working System

LTO Long Term Orientation

OCB Organizational Citizenship Behavior

RMSEA Root Mean Square Error of Approximation

SRMR Standardized Root Mean Square Residual

SPSS Statistical Package for Social Sciences

TLI Tucker-Lewis Index

VSM Values Survey Module

X<sup>2</sup> Chi-square

e.g., for example

et al., and colleagues

i.e., that is

### **Chapter I: General Introduction**

In most management literature, globalization is a background phenomenon that goes almost unquestioned, but a deeper understanding of history shows a cycle of globalization and deglobalization in the world economy (Jones, 2006). According to this author the first globalization started in 1840 until the great depression in 1929, from which a deglobalization period ensued until 1979. From this point onwards an intense globalization activity followed until the economic crisis of 2008 after which pressure has been felt towards deglobalization which is forecasted to continue (Kim et al., 2020). The pandemic came as a recognized accelerator of deglobalization (Abdal & Ferreira, 2021; Peng et al., 2021) and, although globalization is seen as a factor that brought many problems, deglobalization brings with it the specter of conflict escalation among economic powers (Komolov, 2020).

In the last globalization period (1979-2008) everyone was strongly influenced by this development changes and the quickening flow of the world events (Contractor, 2021). Academia is not an exception because as the world connected more and the fundamental differences are thought of as both opportunities as well as barriers in conducting business internationally, cross-cultural research gained a central position. It has attracted many scholars and writers doing cross-cultural explorations and discussions (Gelfand et al., 2017). Deglobalization then would be a negative pressure upon cross-cultural research interest as inferred by the single reference it deserved on a comprehensive review about cross-cultural interactions (Adler & Aycan, 2018). However, the demise of cross-cultural research under a period of deglobalization overlooks the fact that facing current technological evolution, people will always be in contact, (directly person-on-person or indirectly by means of organizations), either because they want to collaborate or because they want to compete.

The benefits from a deep understanding of cross-cultural psychology are evident to establish sustainable international cooperation and business (Bond, 2019) but its benefits are equally, if not even more, critical in guaranteeing that conflict escalation does not attain the level of mutual destruction (Keith, 2019).

The heritage from decades of cross-cultural research has left a rich body of knowledge for management (Adler & Aycan, 2018). The borders that are used to do cross-cultural comparison vary according to the focus of the scholars. Schwartz (2013) eight transnational regions anticipate many possible paired or multiple comparisons but, considering the emerging players in globalization-deglobalization dialectics, it is the West-East axis that offers more interesting findings. According to this author the West will most likely include Western European countries together with English Speaking countries while the East is mostly thought of the Confucian countries of which China is the most representative.

The cultural differences between the West and China are striking (Chen & Miller, 2010) and have always been noted ever since the first European contacts occurred (Page, 2012). For example, it has long been recognized that relational network culture prevails in east Asia, especially in China. People who want to build trust, especially for business issues with Chinese, need to start with the relationships, because making friends is given priority to making a deal. A pleasant dinner or plenty of delightful social activities might be the key successful business factor for such affective trust building (Meyers, 2014). This can be clearly reflected from literature associated with the keyword "guanxi", which is an expressive interpretation of personal interactions in China (e.g. Guo et al., 2018; Shao & Pan, 2019). People with cultural background are closely connected to each other. In the West, like Germany, cognitive trust comes from the other party's skills, achievement, as well as reliability, being a more task-based than relationship-based cooperation style (Meyers, 2014). Therefore, whether it is in business areas or in social life areas, the understanding of cultural differences is always important and matters in all communication aspects.

Cultural differences are expressed in many ways. The most intuitive is by focusing on cultural value differences like national cultural values, social values, and individual values, which are both shaped and also shapers of culture (Hamedani, 2019). These cultural values have deserved the attention of the most prominent scholars such as Geert Hofstede, Trompenaars, Globe, Inglehart, or Shalom Schwartz. Hofstede's cultural dimensions theory is regarded as the fundamental and influential framework in many cross-cultural studies focused on domains such as business and psychological interplay (Kirkman et al., 2017). Although some scholars questioned or criticized Hofstede's conceptualization and operationalization (McSweeney, 2002), the undeniable contributions of his model in both academic and practical fields have been far more commonly recognized than criticized (e.g. Kristjansdottir et al., 2017). Based on Hofstede's cultural values, the Globe (Global Leadership and Organizational

Behavior Effectiveness) project, firstly started by Robert House in 1993, made a further contribution to the theory, differentiating between values and social practices while giving priority to cross-cultural leadership (House et al., 2004). Trompenaars and Hampden-Turner (1993) focused on cross-cultural studies by classifying cultures along a mix of behavioral patterns and identifying seven value orientations, including, universalism & particularism, individualism & communitarianism, neutral & emotional, defuse & specific, achievement & ascription, sequential time & synchronic time, inner &outer-directed, among these, some overlap with Hofstede's dimensions, while others offer novel perspectives. Inglehart and Welzel (2010) argued that values are not static but instead, they change with the development of technology and economy. They constructed a famous map based on the world value survey, one dimension including survival values and self-expression values, the other dimension including secular-rational values and traditional values. More recently, Schwartz (2012) identified 10 basic values: self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism. These are classified into openness to change values, self-enhancement values, conservation values, and self-transcendence values. Irrespective of the categories used to identify cultural values differences, irrespective of its overlap or divergences, the fact remains that no author denies the fundamental contrasts between West and East, namely China, cultural values. The differences are obvious but not necessarily easy to systematically characterize.

It has long been common sense that, because of respective geographic and historical background, West and East differ not only in the aspect of behaviors and underlying values (Bond, 2010) which we might easily observe, feel, learn and adapt to, but also tacitly on the patterns of thinking, which is not as easy to understand, compared to the previously surface perceptible differences such as culture, age, or experience among others.

People who share cultural values might have similar culturally-based behaviors and cognitive thinking (Triandis, 1972). Conversely, differences at this level may be prone to misunderstandings. This kind of deep-rooted cultural differences is one of the most essential and critical challenges for world integration. International business and workforce diversification challenge global leadership and human resources and pose an important and practical issue for organizational performance in international settings (Cho et al., 2017). It is commonsense for everyone that men are from Mars and women are from Venus (Gray, 2009), and it seems that all people agree that men's thinking style is different from that of women. Then what about thinking way differences from across-cultural perspective? People from

different countries, especially distinct cultures, that are working in the same team may misunderstand each other and even think the ideas or behaviors of others are logically flawed. Misunderstandings can often occur among colleagues or between leaders and subordinates. For example, when the leader gives a fierce negative feedback to two subordinates during the working session, an American employee may chat with that manager happily as before, while a Japanese colleague may not accept and even would like to quit the job. This is similar to the consulting cases Meyer (2014) reported focusing on how the most successful managers in the world navigate the cultural mind field in a global environment. Although these fundamental differences are critical to the basic cross-cultural communication, literature is relatively poorly developed compared to the attention given to cultural value differences. Therefore, we expect that by bringing together cultural values, cognitive processes and emotion expressiveness in the organizational business settings, this research could offer theoretical novelty to broaden the horizon and deep-understanding in cross-cultural research, especially in bridging Western and Chinese research.

The achievement of Richard Nisbett and his research team made invaluable contributions to the west-east difference in the psychological domain, namely in the cognitive or thinking dimensions<sup>2</sup>. Nisbett is a famous scholar who has done several in-depth studies as to how easterners and westerns think differently and why. He conducted many experiments with his colleagues and his book "The Geography of Thought" (2003) has become one of the significant references in this line of research. He emphasized the implied differences in thinking patterns between east and west based on empirical evidence from laboratory research. His research teams studied cognitive differences between Westerners and East Asians linking these differences to the corresponding social orientation differences, cultural differences as well as linguistic and genetic distinctions (Varnum et al., 2010). Through the lens of cognitive social psychology, Nisbett contends that the Asians and Westerners have kept very distinct systems of thought for thousands of years. Westerns are more analytic, paying more attention to the object and categories to which it belongs and using rules, including formal logic, to understand and explain the world. He argued that intellectual traditions in ancient Greece emphasized analytic thought, which is defined as a detachment of the object from its context, a tendency to focus on attributes of the object in order to assign it to categories, resting in the use of formal logic, and avoidance of inconsistency. Conversely, in the East Asian cultures like China,

\_

<sup>&</sup>lt;sup>2</sup> In literature scholars often use the term "cognitive style", "thinking style", "thinking pattern" or "intellectual styles". They refer to the same underlying construct and therefore we will use it interchangeably to keep the terminology closer to the original.

individuals give prevalence to focusing on the framework of holistic and entire field, relationships, dialectical reasoning, as well as collective action (Nisbett et al., 2001; Oliveira & Nisbett, 2017).

Sternberg (1997) proposed the necessity to consider culture into the empirical research of thinking styles, although most of his significant studies concern the nature of intellectual styles, rather than the cultural differences comparison. Rooted in the combined product of cognition, personality, and activity (Grigorenko & Sternberg, 1995) people with similar levels or patterns of abilities might have very different thinking styles. Additionally, those who have similar personality characteristics might also differ in their styles of thinking (Grigorenko & Sternberg, 1995). Therefore, in a global economic system, such possible differences may be far more significant than expected, yet scholars do not agree on the full extent of such differences, especially in terms of thinking and feeling toward objects, be they social, physical or just abstract.

Additionally, the difference between West and East has also been studied from the perspective of the emotional domain which is relatively overlooked in cross-cultural research. Paul Ekman (1992) is regarded as one of the most fundamental authors about the nature of emotions from a cross-cultural perspective. His study focused on emotional facial expression. Based on empirical findings, he proposed that seven universal discrete emotions are common for all human beings (Ekman & Davidson, 1994). Albeit universal, such emotions can be differently expressed. Butler et al. (2007) found that in collectivistic cultures, people are less likely to express their own emotion, while other people, predominantly those adopting European values, less frequently suppress emotion expression. This is convergent with Meyer (2014) conclusion that Easterners such as Chinese and Japanese, seem to be more emotionally unexpressive and prefer to avoid confrontation due to the cultural preference for harmony. So, although emotions are universal, their expression is not. Different cultures may have different emotional display rules, for example, individualistic cultures place more importance on the freedom of emotion expressivity and relatively more differences among people than those in collectivistic cultures (Matsumoto et al., 2008).

Considering both the cognitive and emotional domains, as in all research fields growing at a fast pace, cross-cultural studies produced many constructs that are intended to depict comparative psychological dimensions. The vast array of constructs is expectable in a complex phenomenon such as cultural and psychological differences, however, there seems to be divergence in its use (scholars refer to the same constructs attaching difference meanings), in

the choice of wording itself (some constructs differ in name but seem to be addressing the same meaning), and overall, there is a lack of integration in this literature. Likewise, when making an analysis of a cultural phenomenon, we should care against own cultural bias. Literature has not been very successful in bringing together views from all sides, i.e. in countering the autochthone bias. The autochthone bias is critical in cultural research and truly important in business research. The expatriation challenge in international human resources is a suitable case to illustrate this. It is obvious that the management of expatriates is greatly important for organizations in building global strategic base, but some case studies showed that China and other countries in East Asian that share a Confucian culture give great priority to harmony, modesty and diligence (Lin et al., 2012). Chinese expatriates would not be much comfortable to directly give their negative comments or criticism in front of others during a business meeting. Therefore, it would be not easy for them to accept and adapt to a setting that accepts and fosters the direct disagreement or criticisms from their colleagues in host countries like The Netherlands (Meyer, 2014). Overall, there is a disarray in cross-cultural research due to the volume of constructs, their partial conceptual overlap, and scholars seemingly not being able to build a tight network, as suggested by the mapping of the akin research (Figure 1. 1). This figure is made out by use of VOSviewer software developed for scientific literature analysis and visualizing bibliometric landscapes.

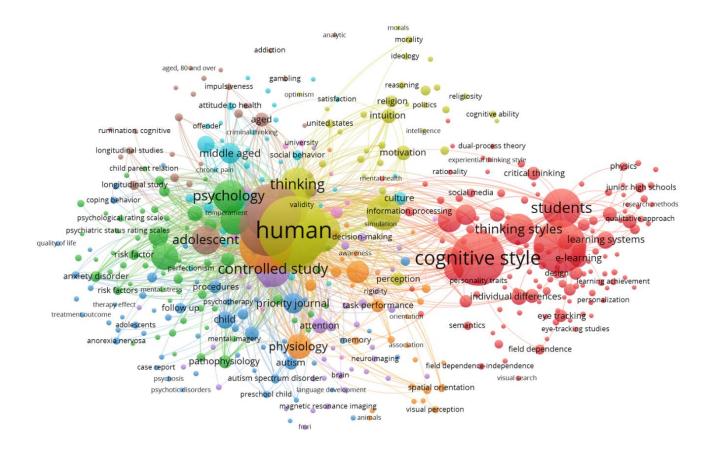


Figure 1. 1 Mapping of co-citations on cognitive style/thinking style

This challenge of finding suitable parsimony in building constructs concerning the cross-cultural differences is matched by the challenge of building suitable measures that allow researchers to go beyond the qualitative approaches. Therefore, we turn to consider hypothetico-deductive method, which has a long history since the time of Plato and widespread in different scientific disciplines such as behavioral sciences (Borsboom et al., 2020). Hypothetic-deductive method is a cornerstone of Science to test results from observations or any other inductive ways, empirically examining these consequences drawn from the hypotheses (Grimes, 1990). Following this scientific logic, in all our next studies, we use quantitative research through specific data collection to test model or theory.

Based on these motivations, thus thesis is designed to exam issues and offer answers as regards cross-cultural fundamental cognitive and emotional differences importance in addition to the cultural values for business, namely, for managing human resources. The first challenge pertains to the conceptual lack of clarity as regards the constructs. To tackle this issue, we designed study 1, based on a systematic review of literature akin to the topic. The leading

question is: "What are the constructs that better depict cognitive, emotional and value differences between Westerners and Chinese?"

Without such construct clarity, empirical studies with extant measures may suffer from the same conceptual blurredness. This is the second challenge: to exam existing measures of the constructs, mostly cognitive and emotion differences. For this purpose, we designed study 2. It focused on the quality of the most dominant measurement scales for cognitive, emotional, value by testing its validity and reliability with a Chinese sample. The current knowledge about these differences within HRM organizational context is contingent upon the quality of these measures used outside the Western context where they were originated. The leading question is thus: "What is the overall psychometric quality of the dominant measures on cognitive, emotional and value differences used in cross-cultural research?"

This knowledge is important not because it allows us for a better understanding of the true nature of human cultural differences, but most importantly because in a world that is hyper connected, the lack of such knowledge opens room for conflict, misunderstandings and ineffectiveness in interpersonal and organizational communication. The domain of international organizations is perhaps the one that experiences at the most the positive and negative effects stemming from this kind of knowledge. Within management research, this knowledge (the conceptual, the theoretical and the measures) is important so to adjust behavioral models pertaining to important variables in organizations. Among these variables, HRM literature has been targeting how to build a set of best practices to foster positive outcomes in employees, or counter negative ones such as turnover intention. Turnover is often chosen as a critical variable in HRM. With the fierce competition for human capital, employee turnover (especially within the context of talent retention) has become one of the major concerns to senior management in organizations (e.g. Gandhi et al., 2021). Many studies demonstrated the consequence of turnover especially voluntary turnover (e. g. Halter et al., 2017; Staw, 1980). High turnover rate can not only increase the huge cost for organizations but also reduce the competitive advantage of companies. To be more specific, turnover increases replacement and recruitment and other opportunity costs which implies a substantial economic loss (Halter et al., 2017). Meanwhile, actual employee turnover can downgrade the employee morale and organizational cohesion climate. All of these have a significant adverse impact on organizational effectiveness (Staw, 1980). Literature on turnover takes it as a reaction to existing situation. However, this perspective can be a product of a short-term view. Cross-cultural psychology can bring novelty to this line of research by highlighting another temporal view: long term orientation (LTO).

As we found that high-performance work systems research is now called to explore how its effectiveness depends on the interaction with context such as culture values, in study 3, we plan to turn to mainly focus on the well-known Chinese culture, trying to explore and examine its moderating role in HPWS-turnover intention model. LTO in research firstly proposed in Geert Hofstede's studies, which is rooted in Confucian value concerning about tradition, perseverance, time and future (Hofstede, 2009). This kind of values focusing on both past and future is contrasting with a short-term perspective that is only focusing on the here and now. One dimension of long-term orientation in approaching organizational behavior that is closely linked to temporal views in the long term is the idea of expectancy. Expectancy-valence theory (EVT, Vroom, 1964) is a crucial departing point to understand the important effect of expectancy in organizations when it relates to short vs long term objectives. It can help explain motivations of employee behavior, so it has developed to a basic paradigm as motivation theory in organizational behavioral studies (Wiesenfeld et al., 2017). Bringing all together suggests LTO can be an important moderator between the expectations and turnover intention.

Our study 3 is designed to address the issue about how the effectiveness of high-performance work systems (HPWS, Wright & Kehoe, 2008) depends on the interaction with the cultural context where the focus is consistently put on performance expectations which reverse the commonly published conceptual models on this topic. Within this cultural context, perceived performance can be a mediator in the relationship between HPWS and turnover intention with the plausible moderation of long-term orientation. The leading question thus is: "How does long term orientation modulate the relation between HPWS and turnover intention?".

We expect through this study to offer an account on the boundary understanding of time horizons (long-term *vs.* short-term orientation) in the implementation of HPWS related with turnover, that is, how HPWS can be more effective when long-term orientation values prevail.

This study with a priority on temporal cross-cultural dimensions is not targeting the other important dimension in cross-cultural differences: cognitive processes. Therefore, our next study 4 was designed to examine this domain. We aim to bring together literature on cognitive and value differences in organizational settings but opted to focus on a specific industry to avoid overgeneralization issues: healthcare. HRM has been keen on devising best practices to foster high service quality in healthcare (Li et al., 2008; Tsaur & Lin, 2004; West et al., 2016) which has been also related to its ability to foster a positive working climate like psychological safety (Agarwal & Farndale, 2017; Bartram et al., 2014) and enabling extra-role behaviors (Morrison,

1996). To complement the previous study, we opted to focus on these key-variables in HRM: participative organizational climate (West & Fare, 1990) and organizational citizenship behaviors (OCB, Organ, 1997). Therefore, the leading question for this study is: "How much does the intersection of cognitive style and individual values change the organizational processes linking organizational climate to service quality?".

We reasoned that the interplay between organizational context and individual features (cognitive and values) is a complex phenomenon as it occurs simultaneously, and the dimensions must be intertwined. Therefore, we designed a conceptual model that previews a three-way moderation of one central cognitive style (analytical thinking), individual values (long term orientation), and an organizational instrument (participative climate) to explain when and how OCB as a mediator in this process leads to higher service quality in hospitals.

Overall, for clarity's sake, Table 1.1 shows the sequence and main findings of the studies.

Table 1. 1 Preview of the empirical studies

	Leading question	Main findings
Study_1	What are the key comparative relevant constructs in cognitive, emotional, and cultural values domains?	Findings from a systematic literature review on 326 articles confirmed both Western and Chinese literatures diverge as regards some core constructs as well as the frequency with which cultural values, cognitive styles, and emotions are targeted.
Study_2	How valid are dominant western measures on cognition, emotion and values in Chinese context?	With a sample of 254 individuals, a valid solution for thinking styles was found only for a 7-factor structure which suggest TSI-R2 is overly complex and may not be suited for Chinese research in HRM as is. Additionally, emotional expressivity measure (BEQ) failed to achieve acceptable fit indices. VSM is more formative rather than reflective such as a latent construct.
Study_3	How important is long term orientation (as a key cultural value) in shaping the effect of HPWS on turnover intention via expected performance?	Findings show a direct and indirect effect of HPWS on turnover intention via perceived financial performance for a sample of 430 employees. However, perceived non-financial performance had a stronger effect in retaining long-term oriented employees but also the opposite effect on short-term oriented employees.
Study_4	How do cognitive style and temporal orientation interact to shape the effect of participative culture on service quality via OCB?	Findings with a sample of 293 healthcare professionals show a direct effect between participative culture and service quality which was reinforced by an indirect effect of OCB only when participants reported being more analytical and long term oriented, thus supporting the three-way interaction.

Together, these studies are expected to offer an understanding on how much one should take into consideration the cognitive and cultural values when transposing HRM practices and policies from the West to China and vice-versa, with important outcomes such as preventing turnover and improving service quality. Studies will be detailed in the ensuing chapters.

# EMPIRICAL STUDIES STUDY 1

Cross-cultural differences in cognition, emotion, and values: A two-way systematic literature review to counter autochthone bias between West and  ${\rm China}^3$ 

<sup>&</sup>lt;sup>3</sup> Submitted to an international peer reviewed indexed journal

# Chapter II: Cross-cultural fundamental differences between West and China: A systematic literature review (Study 1)

Three humble shoemakers brainstorming will make a great statesman.<sup>4</sup> 三个臭皮匠顶个诸葛亮

### **Abstract**

International business interactions, such as those observed between the West and China, very much rely on knowledge from cross-cultural research, which has developed with some degree of disjunction between publications in own language. This paper conducts a systematic literature review on cross-cultural cognitive, emotional, and value constructs in articles written in English and Chinese, so to contribute to a two-way understanding of the most salient constructs used in West and China comparison, relevant for international business settings. We conducted a PRISMA-P compliant systematic literature review on four electronic databases that were systematically searched for eligible studies including those written in both languages. Further eligibility criteria retained 326 articles out of 5810, whose content and results were synthesized and narratively analyzed. Findings confirmed both literatures diverge as regards some core constructs as well as the frequency with which cultural values, cognitive styles, and emotions are targeted. A more parsimonious but comprehensive range of constructs is suggested to apprehend the differences. The two-way systematic literature review adds a novel dimension to cross-cultural systematic reviews by including articles written both in Chinese and English. Bringing together Western and Chinese views on the cognitive, emotional, and cultural values differences foster a finer understanding of the assumptions each party has to counter the autochthone bias in the subjective representation of the I and Other in international settings.

<sup>&</sup>lt;sup>4</sup> Meaning: Joint efforts and wisdom can help solve problems.

### 2.1. Introduction

As a consequence of world integration and the emergence of large non-western economies, such as China or India, the contact and collaboration between people from different cultures and countries are becoming the norm. Effective communication is required, but it is long known that problems can easily occur due to diverse approaches and preferences of information processing and expression (Adler et al., 1986). Language barriers receive much attention, but the true challenge lies in the deep cognitive, affective, and value structure differences that escape consciousness.

Not surprisingly there is considerable literature specialized on cross-cultural comparisons, namely on the East-West divide with a focus on international business (e.g. Brett et al., 2017; Filatotchev et al., 2020; Srivastava et al., 2020; Semnani-Azad & Adair, 2013; Westjohn et al., 2017). These differences concern the ways of behavior and underlying cultural values (Bond, 2010) and tacitly the cognitive and emotional patterns. These three domains set the fundamentals for comparison but there are many divergences in literature.

An obvious one is the varying meaning of West and East. Although within-variance in the West is acknowledged, scholars focus on common grounds, and it is this commonality that literature highlights with West referring to western Europe and English-speaking countries (mostly the US). The same applies to the East but is less acknowledged. East comprehends many cultures that share some features but are largely contrasting (e.g. Japan vs. China). Schwartz's (2007) Confucian transnational region may be helpful to look for common ground because Confucian values are shared across most of the Asian countries, having China as the most representative of the Confucian culture. This divergence is not truly critical as there seems to be awareness and more clarity about what is meant by West and East.

A not-so-obvious divergence stems from autochthone bias. This bias concerns subjective divergences about own-versus-other assumptions on any dimension that could be used for comparison purposes. It fundamentally highlights the subjective nature of social judgment, especially the inescapable lenses of own cultural values (Murphy & Arenas, 2010). This has been discussed as the ethic-emic issue in cultural organizational studies and acknowledged as an important step towards building a universal science that integrates emic constructs with those prevalent in Western cross-cultural literature (Berry, 1989; Gelfand et al., 2017).

The relative disconnected development of research on West and China differences between the respective Academia (e.g. English speaking and Chinese) may be one of the sources for this autochthone bias. Some indigenous concepts such as Guanxi and Mianzi have long gained ground in Western literature (e.g. Buckley et al., 2006) other, subtle constructs such as assumptions about logical reasoning (e.g. strategic ambidexterity, Zhang et al., 2020) remain very much separated. The consequences are extensive both for business research and practice. As regards research, such bias may impoverish knowledge building and contributes to conceptual overlap. As regards business practice, in international settings, this autochthone bias (matched by the other party's allochthone bias) is a fertile ground for misunderstanding and difficulties in conducting international negotiations and agreements (Han et al., 2021; Metcalf et al., 2006). Moreover, extensive evidence is available showing that cultural lenses can hamper cross-border knowledge transfer (Bhagat et al., 2002), that merger and acquisition failure occurs not only because of strategic misfit but due to individual and group level cognitive and emotional responses to change processes (Khan et al., 2017). In the same vein, negotiation failure is due to wrong assumptions about cultural normative behaviors of all parties (Adair et al. 2009). In further exploring causes of failure, Tinsley (2012) underlined that cultural value differences contribution may be overstated as other fundamental differences can be more critical. Among these, culturally-bounded cognitive styles and emotional processes are strong factors in any international business negotiation (Han et al., 2021; Kumar, 2004; Morris & Gelfand, 2004). Thus, cognitive and emotional dimensions are at least as important as cultural values but have received less attention from an emic perspective.

Following Gelfand et al. (2017) call for exploring convergences with etic and emic constructs in cross-cultural research, we have designed a comparative study of China versus West cognitive, emotional, and cultural value features via a two-way systematic literature review to comprehend autochthone literatures.

To achieve this, the paper is structured to introduce challenges in current akin literature by conducting a PRISMA-P compliant systematic literature review (Moher et al., 2015). Findings are discussed and a conclusion is made as regards four leading questions related to challenges in current literature.

### Challenges in the current literature

Research on the topic of East-West differences has been challenged to identify constructs, what cross-cultural comparison shows about their differences, and what are the consequences of such differences. There is a long-lasting and vast collection of studies focused on devising constructs in the cognitive domain (e.g. Epstein, 1994; Grigorenko & Sternberg, 1995; Kagan, 1966;

Witkin et al., 1977), in the affective domain (e.g. Ekman & Friesen, 1971; Gross & John, 2003; Russell, 1980) or the values domain (e.g. Hofstede, 2001; Kluckhohn & Strodtbeck, 1961; Schwartz, 2007). These constructs have been originated from individual differences research within the same cultural background or by contrasting different cultures namely East and West comparison studies (e.g. Mesquita & Frjda, 1992; Nisbett et al., 2001; Peng & Nisbett, 1999). Research has converged in highlighting the intertwined nature of cognitive, affective, and cultural domains and has evolved in relating these configurations with outcomes as diverse as psychological self-esteem (e.g. Zhang & Postiglione, 2001) or decision-making (e.g. Phillips et al., 2016).

Literature in this domain is overwhelming and the speed with which knowledge advanced was only matched by the speed constructs proliferated. Such proliferation expresses differential focuses within the same scholarly communities, as found by Millroth et al. (2020) and it is a natural expression of independent research and theory, but it usually goes against the principle of parsimony and leads to conceptual overlap (Singh, 1991) and empirical redundancy (Le et al., 2010). This is a ubiquitous challenge to researchers. Another challenge pertains to interpretation bias. This concerns the classification efforts and conceptual identification being made from an intrinsically subjective perspective, as highlighted by Chan & Yan's (2007) critique of Nisbett's fundamental assertions about culture differences. Other authors have joined their voices to this critique but targeting other theoretical proposals, e.g. Hofstede's outstanding work in cultural values due to methodological options or generalizability (e.g. Baskerville, 2003; McSweeney, 2002; Nasif et al., 1991; Shaiq et al., 2011) although it has been validated by popularity but requires some substantial adjustments (Minkov, 2018). Likewise, oversimplification of reality has been a concern within this field of research (Nussbaum, 1998). Although it might be impossible to escape one own's cultural lenses when making sense of another culture, it may be helpful to bring views from both (e.g. Western and Chinese) academia so that convergences may be found, and contrasts comprehensively discussed. This means having a deep understanding of local language is critical because language itself is a product and a factor of cognitive and affective processes as well as cultural values themselves (e.g. Bloom & Bloom, 2014; Liu & Zhang, 2005).

Overall, the challenges reviewed motivate four leading research questions within the scope of West-China comparison:

1) How many and what constructs related to the specific domains under analysis (cognitive, emotion, or values) emerge in the literature?

- 2) Which are the most salient constructs based on their frequency in the papers?
- 3) How are they defined? What is the definition of the most popular and recognized constructs in the cognitive, emotional, and value domains?
- 4) What specific features were attributed or empirically found to relate to Western-Chinese differences in each domain area?

### 2.2. Methods

### 2.2.1 Search Strategy and Protocol

The four following databases were systematically searched for eligible studies: ABI Inform, Scopus, WoS, and CNKI (the most widely Chinese Integrated Knowledge Resources Database) was conducted in 2018 and updated lastly in July 2020. The search strategy and protocol were discussed and established with one professor who is a specialist in the field. The search included terms related to cognitive styles, emotions, values, west and east, China / ese, cross-culture. In order to get more precise search results, a preliminary exploratory literature search focused on the combination of keywords, namely: "west\* / east\*" OR "China" OR "Chinese" AND "cogniti\*", OR "thinking styles", OR "thinking patterns" OR "emotion\* intelligence", OR "emotion\* regulation", OR "emotion\* labor", OR "emotion\* suppression", OR "emotion\* expressivity", or OR "values", OR "cultural values" AND "cross-cultural". Due to the language context and translation difference, in the search of CNKI, we used the corresponding Chinese constructs but opted for using "east and west" OR "China and US" to replace "China" OR "Chinese". This can help us to have a rough idea about the propositions about western or eastern thinking/emotion/value dimensions by western and Chinese scholars. This final search was updated on July 31, 2020.

### 2.2.2. Eligibility Criteria

To ensure the relevance and eligibility of the analysis we assessed and selected literature according to the following specific inclusion and exclusion criteria.

• Cognition, emotions, and cultural values were the main focal dimensions. Related topic-studies must have focused on 1) definition and classifications of cognitive-based constructs (e.g. thinking styles), or emotion-based constructs (e.g. emotional regulation), or values-based constructs (e.g. collectivism) and, 2) characteristics or features of these constructs in contrasting west to China.

- Both theoretically descriptive and empirical studies published in peer-reviewed journals are eligible.
- Because cognitive, emotional, and values-based constructs are vastly studied in psychology, anthropology, philosophy, and educational areas, we have not made restrictions to research domains (e.g. Business) so to explore the whole and gain a comprehensive understanding from the systematic literature review.
- · Papers must be written either in English or Chinese.
- China has been selected as the focal geography for the East for being the predominant economy in Asia as our ultimate focus is placed on the relevance of differences for work settings. In defining the target of this study, it is evident that the frontier between west and east is not so clear that it can be identified without doubts. Therefore, building on Schwartz's (2007) classification of the transnational regions in the world, we have set as our eastern target the Confucian societies (with China being the most representative country) and as our western target western Europe and the English-speaking cluster. Overall, the western countries cover the entire west and central Europe as well as North America and Australia plus New Zealand.
- There were no restrictions for the year of publication.

### 2.2.3. Record selection procedure

We entered our defined sets of terms and all possible combinations in the search fields. The search of these terms helped us quickly locate published papers that had relevant information concerning cognition, emotional and cultural values, in addition to focusing on characterizing the western world, eastern world, or contrasting west and east.

The search yielded 5810 articles, 3381 written in English, and 2429 written in Chinese. After excluding the duplicate studies, 3675 articles remained for screening (1747 in English and 1928 in Chinese). The selection procedure comprised three steps. First, two researchers independently assessed titles and abstracts for eligibility and sorted out disagreements until reaching consensus. Overall, at this stage, 166 papers were excluded for not being published in peer-reviewed outlets, 231 due to having a medical or mental health focus, 1494 due to targeting only China or West but not both simultaneously, and 1116 for being unrelated to the study question. To help make a justified decision, the researchers scanned the full content of the remaining 668 articles to consolidate eligibility decisions. This led to further exclusion of 340

papers for being unrelated to the study question (which was not apparent in the abstract) as well as the exclusion of two papers for being written neither in English nor Chinese, as these papers had the title and abstract registered in English in the databases but were actually written in German and Russian. An iterative process developed between researchers to sort out decisions when disagreement occurred. Overall, 342 articles were excluded from the full-text analysis conducted. This resulted in 326 articles retained (126 in English and 200 in Chinese). This set of articles was independently reviewed by two researchers.

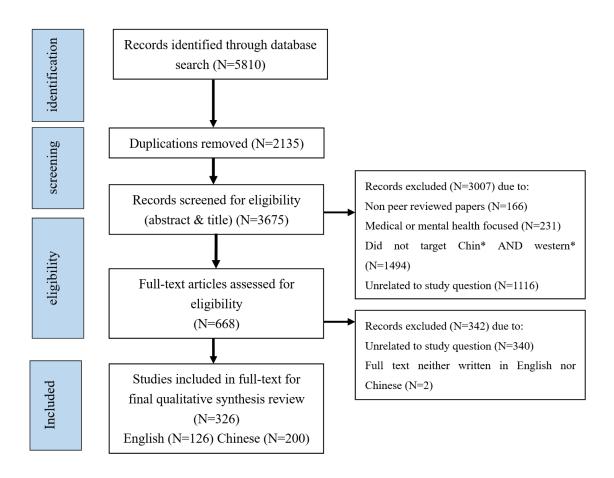


Figure 2. 1 Diagram for data processing

# 2.2.4 Data analysis

To analyze the data, a content narrative analysis of literature was conducted. Due to the heterogeneity of the constructs as well as their research aims and designs that were more

inclined to theoretical explorations in different domains, a meta-analysis was neither possible nor suitable. Following the guidance on the conduct of narrative synthesis in systematic reviews by Popay et al. (2006), we conducted the following steps: first, we created a data extraction form for each study, in which we summarized the author(s), year of publication, title, abstract (if existent), definitions of constructs, comparative features of western and Chinese. Second, we clustered the terms into two separate perspectives, i.e. east-features and west-features in terms of thinking styles, emotional expressivity, and values.

As in any qualitative analysis, subjectivity can bias findings, and to control for this flaw we have conducted two independent codifications of the papers by two raters. For viability sake we randomly extracted 10% of papers written in English and 10% written in Chinese and sent them to two qualified scholars, one fluent in Chinese and the other fluent in English, respectively We have also sent a dictionary of categories with a short explanation of what each one comprised and asked to assign the categories to each paper starting by stating if it concerned cognitive, emotion, and/or value domains and then the specific category or categories identified in each paper. To calculate inter-rater agreement, we use Cohen's Kappa coefficient (Cohen, 1960) that overcomes the biases posed by a simple percentage as it accounts for agreement due to chance. For the sets of papers separately treated, the rating of the Chinese papers converged moderately to show an interrater agreement of .629 and the English were strikingly stronger .878 (almost perfect). For the overall sample of papers, Cohen's kappa was .723 which falls in the .61 to .80 interval that Landis and Koch (1977) label as "substantial". Thus, the categories and guidelines for coding can be taken as sufficiently objective and we can rule out codification biases.

#### 2.3. Results

## 2.3.1. Descriptive information about the remaining samples used to analyze

The description separates the English and the Chinese subsamples. We retained 126 articles written in English, among them, 38 concerning the cognitive domain, 30 the emotion domain, and 62 concerning values. Among these, a couple covered two domains and one paper covered the three domains simultaneously. Most papers (N=91) report empirical research, while the remaining 35 are theoretical. 200 articles written in Chinese were included in the final selection, 151 concerning cognitive domain, four concerning emotion domains, and 50 concerning value domains. Three covered two domains, and one paper the three domains simultaneously. All the

200 included articles are theoretical in nature reporting neither quantitative nor qualitative research.

Due to the comparative focus of this study, 326 articles met this cross-cultural criterion, contrasting China and the West in at least one of the dimensions under study (cognitive, emotional, and values).

Considering the objective of this systematic literature review (to identify what are the dimensions that gather more consensus comparing Westerners with Chinese) we structured results based on the four leading research questions.

#### 2.3.2. Construct identification

This section pertains to the first question: How many and what constructs related to the specific domains under analysis emerge in the literature?

# 2.3.2.1. Cognitive domain

There are 33 constructs extracted from the set of 189 articles that focused on the cognitive domain. These constructs are mostly paired within each other as they concern qualitatively opposite meanings in bi-poles, although they may not have been explicitly reported as such. Thus, the constructs identified were:

- 1. Holistic vs. Analytical cognitive style: understanding a system by large-scale patterns, an orientation to the context or field as a whole, categorizing objects based on their thematic relations, and attributing causality to context vs. breaking it down into pieces, understand each, and putting them together, involving a detachment of the object from its context and a focus on attributes of the objects, categorizing objects taxonomically, and ascribing causality to focal factors or objects (Nisbett et al., 2001).
- 2. Linear vs. nonlinear cognitive style: preference to attend to external, tangible data and facts versus attending to internal feelings, impressions and sensations, to either process the information through logic and rational ways versus processing it through intuition and insight, respectfully (Groves et al., 2008; Vance et al., 2007).
- 3. Abstract vs. Concrete (Imagery) cognitive style: preference for interpreting information by use of reasoning and intuition to deal with subjective concepts and feelings, and perceive information that is invisible to the physical sense, vs. preference for interpreting information

that is gathered by the senses, such as visual, auditory, and tactile stimuli and to apply this information to the physical world (Gregore, 2006).

- 4. *Intuitive vs. Logical cognitive style:* relying more on feelings to make decisions, prefer unstructured situations, and solve problems holistically, vs. preferring to solve problems by breaking them into manageable parts by using analytical and quantitative techniques (Allinson & Hayes, 1996).
- 5. Dialectical Thinking vs. Logic thinking: accepting the unity of opposites, regarding the coexistence of the opposites as permanent vs. following the laws of formal logic and struggle to solve contradictions by synthesis rather than mere acceptance (Peng & Nisbett, 1999).
- 6. Field independence vs. Field dependence judgment: to perceive items with low dependency on the field vs. perceive items with a high dependency of the field (Witkin & Goodenough, 1981).
- 7. *Impulsivity vs. Reflexivity:* Tendency to respond quickly without much information or thought about an object vs. carefully consider alternative solutions, pausing to decrease the number of errors in problem-solving situations (Kagan, 1966).
- 8. Divergent vs. Convergent cognitive style: preference for concrete experiences and reflective observation, to observe rather than to act, being emotionally-oriented and creative, vs. preference for abstract conceptualization and active experimentation, to act rather than to observe (Kolb, 1984).
- 9. *Inductive vs. Deductive reasoning:* preference for establishing inferences from the particular to the general vs. establishing inferences from the general to the particular (Arslan et al., 2009).
- 10. Subjective vs. Objective: Preference for judging the truthfulness of a statement relying on own interests, attitudes and biases or relatively to the nature of the 'total context in which the assertion is made' vs. relying on external objects of facts, independently of the own interests, attitudes, biases or its global context (Gao, 2007; Wang & Liu, 2001; Zhao, 2015).
- 11. *Vague vs. Accurate cognitive style:* preference for describing and expressing thinking in ambiguous vs. clear ways (Shi, 2007; Tu, 2015; Zhao, 2014).
- 12. Relationship oriented vs. Object oriented: preference for categorizing objects based on its relations with other objects vs. based on its attributes (Ji et al., 2000).

- 13. *Functional vs. Thematic:* a tendency to categorize stimuli based on functions vs. based on their interrelationships and thematic relationships (Chiu, 1972; Rau et al., 2004).
- 14. Adaptative vs. Innovative cognitive style: the tendency to consider established procedures and try to "do things better" vs. "do things differently" when solving problems (Kirton, 1976).
- 15. Sharpening vs. Leveling: preference for focusing on differences between objects vs. focusing on similarities (Holzman & Klein, 1954).
- 16. Rule-based vs. Affect-based decision-making style: preference for an explicit rule that dictates choice behavior for specific types of situations vs. preference for the immediate, holistic, affective reaction to different choice alternatives (Weber et al., 2005).

Additionally, Sternberg's thinking styles were seen referred to as the whole set of styles or some of these taken individually, namely, monarchical, external, legislative, internal, judicial, anarchic, hierarchical, or liberal. Sternberg (1988) named the preference of processing the information as thinking styles, which is a concept at the interface between intellectual abilities and personality. Instead of proposing these thinking styles as operating in bi-poles, Sternberg proposed 13 thinking styles different from previous studies, and his categorization of thinking styles is based on a five-layered conceptualization than brings together functions (degree of autonomy in planning and judging - legislative, executive, and judicial), attention (ranging from doings tasks one-by-one to not having any systematic approach to distributing attention to the pending tasks, monarchic, hierarchic, oligarchic, anarchic), level (preference for concrete versus abstract tasks – local vs. global), scope (preference for independent from others work vs interdependent from others - internal vs. external, that relate closely to introverted and extroverted), leaning (preference for tasks that go beyond rules and are open to change vs. strictly adhere to rules and are change-averse-liberal vs conservative). The last three pairs of thinking styles have correlation coefficients smaller than 0.5 and to a certain extent have an acceptable degree of independence, which suggests they can be treated as different dimensions. Later, Zhang and Sternberg (2005) aggregated around three overarching types: Type I – more creativity-generating and complex (Legislative, Judicial, Hierarchical, Global, Liberal), Type II – more norm-favoring and simplistic (Executive, Conservative, Monarchic, Local), and Type III – contingent focus influenced by task characteristics and depending on situational factors like specific tasks and contexts (Internal, External, Oligarchic, Anarchic).

Overall, there is a substantial conceptual overlap between proposed cognitive styles because authors tend to adopt or propose constructs referring to distinct leading research. This has been documented within this line of research (e.g. Allinson & Hayes, 1996; Kozhevnikov, 2007; Kozhevnikov et al., 2014; Miller, 1991; Witkin et al., 1977; Sternberg & Grigorenko, 1997) and this situation adds confusion to the field especially because cognitive styles comprehend dimensions that are often treated as same-level constructs. For example, the Holistic cognitive style (Nisbett et al., 2001) is defined as "distributed attention and contextualized reasoning". Therefore, both "attention focus" and "field dependence" could be comprehended inside the holistic cognitive style.

According to Kozhevnikov et al. (2014), theoretical bases to identify cognitive style dimensions are scant, which creates challenges into clarifying constructs. Therefore, many of the constructs related to cognitive style have arbitrary distinctions and overlapping problems. The same authors stated that the analytical cognitive style has commonly been described in the literature as convergent, differentiated, sequential, reflective, and deductive, whereas the holistic cognitive style has been described as divergent, global, impulsive, intuitive, inductive, and creative. In the review of Blazhenkova and Kozhevnikov (2012), four constructs emerged linked to cross-cultural psychology studies between east and west, including, 1) context dependency vs. independency; 2) analytical vs. intuitive; 3) internal vs. external locus of control; 4) global vs. sequential. Meanwhile, Nisbett and Norenzayan (2002) also categorized some constructs to compare west and east, including, holistic and entire-field vs. analytic; relationships-focused vs. object-focused; intuition/dialectical reasoning vs. rules and formal logic. Within this categorization, the dimensions are often clustered in bundles which could be interpreted also as conceptual identity overlap.

Consequently, for parsimony's sake, we combined constructs based on their conceptual identity referring to the joint proposals of Kozhevnikov *et al.* (2014), Nisbett *et al.* (2001), and Sternberg (1997). We propose six overarching paired cognitive styles. To control for subjectivity (especially as the categories differentially seem to jointly relate) we have conducted an interrater agreement test with four experienced researchers with a psychology background. We sent a dictionary of categories with a short explanation of each construct and asked to assign the categories to each paper starting by stating if it concerned cognitive, emotional, and/or value domains and then the specific category or categories identified in each paper. Results showed a kappa of .775 reflecting substantial agreement. The meta-categories and respective cognitive styles are as follows:

Holistic-analytical meta-category cognitive style (holistic vs analytical; non-linear vs linear; intuitive vs logical; inductive vs deductive; field dependent vs field independent; impulsivity vs reflectivity; vague vs accurate; abstract vs concrete(imagery))

Subjective-objective cognitive style

Dialectical-formal logical meta-category cognitive style (dialectical vs formal logic; leveling vs sharpening)

Adaptative-innovative meta-category cognitive style (adaptative vs innovative; divergent vs convergent, Sternberg's thinking styles ranging from creative to norm oriented)

Relationship-object oriented meta-category cognitive style (relationship vs object oriented; functional vs thematic)

Affect vs rule-based decision-making style

#### 2.3.2.2. Emotional domain

Unlike the cognitive domain, the emotional domain has a less complex set of constructs established from the 34 articles focused on this domain. The three constructs were:

*Emotion Expression-Suppression*: how much individuals show externally their emotions (Gross and John, 2003).

*Emotional intensity*: how much individuals seek to experience intense emotions (Davis *et al.*, 2012).

*Self-focused vs Other-focused emotions*: how much individuals are empathic towards others (Lv *et al.*, 2010).

In this domain, the same construct can be read under different labels although they refer to the same qualitative meaning, e.g. emotional regulation and emotional labor, both refer to emotional expressivity, defined as how much individuals show externally their emotions based on their activation of emotion regulation processes. Likewise, emotional intelligence, albeit a widely used construct in research, was surprisingly targeted only twice in the set of 34 papers and only referring to one of its dimensions, such as emotional awareness, without further consideration about its trait or competence nature.

#### 2.3.2.3. Values domain

Compared with the cognitive and emotional domains, the values domain is more coherent. The cultural value frameworks of Kluckhohn and Strodtbeck (1961), Hofstede (2001), and Schwartz (2007) provide the most popular constructs in the literature reviewed. Many scholars targeted one or several dimensions from these theoretical frameworks in their research questions. Overall, there are 32 constructs extracted from the set of 112 articles that focused on the values domain. The constructs identified are as follows (the least-known constructs are backed up with an exemplary reference while all the others originate from the three frameworks).

*Individualism vs. Collectivism*: the ties between individuals in a society are loose, people are expected to care only themselves vs people are integrated into strong, cohesive in-groups, value harmony, and interpersonal relationships.

*Hierarchy (high power distance) vs. Equality (low power distance):* unequally power distribution is accepted, and powerful members and organizations are expected within a society vs. belief that individuals are and should be equal.

Long term orientation vs. Short term orientation: value future rewards and delayed gratification in a long time-scale perspective vs. value instant rewards or interests without any delay in a very short time perspective

**Tradition** (past time orientation) vs. Future (future time orientation): foster virtues related to the past-experience or tradition vs. foster virtues towards future, decisions are made with the future in mind

*Uncertainty avoidance vs. Uncertainty acceptance*: feel threatened by uncertain, unknown, ambiguous, or unstructured situations vs. feel calm and comfortable about uncertainty and ambiguity.

*Masculinity/Competition vs. Femininity/Collaboration:* value assertive, tough, and material success vs. focus on being more modest, tender, and concerned with the quality of life.

*Harmony vs. Conflict:* value and seek harmony relationships with each other vs. dare not have conflict among groups

High vs. Low context communication culture: there is little assumed shared context or codified and the words themselves contain few or relevant information vs. there is much assumed shared context or codified and the words themselves contain most of relevant information

*Harmony with nature vs Control nature:* the harmonious relationship between humanity and its natural environment vs. human beings controlling the natural environment

Law-based vs. Ethics-based value: give priority to law or ethics, following the law or ethical relationships when making decisions

*Being activities vs. Doing activities:* belief that people should concentrate on living for the moment vs. belief on striving for goals and accomplishments

*Dualistic vs. Monistic:* conceiving minds and bodies as distinct substances vs. conceiving minds and bodies as essentially the same substance (Dai & Shang, 2008)

*Pragmatic vs. Idealistic*: giving priority in decision-making about a problem to "whatever works" vs. giving priority to ideals in a broad and future-oriented way (Huang & Wang, 2011).

*Focus on results vs. focus on process:* value the results the most important vs value the process the most important

Additionally, authors can refer to larger cultural values frameworks to depict this dimension. Namely, Confucian culture values may be globally mentioned to highlight Chinese cultural values such as Guanxi, Mianzi, Family as a basis for education, Hierarchy, Social harmony, or tradition. The same occurs with Taoism that emerges in literature when authors highlight the belief in the naturalistic or the way it is, follow the natural world value. Kluckhohn and Strodtbeck's Values Orientation is also mentioned refereeing to the relationship with nature (mastery, harmony, subjugation); relationship with people (individualistic, collateral, lineal); human activities (being, becoming, doing); relationship with time (past, present, future); and human nature (good, neutral, evil). Schwartz culture value has a comprehensive view covering dimensions of power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. Hofstede (2001) is frequently mentioned but not so much in general terms as the five cultural dimensions of his framework tend to be treated conspicuously and were already mentioned above in this paper (masculinity vs femininity; individualism vs. collectivism; uncertainty avoidance vs. uncertainty acceptance; high vs. low power distance; long term vs. short term orientation).

#### 2.3.3. Frequency

This section pertains to the second question: Which are the most salient constructs based on their frequency in the papers?

# 2.3.3.1. Cognitive domain

The most frequent construct "Holistic-Analytical" was targeted 117 times, followed by "Nonlinear-Linear" which was targeted 62. The proportions are not very dissimilar in English and Chinese literatures as in the English sample Holistic-Analytical is mentioned by 57.9% of articles, against 62.9% in the Chinese articles. Using the six-overarching paired cognitive styles conceptualized above, findings show that holistic-analytic meta-category is the absolute dominant metacognitive style construct in both English and Chinese literature as it covers over 70% of all frequencies in English and about 85% in Chinese (Table 2.1). Authors have occasionally referred to more than one of the cognitive styles in the holistic-analytical meta-category, which is not redundant as it pertains to what could be taken as facets of this meta-category, with a total hit of 305 in the 189 articles. This is especially visible in Chinese literature.

Table 2. 1 Frequencies per cognitive construct and per sample

		English	Chinese
Construct	Sample	Sample	Sample
	(N=189)	(N=38)	(N=151)
Holistic-Analytic meta-category	305	41	264
Holistic vs. Analytic	117	22	95
Non-Linear vs. Linear	62	4	58
Intuitive vs. Logical	38	3	35
Inductive vs. Deductive	14	0	14
Field dependent vs. Field independent	10	9	1
Impulsivity vs. Reflectivity	7	2	5
Vague vs. Accurate	7	0	7
Abstract vs. Concrete (imagery)	50	1	49
Subjective-Objective	24	0	24
Dialectical-Formal logic meta-category	22	6	16
Dialectical vs. Formal logic	21	5	16
Leveling vs. Sharpening	1	1	0
Adaptative-Innovative meta-category	13	3	10
Adaptative vs. Innovative	1	1	0
Divergent vs. Convergent	11	1	10
Sternberg' thinking style	1	1	0
Relationship-Object oriented meta-	7	7	0
category			
Relationship vs. object oriented	5	5	0
Functional vs. Thematic	2	2	0
Affect-Rule based decision-making style	1	1	0

#### 2.3.3.2. Emotional domain

Within the three emotional constructs identified in the literature, "emotional expression-suppression" is overwhelmingly represented with 33 hits out of a sample of 34 articles (accounting for 97.1%). English and Chinese literatures strikingly contrast as regards the occurrence of emotion-focused articles in comparing Westerners and Chinese. Chinese-related articles account only for four out of the 34 identified and all focused on "emotional expression-suppression". Emotions in cross-cultural research have been noticeably more studied in the English articles. Table 2.2 lists the frequencies per construct and per sample.

Table 2. 2 Frequencies per emotional construct and per sample

Construct	Sample	English Sample	Chinese
	(N=34)	(N=30)	Sample (N=4)
<b>Emotion Expression vs. Suppression</b>	33	29	4
Emotional labor / regulation	33	29	4
High vs. Low emotional intensity	1	1	0
Self-focus vs. Other-focus	1	0	1

#### 2.3.3.3. Values domain

The most frequently used construct in studies aiming to compare cultural values between China and the West is "Collectivism vs Individualism", which was targeted 76 times out of 112 possibilities (a 67.9% hit). "Hierarchy vs Equality" is the second construct targeted 36 times. Hofstede's culture value theory is recognized and assumed in most studies both by Chinese and Western scholars when they do comparative studies.

Table 2. 3 Frequencies per value construct per sample

Construct (value)			English	Chinese
N=112   (N=62)   (N=50)	Construct (value)	Sample	Sample	Sample
Collectivism-individualism meta-category		(N=112)	-	-
Collectivism vs. Individualism   76   40   36     Harmony with nature vs. Control nature   12   2   10     Harmony vs. Conflict   11   4   7     High vs. Low context   2   2   0     Law vs. Ethics-based (renqing, mianzi)   5   2   3     Power distance (hierarchy-equality)   36   16   20     Time orientation meta-category   23   10   13     Long-term orientation vs. Short-term orientation   15   9   6     Past-time (tradition) vs. Future-time orientation (future)   7   1   6     Being vs. Doing activities   2   1   1     High-Low Uncertainty avoidance   21   14   7     Confucian cultural values   14   4   10     Masculinity vs. Femininity   10   6   4     Dualism vs. Monism   10   0   1     Focus on results vs. process   1   0   1     Pragmatist vs. Idealist   1   1   0     Kluckhohn and Strodtbeck's Values Orientation   1   0   1     Schwartz culture values   1   1   0				
Harmony with nature vs. Control nature   12   2   10     Harmony vs. Conflict   11   4   7     High vs. Low context   2   2   0     Law vs. Ethics-based (renqing, mianzi)   5   2   3     Power distance (hierarchy-equality)   36   16   20     Time orientation meta-category   23   10   13     Long-term orientation vs. Short-term orientation   15   9   6     Past-time (tradition) vs. Future-time orientation (future)   7   1   6     Being vs. Doing activities   2   1   1     High-Low Uncertainty avoidance   21   14   7     Confucian cultural values   14   4   10     Masculinity vs. Femininity   10   6   4     Dualism vs. Monism   10   0   1     Focus on results vs. process   1   0   1     Pragmatist vs. Idealist   1   1   0     Kluckhohn and Strodtbeck's Values Orientation   1   0   1     Schwartz culture values   1   1   0	Collectivism-individualism meta-category	97	44	53
Harmony vs. Conflict	Collectivism vs. Individualism	76	40	36
High vs. Low context   2   2   0	Harmony with nature vs. Control nature	12	2	10
Law vs. Ethics-based (renqing, mianzi)   5   2   3	Harmony vs. Conflict	11	4	7
Power distance (hierarchy-equality)         36         16         20           Time orientation meta-category         23         10         13           Long-term orientation vs. Short-term orientation         15         9         6           Past-time (tradition) vs. Future-time orientation (future)         7         1         6           Being vs. Doing activities         2         1         1           Confucian cultural values         14         4         10           Masculinity vs. Femininity         10         6         4           Dualism vs. Monism         10         0         10           Focus on results vs. process         1         0         1           Pragmatist vs. Idealist         1         1         0           Kluckhohn and Strodtbeck's Values Orientation         1         0         1           Schwartz culture values         1         1         0	High vs. Low context	2	2	0
Time orientation meta-category         23         10         13           Long-term orientation vs. Short-term orientation         15         9         6           Past-time (tradition) vs. Future-time orientation (future)         7         1         6           Being vs. Doing activities         2         1         1           High-Low Uncertainty avoidance         21         14         7           Confucian cultural values         14         4         10           Masculinity vs. Femininity         10         6         4           Dualism vs. Monism         10         0         10           Focus on results vs. process         1         0         1           Pragmatist vs. Idealist         1         1         0           Kluckhohn and Strodtbeck's Values Orientation         1         0         1           Schwartz culture values         1         1         0	Law vs. Ethics-based (renqing, mianzi)	5	2	3
Long-term orientation vs. Short-term orientation   15   9   6     Past-time (tradition) vs. Future-time orientation (future)   7   1   6     Being vs. Doing activities   2   1   1     High-Low Uncertainty avoidance   21   14   7     Confucian cultural values   14   4   10     Masculinity vs. Femininity   10   6   4     Dualism vs. Monism   10   0   10     Focus on results vs. process   1   0   1     Pragmatist vs. Idealist   1   1   0     Kluckhohn and Strodtbeck's Values Orientation   1   0   1     Schwartz culture values   1   1   0	Power distance (hierarchy-equality)	36	16	20
Past-time (tradition) vs. Future-time orientation (future) 7 1 6 Being vs. Doing activities 2 1 1 High-Low Uncertainty avoidance 21 14 7 Confucian cultural values 14 4 10 Masculinity vs. Femininity 10 6 4 Dualism vs. Monism 10 0 10 Focus on results vs. process 1 0 1 Pragmatist vs. Idealist 1 1 0 Kluckhohn and Strodtbeck's Values Orientation 1 0 1 Schwartz culture values 1 1 0	Time orientation meta-category	23	10	13
Being vs. Doing activities         2         1         1           High-Low Uncertainty avoidance         21         14         7           Confucian cultural values         14         4         10           Masculinity vs. Femininity         10         6         4           Dualism vs. Monism         10         0         10           Focus on results vs. process         1         0         1           Pragmatist vs. Idealist         1         1         0           Kluckhohn and Strodtbeck's Values Orientation         1         0         1           Schwartz culture values         1         1         0	Long-term orientation vs. Short-term orientation	15	9	6
High-Low Uncertainty avoidance 21 14 7  Confucian cultural values 14 4 10  Masculinity vs. Femininity 10 6 4  Dualism vs. Monism 10 0 10  Focus on results vs. process 1 0 1  Pragmatist vs. Idealist 1 1 0  Kluckhohn and Strodtbeck's Values Orientation 1 0 1  Schwartz culture values 1 1 0	Past-time (tradition) vs. Future-time orientation (future)	7	1	6
Confucian cultural values  14 4 10  Masculinity vs. Femininity 10 6 4  Dualism vs. Monism 10 0 10  Focus on results vs. process 1 0 1  Pragmatist vs. Idealist 1 1 0  Kluckhohn and Strodtbeck's Values Orientation 1 0 1  Schwartz culture values 1 1 0	Being vs. Doing activities	2	1	1
Masculinity vs. Femininity1064Dualism vs. Monism10010Focus on results vs. process101Pragmatist vs. Idealist110Kluckhohn and Strodtbeck's Values Orientation101Schwartz culture values110	High-Low Uncertainty avoidance	21	14	7
Dualism vs. Monism10010Focus on results vs. process101Pragmatist vs. Idealist110Kluckhohn and Strodtbeck's Values Orientation101Schwartz culture values110	Confucian cultural values	14	4	10
Focus on results vs. process  1 0 1  Pragmatist vs. Idealist 1 1 0  Kluckhohn and Strodtbeck's Values Orientation 1 0 1  Schwartz culture values 1 1 0	Masculinity vs. Femininity	10	6	4
Pragmatist vs. Idealist 1 1 0  Kluckhohn and Strodtbeck's Values Orientation 1 0 1  Schwartz culture values 1 1 0	Dualism vs. Monism	10	0	10
Kluckhohn and Strodtbeck's Values Orientation 1 0 1  Schwartz culture values 1 1 0	Focus on results vs. process	1	0	1
Schwartz culture values 1 1 0	Pragmatist vs. Idealist	1	1	0
	Kluckhohn and Strodtbeck's Values Orientation	1	0	1
Taoist values 1 1 0	Schwartz culture values	1	1	0
	Taoist values	1	1	0

#### 2.3.4. Definition

This section pertains to the third question: What is the definition of the most popular constructs in the cognitive, emotional, and value domains?

# 2.3.4.1. Cognitive domain

The predominant construct in the cognitive domain, holistic-analytical, has been mostly defined in converging ways with its homonymous construct as proposed by Nisbett et al. (2001, 2003). The meta-category comprehends several constructs that partially overlap but emphasize different aspects of this holistic-analytical dimension. Namely, holistic cognitive style involves attention to the framework as a whole (field dependence, Witkin et al., 1981), triggered by intuitive nonlinear processes (intuitive, Allinson & Hayes, 1996, nonlinear, Groves et al., 2008), that occur in a short time (impulsivity, Kagan, 1966) and offer impressions of an inductive nature (inductive, Arslan et al., 2009) that are imprecise (vague, Shi, 2007) but preferred to gain insight, interpreting information by use of reasoning and intuition, versus sensorial information (Gregorc, 2006).

The second and third cited cognitive style construct "subjective vs. objective" and "dialectical vs. formal logic meta-category" refers to the preference for judging by own interests or external objects of facts, and preference for the extent of acceptance of paradox or contradictions respectively. Interestingly, "subjective vs. objective" is only seen in Chinese literature. The remaining cognitive styles have received relative scarce attention and, in most occasions, they will be seen only in the English literature (i.e. Relationship vs. Object orientation, and Adaptative vs. Innovative meta-categories, affect vs rule-based decision making style).

Overall, English and Chinese literatures converge as regards the holistic vs. analytical cognitive style as the strongest difference between Westerns and Chinese. Both literatures have also produced constructs that have not been mutually used to conceive and measure cognitive differences thus indicating a lack of integration.

#### 2.3.4.2. Emotion domain

The dominant construct in both literatures is "emotion expression vs. suppression" that has been commonly defined as the extent to which individuals hide or restrain the expression of their true positive and negative emotions. This is one of the core dimensions of emotion regulation

proposed by Gross and John (2003) and overshadows all other emotional constructs that have been used to compare West with China. It is worth noticing that Chinese literature has given very scarce attention to emotion-based constructs when comparing Chinese with Westerns. Lastly, some other constructs have been proposed but only in English articles (emotional self-awareness, and emotional intensity) or single one case in Chinese literature (empathy).

#### 2.3.4.3. Values domain

The predominant construct in the values domain, collectivism vs. individualism, gathers the largest attention from authors publishing either in English or Chinese. In its broader understanding, the meta-category highlights the degree that individuals value the interdependence among things, mostly at the social level (Minkov & Hofstede, 2012). In this way, collectivism expresses a belief that interconnectedness is the nature of relations, be their social or with the environment. Harmony as opposed to "conflict with" (Harmony social, Wang, 2010) and to "control over" (Harmony nature, Schwartz, 2007) is a corollary of embracing interdependence and social ethics such as Renqing or Mianzi prevail over other considerations (Ethics-based, Ma & Fan, 2020) to protect social cohesiveness (Hwang, 1987). These tight social bonds favor a complex communication that uses the context to communicate without the need to make much information explicit (high context communication, Richards, 2014).

It is no surprise that this is the dominant meta-category because there is a specific set of Chinese constructs that relate to collectivism, e.g. Guanxi refers to a sense of embeddedness in the hierarchically structured network of social relationship that leads to Renqing, mutual support, and benefits and Mianzi that values saving the face of the others, and thus maintain social harmony (Zhu, 2015). According to the famous professor Fei (1948), there is a discrete pattern of Chinese cultural values, that is, Chinese have a clear view separating in-group and out-group. Behavior (cognitions, emotions, and values) change when dealing with different groups. When in-group, Chinese value harmony and others' interests but when dealing with out-group Chinese are more cautious and competitive. Family is the most important in-group for Chinese people.

The second most frequently mentioned values category is power distance (Hofstede, 2001) that expresses the degree to which individuals accept and expect hierarchical differences in a society where power is unevenly distributed. The third more frequently cited dimension, time orientation, differentiates between preferred time horizons for receiving returns of a given action or decision. The long-term orientation, which is the fifth dimension of cultural values by

Hofstede, seems to be mixed with descriptions of past-time orientation and future-time orientation in some literatures, though they differ. According to Venaik, Zhu, and Brewer (2013), Hofstede's LTO dimension focuses on past tradition and future thrift, while Globe's Future Orientation emphasizes the present and future capture. Long-term oriented individuals tend to view time as a continuum, valuing both the past and the future (Hu, Chand & Evans, 2013) rather than acting only for their effects in the here and now (being, Niu, 2018). Lastly, a closely mentioned construct, high vs low uncertainty avoidance, gathers the attention of both English and Chinese literatures where individuals are contrasted as regards their willingness to embrace and cope with uncertainty (Lu & Luo, 2014). The remaining categories have received comparatively lower attention in both literatures, and in some cases, they have emerged only in the Chinese (dualism vs. monism, Dai & Shang, 2008, or focus on results vs. process, Yan, 1996) or the English (when authors refer to whole cultural values systems without detailing its dimensions, e.g. Schwartz culture values, or Taoism).

# 2.3.5. Comparison between Chinese and western

This section pertains to the last question: What specific features were attributed or empirically found to relate to Western-Chinese differences in each domain area?

#### 2.3.5.1. Cognitive domain

One of the undisputable leading scholars that pioneered the cross-cultural research on cognitive styles is Richard Nisbett. His fundamental assertions have been also questioned and criticized for being overly general and thus unable to provide a nuanced account of reality (e.g. Chan & Yan, 2007). In the same vein, Smith (2013) stressed that people in all cultures may display all cognitive styles even if they seem to be incompatible, e.g. one may find in the same culture both analytic and holistic thinkers. Despite doubts concerning the conspicuous existence of culturally-based cognitive differences, Nisbett's assertions about the geography of thought between Chinese and westerners are the most commonly recognized and assumed in most of the articles reviewed. This has been specially found for the analytical vs. holistic cognitive styles, which cumulated 305 hits out of a 189 sample, thus indicating their centrality in literature.

Scholars seem to strongly converge, both in the theoretical and empirical studies, in stating that westerners prefer holding analytical thinking while Chinese opt for holistic thinking.

Among the many examples that could be cited, Norenzayan et al. (2002) found that the formal logic thought is held more predominantly in European Americans, while the intuitive one is held more predominantly in their East Asian sample, including Chinese. In another example, when contrasting Americans and Chinese as regards strategies to visually explore websites, Dong and Lee (2008) attributed differences to Americans being cognitively more analytic while, conversely, Chinese were more holistic. In a set of experimental studies, De Oliveira and Nisbett (2017) also found a higher holistic tendency among Chinese than Americans. The differences seem to run deep as they have an organic marker such as the one found by Huang et al. (2019). These authors conducted a cross-cultural MRI study and found that Chinese had more holistic processing information as compared to westerners and that this preference was also matched by differences in gray matter density in specific brain regions. Within the context of learning, Cheng et al. (2011) examined the learning behavior of American and Chinese students to find the former had comparatively higher mean scores on the analytic thinking style.

From another approach, due to the close relationship between language and thinking, we found that Chinese articles prefer comparing Chinese with English language syntaxes relating it to how people think. By resourcing to diverse language examples, many articles intended to provide evidence of underlying cognitive differences which, in our samples, reached near 60% of all Chinese articles. Good examples of such an approach have been made by Hou (2008), Li and Yang (2001), Liu and Zhang (2005), Qian (2006), Wang (2004), Wei (2013), and Yu (2010). From the translation, discourse organization, sentence structure, writing and teaching and other aspects of language-related analysis difference, cognitive styles are described and explained, mainly referring to Chinese being more holistic, non-linear, vague and using concrete (imagery) thinking patterns as contrasted with westerners being more analytic, linear, accurate and using abstract thinking patterns.

To summarize, both the Chinese and English literatures acknowledge the holistic-analytical dimension as the major dichotomy concerning cultural-based cognitive variation profiles. This seems to be the most significant dimension in contrasting westerners with Chinese as to cognitive styles. Lastly, the co-existence of predominantly analytic individuals and those that are holistic in both cultures does not preclude its cultural attribution because there is no logical requirement of group homogeneity, but rather there is a requirement that one of the cognitive styles is dominant within each group.

#### 2.3.5.2. Emotion domain

Emotions are so deep-rooted in human evolution that expectable differences could be minimal, if any, in experiencing emotions across cultures. Margavio et al. (2016) findings do support this claim as they found no significant difference in the emotional intelligence score of American and Chinese students. Thus, emotional differences seem to occur in how they are expressed or reacted to, not how they are internally experienced (Deng et al., 2019).

It is the emotional expression that is culturally regulated and fixed by encouraging, through education, the expression of emotions that are taken as advantageous to the group while discouraging those that may be taken as harmful (Liddell & Williams, 2019). For example, westerners show less guilt and being prouder of themselves than Chinese, who tend to have the opposite emotional expression, thus showing more guilt emotions and expressing less individual proud (Lv et al., 2010). Chinese parents, compared with western parents, educate and endorse cooperation, harmony, rather than expressing emotions like anger and aggression (Grabell et al., 2015) while children and families from the U.S. reported greater emotional expressiveness than their Chinese counterparts (Suveg et al., 2014).

Chinese people are influenced and cultivated by the historical development of the Confucian mindset, which encourages no more than and no less than the right appropriate intensity of emotions, just to a properly balanced degree, or its suppression if necessary, to achieve harmony in group relationships (Zhang, 2007). These differences may be elusive to self-report as an experimental study conducted by Zhou and Bishop (2012) showed. In this study, Chinese had a weaker cardiovascular response to suppressing than expressing anger whereas westerners' physiological response was the opposite although, in the study, no difference in emotional suppression was found between Chinese and westerners.

In this systematic review, 33 out of the 34 occurrences pertained to emotional expressivity. Overall, the reviewed articles converge into featuring westerners as more prone to express emotions than Chinese, especially positive emotions, while Chinese get used to suppressing emotions, especially the negative. Westerner people find it normal and comfortable to express true natural emotions (Allen et al., 2014), and accept more positive emotions and less negative emotions (Lv et al., 2010). When communicating with others, for harmony sake, Chinese are sensitive to the emotions of others and tend to express them implicitly and suppress both negative and positive emotions, thus using silence (Zhu, 2016). Some other variables can be at play in expressing emotions. Davis et al. (2012) found a gender moderation in comparing

Chinese and western males and females, where women reported more intense negative emotions than did men.

Emotional labor has surfaced in these studies. Given the overarching norm for emotion control in collectivistic cultures, the act of suppressing emotional self-awareness and faking arousal emotions in such cultures may be experienced as being less effortful and result in less dissonance than doing so in an individualistic culture (Allen et al., 2014).

In conclusion, no matter in which setting, work, or social life context, scholars recognized that Chinese have a more emotional-suppression and concealed tendency profile, while westerners have a more expressive stance with lower emotional regulation.

#### **2.3.5.3.** Value domain

Cultural values were covered by an extensive number of studies that originated from various academic areas. The articles reviewed in this study highlighted individualism-collectivism value orientation which is common to both the cultural value model of Hofstede and the Globe project. This well-established and recognized cultural dimension was used to understand value differences between China and the West and is the most commonly mentioned feature in distinguishing Chinese and western profiles (Lv et al., 2010). For example, individualism is widely regarded as an essential value in American culture while Chinese gives priority to collectivism (Yi et al., 2015). Although western countries might experience different degrees of collectivism and individualism (e.g. contrast the United Kingdom with Portugal, in Hofstede and Globe indices, Chui et al., 2010) there is a consensus that the vast majority of western countries, such as Germany, are less collectivistic than China (Felfe et al., 2008). This does not come as a surprise because China is considered to be typically a collectivist culture where people value group harmony and interdependence over many other social values (Tsai & Men, 2012). Renging and Mianzi are representative cultural beliefs derived from Confucian values that illustrate the primacy of collectivism. One famous Chinese scholar of literature Lin Yutang (Lin, 1962) summarized that Renging and Mianzi are far above law, which is the most concern in Chinese ethical relationships. This has been popularized in the movie industry, in novels, and in advertisements. Based on its popularity, five of the articles reviewed used the famous movies "Guasha" and "pushing hands" to discuss the diverse behaviors influenced by culture, i.e. Chinese tend to focus on collective interest, and can sacrifice their own interests if necessary, giving priority to power and authority. Conversely, westerners emphasize their own interest and independent freedom, advocating equality (Fan, 2014; Guan, 2014; He, 2016; Lu & Jia, 2017;

Xiao, 2009). Wang (2010) argued that the main reason for diverse social titles involves individualism-collectivism, hierarchy-equality value orientation between China and the west.

A second cultural value dimension mentioned in the comparison between China and the west in this review is power distance. China has been consistently found to have higher power distance than e.g. Australia or New Zealand (Albaum et al., 2010), but also the US (Kirkman et al., 2009) or Germany and Denmark (Bredillet et al., 2010). In line with these findings, Hu and Zhang (2012) stated that in China, subordinates have a higher dependence on their senior leaders who have a strong authority while the relations between subordinates and leaders are more equal, with more negations or debate in the communication in the west. Another expression of this high-power distance in China can be witnessed in Chinese tourists consuming behaviors that tend to buy expensive goods to show their social status and purchasing power whereas western tourists show less such consuming behaviors (Liu, 2018).

A third cultural value concerns the temporal orientation and refers to how time is valued, and the extent to which individuals believe they can control time. This dimension has gained relevance in literature, especially when scholars systematized cross-cultural studies targeting Chinese culture (Minkov & Hofstede, 2012). According to these authors, Chinese emphasize the past experience and use it as guidance for the present and future more than westerners do. Conversely, due to a focus on the future, westerners put more value in time and effort into planning while Chinese value more flexibility. On the other hand, China has a high long-term orientation, which values thrift and perseverance, while many western countries have a fairly low long-term orientation score, preferring to spend now than saving for tomorrow (e.g. Chen & Partington, 2004; Cheong et al., 2010; Hu, Chand & Evens, 2013). Long term orientation value long interest and perseverance, focusing more on the results than the process, while short term orientation value more process than results.

The fourth cultural value dimension to stand out in the English and Chinese literatures reviewed is Uncertainty avoidance. High uncertainty avoidant cultures make people think more about hazards and pressure them to plan or prepare for long in advance, such as China does. Whereas low uncertainty avoidance culture makes people more optimistic and calmer, tolerating changes, and adventures (Lu & Bo, 2019).

Lastly, an overarching reference is mostly found in the Chinese articles where authors tend to broadly refer to Chinese culture via Confucian Values. These comprehend many of the dimensions already explored, namely, collectivism, social harmony, high power distance, and

tradition that was registered as a global entry but largely overlaps with the previous dimensions explained but shown under the same "Confucian" umbrella.

To summarize, there are four important dimensions found in literature to compare West and China (by order of importance): collectivism vs. individualism, high vs. low power distance, long vs. short term orientation, low vs high uncertainty avoidance. Scholars largely converge in depicting China as a collectivistic culture, which is more conservative, stable, and strives for social harmony, focusing on ethical family relationships, hierarchical relations, emphasizing long-term interests over the short-term benefits. Conversely, the West is depicted as being mostly individualistic, valuing more equality, accepting social or relational conflict, abided more by law, emphasize short-term rewards over long-term benefits.

#### 2.4. Discussion and Conclusion

After decades of cross-cultural research on West and East, namely China, it would be expectable to find a convergence between western scientific outlets (mostly published in English) and their Chinese counterparts. Surprisingly, many divergences may suggest some disconnectedness already noticed in Sociological studies (Roulleau-Berger & Peilin, 2018) is not yet overcome in business studies. Due to the nature of the topic, it is reasonable to assert such integration would greatly benefit knowledge building. This is especially true when one considers the proliferation of constructs about cognitive, emotional, and cultural values differences (Meglio & Schriber, 2020; Sadler-Smith, 2001) adding to the array of redundant constructs in organizational research (Le et al., 2010). To contribute to a convergence about which constructs can be used for this purpose, this systematic literature review was conducted based on all available relevant publications that explicitly compare China and the West written either in English or Chinese. Accordingly, we analyzed the included sample records in four aspects 1) constructs extracted and derived from content analysis and their descriptions, 2) frequency and generality of each construct, 3) definition and features of the dominant integrative construct in each domain (cognition, emotion, value), and 4) the comparison between Chinese and Western profiles.

We searched databases both written in English and Chinese. The decision to comprehend not only western publications was based on the principle that, as far as cultural studies are concerned, the cultural perspective from scholars themselves (autochthone) can also be an untapped source of bias due to culturally-based criteria used to compared and conceive dimensions. This concern has been expressed by many researchers (e.g. Hofstede, 2001;

Nisbett, 2004; Peng and Nisbett, 1999) and was therefore taken into consideration in designing this systematic literature review.

This option was fruitful in the sense that findings showed the sample of Chinese articles is distinct from the English in many ways. Firstly, the Chinese sample comprehends theoretical articles only. This may explain the relatively lower interrater agreement found for Chinese articles (although still within the acceptance range) as empirical articles must be clearer about variables under analysis. This also suggests that studies concerning cross-cultural cognition, emotion, or values written in China are in lack of empirical methods, either by using questionnaire survey measurements or by systematically run content analyses or another codebased qualitative research. Secondly, an additional difference concerns the attention paid to the emotion domain as the proportion of Chinese articles in this category is strikingly smaller than that in English, which might be a gap with both theoretical and practical significance in Chinese academic areas. Third, Chinese articles used different profiles to explain or explore more issues in intercultural communication, language areas, advertising, compared to more diverse research subjects or approaches in English articles.

As stated, both Western and Chinese publications converge as to the relevance of holisticanalytical dimension but highlight distinct aspects. Chinese scholars highlight nonlinear, intuitive and inductive cognitive, and abstract imagery processes, unlike Western scholars. This can be somewhat overshadowed by both scholars acknowledging the holistic-analytical dimension as the most central but e.g. when representing idiosyncrasies Chinese scholars stress the divergent-convergent thinking which passes almost unnoticed to Western scholars. The consequence of this contrast is a misrepresentation of the true nature of cognitive style differences e.g. at a negotiation table or when training a manager for an expatriation assignment in line with Adair et al. (2009). While a culturally-aware Chinese would be making an effort to communicate with their Western counterparts by adjusting behavior when presenting ideas or proposals towards his/her representation of western cognitive style, some of the adjustments made may be off-target because they are now recognizable by the counterpart. Simultaneously, the culturally-aware Westerner will be doing the same effort with equivalent, but reversed misconceptions. As an example, a culturally intelligent Chinese negotiator (Imai & Gelfand, 2010) trained in Chinese Academia knows that the counterpart has a preference to go through details until an agreement is achieved, and also that a frontal negative communication would be expectable at a western negotiation table. The Chinese negotiator then puts effort into focusing on details but may put too much emphasis on being direct about divergences, which might not be taken as expectable by the Western counterpart because it is not an often-occurring behavior, even in the West. This means the effort to adjust behavior to the parties' ascribed norms could be counterproductive if any given dimension and understanding about differences is not shared. Likewise, although scholars from both Academia converge about emotion expressivity differences, the scant literature in China may give Chinese a minimalist view of its critical importance at the negotiation table or within the framework of expatriation assignment (Gullekson & Dumaisnil, 2016) when compared to the cognitive styles.

Although distinct Chinese and Western profiles in cognition, emotion, and values can be clearly seen in the systematic review, we admit that there seems to be a trend to blur differences, especially due to the deepening global interdependency and more transnational education and mass media (Gelfand et al., 2017). Western cultural values permeate Chinese traditional values and vice-versa. This can call for further in-depth studies that target which aspects or dimensions are assimilated and becoming more and more similar (e.g. in Millennials), and likewise which aspects or dimensions, if any, are becoming more different.

Findings also have implications for future cross-cultural research comparing the West and China as there is a pattern of scarce empirical research in Chinese articles contrasting with the frequent quantitative studies in English, yet based on various specific research goals, where most scholars also followed the assumption and results of Hofstede and Nisbett about the cultural differences between China and the West. This means there are opportunities to further develop comparative quantitative-based research in China, especially focusing on the emotional dimension.

As in all systematic literature reviews, care was taken to prevent bias both in searching, selecting, and interpreting papers' content. However, further systematic literature reviews could be conducted targeting each of the three dimensions separately with finer search keywords or applying broader eligibility criteria. China was also chosen because it is the most representative Confucian society, but not having covered all the Eastern countries can also be taken as a limitation but, just as well, an opportunity to extend this systematic literature review.

To summarize, the systematic literature review extracted dominant constructs for each domain to compare the Chinese and Westerners and identified their feature profiles, i.e. cognition (Westerners more analytic, abstract, objective cognitive styles, while Chinese more holistic, concrete, subjective cognitive style); emotion (Westerners more emotionally expressive with less emotional control, while Chinese more prone to suppress emotion with less

emotional expressions); cultural values (Westerners with more individualism, valuing equality, short-time oriented, and future time value beliefs, while Chinese more collectivism, hierarchical, long-term oriented and past time value beliefs). This is not be a surprising finding, but it helps to navigate across the profusion of constructs that can be seen in the literature. They might be found to be redundant or unnecessary to account for differences mostly because constructs can be nested according to their level of abstraction, in the same way Minkov (2018) found that power distance is a facet of individualism-collectivism. Such a research effort conducted in the cognitive domain would also greatly benefit knowledge in cross-cultural studies and especially in international business. Findings suggest and hopefully contribute to more rigorous and parsimonious use of constructs and to further integrate knowledge so that the cultural divergences are matched by Academia convergences.

# **EMPIRICAL STUDIES**

# STUDY 2

Measuring thinking styles, emotional expressivity, and values: A psychometric test of instruments in China<sup>5</sup>

\_

<sup>&</sup>lt;sup>5</sup> A previous version was accepted and orally presented in 29<sup>th</sup> EBES conference in October 2019 under the title "Measuring thinking styles and emotional expressivity in HRM contexts: A test of two instruments in China".

Chapter III: Measuring thinking styles, emotional expressivity, and values: A psychometric test of instruments in China (study 2)

You can't manage what you can't measure

Peter Drucker

## **Abstract**

The east-west increasing business interchange is pushing HRM to bridge people with contrasting cultures. More importantly, it must bridge individuals with differences on cognition, emotion and values, without which communication is ineffective. For this purpose, managers need to be able to measure and use the different thinking styles, emotion expressivity and cultural values to integrate HR practices and individual profiles. This has been mostly proposed by western scholars, not eastern ones. This research is intended to assess the quality of dominant western-based measures on thinking styles, emotional expressivity and cultural values, with a Chinese sample to gauge the extent of their adequacy for comparative purposes. The sample consisted of 254 valid questionnaires, collected online both with Qualtrics and another Chinese survey platform-WJX. The constructs' reliability and validity were analyzed with Confirmatory Factor Analysis using SPSS AMOS 24. A valid solution for thinking styles was found only for a 7-factor structure which suggest TSI-R2 is overly complex and may not be suited for Chinese research in HRM as is. Additionally, emotional expressivity measure (BEQ) failed to achieve acceptable fit indices. VSM is more formative rather than reflective such as a latent construct. These findings provide insight on cross-cultural problems when targeting the measurement of cognitive, emotional, and values differences, which underlie communication effectiveness in multicultural organizational settings. Findings imply that constructs must be simplified to reach a common ground and understanding on how to integrate these fundamental differences within an effective HRM.

# 3.1. Introduction

Individuals react according to their interpretations of events, rather than the events themselves. Such information processing makes people behavior diverse even when facing the same situations because within organizations truth is socially constructed (Astley, 1985). However, in most organizational literature, policies and practices such as those established in HRM, tend to be thought of as being objective in nature, although their true nature is subjective. The positivistic paradigm prevails in international HRM (Primecz, 2020). Often, such policies and practices are established under the assumption that they are similarly perceived by employees without much consideration for their possible deep individual differences that may condition how they are interpreted. Likewise, context matters for interpretation purposes and so, many policies and practices consider organizational culture but fail to put into the equation the individual values which may not converge at all with the cultural level (Fischer, 2006). This is of special relevance in HRM as the internationalization of business brings to the stage more deep-rooted differences.

Namely, thinking processes themselves contrast as well as the way emotions are expressed for example between Western and Eastern societies (Matsumoto et al., 2008; Nisbett, 2003). Such possible differences, compared to economic or political differences, are far more important because they concern fundamental cognitive, affective and value differences that pass unnoticed to the very conscious scrutiny of decision makers.

Although there is an extensive body of research on such differences, mostly focused on cultural aspects, researchers still do not agree on the constructs related to cognition, emotion, and values that can better depict such differences. Therefore, it is important to contribute to constructs' clarity, which is even more important when conducting empirical studies. Otherwise, findings will suffer from conceptual blurredness.

The thinking patterns are socialized, which means they can be modified by experience and they are dynamic to some extent (Saracho & Spodek, 1993). Likewise, studies that focus merely on the national culture level fail to detect the individual difference withing that culture. Therefore, one of the caveats is to avoid stereotypical views about thinking patterns of people in diverse cultures and accept within-group variance. Thus, it is of great significance to understand how possible differences operate when individuals interact with organizational settings. Such research has much practical and theoretic significance.

One of the required conditions to uncover such fundamental differences is the existence of empirical studies that use sound and clear measures of the cognitive, emotion and values dimensions. The psychometric quality of these measures is even more critical when using non-western samples due to possible cultural bias. Within the context of HRM, this is especially relevant when the measures are used in non-western organizational settings but were generated in westernized settings. This study is designed to test the psychometric quality of three main measures of thinking style, of emotion expression and cultural values.

#### 3.2. Literature review

#### 3.2.1 The development of thinking styles

A style is neither a level of intelligence nor a personality trait, but rather an interaction of intelligence and personality (Grigorenko & Sternberg, 1995). Additionally, people usually have a profile of styles rather than only one style. Literature focusing on "style" shows an array of objects that concern e.g. learning styles, cognitive styles, and thinking styles, which are three popular domains in the field of style (Zhang & Sternberg, 2005). Theoretically, styles reflect individuals' behavioral manners or preferred ways of dealing with information; different styles might relate to different behavioral outcomes (Messick, 1984; Sternberg, 1997; Zhang & Sternberg, 2005).

Thinking style is a concept proposed by Robert Sternberg in his theory of mental self-government (1988). As a typical model of styles, Sternberg's (1997) theory of mental self-government defined thinking styles as preferred ways of using abilities and knowledge people apply to use. The essential notion of this construct is that people somehow need thinking styles to govern or manage their daily activities in life or work. An ability refers to what one can do, whereas a style refers to how one prefers to use one's abilities. In literature about thinking styles, authors use different labels to identify it, e.g. thinking patterns, thinking modes. They are conceptually overlapping under the umbrella of cognitive style and, for parsimony's sake, and because of current use, we will adopt "thinking style" as a designation for all of these. Figure 3.1 depicts the main authors aggregated by preferred terminology.

Table 3.1 The classification of thinking style akin concepts

Cognitive style	Allinson & Hayes (1996), Epstein (1994), Klein & Schlesinger (1951), Miller (1987), Nisbett et al. (2001), Riding & Cheema (1991)  Sadler-Smith et al. (2009), Witkin (1964)
Thinking style	Sternberg (1988), Torrance (1988), Vance et al. (2007), Zhang (2006)
Learning style	Dumn (1984), Newble & Entwistle (1981), Kolb (2007), Schmeck (2013)
Personality type	Holland (1997), Jung (1971), Meyers (1962)

Thinking styles have both a long and a short history. The long history dates back to the philosophical and theoretical foundations, significantly in psychology. The short history originates from this research topic being seen as generally lacking contact with other field literature, mostly existing literature in psychological and educational areas as well as business literature in the recent years (Zhang, 2002). The evolution of the research in the field is depicted in Figure 3.1

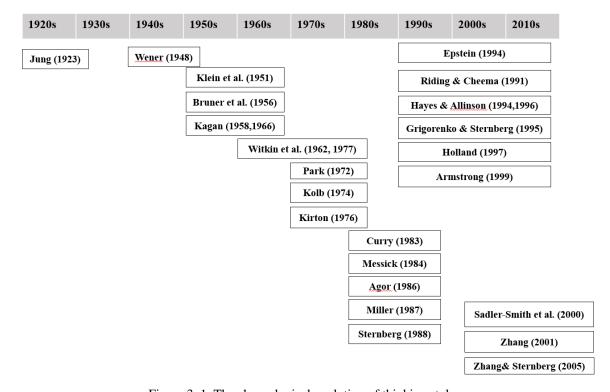


Figure 3. 1 The chronological evolution of thinking style

Human thinking is the function of the human brain in advanced stages with the development of experience. Different nations have evolved in different ways of thinking regarding how individuals should understand reality, experiences, and form habits. These differences pose a risk: the many conflicts among people, groups, and organizations who think, feel and act differently (Tajfel & Turner, 1986). The origins and formations of individuals' thinking styles lie within their social environment and social systems in which they grew up as well as the learning and life experience they had. So, the styles people employ are rooted in the value systems that are specific to their sociocultural contexts (Bond, 2010).

The research of intellectual styles gained increasing attention, especially in educational areas where there are considerable literature reviews (Zhang & Sternberg, 2001, 2006). Many studies and findings on thinking styles are within an educational context. The importance of thinking styles in the educational context is visible in some findings. For example, students were found to achieve better academic results when their thinking styles match their teachers' thinking styles (Zhang, 2006). Likewise, thinking styles were found to contribute to their academic achievement (assessed by both self-rating and performance tests) far beyond their abilities (Grigorenko & Sternberg, 1995; Sternberg & Grigorenko, 1997; Zhang, 2002a, 2002b; Zhang & Sternberg, 2012). Thinking styles deserved far less attention within the context of business organizations. Still, we reason that the construct of "thinking styles" is also significant in these contexts. For example, leaders' sensitivity and awareness of employees' diverse thinking patterns associated with culture can be demonstrated in a wide variety of managerial practices (Hofstede et al., 2002).

# 3.2.2 Measure development: theory of mental self-government

As stated, Robert Sternberg (1988) is most likely the fundamental scholar in thinking style research. In his theory of mental self-government, he refers to the ways in which people apply or use their knowledge. Rooted in previous work on styles, the theory of mental self-government shares some characteristic with earlier theories. According to Grigorenko and Sternberg (1995), existing models and theories on styles are classified into three traditions: cognition-centered, personality-centered, and activity-centered. Thinking styles falls in the cognition-centered tradition which most closely resemble abilities, while the personality-centered styles are viewed as being closer to personality traits, and the activity-centered styles tend to give priority to the notion of styles as mediators of various forms of activities arising from some aspects of cognition and personality.

From the extensive research conducted by Sternberg and associates, it is obvious that the way people solve problems and make decisions not only depend on their level of knowledge but is also influenced by their thinking styles.

Adopting the metaphor of the entity governing the society, Sternberg (1988) described 13 intellectual styles which are similar constructs to govern itself, namely: legislative, executive, judicial, monarchic, hierarchical, oligarchic, anarchic, global, local, liberal, conservative, internal, and external intellectual styles. Based on a series of studies (e.g. Zhang, 1999; Zhang & Sternberg, 2001) on thinking styles, Zhang and Sternberg (2005) reconceptualized the 13 thinking styles into three types: Type I, II, and III. Type I includes the legislative, judicial, hierarchical, global, and liberal styles, and is considered to be more creativity-generating and complex. Type II consists of the executive, conservative, monarchic, and local styles, and is perceived to be more norm-favoring and simplistic. Type III includes the internal, external, oligarchic, and anarchic styles, and is thought to be value-neutral and more dependent on specific contexts or tasks. According to Zhang (2010), cognitive styles, learning styles, and thinking styles are conceptually different style terms. In her opinion, cognitive styles focus on how individuals prefer to cognize information, and learning styles tend to characterize how they learn about information, and thinking styles refer to the preference of thinking about information. However, these constructs share a fundamental similarity: all refer to the interaction of abilities and personality. In most studies of Sternberg and Zhang and co-authors, including books and published papers, the core content of thinking styles, intellectual styles, and cognitive styles is actually the same.

The corresponding measure of the self-governing theory approach to thinking styles is the Thinking Style Inventory (TSI, Sternberg & Wagner, 1992). It is composed of 104 items in its long version, and 65 items in the short one. Due to lower scale reliabilities in dimension of local, monarchic, and anarchic, seven items of these subscales were rewritten, then the revised version of 65-item was made, i.e. the second version TSI-R (Sternberg et al., 2003). After that, Sternberg et al. (2017) concluded the second version of thinking style inventory TSI-R2, because they found there was still very low reliability for the anarchic style scale which forced them to radically change its three-item formulation. In line with our research aim of this study, we opted for the latest version as our testing measurement due to three concerns. First, it is the dominant and systematic measurement of thinking styles with updated revised version. Second, it was already used with Chinese samples as well as with samples in Asian and non-western

countries. Third, its formulation makes it possibly suitable to be used within business organizations, namely linked to human resources practices.

By checking most published articles employing TSI-R2 measurement in China, we found that most reported only Cronbach's alpha as the reliability (internal consistency) and descriptive statistics for the 13 factors (Cheng et al., 2015; Cheng & Zhang, 2015; Higgin & Zhang, 2009; Zhang, 2010; Zhang & He, 2011; Zhu, 2013). A few number of papers reported the factor loadings (principal components analysis), and inter-item correlations as indication of validity. In addition, up to 2009 no research has employed a confirmatory factor analysis (CFA) for the thinking style inventory (Fan & Zhang, 2009). Most recent publications do report acceptable CFA fit indices, but they have used exclusively a student population (e.g. Fan, 2016; Cheng et al., 2016; Cheng & Zhang, 2017; Yuan et al., 2017) and in some cases the lowest reliability falls below the .70 threshold. So, nothing is known about the quality of this measure outside the educational domain with adult working populations.

## 3.2.3 Emotional domain: model of emotional expressivity

There is an emerging attention given to emotions that has not been sufficiently researched within this line of cross-cultural studies contrasting west and east, especially in organizational settings. One of the emphasis found in cross-cultural emotions research lies on emotional expressivity. Emotional expressivity is important because it relates with several areas, such as psychopathology (Morelen et al., 2013; Veilleux et al., 2021), health well-being (Grandey & Melloy, 2017), personality development (Abe & Izard, 1999), or social interactions (Cameron & Overall, 2018). Thus, researchers targeted the construct, and the measurement of emotional expressivity. Kring et al. (1994) simply refer to emotional expressivity as a certain kind of outward display of emotions, no matter if it is positive or negative, no matter if it occurs via facial expression, vocal cues or gestures. Gross and John (1997) converge by defining emotional expression as the behavioral changes visible in the face and body posture that typically accompany emotions, which influence a wide range of intra-and interpersonal process. This falls within the larger scope of emotion regulation which refers to the processes and strategies to help keep, increase or decrease a certain kind of emotional experience (Gross et al., 2006).

One of the prevailing ideas about emotional expressivity is its sensitivity to social learning. Although there are universal basic human emotions (Ekman, 1992), these can be modulated by culture (Matsumoto et al., 1988). Ekman (2004) suggested that cultural differences would be

seen in some of the stimuli, which can elicit particular emotions by learning, and in the rules that can control facial behavior in special social settings, as well as in those consequences of emotional arousal. Culture has an obvious impact on how people interpret and regulate their emotions (Bulter et al., 2009). Therefore, due to cross-cultural variants, emotional regulation strategies may be employed differently (Markus & Kitayama, 1991).

A rich body of literature including both theoretical and empirical studies has showed that people vary in emotional expression across cultures, mostly with sampled populations from west and east, namely, European Americans and East Asians (Soto et al., 2011; Wei et al., 2013). Mesquita (2001) implied that culture can cause different emotional regulation. Compared with Asians in collectivistic cultures, European Americans in individualistic cultures are more likely to choose hedonic emotion regulation strategy for a negative-event experience, that is, up-regulation of keeping positive affect (Miyamoto et al., 2014). In collectivistic cultures, where people tie closely and strongly with groups such as their family (Hofstede, 2001), emotional regulation strategy is encouraged and adopted to achieve pro-social interpersonal relationships (Butler et al., 2007). Kitayama et al. (2006) believed that friendly feelings and guilt is fostered in Japanese culture, while pride and anger is endorsed in North American culture. Under Asian dialectical believes, moderated emotions are valued, and therefore, emotional regulation is common and expected (Miller et al., 2002). Furukawa et al. (2012) found that Asians were observed with more emotions about shame and guilt while Americans were observed highly on pride.

Furthermore, Deng et al. (2019) found that compared to European Americans, Chinese treated emotional expression as more negative and less important. Different cultures have different emotional display rules, also extended to organizations (Gelfand et al., 2017). For example, individualistic cultures place more importance on the freedom of emotion expressivity and also relatively more differences among people than those in collectivistic cultures (Matsumoto et al., 2008; Oyserman et al., 2002). This is in line with Butler et al. (2007) findings that in collectivistic cultures, people prefer to express less their own emotion, and conversely, people adopting European values are less likely to conceal emotions. To sum up, emotional suppression is desirable in collectivistic groups, and too much emotional display is considered negatively connected with social relationship and harmony. Conversely, individualistic cultures, emotional expression is more emphasized and encouraged due to their prioritized value of individual rights and identity with more attention given to the self (Louie et al., 2015).

Still, when interacting with in-group members compared to out-groups, people universally show more emotions (Matsumoto et al., 2008).

#### 3.2.4 Measure development: emotional expressivity questionnaire

The importance of emotions within cross-cultural research has made an impulse to developing measures that enable its empirical study. Among these there are two main instruments commonly used in research (Dobbs et al., 2007): Kring et al. (1994) emotional expressivity scale (EES), and Gross and John (1995) Berkeley Expressivity Questionnaire (BEQ). Both measurement of EES and BEQ have been shown to have high internal consistency and test-retest reliability, as well as convergent and discriminant validity by authors who proposed it first.

EES reflects a one-factor model about a general expressive behavior (Kring et al., 1994) and BEQ reflects a hierarchical three-factor model about an emotional valence-specific construct (Gross & John, 1995). EES is a 17-item scale loading on a single general 2<sup>nd</sup> order factor comprising two 1<sup>st</sup> order factors (emotional suppression, and emotional expression) which has been widely used as a self-report measure of emotion expression in organizational research (e.g. Jiang et al., 2018; Shaw et al., 2003; Schnakenberg & Lysaker, 2020). It is designed to evaluate the extent to which people externally show their emotions, aiming to grasp a general individual emotional expressivity.

Likewise, BEQ is a 16-item scale comprising three factors (positive expressivity, negative expressivity, impulse strength) that can be divided into five factors (impulse strength divides into positive and negative and a fifth factor is extracted from negative expressivity that targets only negative suppression). From a cross-cultural point of view, taken into consideration that negative and positive emotions are related to emotional display norms (Furukawa et al., 2012; Kitayama et al., 2006) BEQ is more informative on how culture may shape emotional expression.

As stated, Gross and John (1995) developed BEQ to measure an individual's emotional expressivity. The reliability and validity of the scale have been investigated and proven high by many authors, such as Akan and Barişkin (2017) who used a Turkish population sample; Kupper et al. (2020) with a Dutch sample, or Lin et al. (2016) with a Japanese sample. The first two subscales from this measure (positive expressivity, and negative expressivity) emphasize the behavioral demonstration, while the third one (impulse strength) give priority to the intentions. Each item is answered on a 7-point Likert-type ranging from 1 (strongly disagree)

to 7 (strongly agree). Gross and John (1998) examined and yield five factors: expressive confidence, positive expressivity, negative expressivity, impulse intensity, and masking. Akan and Barişkin (2017) Turkish version identified 3 factors: emotional expression, impulse strength, and masking. BEQ has been translated into Bengal, Dutch, French, Japanese, Portuguese, Spanish, Swedish and Turkish. Zhao et al. (2015) found reasonable validity indicators for the Chinese version of BEQ, mostly for the five-factor structure, although fit indices still open room for improvement or further testing with a similar population.

# 3.2.5 Value domain: value survey module (VSM)

The most important and popular framework about measuring value in cross-cultural studies is Hofstede's value survey module (Sent & Kroese, 2020). In essence, the purpose of VSM is to identify some basic differences of people across the countries about how they perceive and interpret the real world. There are six distinct value dimensions summarized in VSM 2013, namely (Hofstede et al., 2013): power distance, individualism vs collectivism, masculinity vs femininity, uncertainty avoidance, long-term orientation vs short-term orientation, and indulgence vs restraint. Power distance is defined as the extent of the acceptance about power unequally. Individualism vs collectivism is defined as whether people connecting with each other loosely or closely. Masculinity vs femininity refers to the extent of acceptance of work goals such as success or quality of life. Uncertainty avoidance concerns the extent of tolerance of uncertainty. Long-term orientation vs short-term orientation is defined as orientation towards future rewards or also comprehending the past and present rewards. Indulgence vs restraint refers to the extent whether gratification, desires and life-enjoying are free or controlled.

Geert Hofstede was a pioneer and influential author is cross-cultural studies (Sent & Kroese, 2020), who opened way to make cross-cultural empirical research about cultural values with quantitative measurement (Hofstede, 2001). Therefore, he has made invaluable contribution to the national cultures research and organizational practices due to his famous framework of values. Following the research work of Hofstede, Globe project (House et al.,2001), adopted diverse methods and aimed to answer some basic questions from a worldwide perspective. For example, are there any leader behavior, attributes and organizational practices that are accepted and effective universally or only in certain cultures? The nine independent dimensions within this model comprehend uncertainty avoidance, power distance, institutional collectivism, in-group collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation, and humane orientation.

Concomitantly, Shalom Schwartz's circle of fundamental values (Schwartz, 1992; Schwartz et al., 2012) emerged as one the most prevalent and influential frameworks (Schwartz, 2016). He proposed 10 values falling into four big value dimensions, that is, benevolence and universalism belonging to self-transcendence, tradition, conformity, and security belonging to conservation, all of these are all social interest focus; self-direction, stimulation, and hedonism belonging to openness to change, power, achievement, and hedonism belonging to self-enhancement, all of these are all personal interest focus (Schwadel, 2021).

Stemming from political science and sociology, the cultural theory of Ronald Inglehart (Inglehart, 1997) and Christian Welzel (Inglehart & Welzel, 2005) prevailed. It comprises two major dimensions in cultural orientations: one including a preference for traditional versus secular-rational values, and another including a preference for survival versus self-expression values (Beugelsdijk & Welzel, 2018). Therefore, the famous Inglehart-Welzel cultural map identified many countries into some cultural clusters on the basis of four different values (Lin & Mancik, 2020).

There are some overlaps and idiosyncrasies observable in these proposals. Each has its own rationale and strengths but from the literature review it is Hofstede's theory that is the most popular and influential work on national cultural values. Meanwhile, a key-issue in fully understanding the model lies in how to operationally defined it, i.e. how it can be translated into a measure. Value Survey Module 2013 (VSM 2013) is a 30-item paper-and-pencil questionnaire survey, developed and provided by Hofstede and colleagues (Hofstede & Minkov, 2013), aiming to compare values and sentiments of similar participants from two or more countries, or regions within countries. It consists of six dimensions of national values, each dimension with four questions, as well as six social demographic questions, including gender, age, education, occupation, current personality, and nationality at birth. Gerlach and Eriksson (2021) empirically examined the psychometric quality of three scales extracted from VSM 2013, through the use of Pearson correlations to test validity (cf. Post, 2016) and the country-level Cronbach's alpha values to test internal consistency (cf. Nunnally & Bernstein, 1994). The results showed overall poor reliability and consistently inadequate validity, so they argued that there might be independent dimensions, rather than a well-defined construct. That is to say, it is a fact that the index is used not as a reflective construct but a formative one. The interpretations and generalization of Hofstede's cultural dimension framework go far beyond what the scale items actually measure, instead they are more valuable in the practical structure (Taras et al., 2009).

## 3.3. Methods

#### 3.3.1 Measurement

The second revised version of Sternberg's Thinking Styles Inventory (TSI-R2), Berkeley Expressivity Questionnaire BEQ (Gross & John, 1995), and the VSM manual from Hofstede et al. (2013) were selected to measure the construct "thinking style", "emotional expressivity", and the "culture-profile". Whenever the scales were already available in Chinese (i.e. BEQ and VSM), they were adopted. In the case of TSI-R2 no such version was located and thus we followed a process of translation and backtranslation (Brislin, 1970).

Thinking styles were measured with a TSI-R2 revised version (52 items, 13 dimensions) which was the result of removing the lowest loading item per dimension due to practicality reasons, concerning the length of the integrated survey (detailed items can be seen in the appendix).

Emotional expressivity was measured with the Chinese version of BEQ comprising the original 16 items organized into three factors: impulse strength, negative expressivity, and positive expressivity.

Cultural values were measured with the Chinese version of VSM, 24 items, comprising power distance index, uncertainty avoidance index, masculinity index, individualism index, long term orientation index, indulgence vs restraint index.

## 3.3.2 Data collection and analysis

Data collection was conducted online (with the questionnaire survey both on Qualtrics and another Chinese survey platform-WJX) and lasted from December 2018 to January 2019. It was sent with an invitation message through we chat social network stating the purpose of the study, that it was entirely voluntary, anonymous and for academic purposes. The convenient sampling method followed a snow-balling strategy. Data analysis to test for construct validity was conducted based on Confirmatory Factor Analysis and reliability using SPSS AMOS 24.

#### **3.3.3 Samples**

From 297 original answers received, after the removal of invalid entries (monotonous answer, or indication that the questionnaire was done too hastily) the final sample was cut down to 254 valid data. A valid of final sample comprised 254 participants. Most participants are young,

only including 6.29% above 45, and all others 93.71% falling in the age range of 18-44. The sample also covers 84.25% well-educated population, which means only 15.75% fall below the bachelor's degree. Additionally, most participants (85.83%) have working experience.

#### 3.4. Results

Results showed many difficulties with the psychometric quality of TSI. Mostly because it comprehends 13 factors. A confirmatory factor analysis on the 13-dimension TSI-R2 failed to achieve acceptable fit indices (CMIN/DF=1.899; CFI=0.784; RMSEA=0.060). By using Lagrange multipliers to identify items that could harm the overall quality of the measure, we have endeavored to improve it but still many factors showed poor reliability (Joreskog's Composite Reliability and Cronbach's Alpha below .70). Still, by sequentially and iteratively removing items based both in empirical indication and trying to preserve theory, from the full TSI questionnaire, seven factors survived comprising 18 items (CMIN/DF=1.398; CFI=0.97; RMSEA=0.04). The valid solution thus comprehends, separately: Liberal-Change (CR=.847, AVE=.650), Internal-Self-reference (CR=.760, AVE=.517), Judicial-Analytical/Comparative (CR=.788, AVE=.555), Local-Detail (CR=.808, AVE=.679), Conservative-Rules (CR=.816, AVE=.597), Oligarchic-Other-reference (CR = .728,AVE=.573), and Monarchic-Analytical/One step at a time (CR=.687, AVE=.524).

As regards BEQ, the psychometric quality fell short from achieving acceptable fit indices (CMIN/DF=2.332; CFI=0.854; TLI=0.827; RMSEA=0.073) for the three-factor solution (positive emotional expressivity, negative emotional expressivity, impulse strength). However, although there are no issues pertaining to discriminant validity (all HTMT below .85) none of the factors reached the minimum level in AVE (.500) and the reliability for each separately is only acceptable for the Impulse factor (CR=.716). The five-factor solution showed better fit indices, although marginally unacceptable (CMIN/DF=2.061; CFI=0.892; TLI=0.862; RMSEA=0.065) which was refined by means of including two covariances in the error terms thus showing marginally acceptable fit indices (CMIN/DF=1.883; CFI=0.912; TLI=0.885; RMSEA=0.059). Still, this model kept the same convergent validity issues observed in the previous solution and likewise only one factor shows acceptable reliability (Negative impulse strength).

As regards VSM, published studies do not report on its psychometrics mostly because the indices are formative in nature. Still, if a value is a construct that is intrinsically a latent variable it is possible that such construct could be treated as reflective in nature. We did conduct a

confirmatory factor analysis, but the fit was unacceptable (CMIN/DF=2.572; CFI=0.733; TLI=0.689; RMSEA=0.079). Likewise, no factor showed neither acceptable reliability nor convergence validity indicators (all AVE below .500) and discriminant validity even returned impossible figures with HTMT analysis. Thus, judging on the praxis in academia, we concur that the construct is better treated as a formative construct being a product of expertise and consensus amongst scholars, than a construct that is supposed to operate as a latent variable in peoples' minds. It is also analyzed at national level and not so much at the individual or organizational level. From further exploring the VSM Manual we found that the final index value is actually a result of adding the score in each dimension with a value in each dimension (a constant that is arbitrary on the nature of the samples so to make the scale within the 0-100 range) that will compose the final score. This is a pragmatic decision that allows for some stability in the comparative indices but that may be doubtful as regards mitigating measurement error. Even though, because this is a widely accepted measure of culture, and because it has been so extensively published in top tier journals, and for comparative purposes it does not create any bias as the constant is the same for each dimension in all countries.

# 3.5 Conclusions and Discussion

Cross-cultural research is eager on finding measures that have equivalence across populations with varying cultures. This allows researchers to extrapolate findings and test true differences in the most varied organizational or societal models.

The ultimate challenge is finding equivalent instruments pertaining to the measurement of deep-rooted constructs such as cognitive styles or emotional expressivity. However, finding such instruments is critical to probe into the fundamentals of individual differences based on culture.

Results from this study are a bit dismaying. Although all three instruments are the most popular and used in research, none of the original structure survived this study's empirical test with a Chinese sample.

VSM might be outside the realm of this discussion because it is commonly treated as a formative construct. Still, it is not difficult to sustain that culture should be also reflective in nature as it is internally experienced as a latent construct. From this perspective, its psychometric quality is well below acceptance which goes in line with Gerlach and Eriksson

(2021) recent findings. Yet, this topic might deserve more deep theoretical developments to ascertain the suitability of such analyses.

Overall, the goal of this study was to test the reliability and validity of dominant measurement to see whether it was suitable in China for our project purposes. The psychometric validation of TSI and BEQ might look like a failure, and the results were not as good as expected.

In the case of TSI, our study reports all CFA for TSI-R2. Actually, Fan and Zhang (2009) stated that before 2009, no research tested and reported CFA for the TSI-R2 scale. Many papers only reported descriptive statistics for 13 factors together with the Cronbach's alpha, as well as the factor-loadings and inter-item correlations to prove reliability and validity. After 2009 some studies conducting EFA and/or CFA have demonstrated the reliability and validity among Chinese sample populations but comprehending only students. This might be due to the reason that the priority of researchers employing thinking style inventory was not to examine the psychometric quality of measurement scale but rather used it in the educational setting. In our case, results failed to offer psychometric support for the quality of TSI with a sample mostly comprising Chinese working population. The reliability and validity indices for the TSI-R2 trimmed down to seven factors comprehending 18 items proved sufficiently satisfactory. However, this implies a substantial theoretical change in the rational that guided the design of the original TSI-R2 scale. Disregarding this the facts from the data analysis show that the missing six factors (global, external, hierarchic, executive, anarchic, legislative) could not achieve acceptable fit indices for Sternberg's original thinking styles theory (Sternberg, 1988). In fact, the subscale of global has been previously reported to have low reliability (internal consistency) with very modest Cronbach's alpha, like 0.64 (Zhang & He, 2011), 0.65(Zhang, 2010), and 0.68 (Fan & Zhang, 2014). This goes in line, and reinforce, our findings.

Conversely, BEQ as an instrument, with this sample, cannot be considered neither valid nor reliable, which is slightly different from the results for previous studies. For example, Kupper et al. (2020) used Dutch population samples to reproduce the BEQ's original factor structure and the results showed good internal consistency (Cronbach's alphas ranging 0.86-0.88 for subscales) as well as convergent and divergent validity. However, Dobbs et al. (2007) conducted a CFA of BEQ to find it failed to achieve an adequate fit to their data, except when they modified two items (which were not neither statistically nor theoretically supported, e.g, item 12 loaded on both negative expression and impulse strength factor, as well as error variances of certain items correlated).

The model structure is different from the original hypothesized model structure proposed by Gross and John (1995) which might be due to the inconsistency of the CFA criteria. Furthermore, different results about the assessment of BEQ imply that emotional expressivity is a complicated construct which comprehend many discrete negative and positive emotions not always taken into consideration, and that can vary strongly to produce a general state of negative emotional expression. It is known that emotions are not reactions to the world, instead, they are constructions of the world (Barrett, 2017). Barrett also argued that "emotions are displayed on the face with expressions we recognize" is a commonly believed myth. For different emotion experience, people have different ways of emotional display, especially adding the environmental and cultural factors. Emotional expressivity and emotional recognition should also include the consideration of context. Consequently, it might be more reasonable that researchers adopt diverse discrete emotions profiling in the future studies about emotional expressivity. Meanwhile, though Zhao et al. (2015) used a Chinese version of Berkely Expressivity Questionnaire to test its reliability and validity among Chinese college students, the sample was very young (just aged 18-24) and the statistical data results of CFA about either the fit indices for a three-factor model and a five-factor model showed marginally acceptable with some indices falling below comfortable cut-offs (e.g. CFI<sub>3factor</sub>=0.66 and CFI<sub>5factor</sub>=0.87). Our studies further support these findings.

It goes without saying that our conclusions for these measurement scales must be gauged against its limitations. Namely, although the minimum sample size for conducting a CFA is set at 150 observations (Muthén & Muthén, 2002) or 200 observations (Kline, 2011) and our sample observes this by including 254 individuals, we must take into consideration the number of observed variables (items) in the TSI-R2 and the complexity that represents organizing them into 13 latent variables. Such complex models may probably be better tested by considering the Hair et al. (2019) recommendation of at least 300 observations and in cases of complex models at least 500 observations (Hair et al., 2019). The survived subscale structure for TSI-R2 only accounted for 54% variance (seven vs. thirteen), although samples have advanced in broadening operationalization with most working population, rather than student sample mostly previously (Cheng & Zhang, 2015; Fan, Zhang & Chen, 2018; Zhu, 2013), however, whether it is sufficiently reliable and valid to be used in practical organizational settings still needs further examination. In the future, it might achieve more reliable and satisfactory results by enlarging the sample size.

Creating a basis of practical and meaningful measurement scale of thinking style and emotional expressivity is essential for studies where these variables would be used as in the model. Therefore, if human resources management processes rely on specific individual thinking styles and emotional expressivity in organizations, the improved and high-quality practical measurement of these constructs is of great importance. In addition, due to the suitability and error difference of the same measurement scale in different cultures and languages, future studies should also consider the cultural bias in the consideration of proper measurement scale. The simpler the structure of the questionnaire, the more probable it will be that there is common ground and understanding. Such applies mostly to TSI where the six excluded factors in the Chinese sample suggest they (as conceived originally by Sternberg) are not clear enough in the respondents' mind, and it seemed far more complicated and not suitable for organizational contexts. This means that a more parsimonious questionnaire on thinking styles that captures the main ideas might be helpful to enable cross-cultural research with this focus. Sternberg's dimensions that gathered consensus in the literature are the suitable ground to nurture such endeavor.

# **EMPIRICAL STUDIES**

# STUDY 3

Temporal foundations in Management: The case for long term orientation and performance expectations in Human Resource Management  $^6$ 

<sup>&</sup>lt;sup>6</sup> A version of this paper is under 2<sup>nd</sup> round revision in an international peer-reviewed indexed journal under the title: "Perceived organizational performance as a factor: the case for HPWS and turnover intention bounded by long-term orientation".

# Chapter IV: Temporal foundations in Management: The case for long term orientation and performance expectations in Human Resource Management (Study 3)

The best time to plant a tree was 20 years ago.

The second best time is now.<sup>7</sup>

种树的最佳时间是 20 年前,其次是现在。

#### **Abstract**

Although time horizons are critical for management, especially in HRM, a contextual based approach to theory and practice accounting for society's time orientation is still scarcely researched. To address this issue this study tested the mediator role of perceived performance in the relationship between high-performance work systems (HPWS) and turnover intention with the moderation of long-term orientation, a known Chinese cultural feature. With a sample of 430 employees from manufacture and service industries, findings show a direct and indirect effect of HPWS on turnover intention via perceived financial performance. However, perceived non-financial performance had a stronger effect in retaining long-term oriented employees but also the opposite effect on short-term oriented employees. Findings are discussed at the light of Expectancy-Valence Theory, to conclude that time horizons (long-term vs short-term orientation) matter in management, namely when designing HPWS and that these systems are more effective when long-term orientation values prevail.

 $<sup>^{7}\,\</sup>mbox{The importance}$  and implication of temporal and long-term plan, also better later than never.

# 4.1. Introduction

All societies have an understanding of time and how it should be valued. Some will place a focus on the short term while others will make short-term concessions for the sake of expected long term returns (Karniol & Ross, 1996). Confucian based societies, of which China is the most representative (Jiang, 2018), are known for their long-term orientation (Hofstede, 2009) which represents a construct preference of a time horizon in their decisions. Temporal dimension is critical for management, especially in HRM, where the definition and importance of objectives, strategies and KPIs depend on the time horizon. If a given organization values long-term objectives, it will consistently include KPIs that translate into long-term returns such as employee engagement, customer loyalty, product quality or the development of new services/products.

Strategic HRM approaches, such as High-Performance Work Systems (HPWS, Wright & Kehoe, 2008) are consistent with this long term-orientation and they were designed specifically to motivate employees to have high engagement, involvement, and effectiveness (Pandya & Trivedi, 2018). The long-term management philosophy of HPWS has been found to be advantageous for organizations, because it has been linked, in meta-analytic studies, to many positive outcomes such as organizational performance (accounting returns, growth, or market returns) and operational performance that includes productivity, customer satisfaction, or new product / service (Combs et al., 2006; Jiang et al., 2012). Although it has been mostly researched in the West, its worldwide adoption is now documented (Erturk 2014; Haines et al., 2010; Hom et al., 2009; Memon et al., 2016; Wang et al., 2011).

If indeed HPWS is intrinsically related to long term orientation, then it would be expectable to find much research relating it to time orientation in societies where organizations operate. However, this is an under-research topic, although it seems fundamental to understand the true implications of time orientation options in management especially taking into consideration critics to short-termism (Chandler et al., 2016; Koslowski, 2000). It is known that intertemporal divergences (e.g. managers' short termism in a long-term oriented context or vice versa) create tension in organizations (Hahn et al., 2015). Considering the fundamental structuring role of long-term orientation in management this is a substantial research gap. Closing this gap is important both to theory and practice as the adoption of a specific set of management practices may have counterproductive results if indeed the context is not taken into consideration (Nishii et al., 2018). Within the domain of HRM, among these consequences lie the inability to retain

excellent employees, talents, which will represent a loss in competitive advantage, productivity and work quality (Hancock et al., 2013; Holtom & Burch, 2016) especially in knowledge-based economies (Harris, 2001).

By addressing this gap, this study brings together two research approaches that have been scarcely articulated, namely the temporal research in organizations (Smith et al., 2017) and Strategic HRM (Chow et al., 2008; Storey et al., 2019). We contend this temporal perspective can help understand organizational behavior (Ancona et al., 2001) and include two important dimensions of human behavior: time orientation, and expectations. Future orientation impact career decision making (Ginevra et al., 2016) but also organizational gains (Flammer & Bansal 2017). Expectancy-valence theory (EVT) is an important departing point to understand how expectations matter in organization as they always concern short versus long term objectives. Expectations play a fundamental role in several research domains interest in studying human behavior, such as Economics (Hansen & Sargent 2019), Medicine (Corsi & Colloca, 2017), or Management (Nason et al., 2018). Expectations are thus important to explain organizational behavior because employees and managers do not make decisions just based on what they perceive (Turnley & Feldman, 2000). They make them based also on what they expect as the outlook might matter more than the present due to future orientation (Das, 2019).

In line with these two dimensions of temporal perspective (time orientation and expectations), this study focuses on the modulating role temporal orientation has in management taking into consideration also employees' expectations. The research question is: Does long term orientation changes the HPWS relation to expected performance and turnover intention? More specifically, this study is set to test the moderation role that long-term orientation has in the relationship between HPWS and turnover intention as mediated by financial performance (a short-term measure) and a non-financial performance (a long-term measure). This model answers a need to develop culture-embedded management models, which relate to important HR outcomes such as turnover.

After reviewing the literature concerning temporal dimension, HPWS and turnover intention, the paper adopts an Expectancy-Valence Theory perspective to hypothesize the mediator role of perceived organizational performance in the relationship between HPWS and turnover intention as well as the moderator role of long-term orientation. After elucidating the Chinese context and delineating the methodology, findings about the mediated moderation are shown. The final section offers a discussion at the light of theory as well as the key conclusions and future research prospects.

# 4.2. Literature Review

# 4.2.1 Temporal dimension in management: Long term orientation and Expectations

Temporal focus has been gaining attention in management research and is recognized as important to advance knowledge (e.g. Ancona et al., 2001; Ashkanasy et al., 2004; Bluedorn & Jaussi, 2008; Boniwell, 2009; Das, 2019; DesJardine & Shi, 2020; Engelen et al., 2020; Flammer & Bansal, 2017; Fried & Slowik, 2004; Laverty, 1996, 2004; Maglio & Trope, 2019; Mosakowski & Earley, 2000; Seijts, 1998; Ye et al., 2020).

The temporal dimension sees time as a key factor in explaining how organizations function (Ancona et al. 2001) and strategy has been a valued construct in organizational management which is, by definition, focusing on the long term rather than the short term, for which tactic is the most suitable construct (Abrate & Viglia, 2016; Carey et al., 2018; Peter & Jarratt, 2015). Although there is indication that short-term orientation (present or long-present) can be beneficial for such counterintuitive outcomes such as sustainable development (e.g. Kim et al., 2019), a long-term orientation (LTO), also named future orientation (Ashkanasy et al., 2004), is not only generally valued (Chandler et al., 2016; Wang & Bansal, 2012) as it is known to relate to higher organizational gains (Flammer & Bansal, 2017).

LTO is an important cultural value that meaningfully affects the behavior of individuals. It is the fifth cultural dimension in Hofstede's model, though it was first named Confucian Dynamism (Hofstede & Bond, 1988). LTO comprehends two dimensions: tradition, and planning (Bearden et al., 2006). This distinction is in line with Brigham et al. (2014) argument that LTO consists of focusing on the future (planning) but also taking into consideration the accompanying influence of the past and present (traditions). It is generally beneficial and valued in Asian cultures such as China. Values associated with LTO are thrift, perseverance and the adaptation of traditions to new circumstances as well as deferred gratification of needs (Hofstede, 2009) as against short-term gratification (Kuchinke, 1999). Actually, in many occasions such as personal life or career change, time perspective is crucial when individuals make their critical decisions concerning present and future issues. Long-term orientation represents an expectation towards a future commitment (Lui & Ngo, 2012) while short term orientation may favor decisions targeting immediate and visible results (Lin et al., 2019) due to the desire for instant gratification or an attitude that assumes impossibility to achieve objective in the future (Molinari et al., 2016).

Expectations always concern a certain time horizon and are the basis to understand much of human motivation / behavior (Maden et al., 2016). Psychology has shown that expectation formulation is a process that starts with the precipitating phenomenon, and then resources to prior understanding, cognitively process information, formulates an expectation, to produce an outcome, and finally, a post-outcome cognitive processing (Janzen et al., 2006). Meanwhile, expectations usually emerge from past experience or hope of future probability to take effect on present decision-making or other behaviors. Expectations can seriously influence human present behavior and decision-making. For instance, Murnighan and Roth (1983) argued that expected probability of continued future play could predict cooperation. In marketing business, anticipation is representing an orientation for customer future needs (Kandampully & Duddy, 1999).

The Expectancy-Valence theory (EVT, Vroom 1964) was the first attempt to use cognitive-oriented assumptions as of the basis for a general theory of work motivation. Vroom (1964) stated at first, individuals anticipate certain outcomes based on their perceived behaviors; second, each outcome means certain value to individuals; third, individuals need to make efforts to get certain desired outcome. EVT helps explaining and addressing some issues related to employee motivation. Eccles and Wigfield (1995) used expectancy-value theory to combine expectancy of success and value when working on learning behavior and decisions. Gradually, it has evolved as a basic paradigm for the study of human attitudes and behaviors in organizational settings (Wiesenfeld et al., 2017).

Thus, expectations can be a source of problems just as well as they can be a solution for them because positive future expectations can buffer negative psychological emotions and deter employees from demotivation (Maden et al., 2016). Like in many decisions made in organizational context, individuals rely on expectations to make decisions pertaining e.g. their career choices (Ferrari et al., 2010), how much they invest in contextual performance (Strobel et al., 2013) or how much they experience emotional exhaustion, job satisfaction, or turnover intention (Maden et al., 2016). From all the detrimental effects that expectations can bring to organizations, turnover intention has been greatly studied due to its potential magnitude (Bridges et al., 2007).

#### 4.2.2 HPWS and turnover intention

Turnover research has a long history (Hom et al., 2017) and comprehends several theoretical approaches and models intended to uncover the causes and consequences of turnover, conceived both as an individual phenomenon as well as a collective one (Hausknecht, 2017).

Within such models, the behavioral intention emerged as a central variable, especially regarding individual voluntary turnover because it expresses the thoughts about leaving the current working organization or quitting the job (Simon et al., 2010). It has been consistently found to be the best direct predictor of actual turnover (Cho & Lewis 2012; Cohen et al., 2016) being frequently used as a surrogate (Jiang et al., 2012). The prediction power of turnover intention on actual turnover is quite strong; being reported to reach as much as 73% explained variance (Lucas et al., 1993) although a more comprehensive meta-analytic study would point towards a 25% explained variance (Rubenstein et al., 2018). Still, it was found to be the highest direct predictor of actual turnover in this comprehensive meta-analysis.

Behavioral intention is very sensitive to management practices (Chen & Tsai 2007; Choi et al., 2004; Widianti et al., 2015). Among such practices in the organizational domain, HR practices are long known to affect attitudes and motivation (Arthur 1994; Evans & Davis 2005) such as employee turnover (Lu et al., 2002). HRM research and practice has put emphasis on shifting from control HR practices to commitment HR practices (Noe et al., 2015) that are precisely designed to foster the employee involvement and engagement, so to reduce intention to quit and associated attitudes that are detrimental for organizations (Latorre et al., 2016). HPWS is an example of a set of HR management measures (Wright & Kehoe 2008) intended to motivate employees, to increase their engagement, involvement, and effectiveness (Pandya & Trivedi, 2018).

Scholars diverge as to the precise set of practices that such HPWS should comprehend (Chadwick, 2010; Lu et al., 2015) especially when contrasted with practitioners (Jewell et al., 2020), but there is a wide consensus these practices operate as a bundle (Delery & Shaw 2001; Wright & Kehoe 2008). Pfeffer (1998) argued that seven HR practices substantially improve organizational effectiveness, namely: 1) employment security 2) selective recruitment, 3) self-managed teams and decentralization of decision making as the basic principles of organizational design, 4) comparatively high compensation contingent on organizational performance, 5) extensive training, 6) reduced status distinctions and barriers, including dress, language, office arrangements, and wage differences across levels, and 7) extensive sharing of financial and

performance information throughout the organization. Within HPWS research, an approach that has received much attention was proposed by Appelbaum et al. (2000), which can be regarded as a stronger conceptualization of HPWS comprehending three dimensions, indicating that organizations foster employees' abilities, motivation, and opportunities (AMO structure). Ability (A) refers to the individual skills necessary to perform, such as advanced human resource selecting, skill development, and training in the workplace. Motivation (M) refers to the desire of employees to perform and comprehends incentives such as pay, benefits, and promotion prospect. Opportunity (O) refers to the kinds of opportunities to perform, such as working team autonomy, teamwork development, and involvement (Lepak & Shaw 2008). This conception of how HR practices are intertwined to produce positive effects has been known as the configurational approach (Martin-Alcazar et al., 2005) and was associated to organizational outcomes such as voluntary turnover as shown by Jiang et al. (2012) meta-analysis.

The research on the relationship between HPWS and retention/ turnover intention has consistently shown a negative association (Erturk 2014; Haines et al. 2010; Hom et al. 2009; Memon et al. 2016; Wang et al. 2011). Although there are findings that suggest that not all HR practices directly influence voluntary turnover (Selden & Sowa 2015), overall the set of HPWS is seen as effective in preventing turnover. We, therefore, propose that:

Hypothesis 1: HPWS is negatively associated with turnover intention

The process by which HPWS prevents employee turnover has also been explored with many possible mediators (Hom et al. 2017). Among these mediators, expectations were found to operate in certain cases e.g. Luna-Arocas and Camps (2008) which goes in line with Bateman and Barry's (2012) theory that highlights the role anticipatory cognition plays in persisting in long-term goals such as remaining in a given organization.

# 4.2.3 Performance expectations, HPWS, and turnover intention

Organizational performance is one of the many issues about which individuals build expectations. It is one of the most important aspects in organizational settings as it relates not only with how the organization has been managed, but also with future prospects inside that organization (Oettingen & Mayer 2002). The organizational decline research has shown that once establish the subjective idea that an organization in declining, a vicious cycle gains momentum (Masuch, 1985) which leads to a loss of psychological resources that operate as a self-fulfilling prophecy and ultimately worsens the organizational situation (Edwards et al., 2002).

Expectations pertaining to organizational performance may concern different time horizons because organizational performance comprehend dimensions that have a short-term expression as well as those that are operating more on the long run. Among these dimensions one can distinguish between financial and non-financial performance. Financial performance is a money-related dimension, comprising profits and benefits and conceives organizational value as a function of growth and profitability (Palepu, 1986).

Financial performance is most commonly measured via sales growth, return on sales, return on equity, and profitability or a balanced budget, which have been linked to HPWS (Jiang et al., 2012). The KPIs tend to be reported per quarter periods, but its monitoring in stock exchange is done continuously. Conversely, the non-financial performance includes some indicators such as employee or customer satisfaction, both found to be strategically important to a firm's competitive advantage on the long run (Wiklund & Shepher, 2003). Although they can be taken as drivers of financial performance, a comprehensive organizational performance system such as the well-established Malcolm Baldrige Quality Award model or the European Foundation for Quality Management model conceive customer satisfaction, new product / services quality and innovation as performance indicators per se (Kafetzoupoulos et al., 2019; Wilson & Collier, 2000). Their benefits are always projected to occur in the long run, not so much on the short run, and in the case of Malcolm Baldrige Quality Award, HPWS is explicitly identified as a driver (Wilson & Collier, 2000).

Perceived performance can foster a sense of pride, satisfaction, commitment, and even security because an employee will nurture a more positive expectation about the future in an organization that is doing well (Armstrong, 2005). The central importance of performance makes it a critical variable to understand expectation and how unmet expectations can foster employee responses, such as turnover.

Although turnover intention is treated as a proximal HR driver of performance instead of a dependent variable (e.g. Park & Shaw, 2013), from an EVT point of view, the perception of performance (both financial and nonfinancial) can precede the behavioral intention, in this case, turnover intention. This is especially highlighted by Karniol and Ross (1996) conception of a two-way connection between past, present and imagined future in understanding human motivation. Combs et al. (2006) finding that financial and non-financial seem to have an equivalent relationship magnitude with HPWS also favors such interpretation. This allows us to treat non-financial and financial performance as concomitant factors, in the same manner

Jiang et al. (2012) meta-analysis did by separating operational performance from financial performance, both associate with turnover intention. Therefore, we hypothesize that:

Hypothesis 2a: Perceived financial performance mediates the relationship between HPWS and turnover intention.

Hypothesis 2b: Perceived non-financial performance mediates the relationship between HPWS and turnover intention.

This mediation model brings together HPWS, perceived performance, and turnover intention taken from a temporal dimension of "expectations". However, as stated, temporal dimension also comprehends time orientation.

## 4.2.4 Bringing together expectations and LTO

At the organizational level, LTO is a relevant construct to identify which KPIs should be used to measure organizational performance. Listed companies that are often short-lived focus on purely financial performance such as sales and stocks (Felstead, 2018) while companies that invest in the long-term will extend these KPIs into sustainability and other non-financial indicators in line with corporate social responsibility (Kucharska & Kowalczyk 2019).

Employees vary as regards long-term or short-term orientation due to shifting values and thinking orientations (Lepak & Shaw, 2008). This variation explains the divergent findings as regards the motivating potential of short-term versus long-term goals (Karniol & Ross, 1996) where short-term goals seem to exert a stronger effect. This was found in a western context that is mostly short-termed oriented (Hofstede, 2009) and it is in this precise context that managerial short-termism has been researched and found to lead to higher turnover rates among managers (Palley, 1997). This seems to be more characteristic of Anglo-Saxon economies where there is a widespread belief that employers prefer to make investments to maximize the short-term gains and rewards, instead of the larger returns which may generate in the future at the expense of present sacrifices or benefits (Felstead, 2018). However, countries like Germany and Japan have a strong emphasis on developing long-term productive capacity (Gospel & Pendleton, 2005) and, together with China, have high LTO contrasting with most of the western countries (Hofstede, 2009). As a construct that characterizes organizational context, LTO favors decisions with a time horizon aligned with social values.

In the same manner that employees with different cultural orientations may be affected in different ways by the same incentive dimensions (Adler & Gundersen, 2007), so do

expectations about short-term and long-term performance have distinct outcomes due to individual time orientation. Financial KPIs are known to have a short-term focus (that was named short-termism, Marginson & McAulay, 2008) while non-financial ones offer a long-term perspective of employee motivation levels (Appelbaum & Kamal, 2000).

Thus, it is reasonable to infer that expectations concerning short-term variables are more valued in societies that are also short-termed while, conversely, expectations concerning long-term variables (e.g. non-financial performance) are more valued in societies such as China due to its high LTO (Hofstede, 2009). Most recently Han et al. (2020) theorized that HPWS can lead to counterintuitive negative effects due to the interaction with organizational culture.

Based on the above, we proposed that:

Hypothesis 3a: LTO moderates the relation between perceived financial performance and turnover intention

Hypothesis 3b: LTO moderates the relation between perceived operational performance and turnover intention

As a consequence, integrating the previous hypotheses, we expect that:

Hypothesis 4a: LTO moderates the indirect effect linking HPWS to turnover intentions through financial performance

Hypothesis 4a: LTO moderates the indirect effect linking HPWS to turnover intentions through non-financial performance

The overall set of hypotheses is depicted in the following conceptual model (Figure 4. 1)

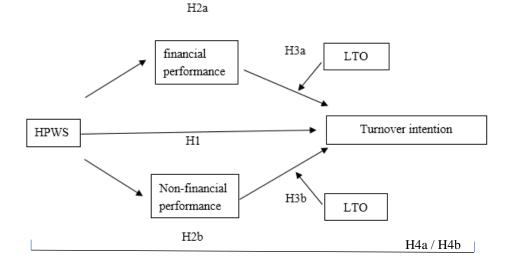


Figure 4. 1 Conceptual Model

#### 4.3. Method

#### 4.3.1 Procedure and data collection

Data collection was conducted with a questionnaire addressed to the working population in China, all over 18 years old, mainly working in Guangdong, Shanghai, and Jiangsu. The sampling followed a snowball strategy. The questionnaire was elaborated using a Chinese survey platform (WJX), with a link that could be sent through social media WeChat to any suitable respondent. Participants were given information that all data collected was only for the purpose of research, with guarantees of anonymity and confidentiality, and that they could terminate at any time if they feel reluctant and uncomfortable. A direct contact was provided to ensure they could ask for further information and crosscheck the origin of the invitation. All answers to attitudinal items were registered on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

#### **4.3.2 Sample**

A total of 455 answers were received, from which 25 excluded due to missing values or inconsistencies following data quality assurance check (Meade & Craig, 2012). The final sample comprises 430 respondents, 209 males (48.6%) and 221 females (51.4%). This is a young (80.5% sample aged up to 34 years old) and highly educated (90.2% have a BSc) sample. The majority has between 3 to 10 years of work tenure and works in the service industry (74.9%). Most organizations are from private companies and employ more than 100 employees.

#### 4.3.3 Measures

As stated, all attitudinal items were assessed with a 7-point Likert scale to the exception of performance variables that were assessed with a 5-point comparative scale (1=much worse than average to 5=much better than average). The questionnaire included a sociodemographic section asking for gender (1=M, 2=F), age (five age groups ranging from 18-24 to above 55 years old passing through 25-34, 35-44, 45-55), professional tenure (five tenure groups ranging from "within 1 year" up to "above 10 years" passing through 1-3, 3-5, 5-10), organizational size (five sizes ranging from "below 10 employees" to "above 100" passing through 10-20. 20-50, and 50-100), and education (five degrees ranging from 1=below high school, 2=passing through high school or equivalent, 3=bachelor, 4=master, 5= Ph.D.).

HPWS was measured with an adaptation of Pfeffer's (1998) having chosen nine practices following Boon, Hartog & Lepak (2019) indication. The practices were all measured with two items and are as follows: 1) Job security (including "My company usually offers steady work contract to new employees" For my company job security is part of its culture"), 2) Selective hiring (including " My company hires new employees based on intensive recruiting efforts resulting in many qualified applicants." "New employees are selected based on rigorous tests or interview panels."), 3) autonomous teams (including" In my company there are many selfdirected/autonomous work teams", " Employees are involved in programs designed to encourage participation"), 4) Generous contingent compensation (including" In my company employees receive above-average compensation and benefits.", "In my company, employees are paid primarily based on their competency and also their group performance (e.g. profitsharing, gainsharing, team-based)", 5) Extensive training (including "My company is committed to the training and development of its employees", "My company offers intensive/extensive training in technical and soft skills"), 6) Low-status distinction (including "In my company supervisors keep open communications with employees"," In my company, there is a culture of equal treatment between everybody."), 7) Extensive sharing of financial / performance (including " My company provides relevant operating performance information to all employees ", "My company provides relevant financial performance information to all employees"), 8) Performance management (including" My company provides formal performance appraisals or evaluations on a routine basis", "In my company performance feedback comes from more than one source"), 9) Career management (including "My company provides many opportunities for career development", "In my company the opportunities to have a promotion in the career are based upon merit or performance."). Because this measure is not consolidated, we conducted a confirmatory factor analysis (CFA) to test for its construct validity and overall psychometric quality. The CFA showed good fit indices ( $\chi 2(135)=362.811$ ,  $\chi$ 2/df=2.687, p < .001, CFI=.949, TLI=.942, RMSEA=.063, SRMR=.049) and composite reliability for the 2nd order factor is .954 (all first order factors have CR above .701). Likewise, the solution has convergent validity (AVE =.698), and all single order factors AVEs are above .539.

Turnover intention was measured Mobley et al., (1979) scale comprehending a 4-item single factor ("I often talk about leaving my current employer", "I will be probably looking for a new job within one year", "I am determined to leave for a new career opportunity", "I am probably leaving because of bad prospects of this company"). The CFA showed good fit indices

 $(\chi 2(2)=4.143, \chi 2/df=2.071, p=.126, CFI=.997, TLI=.992, RMSEA=.050, SRMR=.0188)$ , the measure is reliable (CR = .842) and has convergent validity (AVE=.582).

Perceived organizational financial and non-financial performance was measured based on Delaney and Huselid (1996) study. Participants were asked to think how they compare their organization's performance over the last three years with the competitors in the market by signaling their perception in a 5-point comparative scale ranging from 1 (much worse than average) to 5 (much better than average). The financial dimension of organizational performance was measured with three indicators ("Sales growth", "Financial performance" and "Profitability") while the non-financial performance was measured with four indicators ("employee satisfaction", "customer satisfaction", "service/production quality", and "new product/service development"). The CFA of the two-factor model has good fit indices ( $\chi$ 2(13)=42.338,  $\chi$ 2/df=3.257, p<.001, CFI=.987, TLI=.978, RMSEA=.073, SRMR=.0251) and both the financial performance (CR=.897) and non-financial performance (CR=.899) are reliable and have convergent validity (AVEFP=.745; AVENFP=.693) as well as divergent validity (square rooted AVEs higher than interfactor correlation r=.756, p<.001).

Long-term orientation (LTO) was measured with and adjusted version of Bearden et al. (2006) scale, which was originally based on Hofstede's (2009) LTO. It comprehends six items distributed by two factors including tradition (3 items, e.g. "I value a strong link to my past work") and planning (3 items, e.g. "Persistence in the work is important to me"). We measured LTO at the individual level due to intra-cultural variation (Au 2000). The CFA showed acceptable fit indices ( $\chi$ 2(8)=29.587,  $\chi$ 2/df=2.573, p<.001, CFI=.989, TLI=.980, RMSEA=.061, SRMR=.0221). Both factors are reliable (CR=.857, and .778, respectively). Likewise, both factors have convergent validity (AVE<sub>Tradition</sub>=.666. and AVE<sub>Planning</sub>=.570) as well as divergent validity (square root AVEs higher than interfactor correlation r=.731, p<.001).

Emotional expressivity impulse was used as a marker to gauge common method bias (Podsakoff et al., 2003). It was measured with four items (e.g. "My body reacts very strongly to emotional situations") from Berkeley expressivity questionnaire by Gross and John (1995). The scale is reliable (CR=.769) and has good convergent validity (AVE=.526).

Control variables as stated, comprise the gender, age, education, working tenure, and organizational size.

#### 4.3.4 Measurement model

The overall measurement model shows good fit indices ( $\chi 2(545)=1144.562$ ,  $\chi 2/df=2.100$ , p<.001, CFI=.936, TLI=.930, RMSEA=.051, SRMR=.0588) which are better than alternative measurement models judged on Bollen (1989) chi-square difference as well as Cheung and Rensvold (2002) threshold for  $\Delta$ CFI (Table 4.1).

# **Common method variance (CMV)**

Because common method bias is a matter of concern in any cross-sectional study using self-reported data, we applied Podsakoff et al. (2012) marker variable technique following Simmering et al. (2015) criteria. Emotional expressivity is a suitable marker because it has no theoretical relation with our endogenous constructs (perceived performance, and intention to quit). We use the same scale format and placed it in the questionnaire close to the items measuring the endogenous variables. By using covariance-based SEM, we found no significant paths leading from the marker to the endogenous constructs. Namely to perceived financial performance (-.076, p=.106), perceived non-financial performance (-.022, p=.582), and intention to quit (.035, p=.523). Additionally, we conducted a common latent factor test. This test showed non-significant estimates ( $\beta$ =.01) and the introduction of the common latent factor did not improve the model fit. Therefore, we trust findings are not biased by CMV.

Table 4. 1 Measurement model comparison

Model	$\chi^2$	df	CFI	TLI	RMSEA	SRMR	AIC	$\Delta \chi^2 \left( \Delta df \right)$	ΔCFI
Model A Base	1144.562	545	.936	.930	.051	.056	1314.562	-	-
Model B	1466.415	550	.902	.894	.062	.059	1626.415	321.853 (5)***	.034
Model C	2020.244	554	.843	.831	.079	.069	2172.244	875.682 (9)***	.093
Model D	2355.898	557	.807	.794	.087	.079	2501.898	1211.336 (12)***	.129
Model E	2665.981	557	.774	759	.094	.078	2811.981	1521.419 (12)***	.162
Model F	2882.680	559	.751	.735	.098	.087	3024.680	1738.118 (14)***	.185
Model G	3527.914	560	.682	.662	.111	.0947	3667.914	2383.352 (15)***	.254

<sup>\*\*\*</sup> p<.001, B model (FP and NFP fused), C model (FP, NFP, HPWS fused), D model (FP, NFP, LTO fused), E model (FP, NFP, HPWS, TI fused), F model (FP. NFP,

HPWS, LTO fused), G model (single factor, all fuse

#### 4.3.5 Data analysis strategy

Following screening for data quality (Meade & Craig 2012) we tested for psychometric quality (both reliability, construct and convergent validity) via confirmatory factor analysis (Hair et al., 2013). The descriptive data analysis focused on means and standard deviations and bivariate statistics via Pearson correlation judging its significance using a 95% confidence interval. Finally, we tested hypotheses with model 14 from PROCESS Macro (Hayes, 2018) which corresponds to a moderated mediation model with the moderation occurring in the last step, between the mediator and the dependent variable.

We used the recommended 5000 bootstrap sampling within a bias-corrected bootstrap confidence interval (CI) of 95% (Hayes 2018). Any association path (or effect) is regarded as significant (for a 95% confidence interval) when there is no possibility of the existence of a "0" value within the interval comprehended between the lower and the upper bounds of the CI. That is to say, if the lower bound CI and the upper bound of the CI are both positive or negative, we can trust the effect to be meaningful. Otherwise, if there is one negative and the other one positive at the same time, the effect cannot be trusted to be meaningful.

#### 4.4. Results

Findings firstly pertain to the descriptive statistics analysis and the bivariate correlations between all variables in the model (see Table 4. 2).

Table 4. 2 Descriptive and bivariate statistics

	Min	Mear	n SD										
	Max	I		1	2	3	4	5	6	7	8	9	10
1. Gender	1-2	1.51	.500	1									
2. Age	1-5	2.17	.752	065	5 1								
3. Education	1-5	3.17	.688	.024	086	1							
4. Work tenure	1-5	3.38	1.196	5081	.674**	*179**	* 1						
5. Size of organizations	1-5	4.12	1.239	001	1 .048	.173**	.070	1					
6. HPWS	1-7	4.55	1.15	.007	.065	100*	041	019	1				
7. Financial Perf	1-5	3.29	.78	070	066. (	003	.000	.119*	.530**	1			
8. Non-Financial Perf	1-5	3.35	.77	057	7.072	093	.000	.002	.715**	.688**	1		
9. LTO tradition	1-7	5.54	1.09	025	5 .122*	121*	.079	036	5.415**	.302**	.393**	1	
10. LTO planning	1-7	5.38	1.11	052	2.086	014	.065	018	3.374**	.252**	.358**	.581**	1
11. Turnover intention	1-7	3.60	1.43	017	7105	.071	126**	.004	360**	298**	326**	*156**	181**

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed), \*. Correlation is significant at the 0.05 level (2-tailed).

Among the key variables in the model, LTO (in both tradition and planning) dimensions averages more than 5 out of a 7-point scale, which indicates it is consistent with Hofstede (2009). It is worth noticing that the respective standard deviations are substantial (in the vicinity of 1.10) which favors empirical research due to higher within-sample variance. To the exception of turnover intention (M=3.6, SD=.143) all averages (HPWS, Performances) fall in the right side of the scale (about 2/3 of its full range) meaning they tend to be perceived either as existing or positive.

Bivariate statistic shows almost no significant associations between control variables and those in the testing model. Age positively correlates with LTO tradition, meaning that older people give more priority to their tradition and past. Likewise, turnover intention quite expectably correlates negatively both with age and working tenure.

To the exception of turnover intention, all variables in the model show positive correlations. HPWS has the highest magnitude (r=.715, p < .01) with non-financial performance compared to that with financial performance (r=.530, p < .01), also has strong correlation with LTO, tradition (r=.415, p < .01), and planning (r=.374, p < .01). As expected, turnover intention is negatively correlated with all model variables, namely with HPWS (r= -.360, p < .01), Financial performance (r=-.298, p < .01) and Non-Financial performance (r=-.326, p < .01).

For parsimony's sake, we put the model summary in a single table (see Table 4. 3), and the interaction statistics from each moderator (LTO tradition and planning) in separate tables (see Tables 4. 4 and 4. 5

Table 4. 3 Model summary for dependent variable turnover intention

Moderator	R	R-sq	MSE	F	df1	df2	p
LTO (tradition)	.4234	.1793	1.7143	8.3011	11	418	.0000
LTO (planning)	.4344	.1887	1.6946	8.8394	11	418	.0000

Table 4. 4 LTO tradition conditional mediation for turnover intention

Dependent variable model	В	SE	t	BootLLCI	BootULCI	
Constant	5.63	.60	9.39	4.45	6.81	
HPWS	31	.08	-3.87	47	15	
Financial Performance	30	.11	-2.52	53	06	
Non-Financial Performance	04	.14	-0.34	33	.23	
LTOtradition	01	.07	18	15	.12	
FinPerf x LTO <sub>tradition</sub>	.12	.12	1.06	11	.36	
NFinPerf x LTO <sub>tradition</sub>	23	.12	-1.91	47	.01	

Table 4. 5 LTO planning conditional mediation for turnover intention

	В	SE	t	BootLLCI	BootULCI
Dependent variable model					
Constant	5.49	.59	9.17	4.31	6.67
HPWS	28	.08	-3.57	44	12
Financial Performance	25	.11	-2.24	48	03
Non-Financial Performance	07	.13	54	34	.19
LTO <sub>planning</sub>	08	.06	-1.24	20	.04
FinPerf x LTO <sub>planning</sub>	.10	.10	.97	10	.31
NFinPerf x LTO <sub>planning</sub>	27	.10	-2.51	48	05
Conditional Indirect effect	Effect	se	t	BootLLCI	BootULCI
M-1SD (5.38-1.1068=4.2732)	.22	.18	1.21	13	.59
M (5.38)	07	.13	54	34	.19
M+1SD (5.38+1.1068=6.4868)	37	.18	-2.07	73	01
Johnson-Neyman	Effect	SE	t	BootLLCI	BootULCI
1.00 (5.38-4.37)	1.11	.49	2.24	.13	2.09
2.89 (5.38-2.48)	.60	.30	1.96	.00	1.20
6.34 (5.38+0.96)	33	.17	-1.96	67	.00
7.00 (5.38+1.62)	51	.22	-2.33	95	08
index of moderated mediation	index	BootSE		BootLLCI	BootULCI
	12	.05		24	01

Findings show the direct effect between HPWS and turnover intention is negative and significant for both models including LTO planning and tradition, which corroborates Hypothesis 1.

Findings also showed a consistent indirect effect for perceived financial performance between HPWS and turnover intention in both models that included LTO tradition (B=-.30, CI95[-.53, -.06]), and LTO planning, (B=-.25, CI95[-.48, -.03]). However, no indirect effect was found for non-financial performance. Therefore, this corroborates Hypothesis 2a and rejects Hypothesis 2b. So, the perceived financial performance mediates the relationship between HPWS and turnover intention.

Testing for possible bias arising from correlation between the moderator and the dependent variable, we found that both LTO tradition and planning have no association with turnover intention (LTO tradition, B=-.01, CI95 [-.15, -.12], and LTO planning, B=-.08, CI95 [-.20, -.04]). The analysis, therefore, proceeded to interpreting the moderation effects. Findings showed no interaction between LTO tradition and perceived financial performance in explaining turnover intention (B=-.12, CI95[-.11, .36]). Similarly, findings also showed no interaction between LTO tradition and perceived non-financial performance (B=-.23, CI95 [-.47, .01]).

The perceived nonfinancial performance has no association with turnover intention (B=.07, CI95 [-.34, .19]). For LTO planning, the interaction with perceived financial performance is also not meaningful (B=.10, CI95[-.10, .31]) while it is meaningful for perceived nonfinancial performance (B=-.27, CI95[-.48, -.05]) indicating a moderated mediated model for LTO planning and non-financial performance (B=-.12, CI95 [-.24, -.01]). Findings reject Hypothesis 3a, 4a(both for LTO tradition and planning) and corroborate Hypothesis 3b,4b for LTO planning only.

Overall, findings showed that LTO does not interfere in the negative relationship between perceived financial performance and turnover intention. The hypothesis 3b is partly corroborated, that is, while LTO tradition does not interact, LTO planning does moderate the relationship between perceived non-financial performance and turnover intention (see figure 4. 2). Judging on Johnson-Neyman table (that indicates the conditional effect for values of the moderator), the perceived non-financial performance positively relates with turnover intention when the values of LTO planning are below 2.89 to become negatively related when the values

of LTO planning are higher than 6.34 (out of a 7-point scale). This suggests a curvilinear inverted U-shaped relationship that the direct effect could not show.

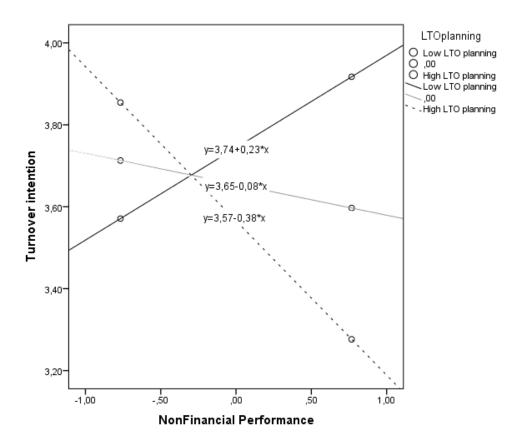


Figure 4. 2 The moderation of LTO planning in the relationships between non-financial performance and turnover

Lastly, the conditional moderated mediation index (-.12) is significant (CI95 [-24; -.01]) which supports Hypothesis 4, namely, Hypothesis 4b based on previous findings testing for Hypothesis 3a and Hypothesis 3b.

# 4.5. Discussion and conclusion

Temporal dimension in Management has deserved attention because management practices, such as HPWS, do not exert an immediate effect on organizational performance as performance dimensions concern proximal and distal outcomes of organizational activity (Jiang et al., 2012). While financial performance can be understood as mostly related to short term (Marginson &

McAulay, 2008), non-financial performance (e.g. Appelbaum & Kamal, 2000) is mostly valued due to its deferred effects, and therefore, fall more into the scope of a long-term analysis. A time-related psychological process that plays a critical role on employee motivation, is expectation, as evidenced by EVT based research (Wiesenfeld et al., 2017). Expectations have the nature of anticipatory cognitions, always concern future time, and they may focus on the short term or the long term. Expectations are known to explain persistence in long-term goals and states, such as deciding whether to remain or not in an organization (Bateman & Barry, 2012). This highlights the advantage of adding to extant turnover intention models the fundamental dimension of LTO, especially in settings where LTO is known to prevail, e.g. China (Hofstede, 2009). Keeping this in mind, this research intended to test a temporal based model taken the example of the moderation role LTO could play in an HPWS - turnover intention model in the unique Chinese cultural context.

Findings corroborated the direct and indirect effect between HPWS and turnover intention via perceived financial performance, thus suggesting its role as a mediator although a direct effect is also observed. This direct effect is amply supported by empirical research from Erturk (2014), Guthrie (2001), Haines et al. (2010), and Hom et al. (2009). It translates the intrinsic effectiveness of HPWS in its original purpose of favoring employee engagement and commitment to the organization (Pandya & Trivedi, 2018). The indirect effect found, that partially supported hypothesis 2, is also in line with Jiang et al. (2012) association between the financial performance and turnover intention. Conversely, perceived non-financial performance was not a mediator in this study which is somehow surprising considering Jiang et al. (2012) findings that establish (in the meta-analytic correlations table) an effect of similar magnitude of the one found for financial performance.

However, it is very informative that Jiang et al. (2012) opted not to represent in their model the direct relationship between nonfinancial performance and turnover intention. This could be explained by the action of unaccounted moderation effects that interfere with the relative importance of nonfinancial dimension to judge upon remaining or not in the organization. The support found for the third hypothesis, concerning the interaction with LTO planning only, does suggest that such an effect occurs in the model. The underlying rationale is: if organizations invest HPWS efforts to emphasize long-term assets such as non-financial performance, employees with a long-term orientation about future planning anticipate a more desirable long-term future. This is consistent with EVT (Daly & Dee, 2006) where the expectations tend to extent perceptions about enduring states, such as organizational outcomes. They conceive such

nonfinancial performance as an investment with an expected positive return in the long run. Therefore, their expectations should be positive and offer them reasons to remain in the organization. The inverse valence relationship found for short-term oriented participants may be explained due to a possible devaluation of long-term investments. Therefore, a short-term oriented employee may conceive non-financial performance as a cost, or at the best, a risky investment that postpones what could be better immediate results. Such short-termism is well documented in extant research concerning shareholders (Fried & Wang, 2019) and there is no reason to contend it does not extend to other life domain decisions or some stakeholders, such as employees.

Such findings are of especial relevance in the Chinese cultural context, where there is a general belief that long-term orientation should prevail (Hofstede, 2009). Distribution found for LTO scale does show prevalence in this sample of LTO individuals in line with what would be expected in China (Chao, 1990; Harris & Carr, 2008; Hofstede, 2009).

These findings offer a theoretic and practical contribution to the existing literature about temporal dimensions in management research, namely the mechanism between HPWS and turnover intention in China. First, most papers regarded the turnover intention as the HR outcome, which is studied as the proximal variable to predict the distant dependent performance variable. Our study, based on the conception of Karniol and Ross (1996) about understanding human motivation in a two-way connection from past to anticipated future, suggests that turnover intention can also be regarded as the consequence of perceived performance, due to anticipatory cognition. This is rather an unconventional model for those researchers that conceive performance as the final outcome, but such conception does not comprehend the role that expectations can play in anticipating a desirable or non-desirable organizational future. Likewise, many performance models establish a recurrent effect (where the causal direction reverses in a circular causal model) but although depicted, tend to be ignored. In short, expectations are critical in human motivation (Berridge, 2000) and the intention to remain or exit an organization must account not only for how much present conditions met previous expectations but also how present conditions nurture expectations about the future. The implications for management research extent beyond HRM as these temporal processes relate to every single management decision.

Some limitations must be accounted to fully understand the scope of such findings. First, although the sample size is reasonable, the sampling procedure does not offer a guarantee of randomization, which may cast doubts about the generalizability of findings. However, the

sample comprehends individuals that originate from very distinct regions in China. Another limitation pertains to the self-report nature of data and its cross-sectional design. This does not necessarily lead to common method bias (Conway & Lance, 2010) but it requires checking if such an issue occurred or not, even when cautionary procedures were in place such as given assurances of anonymity, that there are no right or wrong answers, as we did (Podsakoff et al., 2012). A technical procedure to test it consists of the common latent factor test by adding a common latent factor to the measurement model, checking for the statistical significance of its estimates of the paths connecting to the observed variables. This test showed non-significant estimates ( $\beta$ =.01) and the introduction of such common latent factor did not improve the model fit. Additionally, when common method bias occurs, no moderation effects are expected (Siemsen et al., 2010) contrarily to findings in this study. Although this does not rule out common method bias it does encourage us to think it played no important role in this research. Lastly, being a process, it is much more advisable to conduct a longitudinal study albeit the mechanics of "expectations" do apply to explain current behavioral intentions, which the model addressed.

Findings concerning LTO interaction in the relationship between financial and nonfinancial performance with turnover intention provide guidance and insights into how to retain employees in a varying context where LTO is culturally bounded. First, the lack of interaction with financial performance suggests organizations can give priority to it without consideration for the temporal-horizon context. If employees negatively perceive profits or revenues, they will produce adverse anticipatory cognitions about the future and feel strong motivations to search for another employer, no matter whether they have a short-term or long-term orientation. Particularly, when companies are stuck in financial crisis, or risk bankruptcy, employees will opt to leave in the same way that they intend to leave when they perceive themselves as having low performance (Bridges et al., 2007). Second, nonfinancial performance cannot be ignored in the organization, especially considering employees differ as regards long-term orientation. These long-term oriented employees will have a higher motivation to remain precisely due to the consistency between their long-term focus and the longer-termed nature of non-financial performance. However, conversely, investing in non-financial performance seems to have the opposing effect on short-termed oriented employees, which the organization will somewhat push away if such investment is made at the expense of a positive financial performance in the short run. This seems paradoxical but it does reflect the logic of culture-organization

consistency and the need to consider the cultural context in designing employee turnover models.

Future studies may want to replicate this model in other Asian countries as well as introducing more variables that are known to operate in similar models as revised by Hom et al. (2017) and especially to accommodate the role collectivism (as a cultural dimension that is a feature of Confucian societies) may play in facilitating the collective turnover effects (Hausknecht, 2017) and expand such models into context embeddedness.

# **EMPIRICAL STUDIES**

# **STUDY 4**

The effect of organizational citizenship behavior in improving medical service quality: cognitive and value profiles matter <sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Submitted to an international peer reviewed indexed journal.

# Chapter V: Increasing medical service quality through participative safety and citizenship behaviors: Fitting individual profiles with organizational context (Study 4)

Teachers open the door. You enter by yourself <sup>9</sup> 师傅领进门,修行在个人

## **Abstract**

Improving service quality while keeping costs low has been a pressing matter in many healthcare systems worldwide. Organizational citizenship behaviors (OCB) gained a central role in healthcare management exactly because they favor major output increases e.g. service quality, without the matching soaring costs. A climate of participative safety is critical to foster such behaviors, but research has overlooked how the individual features (cognitive and values) relate to this process. This study collected data from a sample of 293 Chinese physician via cross-sectional data analysis to test a three-way moderation composed of one cognitive style (analytical thinking), individual values (long-term orientation), and an organizational instrument (participative climate), to explain when and how OCB in this process leads to higher service quality in hospitals. Using PROCESS macro analyses, findings suggest that we can optimize the effect of participative safety and OCB in improving service quality through physicians' cognitive and value profiles.

\_

<sup>&</sup>lt;sup>9</sup> Meaning: Teachers give you instructions and knowledge, but it is you to make efforts to learn and apply

# 5.1. Introduction

One of the challenges for business management is to optimize service quality in relation to its costs, i.e. how to offer higher service quality without increasing cost. Yet when it comes to healthcare, being an essential industry for human life, we pay more attention to this tradeoff, especially during the COVID-19 crisis management (Bartsch *et al.*, 2020). Changing this "either/or" tradeoff into a "both/and" conjoint equation requires transforming potential capital into real capital, namely, human ingenuity and goodwill into effective innovation.

Ingenuity is the ground to generate ideas, to be creative. However, ingenuity is not productive if the favorable conditions are not met. These conditions bring together highly qualified individuals (ability), an intention to act towards the organizational good (motivation), and the situation that encourages action (opportunity), which has become to be known as the AMO model (Boon et al., 2019). In short, it is not enough to hire highly qualified professionals because without their goodwill and a favorable context, their potential willingness remains just an unrealized promise. Participative safety is one of the conditions that encourage action as well as trust between coworkers (Song et al., 2020). Goodwill pertains to the expectation that the relations are based upon trust and that they should not have a transactional nature, instead, they should be guided by the greater good. This was explored in literature under the topic of organizational citizenship behavior (OCB, e.g. Mostafa et al., 2019), that brought into the light the mirror of task performance: contextual performance. This untapped potential can add to extant levels of productivity and quality without the matching costs. Therefore, empowering and committing healthcare professionals is a promising strategy to achieve this objective of bringing together maximum service quality and cost-efficiency.

To achieve this, it is important to realize that individuals must have the right profile and the context must be the most favorable to shift from a transactional mindset into a transformational mindset. Universalistic models are the first approach, but research tends to evolve by highlighting the individual differences and the contingent or configurational nature of organizational phenomena in HRM (Cooke et al., 2021). Disregarding context, configurations and contingencies may overlook contradictory findings as illustrated by Han et al. (2020) study. The key question is: how to combine multiple individual features related to their understanding of organizations (cognitions and values) to foster a favorable sense of organizational citizenship that nurtures service quality? Most recent research has been adopting such approach (e.g. Diaz-Fernández et al., 2020). In this line, this study puts forward a configurational model represented

by a three-way moderation effect embedded into a mediation model to account for healthcare service quality. The model intends to explore the role of thinking style and personal values in facilitating the willingness to go beyond own interest, which has an important effect in the relationship between participatory safety and service quality in healthcare settings.

The article starts by offering a literature review on service quality and participative safety, to introduce OCB as a mediator approached from the social exchange theory, and then explore how two individual cognitive and value features, analytical thinking and long-term orientation, can facilitate or hinder such relations. The next section explains the methodological options made pertaining to the sampling, measures and data analysis strategy. After describing findings concerning both the quality of the measurement model as well as the hypotheses testing, we discuss results and address the conclusions highlighting its limitations and opportunities for future research.

#### 5.2. Literature Review

#### 5.2.1. Service Quality and participative safety

Service quality and innovation became a pressing matter in overall business but especially in healthcare (Berry, 2019; Park et al., 2021) because of the pressure to simultaneously provide high quality services while bringing down soaring costs (Wirtz & Zeithaml, 2018). Knowledgeable, capable, and responsible human resources (Seth et al., 2005) are a key to achieve this goal, which require a sense of psychological safety (Edmondson, 1999), also called participative safety (West & Farr, 1990). Participative safety refers to a nonthreatening environment that fosters involvement in decision-making (West & Farr, 1990) favoring employees' participation. This is instrumental to the success of organizations (Wilkinson et al., 2010) because it greatly contributes to improving satisfaction and service quality (Pivcevic & Petric, 2011) and also reduces occupational hazards (Evanoff et al., 1999).

Within health care organizations, information sharing is at the core of this process. Healthcare professionals need to learn from each other, give feedback about their work, and share information in the complicated and demanding working environment (Chang et al. 2013). This information sharing is critical not only for patient's diagnosis and treatment (Parush et al., 2011; Weller et al., 2014) but also to generate novel service creativity about problem solving and preventing errors (Edmondson, 2003; Mele & Polese, 2011; Stern et al. 2008). It is one of the key drivers of healthcare quality and safety culture (Santa et al., 2018).

Healthcare professionals were found to voice either to learn, to inform others or to protect patients (Nembhard et al., 2015). Holland et al. (2013) reported that burnout was negatively associated with nurses' ability to directly communicate their concerns and opinions, as well as being able to codetermine decision-making. Therefore, developing proactive opportunities are suggested in health care sectors and psychological safety is a key to enact healthcare professionals' willingness to take interpersonal risks such as speaking up, sharing information, giving and receiving feedback (O'Donovan et al., 2021).

So, there is this wide consensus that healthcare organizations need to foster a favorable climate and scholars agree that only when individuals feel safe and effective will they share knowledge and learning (Kessel et al., 2012) but also demonstrate proactive participation and voice behavior (Newman et al., 2017), and thus contribute to enhance service quality as found by Ruotsalainen et al. (2020). Therefore, we hypothesize that:

H1: Participative safety is positively associated with service quality

#### 5.2.2. Organizational Citizenship Behavior

Service quality, as an expression of organizational effectiveness (Yoon & Suh, 2003), benefits from all performance drivers, amongst which the employee willingness to go beyond their routine formal job requirements, i.e. to perform organizational citizenship behavior (Bateman & Organ, 1983). This construct can help filling a research gap which is the lacking mechanism that link participative safety to service quality. OCB is a discretionary set of individual behaviors that are not "directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (Organ et al., 2006:8). OCB can thus be taken as a voluntary action of giving extra resources to others or the organization under the expectation (conscious or not) of reciprocity or also an action of giving back others or the organization those resources that were made available, e.g. socio-emotional feelings such as safety, support, or trust (Eisenberger et al., 2001). Exchange relations have long been acknowledged to play a crucial role in the emergence or promotion of OCB (Organ et al., 2006) and thus, this psychological mechanism, in line with the altruistic nature of medical work.

Indeed, the social exchange theory (SET, Blau, 1964; Cropanzano et al., 2017) helps clarifying why OCB should bridge participative safety climate with medical service quality. SET posits that individuals engaging in voluntary actions are motivated by the expected returns from others, no matter if they are tangible or intangible. There is a basic premise that the fundamental form

of human interaction lies in the exchange of social and material resources, guided also by the norm of reciprocity. Such reciprocal exchange results in trust building, which is the fundamental underlying capital that fosters a sense of participative safety (Liu et al., 2020).

OCB is an advantageous asset to any healthcare organization as it increases employees emotional well-being (Grant & Sonnentag, 2010; Glomb et al., 2011), job satisfaction (Torlak et al., 2021), and organizational commitment (Ng & Feldman, 2011) and lowers turnover intention (Shanker, 2018). Ultimately, this translates into higher organizational effectiveness, productivity, helps coping with challenges (Chang et al., 2011; Jiang et al., 2017; Kataria et al., 2012; Kumari & Thapliyal, 2017; Organ et al., 2006) and is consistently reported to drive higher service quality of organizations (Berry, 1999; Morrison, 1997; Podsakoff et al., 2000; Qiu et al., 2019).

This was found to occur also in health care organizations like hospitals in providing stronger patient safety care (Prottas & Nummelin, 2018). It is rather unsurprising because of the highly interdependent nature of healthcare professional teams (Rosen et al., 2018). This highlights the importance of mutual help whenever individuals must rely on each other for resources and desired outcomes (Mathieu et al., 2014). These altruistic behaviors have been one of the fundamental dimensions of OCB ever since its inception (e.g. Smith et al., 1983).

In a recent proposal to account for medical team interaction dimensions in China, "mutual help" emerged as a distinct and theoretically central construct that helped preventing burnout (Song et al., 2019). Effective teamwork is widely acknowledged as necessary to patient safety (Leonard et al., 2004) and quality of care (Rosen et al., 2018) and mutual support became one of the core targets for US nationwide healthcare teamwork training (Clancy & Tornberg, 2007). In line with this, the evolving organizational context where healthcare teams work, is now stressing interpersonal collaboration as the emergent criterion to define team boundaries themselves (Barrow, 2012). Complementarily, participative safety is reasonably believed to foster OCB. Approached as psychological safety, it has been given a central role as a team emergent state in Traylor et al. (2020) IMOI model addressing countermeasures against COVID-19 risks in healthcare teams. This is in line with Frazier et al. (2017) meta-analytic findings that showed psychological safety did relate to higher OCB. The more employees feel safe to participate, the more likely they will display this behavior, namely, altruistic intentions (Liu et al., 2012; Ullah et al., 2016). Because OCB, mostly interpersonal help in healthcare teams, has been both taken as an antecedent of service quality and a consequence of participative safety, we proposed that:

H2: OCB mediates the positive relationship between participative safety and medical service quality.

#### 5.2.3. Long-term orientation and analytical thinking

Literature taking a contingency perspective on the relation between participative safety with OCB is yet underexplored. Buch et al. (2018) study is a good example on the benefits such a contingency approach may entail. These authors explored the interaction between an individual orientation ("other orientation") and two sorts of Leader Member Exchange, social and economic, to account for OCB amongst other individual outcomes. The interactions found in that study clarified "when" and "for whom" reciprocation occurs also showing such relation is not independent of who practices it. Another unexplored individual orientation that should play a role in conditioning reciprocation is the "long term orientation". From the social exchange theory "long term orientation" is in line with the nature itself of OCB due to its focus on postponing immediate returns, as against "economic exchange" that is focused on the short term (Shore et al., 2006). Therefore, participative safety, which is related to having a sense that one can voice concerns, suggestions, or ideas, is then favored by the individuals' long-term orientation (Sherf et al., 2019). In the Chinese context, individuals belonging to the same work team will be treated as in-group people (i.e. the individuals that are taken as belonging to one's own group) that has interactions based on long-term orientation as against the short-term oriented interactions with out-group individuals (Hui & Rousseau, 2004).

In searching for more individual conditions that can hamper or foster the hypothesized positive relation between participative safety and OCB it is important to realize the nature of the work teams and what sort of individual abilities participation entails. In the case of medical teams, individual participation is expected to focus on exchanging information that is tributary to a sound diagnosis, treatment or any clinical related issue (Aveling et al., 2018). Amongst the dispositional features that are favorable to this sort of activity is a cognitive style that became to be known as "analytical thinking" (Nisbett, 2003; Thammasitboon & Cutrer, 2013), which is based on information seeking (Hertzum & Simonsen, 2019). Analytical thinking is the basis of most of what we call modern science (Spruit & Lytras, 2018). A recent meta-analysis found that rational thinking, rather than intuitive thinking, has a positive association with task performance, being especially stronger for complex and creativity-based tasks (Alaybek et al., 2021). Therefore, we proposed our third and fourth hypothesis.

- H3. The moderating effect of LTO on the relationship between Participative safety and organizational citizenship behavior is stronger when Analytic thinking is higher.
- H4. The indirect relationship between Participative safety and Service Quality via OCB will be moderated by LTO and analytical thinking, such that the indirect effect of participative safety becomes stronger as both LTO and Analytic thinking increase (3-way moderated mediation).

The overall set of hypotheses can be seen in the following conceptual model (Figure 5. 1)

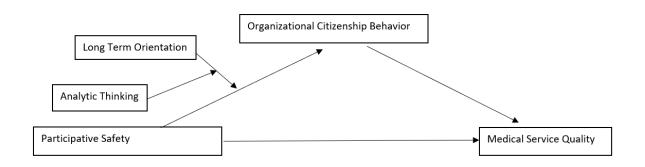


Figure 5. 1 conceptual model

#### 5.3. Method

#### **5.3.1.** Data analysis strategy

Data analysis started by conducting validity and reliability checks through confirmatory factor analysis using current thresholds to judge model fit following Hair et al. (2019) criteria. Additionally, convergent validity was assessed with Fornel and Larcker (1981) average extracted variance (AVE> .500), and discriminant validity with Henseler et al. (2015) HTMT (<.85) and reliability Cronbach alpha and Composite Reliability (> .700). The overall measurement model fit compared with alternative models to judge on its overall construct validity. Hypotheses testing was made with the PROCESS Macro (Hayes, 2018) that simultaneously tests the indirect and interaction effects established in the conceptual model showing bootstrapped intervals. We set the bootstrapping procedure to 5000 repetitions with 95% bias-corrected confidence interval (CI95%), following Hayes (2018) recommendations.

#### **5.3.2.** Procedure and sample

An online questionnaire was sent via wechat networks of healthcare professionals targeting those working in Chinese Public Hospitals. The invitation explained the study as well as the anonymous and confidential nature of the answers and participation. The questionnaire received 293 valid answers from a sample mostly comprising physicians (77.8%), female participants (55.3%), mostly young (79.5% up to 34 years old) and holding at least a Bachelor degree (93.5%) while performing functions at the junior levels (42.2%) with the most frequent organizational tenure being up to 5 years (63.8%). This is expectable in China healthcare systems where a large inflow of young qualified professionals has been witnessed in the last years. The hospitals where the participants work are mainly 3<sup>rd</sup> tier level (77.8%) and located in the Southern provinces (59.7%), but also from the Central provinces (18%) and from the Northern provinces (22.3%) and thus the sample is from across China.

#### **5.3.3.** Measures

Measures that were not available in Chinese were independently translated by two Chinese native speakers knowledgeable in organizational behavior, crossed and then back-translated following standard procedure (Brislin, 1980). All the remaining were published or studied in peer reviewed papers written in Chinese, namely: Participative safety (e.g., Gao et al., 2009), Organizational citizenship behavior (e.g. Zhang & Wang, 2018), Service Quality (e.g. Bai and Chen, 2005), Long term orientation (e.g., Qu & Bai, 2015). Except where indicated, participants were requested to answer in a Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree).

Participative safety was measured with Kivimaki and Eloivainio's (1999) 4-item scale that addresses the joint occurrence of perceived togetherness, sharing information and feeling understood and accepted within the group or organization (e.g. "people feel understood and accepted" or "there are real attempts to share information"). The scale has good reliability (Cronbach alpha=.866, CR=.867) and convergent validity (AVE=.620).

Organizational citizenship behaviors were measured with four items from Van Dyne and Le Pine (1998) scale targeting the perceived degree that coworkers actively seek to help their colleagues throughout work needs (e.g. "to perform functions keeping in mind the benefit of teams and the organization", or "volunteer to do tasks for the teams and the organization"). The

scale has good reliability (Cronbach alpha=.835, CR=.835) and convergent validity (AVE=.560).

Service quality was measured with Chang et al. (2013) 9-item scale used in Chinese hospitals as reflecting those from Parasuraman et al. (1985) and Berry et al. (2002). An overall hospital service quality is conceived as being cumulatively responsive to the patient's needs (e.g. "The entire service process can complete service in a short period of time"), correctly delivering service (e.g. "The entire service process is able to correctly complete designated service items") and providing services that are able to assure the patient and earn confidence (e.g. "The entire service process is trustworthy"). The overall scale, treated as a 2nd order factor, shows good reliability (Cronbach alpha=.904, CR=.944) as well as convergent validity (AVE=.850).

Analytical thinking style was measured with three items adopted from Allinson and Hayes (1996) scale reflecting the core ideas of analytical thinking (i.e. The kind of work I like best is that which requires a logical step-by-step approach", "My understanding of a problem tends to come more from thorough analysis than flashes of insight", and "In my experience, rational thought is the only realistic basis for making decisions"). This scale has good reliability (Cronbach alpha=.761, CR=.762) and convergent validity (AVE=.516).

Long Term Orientation was measured with Bearden et al. (2006) planning scale comprising four items targeting the degree individuals adopt values of thriftiness, postponing rewards and persisting on work goals (e.g. "I don't mind giving up today's fun for future career / work success", "I have a long-term plan for my work", "I work hard for success in the future", "Persistence in the work is important to me"). The scale has good reliability (Cronbach alpha=.786, CR=.815) and convergent validity (AVE=.530).

Control variables used also for descriptive purposes comprehended sociodemographic (gender, 1=male, 2=female; age groups, 1=18 to 24 years old, 2=25-34, 3=35-44, 4=45 to 54, 5=55 or more; education, 1=up to bachelor, 2=bachelor, 3=master, 4=doctorate) but also professional occupation, 1=doctor, 2=nurse, 3=other; category, 1=senior position, 2=junior position) and organizational variables (organizational tenure, 1=up to 5 years, 2=6 to 10, 3=11 to 15, 4=16 or more).

#### 5.3.4. Measurement model and common method bias

To assess the measurement model fit to data we ran a confirmatory factor analysis that showed acceptable fit indices ( $X^2(239)$ =491.427; p<.001; Comparative Fit Index CFI = .936; Tucker-Lewis Index TLI =.921; Root Mean Square Error of Approximation RMSEA = .060, CI90 [.053; .068] PClose = .015; Standardized Root Mean Square Residual SRMR =.0469). No alternative model performed better than the proposed model (Table 5. 1).

As this study is cross-sectional and all measures are self-reported, common method variance should be tested. Following Podsakoff et al. (2003) approach on Harman's (1967) test, findings from an exploratory factor analysis of a single factor showed that only 41.2% variance was accounted thus not reaching the 50% threshold. Likewise, reinforcing this, the single factor solution in the confirmatory factor analysis has worse fit than all alternatives ( $\Delta \chi^2$  (10)=584.744, p<.001;  $\Delta$ CFI=.160) to the exception of the null model. Additionally, we have also took procedural measures when designing the questionnaire so to reduce chances of common method bias following Podsakoff et al. (2003) recommendations, namely, we assured anonymity and also stated that there were no right or wrong answers. For these reasons, we believe common method bias did not occur although the design itself precludes inferring causal relations.

Table 5. 1 Measurement models comparison

Model	$\chi^2$	df	CFI	TLI	RMSEA	CI90 LB UP PClose	SRMR	AIC	$\Delta \chi^2 \left( \Delta df \right)$	ΔCFI
A Base	491.427	239	.936	.921	.060	[.053;.068] .015	.0469	661.427	-	-
SQ+PS	617.606	243	.899	.885	.073	[.066;.080] .000	.0595	779.606	17.38(3) ***	.037
SQ+OCB	706.767	243	.874	.857	.081	[.074;.084] .000	.0677	868.767	215.34(4) ***	.062
SQ+OCB+PS	833.944	246	.841	.821	.090	[.084;.097] .000	.0727	989.944	342.517(4) ***	.095
SQ+OCB+PS and	935.572	248	.814	.793	.097	[.091;.104] .000	.0773	1087.572	444.145(7) ***	.122
AT+LTO	933.372	240	.014	.193	.097	[.091,.104] .000	.0773	1087.372	444.143(7)	.122
Single factor	1076.171	249	.776	.752	.107	[.100;.113] .000	.0838	1226.171	584.744(10) ***	.160
Null model	1066.204	249	.779	.755	.106	[.100;.113] .000	.3011	1216.204	574.777(10) ***	.157

<sup>\*\*\*</sup> p<.001, B model (SQ and PS fused), C model (SQ and OCB fused), D model (SQ, OCB, PS fused), E model (SQ, OCB, PS fused, and AT, LTO fused), F model (SQ, OCB, PS, AT, LTO fused)

### 5.4. Results

As per the description of participants' positioning on the conceptual variables, table 5. 2 shows the means, standard deviations and bivariate relations. LTO has the highest mean, averaging 5.91 out of a 7-point scale (SD=0.76) and ranging from 2.75 to 7. This suggests participants depict themselves in line with the Confucian culture that values thriftiness and persistence, postponing rewards, and seeing work on a long-term basis, also consistent with Hofstede (2009) findings for Chinese samples. Additionally, participants report themselves as being highly analytical, which is expectable in a doctor population that was trained to value more rational and analytical approach to clinical issues (averaging 5.73 out of 7 points, SD=0.78, ranging 3 to 7). Organizational citizenship behavior and service quality lean on the right side of the scale with more positive answers, 5.87 (SD=0.71) and 5.42 (SD=0.85), respectively but with scale ranging across most of the scale points. Participative safety also shows the same profile, but answers covered all scale points (1 to 7) meaning there are cases where participants report being in contexts that offer them no opportunity to participate whereas others perceive to have full opportunity.

Table 5. 2 Descriptive and bivariate statistics

	Min-max	means	SD	1	2	3	4	5	6	7	8
1.Gender	1-2	1.55	.498	1							
2.Age	1-5	2.06	.704	156**	1						
3.Professional tenure	1-4	1.66	.946	089	.761**	1					
4.Organizational tenure	1-4	1.60	.922	069	.750**	.955**	1				
5.Participative Safety	1-7	5.52	.96	.064	075	014	065	1			
6.Analytical thinking	3-7	5.73	.78	056	.005	.036	.021	.460**	1		
7. Long Term Orientation	2.75-7	5.91	.76	.007	083	059	066	.532**	.504**	1	
8.Org. Citizenship Behavior	3-7	5.87	.71	.078	025	.045	.019	.528**	.546**	.565**	1
9.Service Quality	2.78-7	5.42	.85	.006	146*	021	064	.660**	.478**	.490**	.526**

<sup>\*</sup>p<.05 \*\*p<.01

Bivariate statistic shows almost no significant correlations between control variables and those that are comprehended in the conceptual model. One noticeable exception is the negative association between age and service quality. Older professionals seem to report lower perceived

service quality which could be interpreted as an expression of either a deeper understanding of the issues they face in this domain or that they have set, due to experience, a higher expectation level of service quality. All variables in the conceptual model have, as expected, positive significant associations between themselves. The strongest correlation occurs between participative safety and service quality (r=.660, p<.01). There is also a positive association between organizational citizenship behavior with both service quality (r=.526, p<.01) and participative safety (r=.528, p<.01) which encourages further analyses as depicted in the conceptual model.

The Process macro in the SPSS software (Hayes, 2018) (model 11) was used to test all the hypotheses comprehended in the conceptual model. The direct effect between participative safety and service quality has been observed (B=.4626, SE=.0446, t=10.3777, p<.001, bootstrapped CI95% [.374; .550]) which supports hypothesis 1. Likewise, findings show an indirect effect of organizational citizenship behavior on the relationship between participative safety and service quality (.040, BootSE=.015, CI95% [.016; .076]) which supports hypothesis 2 (Table 5.3).

Table 5. 3 Results of the moderated moderated-mediation model ( $R^2$ =.510)

Dependent variable model		nizational (	Citizenship Beha	avior	Service Quality					
	В	SE	t	BootLLCI	BootULCI	В	SE	t	BootLLCI	BootULCI
Constant	5.66	.15	38.81	5.37	5.94	4.19	.38	10.85	3.43	4.95
Gender	.09	.06	1.47	03	.21	11	.07	-1.56	25	.03
Age	04	.06	66	17	.08	25	.08	-3.12	40	09
Professional tenure	.13	.11	1.16	09	.35	.16	.13	1.20	10	.42
Organizational tenure	04	.11	39	26	.17	05	.13	38	31	.21
Participative safety	.13	.04	3.32	.05	.21	.46	.04	10.37	.37	.55
Org. Citizenship Behavior						.29	.05	4.97	.17	.41
Long Term Orientation	.21	.05	3.92	.10	.32					
Analytical thinking	.14	.05	2.89	.04	.24					
Int_1(PartSaf*LTO)	.10	.04	2.21	.01	.20					
Int_2(PartSaf*AnalyThi)	.04	.05	.94	05	.14					
Int_3(LTO*AnalyThi)	05	.05	-1.09	16	.04					
Int_4(PartSaf*LTO* AnalyThi)	.20	.04	4.98	.12	.29					
						Index	BootsSE		BootLLCI	BootULCI
Indirect Effect						.04	.01		.01	.07
Index of moderated moderated-mediation						.06	.02		.02	.10

Process macro Model 11 (Hayes, 2018) previews also a test of a moderated moderated-mediation model with a three-way interaction in the path linking the independent variable to the mediator. In the case of this conceptual model, analytical thinking is expected to moderate the moderation effect of LTO on the relation between participative safety and service quality via organizational citizenship behavior. Accordingly, in this model, participative safety, analytical thinking, and LTO were included in the interaction. The regression coefficient of the three-way interaction was found to be positively related and significant (.207, p<.01, CI95% [.125; .289]). Additionally, the three-way interaction (participative safety \* LTO\*Analytical thinking) was found to be sufficiently strong to moderate the mediation between participative safety and service quality through organizational citizenship behavior. The corresponding index of moderated moderated-mediation is thus significant (.0618, BootSE=.0200, CI95% [.0238, .1030]). Conditional moderated mediation quantifies the linear relationship between LTO and an indirect effect of participative safety at given values of analytical thinking (Hayes, 2018).

Table 5. 4 shows the conditional indirect effect of participative safety on service quality at relatively low, moderate, and relatively high values of analytical thinking. Examining the indices of conditional moderated mediation, it shows that the indirect effect of participative safety is not significant for values of analytical thinking until they reach a very high magnitude (6.51) where the analysis shows a positive effect (.0798).

Table 5. 4 Conditional indirect effect of participative safety on service quality

LTO	Analytical thinking	effect	Boot SE	Boot LLCL	Boot ULCL
7644	7802	.0415	.0208	.0078	.0907
7644	.0000	.0158	.0173	0142	.0542
7644	.7802	0099	.0278	0621	.0470
.0000	7802	.0288	.0233	0044	.0880
.0000	.0000	.0400	.0154	.0161	.0763
.0000	.7802	.0511	.0212	.0147	.0975
.7644	7802	.0161	.0356	0428	.1009
.7644	.0000	.0641	.0251	.0237	.1231
.7644	.7802	.1121	.0316	.0556	.1792
	Ir	ndices of conditional me	oderated mediation by LTO		
Analytical thinking	index		Boot SE	Boot LLCL	Boot ULCL
7802 (relatively low)	0166		.0230	0630	.0282
.0000 (moderate)	.0316		.0198	0050	.0738
.7802 (relatively high)	.0798		.0273	.0289	.1361

Figure 5. 2 shows the graphic depiction of the moderation effect of analytic thinking at relatively low, moderate, and relatively high values which reinforces the existence of the moderation effect at high values of analytic thinking as mentioned in the table 5. 4. Therefore, both H3 and H4 were supported.

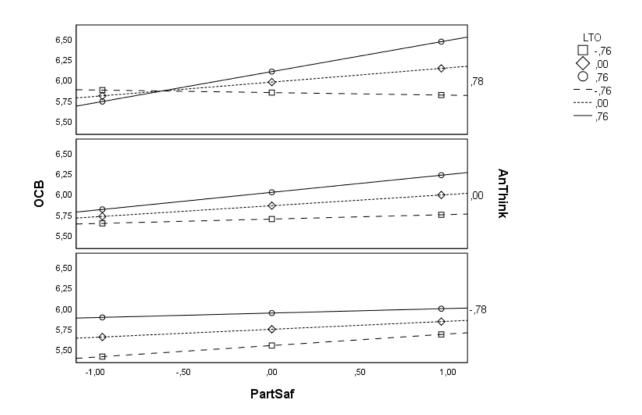


Figure 5. 2 Graphical moderated moderation effect

As a cautionary measure in cross-sectional studies, it is important to ascertain if the reverse causal model shows equivalent findings across the paths (MacCallum & Austin, 2000). The Hayes model that mirrors the one we designed allows this test, which is Model 18. We thus computed this reversed model and found that neither the indirect effect (.0721, SE=.0443 CI95 [-.0110; .1641]) nor the moderate-moderated mediation index (.0510, SE=.0287, CI95 [-.0133; .1010]) hold. Thus, we trust that the theoretical underpinnings and data analysis findings show the proposed conceptual model is robust.

# 5.5. Discussion and conclusion

This study examined a multi-relationship of moderated-moderated mediation effect between participative safety and medical service quality. Process Hayes model 11 was applied to test the conceptual model. All our hypothesize were supported, which are all in line with our model assumption and theoretical rationality.

The results showed that participative safety is positively associated with service quality (Hypothesis 1), which is consistent with the conclusions of previous studies (Pivcevic & Petric, 2011; Ruotsalainen et al., 2020). It is further to emphasize the importance of fostering a favorable climate for employees to participate and share when organizations want to improve their service quality aiming to long-lasting competitive advantage. This is vital for healthcare services as patient's diagnosis and treatment (Weller et al., 2014) is very much dependent on healthcare professionals' willingness to voice and share information (O'Donovan et al., 2021). The direct positive association helps confirm that participative safety is a key driver of the improvement of service quality (Santa et al., 2018).

The result also confirmed the role of organizational citizenship behavior as a mediator in the association between participative safety and service quality. This finding brings together studies that targeted OCB as a leverage of service quality (Bienstock et al., 2003) and studies that relate employees' sense of safety with their altruistic intentions (Frazier et al., 2017; Liu et al., 2012; Ullah et al., 2016). The application of social exchange theory (Blau, 1964; Cropanzano et al., 2017) supports this explanative mechanism of OCB. Altruistic behaviors such as mutual help and collaboration taken as critical organizational resources can indeed lead to desired outcomes (Mathieu et al., 2014), especially in healthcare settings that are fundamentally interdependent in nature (Rosen et al., 2018).

However, under the enlightening reasoning of Buch et al. (2018) who set a good example about a contingency approach in exploring the relationship between participative safety and OCB, this study also introduces individual characteristics crossing the personal values (i.e. long term orientation, Nevins et al., 2007) with cognitive processes (i.e. analytical thinking, Nisbett, 2003). These have been scarcely studied in previous literature and a 3-way moderated mediation mechanism is examined. Findings corroborated the moderating effect of long-term orientation between participative safety and OCB is stronger when analytic thinking is higher. Moreover, findings show the indirect effect between participative safety and service quality via OCB is also sensitive to this three-way moderation, such that the indirect effect of participative safety

occurs when LTO and analytical thinking are simultaneously present. The findings are similar to the interactions investigated by Buch et al. (2018), and offer further support to the claim that participative safety is favored by individual's long-term orientation (Sherf et al., 2019). It also deepens the understanding about the role of analytic thinking in modern science, especially in complex and creativity-based tasks (Alaybek et al., 2021) which is especially interesting in the context of the empirical study, China, where extant literature would foster the idea that analytical thinking would not predominate (Nisbett, 2003). However, it is unreasonable to expect professional values would not play an important role in conditioning individual preferences for cognitive processing.

Globally, this study extends the theoretical underpinnings of OCB by investigating it in a moderated-moderated mediation perspective within a sample of healthcare professionals. Additionally, the results of this study demonstrated that the indirect effect of participative safety on service quality via OCB is reinforced when individuals have higher long-term orientation and show an analytical cognitive style as contrasted with a holistic one. This is, to our knowledge, a novel contribution as there are no empirical studies in literature that examine these individual characteristics from this configurational approach. Still, organizational behavior models are expected to evolve by incorporating complex sets of variables that enlighten the how (process) and when (boundary conditions) so to provide a closer-to-reality understanding.

The research followed a contingency approach from a multi-layer framework of medical service quality that makes contributions to the growing literature of participative safety and OCB. Firstly, adding to the already established notion that information sharing is critical in healthcare and highly emphasized in improving quality of care (Rosen et al., 2018) and decreasing of medical malpractice (Mele & Polese, 2011), this study highlighted the role OCB can play as an intermediate explanatory mechanism. Thus, it stresses the importance of further exploring ways of fostering OCB in healthcare settings. Secondly, by advancing different possibilities of complex-interactions between individual characteristics (values and cognitive processes) these findings encourage a range of studies that bring together more complex individual-organizational settings that can be taken as a whole and not as separate realities since it in nonsensical to examine organizational behavior assuming individual differences will not play a key role in how human resources policies (such as those targeting the creation of a favorable climate to employee participation) will be deployed and, mostly important, will be effective. Thirdly, individual long-term orientation has been mostly explored in the business

negotiation context rather than service quality in healthcare settings, and analytic thinking has been scarcely mentioned in service quality literature, albeit findings show these are a very important dimensions related to the nature of clinical requirements.

These contributions must be taken cautiously due to methodological limitations. Although we have no apparent indication of common method bias, we should always caution that cross-sectional studies are never able to show causal nexus. Still, additional information that offers more assurance is the failure of the reversed causal model (MacCallum & Austin, 2000) as well as the existence of the interaction effects which would not be expectable if common method variance played a role.

## **Practical implications**

The research findings offer practical implications for healthcare management. Decisionmakers may benefit from changing commonly held beliefs that organizational practices, such as fostering a participative safety climate, will operate in similar ways, irrespective of the individuals' profile. In this case, to leverage citizenship behaviors through a participative safety climate, managers should gauge their workforce's individual profile as regards LTO and analytical thinking. So, increased effectiveness will be expected from considering both analytical thinking and LTO as catalyzers of positive outcomes resulting from participative safety, namely OCB and service quality. This can be achieved by implementing some HR practices in the recruitment and selecting phase. When making staffing decisions, managers may benefit from targeting high analytical processing and high-LTO applicants. Likewise, because these features can be developed, when designing training activities for healthcare professionals, managers may want to incorporate these learning objectives into their portfolio so to enable individuals to enhance their analytical capacity as well as valuing a long-term perspective. Performance appraisal is critical because the balance between short-term and longterm objectives, as expressed in KPIs, will convey a clear message to healthcare workers, that the hospital is valuing long-term commitment with performance and not just quick fix indicators. If training and performance appraisal value more than simple task-related performance and includes contextual-performance, i.e. OCB related achievements, such training and performance management will further reinforce altruism expressions such as OCB that are important to leverage service quality without the corresponding monetary costs. This is crucial for a sector that added unsurmountable costs due to COVID-19 to an already financially pressing situation in developed economies (Bartsch et al., 2020) with the concomitant public demand for higher service quality.

# Chapter VI: GENERAL DISCUSSION OF RESULTS AND CONCLUSIONS

He who asks a question might be a fool for five minutes, he who doesn't ask a question remains a fool forever.<sup>10</sup>

请教别人一次是五分钟的傻子

从不请教别人是一辈子的傻子

Chinese Proverb

This chapter is intended to bring together the findings from all the empirical studies keeping in mind their instrumental value to judge on the merits of the proposal. We will not simply repeat the results and conclusions of previous studies, instead, this chapter summarizes the main findings and theoretical implications, as well as the practical contributions of this whole project.

\_

<sup>&</sup>lt;sup>10</sup> It is better to ask modestly when one does not understand rather than being left in ignorance.

# **6.1** Main findings and theoretical implications

The studies conducted and presented in this thesis made, in our best judgment, some contributions to the whole body of research in this area.

Study 1 contributed to highlight the existing diverse conceptions and measures concerning cognitive, emotion and values constructs used in cross-cultural research, which adds confusion to the field. It additionally helped to clarify which constructs, or dimensions, have been mostly used to compare cultural differences in cross-cultural studies, especially those between West and China. Our systematic literature review is to our knowledge the first to cover both English and Chinese language academia simultaneously, including four aspects to help readers understand further, separately, constructs extracted and derived from content analysis and their descriptions. It also aims to offer an understanding about the frequency and general use of each construct; definitions and features of the dominant integrative construct in each domain (cognition, emotion, value). Lastly, it aimed to compare scholars' options made in both Chinese and English literatures while suggesting the main differences between Chinese and Western profiles as regards the three domains. This systematic literature review corroborated the idea that Westerners tend to be more individualistic, emphasizing equality and fairness, enjoying present rather than long-term rewards, and more likely been prone to avoid uncertainty which goes in line with Hofstede (2001) or Schwartz (2007) findings. Likewise, Westerners do analytic thinking style more often than holistic thinking (Nisbett et al., 2001), and accordingly, they are more emotional expressive than easterners (Gross & John, 2003). Conversely, based on the main construct difference and generality, Chinese are believed to be more collectivistic, accepting more hierarchy and uncertainty, preferring more long-term orientation instead of current short-term benefits. Furthermore, Chinese tend to think in a more holistic pattern rather than analytic thinking, being more likely to suppress emotions as the dominant emotional regulation strategy. Our findings corroborate this assertion.

Because the array of the constructs in cognition, emotion, culture value is diversified in existing research due to different research purposes (which might cause confusion and complexity to readers) we conducted this systematic literature review with the intention of uncovering tacit consensus among scholars about the constructs and respective dimensions that can be used to serve the research goals. Meanwhile, we bridge both English and Chinese language academia and contribute to the convergence. It is known that different languages lead to different thinking patterns (Grabe & Kaplan, 2014). This is also endorsed by our comparison,

for example, articles written in Chinese just grasp theoretical perspectives, lacking empirical studies with either survey or structured data-based qualitative research, albeit this is more of a methodological nature rather than an intrinsic expression of cognitive differences. Additionally, compared to diverse subjects written in English, Chinese papers related to such constructs are mainly focused on differences of intercultural communication, language, and advertising design. Therefore, our option for a combined coverage was proved to be fruitful. This study fills a gap in the existing literature research and allows a further understanding of those conceptual facets that distinguish Westerner and Chinese profiles in cognition, emotion, and values. As a caveat, we do not want to endorse stereotypes about the differences between West and China, especially because the increasingly close contact and communication among countries fosters within-country heterogeneity of profiles that will most likely emerge precisely due to the continuous contact. In the eventuality of a possible deglobalization trend incoming (although always cyclic in nature), understanding these differences is even more critical to prevent negative stereotypes and miscommunications.

Once having identified the most frequent constructs used for such comparison, study 2 tested the psychometric quality of the dominant measurement scales for cognition, emotion and values with a Chinese sample. That is, the reliability and validity for measurement scale of thinking style (Sternberg, Wagner & Zhang, 2007), emotional expressivity (Gross & John, 1995), and cultural values (Hofstede, 2010). The disappointing results of this study seem a failure in achieving acceptable fit indices. Namely, the confirmatory factor analysis for the original 13-dimension of TSI-R2 and the original three factors of BEQ all fell short from the minimum proper fit threshold. However, some studies base their psychometric quality evidence on showing Cronbach alpha (or another reliability indicator) of each scale, which is, to our humble judgment, insufficient to ensure the scale has construct validity. Some other, though, did report acceptable fit indices for CFA.

However, this study also makes some contributions to the existing literature. It is commonly believed that there is great significance to create a reliable and meaningful measurement scale for critical variables, which can be applied in models about focused issues. The complexity of models taken as reasonable (e.g. 13 factors in TSI-R2) would favor the anticipation of such psychometric failure. This is a valuable finding because it suggests that we need to simplify construal design (make constructs simple) to reach a common ground and better manage the fundamental cross-cultural differences within multicultural HRM research. In addition, this study provides a deep insight not into the better understanding about the nature of cross-culture

studies, but also to help avoid unnecessary conflict, misunderstandings and ineffectiveness in research within international organizations. This study suggests that some measures originated in the western context might be too complex to be suited for Chinese HRM research, namely the thinking style inventory, and additionally, the VSM derived from Hofstede dimensions which is mostly believed to be the dominant measure validated by expertise and consensus among scholars (being actually used as a formative construct rather than a reflective one). This assumption is questionable and may open venues for future research (McSweeney, 2002). The different conclusions about BEQ indicated that emotional expressivity is a complex construct, which might be due to the fact that emotional display rules and interpretations are not universal (Barrett, 2017). This means that more discrete emotions included into the consideration rather than sample valence of emotion expressivity such as positive or negative make more sense.

Study 3 shifted the focus into closer-to-practice HRM issues concerning the interactions with the cultural context across a temporal perspective. These time horizons (short versus long term) are an essential and vital dimension in organizations due to the concern about proximal and distal outcomes. When the existing model of HPWS-turnover (Hom et al., 2017) adds a variable of long-term orientation, how does the process play? This study was designed to exactly provide the answer to this. Our findings show a moderation effect of long-term orientation planning in the relationship between perceived non-financial performance and turnover intention. Conversely, no interaction in the negative association between perceived financial performance and intention to quit was found. Yet, the direct and indirect effects between HPWS and turnover intention via perceived financial performance are proved. This goes in line with the statements observed in extant empirical research (e.g. Comb et al., 2006; Jiang et al., 2012) although it reverses the common causal nexus (still one should bear in mind that causality is hardly ascertained by correlational studies but causality will be also unlikely to be single directional but rather circular).

This result is rational from the perspective of expectancy theory (Vroom, 1964). Divergent anticipations can cause diverse attitudes or behaviors such as turnover. Also, employees will nurture diverse desired rewards based on their own contributions and development of the organizations. This finding makes a contribution to turnover studies through the introduction of a reversed temporal dimension focused on the long-term orientation. This model not only allows the further understanding about the implementation mechanism of HPWS, but also broadens the applied use of the theory of expectation, indicating that expectancy, as a time-related psychological process, plays an important role in explaining the motivational strength

of HPWS. Our findings proved and explored an unconventional model where perceived performance can logically precede turnover intention, rather than just being the general consequence. This broadened the conception of Kamiol and Ross (1996) which helps understand human motivation in a two-way connecting past and anticipated future.

Study 4 further deepens the analysis within organizational contexts. It focused the interplay of cognitive processes in cross-cultural differences. Findings show a multi-relationship of moderated-moderated mediations (dimension of cognitive, long-term orientation, organizational citizenship behavior intertwined) effecting participative safety in relation to medical service quality. This provides another account of the boundary conditions in organizational studies other than the time horizon (long-term vs short-term).

Based on the good reasoning example of Buch et al. (2018) about a contingency approach in the exploration of the association between participative safety and OCB, this study introduces personal profiles combining individual values i.e. long-term orientation (Nevins et al., 2007) with cognitive characteristics i.e. analytical thinking (Nisbett, 2003). These have been but scarcely noticed and studied in literature. To a certain extent, it is supporting and also further deepening the interactions found by Buch et al. (2018). Our study showed that participative safety is positively related with service quality and highlighted the mediator role of organizational citizenship behavior. Furthermore, the indirect effect between participative safety and service quality via OCB is responsive to the three-way moderation, that is, the indirect effect occurs when LTO and analytic thinking interact. Findings suggest analytical thinking (a typical western style) together with LTO (a typical Chinese style) is more advantageous, highlighting a closer-to-strategical thinking.

Due to the specified sample population of healthcare professions in hospitals, this study broadens the theory of OCB through the moderated-moderated mediation effect. This can be seen as an answer to the long call for configurational approaches to organizational behavior (e.g. Fiss, 2007). To our knowledge, this is a pioneer study that combines variables of individual characteristics through a configurational approach in this field of research.

# **6.2 Practical implications**

The implementation of HPWS, which is originated from western context and studied mostly in West, is seemingly more complicated in China, especially attending to the nature of constructs in human resources that have only been emerging since the reform and opening in 1980s,

without the long history that characterizes its development and use in the West (Zhao et al., 2019). The strategic position of human resources is increasingly important and greatly impacts the organizational outcomes. Practitioners and scholars conducted many explorations in this area. As the business environment changes very fast and becomes more and more complex, especially due to the speedy technological innovation, Chinese organizations are continuously challenged and need to cope with fiercer competition. On the one hand, employers need to maximize the use of their resources to achieve high performance effectiveness. On the other hand, employees need to rely on effective human resources practices to balance their life and work, to reach their goals such as monetary and career development. Therefore, the research about the implementation of human resources in a local environment, such as the Chinese, has profound practical significance. This knowledge is critical to answer commonly asked questions about how to retain talented employees and how to improve their effectiveness and service quality which are critical in sensitive industries such as healthcare. This has become a strategic priority for the Chinese Government especially since medical system reform launched in 2009 which is generally believed to be the new real beginning, because the past decades of medical system reform that started in 1985 did not reach its purposes (Zhou et al., 2015). The fresh new one is aiming to practically solve the problems of residents to overcome difficulties and high expenses in having a doctor consultation, as well as to enhance the service quality (Wang et al., 2019).

Either in a scenario of growing globalization or growing deglobalization, organizations will be keen on gaining a good understanding about people from different cultures and countries. The diverse cross-cultural issues indeed have been studied for many decades within the last cycle of globalization. Cross-cultural research is based on knowledge about some fundamental differences, from surface cultural life-style which can be easily observed and imitated, to deep cultural features, individual cognitions and emotional aspects, which cannot be so easy to understand and learn. Individuals who share similar worldviews and values more likely interpret things with the same attitudes and behaviors. Therefore, constructs about the cognition, emotion, and values are key for studying cross-cultural phenomena and have a great practical implication for organizations. There is a great effort into gauging the suitability of cross-cultural knowledge namely, the validity of the original theory, the original measures, which are always demanding rich examination, especially about its application outside the original context, e.g. Western constructs, measures and models in China.

The first study summarized dominant profile differences between West and China from the systematic literature review in cognitive, emotional and value aspects, that is, westerners more tendency to be analytic, abstract, objective, less emotional control, more individualism, equality, short-term, and future time value beliefs, while Chinese tend to be more holistic, concrete, subjective, less emotional expression, more collectivism, hierarchy, long-term and past time value beliefs. Though we should not have bias and many constructs can co-exist in the same culture, this study may be helpful to international business and negotiation. If people can learn well and apply them in their practical issues, they can avoid misunderstanding and conflicts because e.g. an analytical thinker may label as confusing another person that has a holistic profile, or even nonsensical another person that has paradoxical thinking (Zhong Yong, as autochthone construct in China). Conversely, a holistic thinker may be unease with someone that is analytical because he or she may sense this as overly focused on micro issues, or unable to grab directly the larger picture. Overall, this study provides an insight to implications of cognition, emotion, and value in cross-cultural interaction.

The second study offers a practical implication in conducting research, that is, cultural bias needed to be concerned in the consideration of proper measurement scales. In some studies focused on real phenomena, the questionnaire of concepts such as thinking style, emotional expressivity and values is more probable if they can share common ground and understanding. Measures that have uniformity across culture and populations are the pending issue to deep hypothetic-deductive research in organizational settings. One important practical implication of this study is that it showed that VSM developed by Hofstede works as a formative construct rather than a reflective one, which makes it unsuitable for some data analysis techniques (e.g. Covariance based structural equations modelling) although compared to other dimensions and measurements, Hofstede's theory is the most influential and informative in the practical crosscultural studies. Additionally, the failure of TSI-R2 might also imply that it is advisable to apply other measurement scale for thinking style and cultural value than TSI-R2 and VSM2013 in Chinese organizational settings. Alternatively, this can be a starting point to explore simpler conceptions for applied research underlying the proposed theories.

The third study concluded that the role of time horizon (LTO), a certain extent of expectations, is very important as it can relate to every single management decision. In particularly, a general belief that LTO is prevailing indicates LTO should be considered in practical human resources implementation. Valuing long-term outcomes is relatively opposite to instant gratification. Therefore, if employees have high anticipations for the future of the

organization, they will more likely engage in that organization intending to stay for a long time. From the HPWS-turnover intention model, we demonstrate that the perceived financial performance plays a mediator role, while the perceived non-financial performance has a mediator role only when the moderation of LTO is considered. This brings back the old of Motivator-Hygiene Theory by Fredrick Herzberg and highlights the importance of differentiating between the focus of rewards based on financial and non-financial KPIs. Likewise, it brings the very important question of knowing how to foster a long-term orientation amongst employees?

The final study provided practical implications for organizational contexts, especially for healthcare organizations. The findings of this study showed that the interactions of analytic thinking and long-term orientation can take effects in the influencing mechanism from participative safety to service quality via organizational citizenship behavior. Employees do not have participative safety due to several reasons, such as afraid of making mistakes or being punished, or believing their action will make no difference in the workplace. However, the individual characteristic are found to moderate the indirect effect between participative safety and service quality via OCB.

Therefore, in the real working place, HR decision makers may consider the activities and practices that enhance analytical ability and foster long-term perspectives of professionals. This will most likely improve the whole performance outcomes without increasing costs due to OCB, which is an especially important and meaningful goal during crises such as the COVID-19.

In summary, this thesis made a big contribution to better understand the cross-cultural practices, i.e. addressing the considerations of personal profiles namely cognition and values into the practical implementations of human resources and full use of the resources capital.

# **6.3 Theoretical implications**

This thesis was built on theoretical approaches to structure the empirical studies and findings may have contributed to the supplement of expectancy-valence theory (EVT) and social exchange theory (SET) to a certain degree.

EVT is regarded as the basic motivation theory in organizational behavior research (Wiesenfeld, et al., 2017). The feature distinction of this theoretical framework is to relate

certain actions, such as decision or persistence, to the perceived valence (cost-benefits) of the expected outcome. We applied and explored the effect of temporal horizon, long-term orientation, which we framed as related to expectations within the model of human resource management, further extending the theory of expectancy in explanations of employee turnover intentions. We believe the third study breaks the commonly accepted causal nexus that links employee turnover intention to perceived organizational performance, which may raise eyebrows but, from an expectancy-valence theory, it is reasonable and puts emphasis on the key-feature of long-term orientation: anticipating the distant expected future.

SET is a popular theory in helping to explain phenomena in social psychology, business management, or anthropology. It refers to the resources people gain from their social interactions following the principle of reciprocity. Relationship-based Chinese culture is especially emphasizing reciprocity and the exchange of benefits, so the perspective of SET in organizations is crucial for the better understanding of the employee behavior in work places in China. Employees use perceived employer investment and perceived organizational support as one criterion to balance their responsibilities and rewards. This research supplemented the theory in explaining the motivations of organizational citizenship behavior from the interactions of organizational context and the personal profiles (long-term orientation crossed with analytical thinking), which is a new perspective to the application of SET. This does not change SET but it extends its application based on the individual features while focusing on an indirect and non-formal sort of reward system (Organ, 1990) represented by organizational citizenship behavior.

# **6.4 Methodological implications**

Although the motivation of the thesis is not innovation in methods – it does not have a focus on methodological development – there were some options made that can be suggestive of such further developments.

In the first study, the clear and rigorous journal and paper selection criteria is fundamental in methodological strategy, and this sort of systematic literature review is mostly targeting articles coming from international reliable academic database sources, like ABI Inform, Scopus, WoS, or from the corresponding one in China (CNKI). However, it is not common to see such reviews incorporating articles from both western and Chinese databases. Another

methodological option that is not so commonly observed, but that we deemed to be required, is to reduce the bias findings in such review studies by means of deploying an inter-rater agreement measure. Due to the strong qualitative nature of such reviews, this analysis was important to increase the possibility of objectivity and accuracy. This is not very broadly seen in the literature review studies. In addition, we adopted the software tool named VOSviewer to construct and visualize the academic networks concerning such current research citations on thinking style and cognitive style, which we believe is an efficient tool to gain a comprehensive view on the field.

In the second study, we drew a figure to demonstrate the chronological evolution of thinking styles, which we believe clearly provides readers with an idea and impression about the development of cognitive construal focuses across time. Depicting chronological patterns is the core of the historical reasoning. This is the identification of significant events or developments following a timeline, and therefore, the relationships and causality can be explicitly demonstrated and understood, offering readers a general and clear idea about the historical continuity and change in Science.

In the third and fourth studies, we conducted confirmatory factor analyses to examine the validity and reliability for psychometric quality, which is definitely not novel as a data analysis procedure, but it is relatively uncommon in studies that adopt some of the typologies (e.g. Sternberg) and just assume the items measure the dimensions as if they are formative in nature albeit they are theoretically conceived as being reflective constructs. Additionally, for study 3, a reverse causal model was tested to provide additional assurance of the original model paths due to the uncommonly proposed direction of the effect (from perceived performance to employee turnover intention) as MacCallum and Austin (2000) rightfully claim that if a reverse causal model has equivalent acceptability across the paths one needs to take this as a caveat. This, we believe, is a methodological option that should gain primacy in future research of such kind (even when they use time-lag design, because of circular causality).

# 6.5 Limitations of the empirical studies

Although the thesis was conducted also with the intention to contribute to current academic areas in several aspects, like theoretical, practical, as well as the methodological domains, with a focus on deepening the understanding in cross-cultural human resources and organizational behaviors, there are some limitations that must be acknowledged to gauge the true magnitude of the contribution. They can pave way to further research in the similar line of studies.

The first study is a systematic literature review, which is believed to be of great value in international business research (Paul & Criado, 2020). We note it does have limitations of restricted sample range. We chose China as the most representative country of Confucian society targeted in Eastern (Schwartz, 2013), but it is indeed not equaling to the whole Eastern countries. Furthermore, all analyzed sample articles are only written in English and Chinese, thus, future studies could take published papers written in other languages such as French, German, Portuguese, Spanish, according to specific research interests. In addition, the four selected scientific databases might not be fully comprehensive for such kind of broad and complicated theme, especially because of its cross-cultural and of interdisciplinary nature. In the future, it might be a good chance to extend the scope of this study and conduct a similar systematic literature review covering such academic communities from other countries and languages.

The second study tested the validity and reliability of dominant measures in thinking style, emotional expressivity, and cultural values, i.e. TSI-R2, BEQ, VSM. There are other measures albeit not so popular. However, popularity is not a proof of higher quality. Additionally, the number of samples is not very large for the purpose of examining the psychometric problems in organizational contexts, though already reaching minimum sample size.

In the third and fourth studies, the sample size is reasonable and comfortable to the complexity of the models tested. However, all measurements were self-reported questionnaires and cross-sectional designs, which always raises the possibility of the existence of common method bias. It is the existing fact about the challenging influence of self-report questionnaire data in attitude survey, for example, respondents might have their own response bias due to their preference or social desirability or time rush no matter what the real question is asking (Paulhus, 1991), additionally, respondents might balance the inconsistent responses after noticing the intentions of survey in individual test, like positive or negative answer, moderate or extreme answer (Anastasi & Urbina, 1997), also because of the translation or the cultural impact, respondents might fail to understand the questions rightly. Although some a posteriori tests were done according to the recommendations of (Podsakoff et al., 2012) they are never definite into ruling out such possible bias. As studies evolved, we understood that such crosssectional design was risky but still, with a distance data collection, it would be riskier to develop a multi-wave design especially due to anonymity concerns. We could have opted to give codes to participating individuals, but the use of wechat or any other electronic databases in China is granted to credited identifiable individuals only. Likewise, we could have opted to use panel

data but it is not only unaffordable in China as quality concerns can arise from the lack of true control about respondents' profile. Still, under the right circumstances and with the sufficient resources, future research may benefit from opting for a longitudinal design.

#### **6.6 Directions for further research**

We believe the four empirical studies do offer some answers but also raise many questions that can motivate future research.

In the first study, the Chinese articles were found with lower interrater agreement as well as lacking empirical research within cross cultural studies concerning cognition, emotion, and values. This suggests the need for more empirical scientific research in such areas for Chinese Academia.

In the second study, it would be more fruitful to check psychometric quality of several measurement scales not limited to the dominant ones. Likewise, the factor structure of the ones studied may deserve further attention in China as already indicated by studies conducted by Zhao et al. (2015) on BEQ structure.

Concerning the third and fourth studies, a two-wave or three-wave research design is better for future studies when doing the data collection. This is also the future trend in such questionnaire quantitative studies, which can improve and ensure the quality of data sample and the actual associations in the model. Additionally, for study three, the replication of the same model or introduction of more variables could be conducted with data from other Asian Confucian countries and also Western, for comparative purposes. For study four, other industries besides healthcare professional populations could be explored to further examine whether the conclusion is targeting specific field or can be extrapolated to universal settings.

The last point we would like to mention is the missing of emotion aspect in the model hypothesis and testing. Although we summarized the difference between Chinese and western profiles in cognition, emotion and values, it is undeniable that there also seems to be a trend for difference blurring, especially under the current development of international education and business interactions. It is also interesting to note that Chinese scholars have been given a relatively scarcer attention to the emotional dimension. Unfortunately, though we were very interested in emotional expressivity underlying communication, expecting to find certain moderating role in the organizational boundary conditions, the psychometric quality of the

measurement scale BEQ gave us little encouragement. Therefore, for practicality's sake, we temporally drop out the emotion aspect. We hope future studies could make some advancement focusing on how emotions can feature Chinese organizational contexts as compared to Western ones.

# **REFERENCES**

- Abdal, A., & Ferreira, D. M. (2021). Deglobalization, Globalization, and the Pandemic. *Journal of World-Systems Research*, 27(1), 202-230. <a href="https://doi.org/10.5195/jwsr.2021.1028">https://doi.org/10.5195/jwsr.2021.1028</a>
- Abe, J. A., & Izard, C. E. (1999). The developmental functions of emotions: An analysis in terms of differential emotions theory. *Cognition and Emotion*, 13, 523–549, <a href="https://doi.org/10.1080/026999399379177">https://doi.org/10.1080/026999399379177</a>
- Abrate, G., & Viglia, G. (2016). Strategic and tactical price decisions in hotel revenue management. *Tourism Management*, 55, 123-132. <a href="https://doi.org/10.1016/j.tourman.2016.02.006">https://doi.org/10.1016/j.tourman.2016.02.006</a>
- Adair, W. L., Taylor, M. S., & Tinsley, C. H. (2009). Starting out on the right foot: Negotiation schemas when cultures collide. *Negotiation and Conflict Management Research*, 2(2), 138-163. https://doi.org/10.1111/j.1750-4716.2009.00034.x
- Adler, N. J., & Aycan, Z. (2018). Cross-cultural interaction: What we know and what we need to know. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 307-333. https://doi.org/10.1146/annurev-orgpsych-032117-104528
- Adler, N. J., Doktor, R., & Redding, S. G. (1986). From the Atlantic to the Pacific century: Cross-cultural management reviewed. *Journal of Management*, 12(2), 295-318. https://doi.org/10.1177/014920638601200210
- Adler, N., & Gundersen, A. (2007). *International dimensions of organizational behavior*. 5th edition, Cengage Learning.
- Agarwal, P., & Farndale, E. (2017). High performance work systems and creativity implementation: the role of psychological capital and psychological safety. *Human Resource Management Journal*, 27(3), 440-458. <a href="https://doi.org/10.1111/1748-8583.12148">https://doi.org/10.1111/1748-8583.12148</a>
- Alaybek, B., Wang, Y., Dalal, R. S., Dubrow, S., & Boemerman, L. S. (2021). The relations of reflective and intuitive thinking styles with task performance: A meta-analysis. Personnel Psychology, <a href="https://doi.org/10.1111/peps.12443">https://doi.org/10.1111/peps.12443</a>
- Albaum, G., Yu, J., Wiese, N., Herche, J., Evangelista, F., & Murphy, B. (2010). Culture-based values and management style of marketing decision makers in six Western Pacific Rim

- countries. *Journal of Global Marketing*, 23(2), 139-151. https://doi.org/10.1080/08911761003673488
- Allen, J. A., Diefendorff, J. M., & Ma, Y. (2014). Differences in emotional labor across cultures: A comparison of Chinese and US service workers. *Journal of Business and Psychology*, 29(1), 21-35. <a href="http://doi.10.1007/s10869-013-9288-7">http://doi.10.1007/s10869-013-9288-7</a>
- Allinson, C. W., & Hayes, J. (1996). The cognitive style index: A measure of intuition analysis for organizational research. Journal of Management studies, 33(1), 119-135. https://doi.org/10.1111/j.1467-6486.1996.tb00801.x
- Akan, Ş. T., & Barişkin, E. (2017). Reliability and validity indicators of Berkeley Expressivity Questionnaire in the context of culture and gender. *Turkish Journal of Psychiatry*, 28(1), 43-50
- Anastasi, A., & Urbina, S. (1997). Psychological testing. Prentice Hall/Pearson Education.
- Ancona, D. G., Goodman, P. S., Lawrence, B. S., & Tushman, M. L. (2001). Time: A new research lens. *Academy of management Review*, 26(4), 645-663. https://doi.org/10.5465/amr.2001.5393903
- Appelbaum, E., Bailey, T., Berg, P., Kalleberg, A., & Bailey, T. (2000). *Manufacturing advantage: Why high performance work systems pay off, Ithaca*. New York: Cornell University Press.
- Appelbaum, S., & Kamal, R. (2000). An analysis of the utilization and effectiveness of non-financial incentives in small business. *Journal of Management Development*, 19(9), 733 763. <a href="https://doi.org/10.1108/02621710010378200">https://doi.org/10.1108/02621710010378200</a>
- Armstrong, M. (2005). A handbook of employee reward management and practice. Kogan Page Publishers.
- Arslan, C., Göcmencelebi, S. I., & Tapan, M. S. (2009). Learning and reasoning styles of pre service teachers': inductive or deductive reasoning on science and mathematics related to their learning style. *Procedia-Social and Behavioral Sciences*, *1*(1), 2460-2465. <a href="https://doi.org/10.1016/j.sbspro.2009.01.432">https://doi.org/10.1016/j.sbspro.2009.01.432</a>
- Arthur, J. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37(3), 670-687. https://doi.org/10.5465/256705

- Ashkanasy, N., Gupta, V., Mayfield, M. S., & Trevor-Roberts, E. (2004). Future orientation. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies:(pp. 282–342), SAGE Publications
- Astley, W. G. (1985). Administrative science as socially constructed truth. *Administrative science quarterly*, 30(4), 497-513. <a href="https://doi.org/10.2307/2392694">https://doi.org/10.2307/2392694</a>
- Aveling, E. L., Stone, J., Sundt, T., Wright, C., Gino, F., & Singer, S. (2018). Factors influencing team behaviors in surgery: a qualitative study to inform teamwork interventions. *The Annals of thoracic surgery*, 106(1), 115-120. https://doi.org/10.1016/j.athoracsur.2017.12.045
- Bai, C. H. & Chen, Y. (2005). Constructing a Public Service Quality Evaluation Model: Evidence from Chinese Public Service Industry. *Nankai Business Review*, 8(4), 4-11.
- Barrett, L. F. (2017). *How emotions are made: The secret life of the brain*. Houghton Mifflin Harcourt.
- Barrow, M. (2012). Conflict in context: designing authentic teamwork education. *Medical education*, 46(10), 926–927. https://doi.10.1111/j.1365-2923.2012.04335.x
- Bartram, T., Karimi, L., Leggat, S. G., & Stanton, P. (2014). Social identification: linking high performance work systems, psychological empowerment and patient care. *The International Journal of Human Resource Management*, 25(17), 2401-2419. https://doi.org/10.1080/09585192.2014.880152
- Bartsch, S. M., Ferguson, M. C., McKinnell, J. A., O'Shea, K. J., Wedlock, P. T., Siegmund, S. S., & Lee, B. Y. (2020). The potential health care costs and resource use associated with COVID-19 In the United States: A simulation estimate of the direct medical costs and health care resource use associated with COVID-19 infections in the United States. *Health affairs*, 39(6), 927-935. <a href="https://doi.org/10.1377/hlthaff.2020.00426">https://doi.org/10.1377/hlthaff.2020.00426</a>
- Baskerville, R. F. (2003). Hofstede never studied culture. *Accounting, organizations and society*, 28(1), 1-14. https://doi.org/10.1016/S0361-3682(01)00048-4
- Bateman, T. S., & Organ D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship. *Academy of Management Journal*, 26(4), 587-595. <a href="https://doi.org/10.5465/255908">https://doi.org/10.5465/255908</a>

- Bateman, T., & Barry, B. (2012). Masters of the long haul: Pursuing long term work goals. *Journal of Organizational Behavior*, 33(7), 984-1006. https://doi.org/10.1002/job.1778
- Bearden, W., Money, R., & Nevins, J. (2006). A measure of long-term orientation: Development and validation. *Journal of the Academy of Marketing Science*, 34(3), 456-467. https://doi.org/10.1177/0092070306286706
- Berridge, K. (2000). Reward learning: Reinforcement, incentives, and expectations. *The Psychology of learning and motivation*, 40, 223-278. <a href="https://doi.org/10.1016/S0079-7421(00)80022-5">https://doi.org/10.1016/S0079-7421(00)80022-5</a>
- Berry, L.L. (1999). *Discovering the soul of services: The nine drivers of sustainable business success*, New York: Free Press
- Berry, L. L. (2019). Service innovation is urgent in healthcare. *Journal of the Academy of Marketing Science*, 9(1-2), 78-92. https://doi:10.1007/s13162-019-00135-x
- Berry, L. L., Seiders, K., & Grewal, D. (2002). Understanding service convenience. *Journal of Marketing*, 66(3), 1-17. <a href="https://doi.org/10.1509/jmkg.66.3.1.18505">https://doi.org/10.1509/jmkg.66.3.1.18505</a>
- Berry, J. W. (1989). Imposed etics-emics-derived etics: The operationalization of a compelling idea. *International journal of psychology*, 24(6), 721-735. https://doi.org/10.1080/00207598908247841
- Beugelsdijk, S., & Welzel, C. (2018). Dimensions and dynamics of national culture: Synthesizing Hofstede with Inglehart. *Journal of cross-cultural psychology*, 49(10), 1469-1505. <a href="https://doi.org/10.1177/0022022118798505">https://doi.org/10.1177/0022022118798505</a>
- Bhagat, R. S., Kedia, B. L., Harveston, P. D., & Triandis, H. C. (2002). Cultural variations in the cross-border transfer of organizational knowledge: An integrative framework. *Academy of management review*, 27(2), 204-221. https://doi.org/10.5465/amr.2002.6588000
- Bienstock, C.C., DeMoranville, C.W. & Smith, R.K. (2003). Organizational citizenship behavior and service quality. *Journal of Services Marketing*, 17(4), 357-378. https://doi:10.1108/08876040310482775
- Blau, P. (1964). Exchange and Power in Social Life. Wiley, New York, NY, USA

- Blazhenkova, O., & Kozhevnikov, M. (2012). Intellectual styles in members of different professions. in L. Zhang, R. Sternberg, and S. Rayner (eds), *Handbook of Intellectual Styles. Preferences in Cognition, Learning and Thinking* (353-372), New York: Springer.
- Bloom, A. H., & Bloom, A. H. (2014). *The linguistic shaping of thought: A study in the impact of language on thinking in China and the West*. Psychology Press.
- Bluedorn, A. C., & Jaussi, K. S. (2008). Leaders, followers, and time. *The Leadership Quarterly*, 19(6), 654-668. https://doi.org/10.1016/j.leaqua.2008.09.006
- Bollen, K. A. (1989). Structural Equations with Latent Variables. Wiley-Interscience
- Bond, M. H. (Ed.). (2010). *The Oxford handbook of Chinese psychology*. Oxford Library of Psychology.
- Bond, M. H. (2019). *Traveling from the past into the future of cross-cultural psychology: A personal-scientific journey*. In D. Matsumoto & H. C. Hwang (Eds.), The handbook of culture and psychology (pp. 45–66). Oxford University Press. <a href="https://doi.org/10.1093/oso/9780190679743.003.0002">https://doi.org/10.1093/oso/9780190679743.003.0002</a>
- Boniwell, I. (2009). *Perspectives on time*. In S. J. Lopez & C. R. Snyder (Eds.), Oxford library of psychology. Oxford handbook of positive psychology: (p. 295–302). Oxford University Press.
- Boon, C., Den Hartog, D. N., & Lepak, D. P. (2019). A Systematic Review of Human Resource Management Systems and Their Measurement. *Journal of Management*, 45 (6), 2498-2537. https://doi.org/10.1177/0149206318818718
- Borsboom, D., van der Maas, H. L. J., Dalege, J., Kievit, R., & Haig, B. (2020). Theory construction methodology: A practical framework for theory formation in psychology. PsyArXiv, Preprint. <a href="https://psyarxiv.com/w5tp8/">https://psyarxiv.com/w5tp8/</a>.
- Bredillet, C., Yatim, F., & Ruiz, P. (2010). Project management deployment: The role of cultural factors. *International Journal of Project Management*, 28(2), 183-193. https://doi.org/10.1016/j.ijproman.2009.10.007
- Brett, J. M., Gunia, B. C., & Teucher, B. M. (2017). Culture and negotiation strategy: A framework for future research. *Academy of Management Perspectives*, 31(4), 288-308. https://doi.org/10.5465/amp.2015.0195

- Bridges, E., Johnston, H., & Sager, J. K. (2007). Using model-based expectations to predict voluntary turnover. *International Journal of Research in Marketing*, 24(1), 65-76. https://doi.org/10.1016/j.ijresmar.2006.09.003
- Brigham, K. H., Lumpkin, G. T., Payne, G. T., & Zachary, MA. (2014). Researching long-term orientation: A validation study and recommendations for future research. *Family Business Review*, 27(1), 72-88. <a href="https://doi.org/10.1177/0894486513508980">https://doi.org/10.1177/0894486513508980</a>
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1(3), 185-216. https://doi.org/10.1177/135910457000100301
- Brislin, R. W. (1980). *Translation and content analysis of oral and written material*, in Handbook of Cross-cultural Psychology: Methodology, eds H. C. Triandis and J. W. Berry (Boston, MA: Allyn and Bacon), 349–444.
- Buch, R., Kuvaas, B., & Dysvik, A. (2018). The role of other orientation in reactions to social and economic leader–member exchange relationships. Journal of organizational behavior, 40(3), 296-310. <a href="https://doi.org/10.1002/job.2329">https://doi.org/10.1002/job.2329</a>
- Buckley, P. J., Clegg, J. & Tan, H. (2006). Cultural awareness in knowledge transfer to China— The role of guanxi and mianzi. *Journal of World Business*. 41(3), 275-288.
- Butler, E. A., Lee, T. L., & Gross, J. J. (2007). Emotion regulation and culture: Are the social consequences of emotion suppression culture-specific?. *Emotion*, 7(1), 30-48. https://doi.org/10.1037/1528-3542.7.1.30
- Cameron, L. D., & Overall, N. C. (2018). Suppression and expression as distinct emotion-regulation processes in daily interactions: Longitudinal and meta-analyses. *Emotion*, 18(4), 465-480. https://doi.org/10.1037/emo0000334
- Carey, D., Dumaine, B., Useem, M., & Zemmel, R. (2018). Go long: Why long-term thinking is your best short-term strategy. University of Pennsylvania Press.
- Chadwick, C. (2010). Theoretic insights on the nature of performance synergies in human resource systems: Toward greater precision. *Human Resource Management Review*, 20(2), 85-101. <a href="https://doi.org/10.1016/j.hrmr.2009.06.001">https://doi.org/10.1016/j.hrmr.2009.06.001</a>
- Chan, H. M., & Yan, H. K. (2007). Is There a Geography of Thought for East West Differences? Why or why not? *Educational Philosophy and Theory*, 39(4), 383-403. https://doi.org/10.1111/j.1469-5812.2007.00346.x

- Chandler, J. A., Zachary, M. A., Brigham, K. H., & Payne, G. T. (2016). Long-term orientation: Reviewing the past and identifying future opportunities for family business research. New York: The Routledge Companion to Family Business.
- Chang, C. S., Chen, S. Y., & Lan, Y. T. (2011). Raising nurses' job satisfaction through patient-oriented perception and organizational citizenship behaviors. *Nursing Research*, 60(1), 40–46. <a href="https://doi:10.1097/nnr.0b013e3181e507dd">https://doi:10.1097/nnr.0b013e3181e507dd</a>
- Chang, C. S., Chen, S. Y., & Lan, Y. T. (2013). Service quality, trust, and patient satisfaction in interpersonal-based medical service encounters. *BMC Health Services Research*, 13(1), 22-32, <a href="https://doi:10.1186/1472-6963-13-22">https://doi:10.1186/1472-6963-13-22</a>
- Cho, S., Kim, A., & Mor Barak, M. E. (2017). Does diversity matter? exploring workforce diversity, diversity management, and organizational performance in social enterprises.

  \*\*Asian Social Work and Policy Review, 11(3), 193-204.\*\*

  https://doi.org/10.1111/aswp.12125
- Cheng, S., & Zhang, L. F. (2015). Thinking style changes among deaf, hard-of-hearing, and hearing students. *The Journal of Deaf Studies and Deaf Education*, 20(1), 16-26. https://doi.org/10.1093/deafed/enu038
- Cheng, S., & Zhang, L. F. (2017). Thinking styles and quality of university life among deaf or hard of hearing and hearing students. *American annals of the deaf*, 162(1), 8-23.
- Cheng, S., Zhang, L. F., & Hu, X. (2016). Thinking styles and university self-efficacy among deaf, hard-of-hearing, and hearing students. *Journal of Deaf Studies and Deaf Education*, 21(1), 44-53. <a href="https://doi.org/10.1093/deafed/env032">https://doi.org/10.1093/deafed/env032</a>
- Chao, Y. T., (1990). Culture and work organization the Chinese case. *International Journal of Psychology*, 25(3-6), 583–592. <a href="https://doi.org/10.1080/00207599008247914">https://doi.org/10.1080/00207599008247914</a>
- Chen, C. F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism management*, 28(4), 1115-1122. <a href="https://doi.org/10.1016/j.tourman.2006.07.007">https://doi.org/10.1016/j.tourman.2006.07.007</a>
- Chen, M. J., & Miller, D. (2010). West meets East: Toward an ambicultural approach to management. *Academy of Management Perspectives*, 24(4), 17-24. https://doi.org/10.5465/amp.2010.24.4.3651479.a
- Chen, P., & Partington, D. (2004). An interpretive comparison of Chinese and Western conceptions of relationships in construction project management work. *International*

- *Journal of Project Management*, 22(5), 397-406. https://doi.org/10.1016/j.ijproman.2003.09.005
- Cheng, H., Andrade, H. L., & Yan, Z. (2011). A cross-cultural study of learning behaviours in the classroom: From a thinking style perspective. *Educational Psychology*, *31*(7), 825-841. https://doi.org/10.1080/01443410.2011.608526
- Cheong, Y., Kim, K., & Zheng, L. (2010). Advertising appeals as a reflection of culture: a cross-cultural analysis of food advertising appeals in China and the US. *Asian Journal of Communication*, 20(1), 1-16. https://doi.org/10.1080/01292980903440848
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural equation modeling*, 9 (2), 233-255. https://doi.org/10.1207/S15328007SEM0902\_5
- Chiu, L. H. (1972). A cross-cultural comparison of cognitive styles in Chinese and American children. *International Journal of Psychology*, 7(4), 235-242. https://doi.org/10.1080/00207597208246604
- Cho, Y. J., & Lewis, G. B. (2012). Turnover intention and turnover behavior: Implications for retaining federal employees. *Review of Public Personnel Administration*, 32(1), 4-23. <a href="https://doi.org/10.1177/0734371X11408701">https://doi.org/10.1177/0734371X11408701</a>
- Choi, K. S., Cho, W. H., Lee, S., Lee, H., & Kim, C. (2004). The relationships among quality, value, satisfaction and behavioral intention in health care provider choice: A South Korean study. *Journal of Business Research*, 57(8), 913-921. https://doi.org/10.1016/S0148-2963(02)00293-X
- Chow, I. H., Huang, J. C., & Liu, S. (2008). Strategic HRM in China: Configurations and competitive advantage. *Human Resource Management*, 47(4), 687-706. <a href="https://doi.org/10.1002/hrm.20240">https://doi.org/10.1002/hrm.20240</a>
- Chui, A. C., Titman, S., & Wei, K. J. (2010). Individualism and momentum around the world. *The Journal of Finance*, 65(1), 361-392. <a href="https://doi.org/10.1111/j.1540-6261.2009.01532.x">https://doi.org/10.1111/j.1540-6261.2009.01532.x</a>
- Clancy, C. M., & Tornberg, D. N. (2007). TeamSTEPPS: assuring optimal teamwork in clinical settings. *American Journal of Medical Quality*, 22(3), 214-217. https://doi.org/10.1177/1062860607300616

- Cohen, G., Blake, R. S., & Goodman, D. (2016). Does turnover intention matter? Evaluating the usefulness of turnover intention rate as a predictor of actual turnover rate. *Review of Public Personnel Administration*, 36(3), 240-263. <a href="https://doi.org/10.1177/0734371X15581850">https://doi.org/10.1177/0734371X15581850</a>
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37-46. https://doi.org/10.1177/001316446002000104
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high performance work practices matter? A meta analysis of their effects on organizational performance.

  \*Personnel Psychology, 59(3), 501 528. <a href="https://doi.org/10.1111/j.1744-6570.2006.00045.x">https://doi.org/10.1111/j.1744-6570.2006.00045.x</a>
- Contractor, F. J. (2021). The world economy will need even more globalization in the post-pandemic 2021 decade. *Journal of International Business Studies*, 1-16.
- Conway, J.M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25(3), 325-334. https://doi:10.1007/s10869-010-9181-6
- Cooke, F. L., Xiao, M., & Chen, Y. (2021). Still in search of strategic human resource management? A review and suggestions for future research with China as an example. Human Resource Management, 60(1), 89-118. http://doi:10.1002/hrm.22029
- Corsi, N., & Colloca, L. (2017). Placebo and nocebo effects: the advantage of measuring expectations and psychological factors. Frontiers in Psychology, 8, 308, <a href="https://doi.org/10.3389/fpsyg.2017.00308">https://doi.org/10.3389/fpsyg.2017.00308</a>
- Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory:

  A critical review with theoretical remedies. Academy of Management Annals, 11(1),

  479-516. <a href="https://doi.org/10.5465/annals.2015.0099">https://doi.org/10.5465/annals.2015.0099</a>
- Dai, M. & Shang, D. (2008). View the concept of "self" in Chinese traditional philosophy from the perspective of comparison between China and west, *Journal of Hubei University* (*Philosophy and Social Science*), 35(2), 1-4.
- Daly, C., & Dee, J. (2006). Greener pastures: Faculty turnover intent in urban public universities. *Journal of Higher Education*, 77(5), 776-803. https://doi.org/10.1080/00221546.2006.11778944

- Das, T. K. (2019). Future Orientation in Strategy Making. Time Issues in Strategy and Organization, Charlotte: Information Age Publishing.
- Davis, E., Greenberger, E., Charles, S., Chen, C., Zhao, L., & Dong, Q. (2012). Emotion experience and regulation in China and the United States: how do culture and gender shape emotion responding? *International Journal of Psychology*, 47(3), 230-239. https://doi.org/10.1080/00207594.2011.626043
- De Oliveira, S., & Nisbett, R. E. (2017). Beyond East and West: Cognitive Style in Latin America. *Journal of Cross-Cultural Psychology*, 48(10), 1554-1577. https://doi.org/10.1177/0022022117730816
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949-969. <a href="https://doi.org/10.5465/256718">https://doi.org/10.5465/256718</a>
- Delery, J. E., & Shaw, J. D. (2001). The strategic management of people in work organizations: review, synthesis, and extension. *Research in Personnel and Human Resources Management*, 20, 165-197. https://doi.org/10.1016/S0742-7301(01)20003-6
- Deng, X., An, S., & Cheng, C. (2019). Cultural differences in the implicit and explicit attitudes toward emotion regulation. *Personality and Individual Differences*, 149, 220-222. <a href="https://doi.org/10.1016/j.paid.2019.05.057">https://doi.org/10.1016/j.paid.2019.05.057</a>
- DesJardine, M. R., & Shi, W. (2020). CEO Temporal Focus and Behavioral Agency Theory: Evidence from Mergers and Acquisitions. *Academy of Management Journal*, <a href="https://doi.org/10.5465/amj.2018.1470">https://doi.org/10.5465/amj.2018.1470</a>
- Díaz-Fernández, M., López-Cabrales, A., & Valle-Cabrera, R. (2020). Strength of HRM systems and perceived organizational support as determinants of employment relationships: The perspective of HR managers and workers' representatives. *BRQ Business Research Quarterly*, 1-15. https://doi.org/10.1177/2340944420977506
- Dobbs, J. L., Sloan, D. M., & Karpinski, A. (2007). A psychometric investigation of two self-report measures of emotional expressivity. *Personality and Individual Differences*, 43(4), 693-702. <a href="https://doi.org/10.1016/j.paid.2007.01.010">https://doi.org/10.1016/j.paid.2007.01.010</a>
- Dong, Y., & Lee, K. P. (2008). A cross-cultural comparative study of users' perceptions of a webpage: With a focus on the cognitive styles of Chinese, Koreans and Americans. *International Journal of Design*, 2(2), 19-30.

- Dunn, R. (1984). Learning style: State of the science. *Theory into practice*, 23(1), 10-19. https://doi.org/10.1080/00405848409543084
- Eccles, J. S., & Wigfield, A. (1995). In the mind of the actor: The structure of adolescents' achievement task values and expectancy-related beliefs. *Personality and Social Psychology Bulletin*, 21, 215–225. <a href="https://doi.org/10.1177/0146167295213003">https://doi.org/10.1177/0146167295213003</a>
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. Administrative science quarterly, 44(2), 350-383. https://doi.org/10.2307/2666999
- Edmondson, A. C. (2003). Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40(6), 1419-1452. https://doi.org/10.1111/1467-6486.00386
- Edwards, J. C., McKinley, W., & Moon, G. (2002). The enactment of organizational decline: the self-fulfilling prophecy, *International Journal of Organizational Analysis*, 10(1), 55-75. <a href="https://doi.org/10.1108/eb028944">https://doi.org/10.1108/eb028944</a>
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42-51. https://doi.org/10.1037/0021-9010.86.1.42
- Ekman, P. (1992). Are there basic emotions?. Psychological Review, 99(3), 550-553. https://doi.org/10.1037/0033-295X.99.3.550
- Ekman, P. (2004). Emotions revealed. Bmj, 328(Suppl S5).
- Ekman, P. E., & Davidson, R. J. (1994). *The nature of emotion: Fundamental questions*. Oxford University Press.
- Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of personality and social psychology*, 17(2), 124-129. <a href="https://doi.org/10.1037/h0030377">https://doi.org/10.1037/h0030377</a>
- Engelen, P. J., Heugens, P., van Essen, M., Turturea, R. & Bailey, N. (2020). The impact of stakeholders' temporal orientation on short- and long-term IPO outcomes: A meta-analysis. *Long Range Planning*, *53* (2). <a href="https://doi.org/10.1016/j.lrp.2018.10.003">https://doi.org/10.1016/j.lrp.2018.10.003</a>
- Epstein, S. (1994). Integration of the cognitive and psychodynamic unconscious. *American Psychologist*, 49, 709–724. <a href="https://doi.org/10.1037/0003-066X.49.8.709">https://doi.org/10.1037/0003-066X.49.8.709</a>

- Epstein, S. (2003). Cognitive experiential self-theory of personality. In T. Millon & M. J. Lerner (Eds.). *Handbook of Psychology: Personality and Social Psychology* (Vol. 5, pp. 159–184). New York: Wiley.
- Erturk, A. (2014). Influences of HR practices, social exchange, and trust on turnover intentions of public IT professionals. *Public Personnel Management*, 43(1), 140-175. <a href="https://doi.org/10.1177/0091026013517875">https://doi.org/10.1177/0091026013517875</a>
- Evanoff, B. A., Bohr, P. C., & Wolf, L. D. (1999). Effects of a participative ergonomics team among hospital orderlies. *American Journal of Industrial Medicine*, 35(4), 358–365. https://doi.org/10.1002/(SICI)1097-0274(199904)35:4<358::AID-AJIM6>3.0.CO;2-R
- Evans, W. R., & Davis, W. D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management*, 31(5), 758-775. https://doi.org/10.1177/0149206305279370
- Fan, J. (2016). The role of thinking styles in career decision-making self-efficacy among university students. *Thinking Skills and Creativity*, 20, 63-73. https://doi.org/10.1016/j.tsc.2016.03.001
- Fan, J., & Zhang, L. F. (2014). The role of learning environments in thinking styles. *Educational Psychology*, 34(2), 252-268. <a href="https://doi.org/10.1080/01443410.2013.817538">https://doi.org/10.1080/01443410.2013.817538</a>
- Fan, J., Zhang, L. F., & Chen, C. (2018). Thinking styles: Distinct from personality?.

  \*Personality and Individual Differences, 125, 50-55.

  https://doi.org/10.1016/j.paid.2017.12.026
- Fan, W., & Zhang, L. F. (2009). Are achievement motivation and thinking styles related? A visit among Chinese university students. *Learning and Individual differences*, 19(2), 299-303. <a href="https://doi.org/10.1016/j.lindif.2008.10.005">https://doi.org/10.1016/j.lindif.2008.10.005</a>
- Fan, Y. (2014). View the Conflicts of Values Between China and Western Countries Through the Movie Pushing Hands: from the Perspective of Kluckhohn's Value Dimensions, *Overseas English*, 4, 169-171.
- Fei, X. T. (1948). From the Soil —The Foundations of Chinese Society, Foreign Language Teaching and Research Press.
- Felfe, J., Yan, W., & Six, B. (2008). The impact of individual collectivism on commitment and its influence on organizational citizenship behaviour and turnover in three

- countries. *International Journal of Cross Cultural Management*, 8(2), 211-237. https://doi.org/10.1177/1470595808091790
- Felstead, A. (2018). Tracing the connections: short-termism, training and recession. *The International Journal of Human Resource Management*, 29 (4), 664-682. https://doi.org/10.1080/09585192.2016.1184176
- Ferrari, L., Nota, L., & Soresi, S. (2010). Time perspective and indecision in young and older adolescents. *British journal of guidance & counselling*, 38(1), 61-82. https://doi.org/10.1080/03069880903408612
- Filatotchev, I., Wei, L. Q., Sarala, R. M., Dick, P., & Prescott, J. E. (2020). Connecting eastern and western perspectives on management: Translation of practices across organizations, institution and geographies. *Journal of Management Studies*, 57(1), 1-24. https://doi.org/10.1111/joms.12526
- Fischer, R. (2006). Congruence and functions of personal and cultural values: Do my values reflect my culture's values?. *Personality and social psychology bulletin*, 32(11), 1419-1431. https://doi.org/10.1177/0146167206291425
- Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. *Academy of management review*, 32(4), 1180-1198. <a href="https://doi.org/10.5465/amr.2007.26586092">https://doi.org/10.5465/amr.2007.26586092</a>
- Flammer, C., & Bansal, P. (2017). Does a long term orientation create value? Evidence from a regression discontinuity. *Strategic Management Journal*, 38(9), 1827-1847. <a href="https://doi.org/10.1002/smj.2629">https://doi.org/10.1002/smj.2629</a>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 18(1), 39-50. https://doi.org/10.1177/002224378101800104
- Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vracheva, V. (2017). Psychological safety: A meta analytic review and extension. *Personnel Psychology*, 70(1), 113-165. <a href="https://doi.org/10.1111/peps.12183">https://doi.org/10.1111/peps.12183</a>
- Fried, J. M., & Wang, C. C. (2019). Short-termism and capital flows. *Review of Corporate Finance Studies*, 8(1), 207-233. <a href="https://doi.org/10.1093/rcfs/cfy011">https://doi.org/10.1093/rcfs/cfy011</a>
- Fried, Y., & Slowik, L. H. (2004). Enriching goal-setting theory with time: An integrated approach. *Academy of management Review*, 29(3), 404-422. <a href="https://doi.org/10.5465/amr.2004.13670973">https://doi.org/10.5465/amr.2004.13670973</a>

- Furukawa, E., Tangney, J., & Higashibara, F. (2012). Cross-cultural continuities and discontinuities in shame, guilt, and pride: A study of children residing in Japan, Korea and the USA. *Self and Identity*, 11(1), 90-113. https://doi.org/10.1080/15298868.2010.512748
- Gandhi, A., Yu, H., & Grabowski, D. C. (2021). High Nursing Staff Turnover In Nursing Homes Offers Important Quality Information: Study examines high turnover of nursing staff at US nursing homes. *Health Affairs*, 40(3), 384-391. https://doi.org/10.1377/hlthaff.2020.00957
- Gao, P., Li, Y. and Tang, C. (2009). Chinese Validation of the team climate inventory: a measure of team climate for innovation in RandD teams. *Science and Scientifical Technology Management*, 6, 166-170.
- Gao, Q. (2007). The comparison between Chinese and western thinking difference and Chinese and English scientific and technological styles. *Journal of Inner Mongolia Agricultural University: Social Science Edition*, 746(6), 94-96.
- Gelfand, M. J., Aycan, Z., Erez, M., & Leung, K. (2017). Cross-cultural industrial organizational psychology and organizational behavior: A hundred-year journey. *Journal of Applied Psychology*, 102(3), 514-529. https://doi.org/10.1037/apl0000186
- Gerlach, P., & Eriksson, K. (2021). Measuring Cultural Dimensions: External Validity and Internal Consistency of Hofstede's VSM 2013 Scales. *Frontiers in psychology*, 12, 1056. https://doi.org/10.3389/fpsyg.2021.662604
- Ginevra, M. C., Pallini, S., Vecchio, G. M., Nota, L., & Soresi, S. (2016). Future orientation and attitudes mediate career adaptability and decidedness. *Journal of Vocational Behavior*, 95, 102-110. <a href="https://doi.org/10.1016/j.jvb.2016.08.003">https://doi.org/10.1016/j.jvb.2016.08.003</a>
- Glomb, T. M., Bhave, D. P., Miner, A. G., & Wall, M. (2011). Doing good, feeling good: Examining the role of organizational citizenship behaviors in changing mood. *Personnel Psychology*, 64(1), 191-223, <a href="https://doi.org/10.1111/j.1744-6570.2010.01206.x">https://doi.org/10.1111/j.1744-6570.2010.01206.x</a>
- Gospel, H. F., & Pendleton, A. (2005). *Corporate governance and labor management: An international comparison*. Oxford University Press on Demand.
- Grabe, W., & Kaplan, R. B. (2014). Theory and practice of writing: An applied linguistic perspective. Routledge.

- Grabell, A. S., Olson, S. L., Miller, A. L., Kessler, D. A., Felt, B., Kaciroti, N., Wang, L. & Tardif, T. (2015). The impact of culture on physiological processes of emotion regulation: A comparison of US and Chinese preschoolers. *Developmental Science*, *18*(3), 420-435. https://doi.org/10.1111/desc.12227
- Grandey, A. A., & Melloy, R. C. (2017). The state of the heart: Emotional labor as emotion regulation reviewed and revised. *Journal of occupational health psychology*, 22(3), 407-422. https://doi.org/10.1037/ocp0000067
- Grant, A. M., & Sonnentag, S. (2010). Doing good buffers against feeling bad: Prosocial impact compensates for negative task and self-evaluations. *Organizational Behavior and Human Decision Processes*, 111(1), 13-22. <a href="https://doi.org/10.1016/j.obhdp.2009.07.003">https://doi.org/10.1016/j.obhdp.2009.07.003</a>
- Gray, J. (2009). Men are from Mars, women are from Venus: The classic guide to understanding the opposite sex. Zondervan.
- Gregorc, A. (2006). The Mind Styles Model: Theory, Principles, and Practice. AFG, Columbia
- Grigorenko, E. L., & Sternberg, R. J. (1995). *Thinking styles*. In D. Saklofske & M. Zeidner (Eds.), *International handbook of personality and intelligence* (pp. 205–229). New York: Plenum. Springer, Boston, MA.
- Grimes, T. R. (1990). Truth, content, and the hypothetico-deductive method. *Philosophy of Science*, 57(3), 514-522.
- Gross, J. J., & John, O. P. (1995). Facets of emotional expressivity: Three self-report factors and their correlates. *Personality and individual differences*, 19(4), 555-568. https://doi.org/10.1016/0191-8869(95)00055-B
- Gross, J. J., & John, O. P. (1997). Revealing feelings: facets of emotional expressivity in self-reports, peer ratings, and behavior. Journal of personality and social psychology, 72(2), 435-448. <a href="https://doi.org/10.1037/0022-3514.72.2.435">https://doi.org/10.1037/0022-3514.72.2.435</a>
- Gross, J. J., & John, O. P. (1998). Mapping the domain of expressivity: multimethod evidence for a hierarchical model. Journal of personality and social psychology, 74(1), 170 –191. https://doi.org/10.1037/0022-3514.74.1.170
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348-362. https://doi.org/10.1037/0022-3514.85.2.348

- Gross, J. J., Richards, J. M., & John, O. P. (2006). Emotion regulation in everyday life.In D. K. Snyder JA, Simpson JN. Hughes Emotion (Eds.), Regulation in Families: Pathways to Dysfunction and Health (pp 13-35). Washington. DC: APA.2006.
- Groves, K., Vance, C., & Paik, Y. (2008). Linking linear/nonlinear thinking style balance and managerial ethical decision-making. *Journal of Business Ethics*, 80(2), 305-325.
- Groza, M. D., Locander, D. A., & Howlett, C. H. (2016). Linking thinking styles to sales performance: The importance of creativity and subjective knowledge. *Journal of Business Research*, 69(10), 4185-4193. https://doi.org/10.1016/j.jbusres.2016.03.006
- Guan, J. (2014). Analysis of Chinese and American cultural values from the film Gua Sha. Linguistic Journal, 6, 35-37
- Gullekson, N., & Dumaisnil, A. (2016). Expanding horizons on expatriate adjustment: A look at the role of emotional display and status. *Human Resource Management Review*, 26(3), 260-269. <a href="https://doi.org/10.1016/j.hrmr.2016.03.004">https://doi.org/10.1016/j.hrmr.2016.03.004</a>
- Guo, Y., Rammal, H. G., Benson, J., Zhu, Y., & Dowling, P. J. (2018). Interpersonal relations in China: Expatriates' perspective on the development and use of guanxi. *International Business Review*, 27(2), 455-464. https://doi.org/10.1016/j.ibusrev.2017.09.012
- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180-190. https://doi.org/10.5465/3069345
- Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2015). Tensions in corporate sustainability: Towards an integrative framework. *Journal of Business Ethics*, 127(2), 297–316.
- Haines, III.V., Jalette, P., & Larose, K. (2010). The influence of human resource management practices on employee voluntary turnover rates in the Canadian non-governmental sector. 

  \*Industrial and Labor Relations Review, 63(2), 228-246.\*

  https://doi.org/10.1177/001979391006300203
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12.
- Hair, J., Black, W., Babin, B. & Anderson, R. (2019). *Multivariate data analysis* (8th ed). Andover: Cengage.

- Halter, M., Boiko, O., Pelone, F., Beighton, C., Harris, R., Gale, J., Gourlay, S. & Drennan, V. (2017). The determinants and consequences of adult nursing staff turnover: a systematic review of systematic reviews. *BMC health services research*, 17(1), 1-20.
- Hamedani, M. Y., & Markus, H. R. (2019). Understanding culture clashes and catalyzing change: A culture cycle approach. *Frontiers in psychology*, 10, 1-7. <a href="https://doi.org/10.3389/fpsyg.2019.00700">https://doi.org/10.3389/fpsyg.2019.00700</a>
- Han, D., Park, H., & Rhee, S. Y. (2021). The Role of Regulatory Focus and Emotion Recognition Bias in Cross-Cultural Negotiation. *Sustainability*, 13(5), 1-20. <a href="https://doi.org/10.3390/su13052659">https://doi.org/10.3390/su13052659</a>
- Han, J., Sun, J. M., & Wang, H. L. (2020). Do high performance work systems generate negative effects? How and when? *Human Resource Management Review*, 30(2), https://doi.org/10.1016/j.hrmr.2019.100699
- Hancock, J., Allen, D., Bosco, F., McDaniel, K., & Pierce, C. (2013). Meta-analytic review of employee turnover as a predictor of firm performance. *Journal of Management*, 39(3), 573–603. https://doi.org/10.1177/0149206311424943
- Hansen, L. P., & Sargent, T. (2019). Rational expectations econometrics. CRC Press.
- Harman, H.H. (1967). Modern factor analysis. Chicago, IL: The University of Chicago Press.
- Harris, R. G. (2001). The knowledge based economy: intellectual origins and new economic perspectives. *International Journal of Management Reviews*, 3(1), 21-40. https://doi.org/10.1111/1468-2370.00052
- Harris, S., & Carr, C. (2008). National cultural values and the purpose of businesses.

  \*\*International Business Review\*, 17(1), 103-117.

  https://doi.org/10.1016/j.ibusrev.2007.08.002
- Hausknecht, J. P. (2017). Collective turnover. *Annual Review of Organizational Psychology* and *Organizational Behavior*, 4, 527-544.
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford publications. New York.
- He, W. (2016). View cross-cultural communications from cultural values between China and western—take the film "pushing hands" as an example, *Linguistic Journal*, 11, 88-89-130.

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Hertzum, M., & Simonsen, J. (2019). How is professionals' information seeking shaped by workplace procedures? A study of healthcare clinicians. Information Processing & Management, 56(3), 624-636. <a href="https://doi.org/10.1016/j.ipm.2019.01.001">https://doi.org/10.1016/j.ipm.2019.01.001</a>
- Higgins, P., & Zhang, L. F. (2009). The thinking styles of human resource practitioners. *The Learning Organization*. 16(4), 276-289. <a href="https://doi.org/10.1108/09696470910960374">https://doi.org/10.1108/09696470910960374</a>
- Hofstede G, Van Deusen CA, Mueller CB, Charles TA.(2002). What goals do business leaders pursue? A study in fifteen countries. *Journal of International Business Studies*, 33 (4), 785–803. https://doi.org/10.1057/palgrave.jibs.8491044
- Hofstede, G. (1980). *Cultural consequences: International differences in work-related values.*Beverly Hills: Sage.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations.* 2nd ed. Thousand Oaks: Sage
- Hofstede, G. (2009). Geert Hofstede™ Cultural Dimensions. Retrieved from (accessed 1 January 2020) http://www.geert-hofstede.com
- Hofstede, G., & Bond, M. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4), 5-21. <a href="https://doi.org/10.1016/0090-2616(88)90009-5">https://doi.org/10.1016/0090-2616(88)90009-5</a>
- Hofstede, G., Hofstede, G. J., Minkov, M., & Vinken, H. (2013). Values survey module 2013.URL:http://www.geerthofstede.nl/vsm2013. (accessed November 4, 2014).
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Holland, P. J., Allen, B. C., and Cooper, B. K. (2013). Reducing burnout in Australian nurses: The role of employee direct voice and managerial responsiveness. *The International Journal of Human Resource Management*, 24(16), 3146-3162. <a href="https://doi.org/10.1080/09585192.2013.775032">https://doi.org/10.1080/09585192.2013.775032</a>

- Holtom, B., & Burch, T. (2016). A model of turnover-based disruption in customer services.

  \*Human Resource Management Review, 26(1), 25-36.

  https://doi.org/10.1016/j.hrmr.2015.09.004
- Holzman, P. S., & Klein, G. S. (1954). Cognitive system-principles of leveling and sharpening: Individual differences in assimilation effects in visual time-error. *The Journal of Psychology*, *37*(1), 105-122. <a href="https://doi.org/10.1080/00223980.1954.9916135">https://doi.org/10.1080/00223980.1954.9916135</a>
- Hom, P. W., Lee, T. W., Shaw, J. D., & Hausknecht, J. P. (2017). One hundred years of employee turnover theory and research. *Journal of Applied Psychology*, 102(3), 530-545. https://doi.org/10.1037/apl0000103
- Hom, P. W., Tsui, A. S., Wu, J. B., Lee, T. W., Zhang, A. Y., Fu, P. P., & Li, L. (2009). Explaining employment relationships with social exchange and job embeddedness. *Journal of Applied Psychology*, 94(2), 277–297. <a href="https://doi.org/10.1037/a0013453">https://doi.org/10.1037/a0013453</a>
- Hou, X. J. (2008). The influence of thinking difference on college English writing from the perspective of Chines and western. *Science & Technology information*, 15, 188.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.
- House, R., Javidan, M., & Dorfman, P. (2001). Project GLOBE: an introduction. *Applied Psychology*, 50(4), 489-505. <a href="https://doi.org/10.1111/1464-0597.00070">https://doi.org/10.1111/1464-0597.00070</a>
- Hu, B. & Zhang, J. (2012). Analysis the Chinese and western cultural difference in cross-cultural communication, *Hebei Academic Journal*, 32(6), 201-203.
- Hu, C., Chand, P., & Evans, E. (2013). The effect of national culture, acculturation, and education on accounting judgments: A comparative study of Australian and Chinese culture. *Journal of International Accounting Research*, 12(2), 51-77. <a href="https://doi.org/10.2308/jiar-50507">https://doi.org/10.2308/jiar-50507</a>
- Huang, C. M., Doole, R., Wu, C. W., Huang, H. W., & Yi-Ping, C. (2019). Culture-related and individual differences in regional brain volumes: A cross-cultural voxel-based morphometry study. Frontiers in Human Neuroscience, 13, 1-8. <a href="https://doi.org/10.3389/fnhum.2019.00313">https://doi.org/10.3389/fnhum.2019.00313</a>
- Huang, L., & Wang, X. (2011). The influence of the different thinking pattern between Chinese and English on English writing, *Theory and Practice in Language Studies*, *1*(4), 390-394. https://doi.org/10.4304/tpls.1.4.390-394

- Hui, C., Lee, C., and Rousseau, D. M. (2004). Psychological Contract and Organizational Citizenship Behavior in China: Investigating Generalizability and Instrumentality. *Journal of Applied Psychology*, 89(2), 311–321. <a href="https://doi.org/10.1037/0021-9010.89.2.311">https://doi.org/10.1037/0021-9010.89.2.311</a>
- Hwang, K. K. (1987). Face and favor: The Chinese power game. *American Journal of Sociology*, 92(4), 944-974. <a href="https://doi.org/10.1086/228588">https://doi.org/10.1086/228588</a>
- Imai, L., & Gelfand, M. J. (2010). The culturally intelligent negotiator: The impact of cultural intelligence (CQ) on negotiation sequences and outcomes. *Organizational behavior and human decision processes*, 112(2), 83-98. <a href="https://doi.org/10.1016/j.obhdp.2010.02.001">https://doi.org/10.1016/j.obhdp.2010.02.001</a>
- Inglehart, R. (1997). *Modernization and postmodernization in 43 societies* (pp. 67-107). Princeton university press.
- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence*. Cambridge university press.
- Inglehart, R., & Welzel, C. (2010). Changing mass priorities: The link between modernization and democracy. *Perspectives on politics*, 8(2), 551-567. https://doi.org/10.1017/S1537592710001258
- Janzen, J. A., Silvius, J., Jacobs, S., Slaughter, S., Dalziel, W., & Drummond, N. (2006). What is a health expectation? Developing a pragmatic conceptual model from psychological theory. *Health Expectations*, 9(1), 37-48. <a href="https://doi.org/10.1111/j.1369-7625.2006.00363.x">https://doi.org/10.1111/j.1369-7625.2006.00363.x</a>
- Jewell, D. O., Jewell, S. F., & Kaufman, B. E. (2020). Designing and implementing highperformance work systems: Insights from consulting practice for academic researchers. *Human Resource Management Review*, <a href="https://doi.org/10.1016/j.hrmr.2020.100749">https://doi.org/10.1016/j.hrmr.2020.100749</a>
- Ji, L. J., Peng, K., & Nisbett, R. E. (2000). Culture, control, and perception of relationships in the environment. *Journal of Personality and Social Psychology*, 78(5), 943-955.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294. https://doi.org/10.5465/amj.2011.0088

- Jiang, S. L., Li, S. B., Zhao, J. B., & Zou, L. Q. (2018). Olfactory identification ability is associated to emotional states and expression in individuals with schizotypy. *Personality and Individual Differences*, 129, 54-58. https://doi.org/10.1016/j.paid.2018.03.011
- Jiang, W., Zhao, X., & Ni, J. (2017). The impact of transformational leadership on employee sustainable performance: The mediating role of organizational citizenship behavior. Sustainability, 9(9), 1567. <a href="https://doi.org/10.3390/su9091567">https://doi.org/10.3390/su9091567</a>
- Jiang, Y. H. (2018). Confucian Political Theory in Contemporary China. *Annual Review of Political Science*, 21, 155-173.
- Jones, A. (2006). Dictionary of globalization. Polity.
- Jung, C. G. (1971). *Psychological types*. (H. G. Baynes, Trans., revised by R. F. C. Hull). Princeton, NJ: Princeton University Press. (Original work published 1923).
- Kafetzoupoulos, D., Gotzamani, K., & Skalkos, D. (2019). The relationship between EFQM enablers and business performance. *Journal of Manufacturing Technology Management*, 30 (4), 684-706
- Kagan, J. (1958). The concept of identification. *Psychological Review*, 65(5), 296-305. https://doi.org/10.1037/h0041313
- Kagan, J. (1966). Reflection-impulsivity: The generality and dynamics of conceptual tempo. *Journal of Abnormal Pychology*, 71(1), 17-24. <a href="https://doi.org/10.1037/h0022886">https://doi.org/10.1037/h0022886</a>
- Kandampully, J., & Duddy, R. (1999). Competitive advantage through anticipation, innovation and relationships. *Management Decision*, 37(1), 51-56. https://doi:10.1108/00251749910252021
- Karniol, R., & Ross, M. (1996). The motivational impact of temporal focus: Thinking about the future and the past. *Annual Review of Psychology*, 47(1), 593-620.
- Kataria, A., Garg, P., & Rastogi, R. (2012). Employee engagement and organizational effectiveness: The role of organizational citizenship behavior. *International Journal of Business Insights & Transformation*, 6(1), 102-113
- Keith, K. D. (2019). Culture and psychology: Prospects and possibilities. *Cross Cultural Psychology: Contemporary Themes and Perspectives*, 709-723. <a href="https://doi.org/10.1002/9781119519348.ch34">https://doi.org/10.1002/9781119519348.ch34</a>

- Kessel, M., Kratzer, J., & Schultz, C. (2012). Psychological safety, knowledge sharing, and creative performance in healthcare teams. Creativity and innovation management, 21(2), 147-157. http://doi.10.1111/j.1467-8691.2012.00635.x
- Khan Z, Rao-Nicholson R, Akhtar P, & He, S. (2017). Cross-border mergers and acquisitions of emerging economies' multinational enterprises—The mediating role of socialization integration mechanisms for successful integration. *Human Resource Management Review*. <a href="https://doi.org/10.1016/j.hrmr.2016.12.003">https://doi.org/10.1016/j.hrmr.2016.12.003</a>
- Kim, A., Bansal, P., & Haugh, H. (2019). No time like the present: How a present time perspective can foster sustainable development. *Academy of Management Journal*, 62(2), 607-634. <a href="https://doi.org/10.5465/amj.2015.1295">https://doi.org/10.5465/amj.2015.1295</a>
- Kim, H. M., Li, P., & Lee, Y. R. (2020). Observations of deglobalization against globalization and impacts on global business. *International Trade, Politics and Development*, 4 (2), 83-103.
- Kirkman, B. L., Chen, G., Farh, J. L., Chen, Z. X., & Lowe, K. B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal*, 52(4), 744-764. <a href="https://doi.org/10.5465/amj.2009.43669971">https://doi.org/10.5465/amj.2009.43669971</a>
- Kirkman, B. L., Lowe, K. B., & Gibson, C. B. (2017). A retrospective on Culture's Consequences: The 35-year journey. *Journal of International Business Studies*, 48(1), 12-29.
- Kirton, M. (1976). Adaptors and innovators: A description and measure. *Journal of Applied Psychology*, 61(5), 622-629. <a href="https://doi.org/10.1037/0021-9010.61.5.622">https://doi.org/10.1037/0021-9010.61.5.622</a>
- Kitayama, S., Mesquita, B., & Karasawa, M. (2006). Cultural affordances and emotional experience: socially engaging and disengaging emotions in Japan and the United States. *Journal of personality and social psychology*, 91(5), 890-903. https://doi.org/10.1037/0022-3514.91.5.890
- Kivimaki, M., & Elovainio, M. (1999). A short version of the Team Climate Inventory: Development and psychometric properties. *Journal of occupational and organizational psychology*, 72(2), 241-246. http://doi.10.1348/096317999166644

- Klein, G. S., & Schlesinger, H. J. (1951). Perceptual attitudes toward instability: I. Prediction of apparent movement experiences from Rorschach responses. *Journal of Personality*, 19, 289 –302. https://doi.org/10.1111/j.1467-6494.1951.tb01103.x
- Kline, R. B. (2011). *Convergence of structural equation modeling and multilevel modeling*. In M. Williams (Ed.), Handbook of methodological innovation. Thousand Oaks, CA: Sage
- Kluckhohn, F. R., & Strodtbeck, F. L. (1961). *Variations in value orientations*. New York: Row, Peterson and Company
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development, Upper Saddle River, New Jersey: Prentice Hall
- Kolb, D. A. (2007). The Kolb learning style inventory. Boston, MA: Hay Resources Direct.
- Komolov, O. (2020). Deglobalization and the "Great Stagnation". International Critical Thought, 10(3), 424-439. https://doi.org/10.1080/21598282.2020.1846582
- Koslowski, P. (2000). The limits of shareholder value. *Journal of Business Ethics*, 27(1), 137–148.
- Kozhevnikov, M. (2007). Cognitive styles in the context of modern psychology: toward an integrated framework of cognitive style. *Psychological Bulletin*, *133*(3), 464-481. https://doi.org/10.1037/0033-2909.133.3.464
- Kozhevnikov, M., Evans, C., & Kosslyn, S. M. (2014). Cognitive style as environmentally sensitive individual differences in cognition: A modern synthesis and applications in education, business, and management. *Psychological Science in the Public Interest*, 15(1), 3-33. <a href="https://doi.org/10.1177/1529100614525555">https://doi.org/10.1177/1529100614525555</a>
- Kring, A. M., Smith, D. A., & Neale, J. M. (1994). Individual differences in dispositional expressiveness: development and validation of the Emotional Expressivity Scale. *Journal of personality and social psychology*, 66(5), 934-949. <a href="https://doi.org/10.1037/0022-3514.66.5.934">https://doi.org/10.1037/0022-3514.66.5.934</a>
- Kristjánsdóttir, H., Guðlaugsson, Þ. Ö., Guðmundsdóttir, S., & Aðalsteinsson, G. D. (2017). Hofstede national culture and international trade. *Applied Economics*, 49(57), 5792-5801. <a href="https://doi.org/10.1080/00036846.2017.1343446">https://doi.org/10.1080/00036846.2017.1343446</a>

- Kucharska, W., & Kowalczyk, R. (2019). How to achieve sustainability? —Employee's point of view on company's culture and CSR practice. *Corporate Social Responsibility and Environmental Management*, 26(2), 453-467. https://doi.org/10.1002/csr.1696
- Kuchinke, K. P. (1999). Leadership and culture: Work related values and leadership styles among one company's US and German telecommunication employees. *Human Resource Development Quarterly*, 10 (2), 135-154. <a href="https://doi.org/10.1002/hrdq.3920100205">https://doi.org/10.1002/hrdq.3920100205</a>
- Kumar, R. (2004). Culture and emotions in intercultural negotiations: An overview. In M. Gelfand and J. Brett (Eds.), *The handbook of negotiation and culture*, Palo Alto, CA: Stanford University Press, pp.95-113.
- Kumari, P., & Thapliyal, S. (2017). Studying the impact of organizational citizenship behavior on organizational effectiveness. *Human Resource Management*, 4(1), 9-21.
- Kupper, N., Duijndam, S., & Karreman, A. (2020). Emotion expressivity in the Dutch: Validation of the Dutch translation of the Berkeley Expressivity Questionnaire. *Psychological assessment*, 32(5), e28-e34. <a href="https://doi.org/10.1037/pas0000812">https://doi.org/10.1037/pas0000812</a>
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 159-174. https://doi.org/10.2307/2529310
- Latorre, F., Guest, D., Ramos, J., & Gracia, F. J. (2016). High commitment HR practices, the employment relationship and job performance: A test of a mediation model. *European Management Journal*, 34(4), 328-337. <a href="https://doi.org/10.1016/j.emj.2016.05.005">https://doi.org/10.1016/j.emj.2016.05.005</a>
- Laverty, K. J. (1996). Economic "short-termism": The debate, the unresolved issues, and the implications for management practice and research. *Academy of Management Review*, 21(3), 825-860. <a href="https://doi.org/10.5465/amr.1996.9702100316">https://doi.org/10.5465/amr.1996.9702100316</a>
- Laverty, K. J. (2004). Managerial myopia or systemic short-termism? The importance of managerial systems in valuing the long term. *Management Decision*, 42(8), 949-962. https://doi:10.1108/00251740410555443
- Le, H., Schmidt, F. L., Harter, J. K., & Lauver, K. J. (2010). The problem of empirical redundancy of constructs in organizational research: An empirical investigation. *Organizational Behavior and Human Decision Processes*, 112(2), 112-125. https://doi.org/10.1016/j.obhdp.2010.02.003

- Leonard, M., Graham, S., & Bonacum, D. (2004). The human factor: the critical importance of effective teamwork and communication in providing safe care. *BMJ Quality & Safety*, 13(suppl 1), i85-i90. <a href="https://doi.org/10.1136/qshc.2004.010033">https://doi.org/10.1136/qshc.2004.010033</a>
- Lepak, D. P., & Shaw, J. D. (2008). Strategic HRM in North America: looking to the future. *The International Journal of Human Resource Management*, 19 (8), 1486-1499. <a href="https://doi.org/10.1080/09585190802200272">https://doi.org/10.1080/09585190802200272</a>
- Li, J. M., Yang, J. S., & Wu, H. H. (2008). Improving service quality and organisation performance through human resource practices. A case study. *Total Quality Management*, 19(9), 969-985.
- Li, Y. C. & Yang, M. (2001). Chinese and Western thinking modes and discourse organization. *Journal of Shandong Normal University College of Foreign Languages*, 1, 18-22,45.
- Liddell, B. J., & Williams, E. N. (2019). Cultural differences in interpersonal emotion regulation. *Frontiers in Psychology*, *10*, 1-15. https://doi.org/10.3389/fpsyg.2019.00999
- Lin, C. Y. Y., Lu, T. C., & Lin, H. W. (2012). A different perspective of expatriate management. *Human Resource Management Review*, 22(3), 189-207.
- Lin, K., & Mancik, A. M. (2020, December). National Culture on the Cross National Variation of Homicide: An Empirical Application of the Inglehart Welzel Cultural Map. *Sociological Forum*, 35 (4), 1114-1134, <a href="https://doi.org/10.1111/socf.12640">https://doi.org/10.1111/socf.12640</a>
- Lin, M., Soi Kawase, S., Narita Ohtaki, R., Itoh, M., & Kim, Y. (2016). Reliability and validity of a self report emotional expressivity measure: The Japanese version of the Berkeley Expressivity Questionnaire. *Japan Journal of Nursing Science*, 13(1), 196-201. <a href="https://doi.org/10.1111/jjns.12094">https://doi.org/10.1111/jjns.12094</a>
- Lin, Y., Shi, W., Prescott, J. E., & Yang, H. (2019). In the eye of the beholder: Top managers' long-term orientation, industry context, and decision-making processes. *Journal of Management*, 45(8), 3114-3145. https://doi.org/10.1177/0149206318777589
- Lin, Y. T. (1962). My country and my people. Rex Bookstore, Inc.
- Liu, F. & Zhang, X. H. (2005). View the difference of thinking ways between Chinese and Western from the English and Chinese sentence structure. *Journal of Zaozhuang University*, 4(1), 75-77.

- Liu, F. C., Cheng, K. L., Chao, M., & Tseng, H. M. (2012). Team innovation climate and knowledge sharing among healthcare managers: mediating effects of altruistic intentions. *Chang Gung Medical Journal*, 35(5), 408-419.
- Liu, P. Y. (2018). Discuss on the influence of differences of Cultural Values on Tourism Consumption Behavior-A Case Study of Chinese and Western Tourists' Consumption in Xinjiang, *Art and cultural Communication*, *10*, 231-232.
- Liu, S. X., Zhou, Y., Cheng, Y., & Zhu, Y. Q. (2020). Multiple mediating effects in the relationship between employees' trust in organizational safety and safety participation behavior. *Safety science*, 125, 1-13. <a href="https://doi.org/10.1016/j.ssci.2020.104611">https://doi.org/10.1016/j.ssci.2020.104611</a>
- Louie, J. Y., Wang, S. W., Fung, J., & Lau, A. (2015). Children's emotional expressivity and teacher perceptions of social competence: A cross-cultural comparison. *International Journal of Behavioral Development*, 39(6), 497-507. <a href="https://doi.org/10.1177/0165025414548775">https://doi.org/10.1177/0165025414548775</a>
- Lu, C. M., Chen, S. J., Huang, P. C., & Chien, J. C. (2015). Effect of diversity on human resource management and organizational performance. *Journal of Business Research*, 68(4), 857-861. https://doi.org/10.1016/j.jbusres.2014.11.041
- Lu, K. Y., Lin, P. L., Wu, C. M., Hsieh, Y. L., & Chang, Y. Y. (2002). The relationships among turnover intentions, professional commitment, and job satisfaction of hospital nurses.

  \*\*Journal of Professional Nursing\*, 18(4), 214-219.

  https://doi.org/10.1053/jpnu.2002.127573
- Lu, Q. X. & Bo, C. L. (2019). A Comparative Study of Professional Social Work Values between China and America-Based on Hofstede's cultural dimension theory, *Journal of Changchun University of Science and Technology (Social Sciences Edition*, 32(3), 54-60
- Lu, X. H. & Jia, X. Y. (2017). Interpretation of Chinese and American family values by example of "pushing hands", *Drama House*, *16*, 87-88
- Lu, Y. & Luo, Y. X. (2014). A comparative study of the cultural values in Chinese and American advertisements. *Overseas English*, *11*, 202-203
- Lucas, M. D., Atwood, J. R., & Hagaman, R. (1993). Replication and validation of anticipated turnover model for urban registered nurses. *Nursing Research*, 42(1), 29-35. <a href="https://doi.org/10.1097/00006199-199301000-00006">https://doi.org/10.1097/00006199-199301000-00006</a>

- Lui, S. S., & Ngo, H. Y. (2012). Drivers and outcomes of long term orientation in cooperative relationships. *British Journal of Management*, 23(1), 80-95. <a href="https://doi.org/10.1111/j.1467-8551.2010.00719.x">https://doi.org/10.1111/j.1467-8551.2010.00719.x</a>
- Luna-Arocas, R., & Camps, J. (2008). A model of high-performance work practices and turnover intentions. *Personnel Review*, 37(1), 26–46. <a href="https://doi:10.1108/00483480810839950">https://doi:10.1108/00483480810839950</a>
- Lv, Q. Y., Wang, Y. Z. & Wang, Z. H. (2010). The emotional difference under the cultural mode of individualism and collectivism. *Journal of Lanzhou University (Social Sciences)*, 38(6), 90-94
- Ma, D. & Fan, Y. L. (2020). A Study of Chinese and American Cultural Values in Intercultural Communication, *Theoretic Observation*, *165*(3), 129-131
- MacCallum, R. C., and Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, 51(1), 201–226. <a href="https://doi:10.1146/annurev.psych.51.1.20">https://doi:10.1146/annurev.psych.51.1.20</a>
- Maden, C., Ozcelik, H., & Karacay, G. (2016). Exploring employees' responses to unmet job expectations. *Personnel Review*, 45 (1), 4-28. <a href="https://doi:10.1108/pr-07-2014-0156">https://doi:10.1108/pr-07-2014-0156</a>
- Maglio, S. J., & Trope, Y. (2019). Temporal orientation. *Current opinion in psychology*, 26, 62-66.
- Margavio, T., Margavio, G. W., Moses, D. R., & Hignite, M. (2016). Emotional Intelligence: A Comparison of Chinese and American Accounting Majors. *Business and Management*, 8(4), 145-158.
- Marginson, D., & McAulay, L. (2008). Exploring the debate on short termism: A theoretical and empirical analysis. *Strategic Management Journal*, 29(3), 273-292. https://doi.org/10.1002/smj.657
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological review*, 98(2), 224-253. https://doi.org/10.1037/0033-295X.98.2.224
- Martin-Alcazar, F., Romero-Fernandez, P. M., & Sanchez-Gardey, G. (2005). Strategic human resource management: integrating the universalistic, contingent, configurational and contextual perspectives. *The International Journal of Human Resource Management*, 16(5), 633-659. <a href="https://doi.org/10.1080/09585190500082519">https://doi.org/10.1080/09585190500082519</a>

- Masuch, M. (1985). Vicious circles in organizations, *Administrative Science Quarterly*, 30(1), 14-33. <a href="https://doi.org/10.2307/2392809">https://doi.org/10.2307/2392809</a>
- Masuda, T. & Nisbett, R. (2001). Attending holistically versus analytically: comparing the context sensitivity of Japanese and Americans, *Journal of Personality and Social Psychology*, 81(5), 922-934. https://doi.org/10.1037/0022-3514.81.5.922
- Mathieu, J. E., Tannenbaum, S. I., Donsbach, J. S., & Alliger, G. M. (2014). A review and integration of team composition models: Moving toward a dynamic and temporal framework. *Journal of management*, 40(1), 130-160. <a href="https://doi.org/10.1177/0149206313503014">https://doi.org/10.1177/0149206313503014</a>
- Matsumoto, D., Kudoh, T., Scherer, K., & Wallbott, H. (1988). Antecedents of and reactions to emotions in the United States and Japan. *Journal of Cross-Cultural Psychology*, 19(3), 267-286. https://doi.org/10.1177/0022022188193001
- Matsumoto, D., Yoo, S. H., & Fontaine, J. (2008). Mapping expressive differences around the world: The relationship between emotional display rules and individualism versus collectivism. *Journal of cross-cultural psychology*, 39(1), 55-74. <a href="https://doi.org/10.1177/0022022107311854">https://doi.org/10.1177/0022022107311854</a>
- McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith-a failure of analysis. *Human relations*, 55(1), 89-118. https://doi.org/10.1177/0018726702551004
- Meade, A. W. & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological methods*,17 (3), 437-455. <a href="https://doi:10.1037/a0028085">https://doi:10.1037/a0028085</a>
- Meglio, O., & Schriber, S. (2020). Umbrella Constructs: An Overarching Framework. *In Mergers and Acquisitions*. Palgrave Macmillan, Cham, pp.27-56.
- Mele, C., & Polese, F. (2011). *Key dimensions of service systems in value-creating networks*. In The science of service systems (pp. 37-59). Springer, Boston, MA.
- Memon, M. A., Salleh, R., & Baharom, M. N. R. (2016). The link between training satisfaction, work engagement and turnover intention. *European Journal of Training and Development*, 40(6), 407-429. <a href="https://doi:10.1108/ejtd-10-2015-0077">https://doi:10.1108/ejtd-10-2015-0077</a>
- Mesquita, B. (2001). Emotions in collectivist and individualist contexts. *Journal of personality and social psychology*, 80(1), 68-74. https://doi.org/10.1037/0022-3514.80.1.68

- Mesquita, B., & Frijda, N. H. (1992). Cultural variations in emotions: a review. *Psychological bulletin*, 112(2), 179-204. <a href="https://doi.org/10.1037/0033-2909.112.2.179">https://doi.org/10.1037/0033-2909.112.2.179</a>
- Messick, S. (1984). The nature of cognitive styles: Problems and promise in educational practice. *Educational psychologist*, 19(2), 59-74. <a href="https://doi.org/10.1080/00461528409529283">https://doi.org/10.1080/00461528409529283</a>
- Metcalf, L. E., Bird, A., Shankarmahesh, M., Aycan, Z., Larimo, J., & Valdelamar, D. D. (2006). Cultural tendencies in negotiation: A comparison of Finland, India, Mexico, Turkey, and the United States. *Journal of World Business*, 41(4), 382-394. <a href="https://doi.org/10.1016/j.jwb.2006.08.004">https://doi.org/10.1016/j.jwb.2006.08.004</a>
- Meyer, E. (2014). The culture map: Breaking through the invisible boundaries of global business. Public Affairs.
- Michael E. W. Varnum, Igor Grossmann, Shinobu Kitayama, and Richard E. Nisbett (2010). The origin of cultural differences in cognition. The Social Orientation Hypothesis. Association psychology science.
- Miller, A. (1987). Cognitive styles: An integrated model. *Educational Psychology*, 7, 251–268. https://doi.org/10.1080/0144341870070401
- Miller, A. (1991). Personality types, learning styles and educational goals. *Educational Psychology*, 11(3-4), 217-238. <a href="https://doi.org/10.1080/0144341910110302">https://doi.org/10.1080/0144341910110302</a>
- Miller, P. J., Wang, S. H., Sandel, T., & Cho, G. E. (2002). Self-esteem as folk theory: A comparison of European American and Taiwanese mothers' beliefs. *Parenting: science and practice*, 2(3), 209-239. https://doi.org/10.1207/S15327922PAR0203\_02
- Millroth, P., Juslin, P., Winman, A., Nilsson, H., & Lindskog, M. (2020). Preference or ability: Exploring the relations between risk preference, personality, and cognitive abilities.

  \*\*Journal of Behavioral Decision Making, 33(4), 477-491.\*\*

  https://doi.org/10.1002/bdm.2171
- Minkov, M. (2018). A revision of Hofstede's model of national culture: Old evidence and new data from 56 countries. *Cross Cultural & Strategic Management*. 25(2), 231-256. https://doi.org/10.1108/CCSM-03-2017-0033
- Minkov, M., & Hofstede, G. (2012). Hofstede's fifth dimension: New evidence from the World Values Survey. *Journal of Cross-Cultural Psychology*, 43(1), 3-14. https://doi.org/10.1177/0022022110388567

- Miyamoto, Y., Ma, X., & Petermann, A. G. (2014). Cultural differences in hedonic emotion regulation after a negative event. *Emotion*, 14(4), 804-815. https://doi.org/10.1037/a0036257
- Mobley, W. H., Griffeth, R. W., Hand, H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86 (3), 493-522. https://doi.org/10.1037/0033-2909.86.3.493
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., & Stewart, L. A. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic reviews*, 4(1), 1-9.
- Molinari, L., Speltini, G., Passini, S., & Carelli, M. G. (2016). Time perspective in adolescents and young adults: Enjoying the present and trusting in a better future. *Time and Society*, 25(3), 594-612. https://doi.org/10.1177/0961463X15587833
- Morelen, D., Jacob, M. L., Suveg, C., Jones, A., & Thomassin, K. (2013). Family emotion expressivity, emotion regulation, and the link to psychopathology: Examination across race. *British Journal of Psychology*, 104(2), 149-166. <a href="https://doi.org/10.1111/j.2044-8295.2012.02108.x">https://doi.org/10.1111/j.2044-8295.2012.02108.x</a>
- Morris, M. W., & Gelfand, M. J. (2004). Cultural differences and cognitive dynamics: Expanding the cognitive perspective on negotiation. *The handbook of negotiation and culture*, 45-70.
- Morrison, E. W. (1996). Organizational citizenship behavior as a critical link between HRM practices and service quality. *Human resource management*, 35(4), 493-512. https://doi.org/10.1002/(SICI)1099-050X(199624)35:4<493::AID-HRM4>3.0.CO;2-R
- Morrison, E. W. (1997). Service quality: An organizational citizenship behavior framework. *Advances in the management of organizational quality*, 2(2), 211-249.
- Mosakowski, E., & Earley, P. C. (2000). A selective review of time assumptions in strategy research. *Academy of management review*, 25(4), 796-812. <a href="https://doi.org/10.5465/amr.2000.3707728">https://doi.org/10.5465/amr.2000.3707728</a>
- Mostafa, A. M. S., Bottomley, P., Gould Williams, J., Abouarghoub, W., & Lythreatis, S. (2019). High commitment human resource practices and employee outcomes: The contingent role of organizational identification. *Human Resource Management Journal*, 29(4), 620-636. <a href="https://doi.org/10.1111/1748-8583.12248">https://doi.org/10.1111/1748-8583.12248</a>

- Murnighan, J. K., & Roth, A. E. (1983). Expecting continued play in prisoner's dilemma games:

  A test of several models. *Journal of conflict resolution*, 27(2), 279-300. https://doi.org/10.1177/0022002783027002004
- Murphy, M., & Arenas, D. (2010). Through indigenous lenses: Cross-sector collaborations with fringe stakeholders. *Journal of Business Ethics*, 94(1), 103-121.
- Muthén, L. K., & Muthén, B. O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural equation modeling*, 9(4), 599-620. <a href="https://doi.org/10.1207/S15328007SEM0904\_8">https://doi.org/10.1207/S15328007SEM0904\_8</a>
- Myers, I. B. (1962). *The Myers-Briggs Type Indicator: Manual*. Consulting Psychologists Press. <a href="https://doi.org/10.1037/14404-000">https://doi.org/10.1037/14404-000</a>
- Nasif, E. G., Al-Daeaj, H., Ebrahimi, B., & Thibodeaux, M. S. (1991). Methodological problems in cross-cultural research: An updated review. *Management International Review*. 31(1), 79-91.
- Nason, R. S., Bacq, S., & Gras, D. (2018). A behavioral theory of social performance: Social identity and stakeholder expectations. *Academy of Management Review*, 43(2), 259-283. https://doi.org/10.5465/amr.2015.0081
- Nevins, J.L., Bearden, W.O. & Money, B. (2007). Ethical Values and Long-term Orientation. *Journal of Business Ethics*, 71, 261–274. https://doi.org/10.1007/s10551-006-9138-x
- Newble, D. I., & Entwistle, N. J. (1986). Learning styles and approaches: implications for medical education. *Medical education*, 20(3), 162-175. <a href="https://doi.org/10.1111/j.1365-2923.1986.tb01163.x">https://doi.org/10.1111/j.1365-2923.1986.tb01163.x</a>
- Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, 27(3), 521-535. <a href="https://doi.org/10.1016/j.hrmr.2017.01.001">https://doi.org/10.1016/j.hrmr.2017.01.001</a>
- Ng, T. W., & Feldman, D. C. (2011). Affective organizational commitment and citizenship behavior: Linear and non-linear moderating effects of organizational tenure. *Journal of Vocational Behavior*, 79(2), 528-537. https://doi.org/10.1016/j.jvb.2011.03.006

- Nisbett, R. E. (2003). *The geography of thought: how Asians and Westerners think differently* ... and why. New York: Free Press
- Nisbett, R. E., & Masuda, T. (2003). Culture and point of view. *Proceedings of the National Academy of Sciences*, 100(19), 11163-11170. https://doi.org/10.1073/pnas.1934527100
- Nisbett, R. E., & Norenzayan, A. (2002). *Culture and cognition*. In H. Pashler & D. Medin (Eds.), *Steven's handbook of experimental psychology*: Memory and cognitive processes (p. 561–597). John Wiley & Sons Inc.
- Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review*, 108(2), 291-310.
- Nishii, L. H., Khattab, J., Shemla, M., & Paluch, R. M. (2018). A multi-level process model for understanding diversity practice effectiveness. *Academy of Management Annals*, 12(1), 37-82. https://doi.org/10.5465/annals.2016.0044
- Niu, Y. H. (2018). A comparative study of the cultural values of slogans in Chinese and American public service advertisements. *Modern Communication*, *1*, 38-39
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2015). *Human Resource Management: Gaining a Competitive Advantage*. 8th edition, Burr Ridge, Illinois: Irwin.
- Norenzayan, A., Smith, E. E., Kim, B. J., & Nisbett, R. E. (2002). Cultural preferences for formal versus intuitive reasoning. *Cognitive Science*, 26(5), 653-684.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory*. 3rd Edn. New York, NY: McGraw-Hill.
- Nussbaum, M. C. (1998). Cultivating humanity. Harvard University Press.
- O'Donovan, R., De Brún, A., & McAuliffe, E. (2021). Healthcare Professionals Experience of Psychological Safety, Voice, and Silence. *Frontiers in Psychology*, 12, 383. <a href="https://doi.org/10.3389/fpsyg.2021.626689">https://doi.org/10.3389/fpsyg.2021.626689</a>
- Oettingen, G., & Mayer, D. (2002). The motivating function of thinking about the future: expectations versus fantasies. *Journal of personality and social psychology*, 83(5), 1198-1212. <a href="https://doi.org/10.1037/0022-3514.83.5.1198">https://doi.org/10.1037/0022-3514.83.5.1198</a>
- Organ, D.W. (1990). The motivational basis of organizational citizenship behavior. *Research* in organizational behavior, 12(1), 43-72.

- Organ, D.W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human performance*, 10(2), 85-97. <a href="http://doi.10.1207/s15327043hup1002\_2">http://doi.10.1207/s15327043hup1002\_2</a>
- Organ D.W., Podsakoff P.M., MacKenzie S.B. (2006). *Organizational Citizenship Behavior: Its nature, antecedents and consequences.* Thousand Oaks, CA: Sage Publications Inc
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological bulletin*, 128(1), 3-72. https://doi.org/10.1037/0033-2909.128.1.3
- Page, M. (2012). First Global Village. Leya.
- Palepu, K. G. (1986). Predicting takeover targets: A methodological & empirical analysis.

  \*\*Journal of Accounting and Economics, 8(1), 3-35. <a href="https://doi.org/10.1016/0165-4101(86)90008-X">https://doi.org/10.1016/0165-4101(86)90008-X</a>
- Palley, T. I. (1997). Managerial turnover and the theory of short-termism. *Journal of Economic Behavior and Organization*, 32(4), 547-557. <a href="https://doi.org/10.1016/S0167-2681(97)00012-7">https://doi.org/10.1016/S0167-2681(97)00012-7</a>
- Pandya, K., & Trivedi, S. (2018). A Study on relationship between High Performance Work Practices (HPWP), Organizational Citizenship Behaviour (OCB) and Turnover Intention (TI): An empirical view of manufacturing unit. *Oakbrook Business Review*, 4(2), 7-17.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50. http://doi.10.1177/002224298504900403
- Park, S. J., Yi, Y., & Lee, Y. R. (2021). Heterogeneous dimensions of SERVQUAL. *Total Quality Management & Business Excellence*, 32(1-2), 92-118. https://doi.org/10.1080/14783363.2018.1531700
- Park, T. Y., & Shaw, J. D. (2013). Turnover rates and organizational performance: A meta-analysis. *Journal of Applied Psychology*, 98(2), 268-309. <a href="https://doi.org/10.1037/a0030723">https://doi.org/10.1037/a0030723</a>
- Parush, A., Kramer, C., Foster-Hunt, T., Momtahan, K., Hunter, A., & Sohmer, B. (2011). Communication and team situation awareness in the OR: Implications for augmentative information display. *Journal of biomedical informatics*, 44(3), 477-485. https://doi.org/10.1016/j.jbi.2010.04.002

- Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know?. *International Business Review*, 29(4), https://doi.org/10.1016/j.ibusrev.2020.101717
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P.
  R.Shaver, & L. S. Wrightsman (Eds.), Measures of personality and social psychological attitudes (pp. 17–60). New York, NY: Academic Press/Harcourt Brace Jovanovich.
- Peng, K., & Nisbett, R. E. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist*, 54(9), 741-754. <a href="https://doi.org/10.1037/0003-066X.54.9.741">https://doi.org/10.1037/0003-066X.54.9.741</a>
- Peng, M. W., Kathuria, N., Viana, F. L. E., & Lima, A. C. (2021). Conglomeration, (De) Globalization, and COVID-19. *Management and Organization Review*, 17(2), 394-400.
- Peter, M. K., & Jarratt, D. G. (2015). The practice of foresight in long-term planning. *Technological Forecasting and Social Change*, 101, 49-61. <a href="https://doi.org/10.1016/j.techfore.2013.12.004">https://doi.org/10.1016/j.techfore.2013.12.004</a>
- Pfeffer, J. (1998). Seven practices of successful organizations. *California Management Review*, 40, 96-124.
- Phillips, W. J., Fletcher, J. M., Marks, A. D., & Hine, D. W. (2016). Thinking styles and decision making: A meta-analysis. *Psychological Bulletin*, *142*(3), 260-290. https://doi.org/10.1037/bul0000027
- Pivcevic, S., & Petric, L. (2011). Empirical evidence on innovation activity in tourism: the hotel sector perspective. *The Business Review*, 17(1), 142-149.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539-569.
- 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), 879-903. <a href="http://doi.10.1037/0021-9010.88.5.879">http://doi.10.1037/0021-9010.88.5.879</a>
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of management*, 26(3), 513-563. https://doi.org/10.1016/S0149-2063(00)00047-7

- Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K., & Duffy, S. (2006). *Guidance on the Conduct of Narrative Synthesis in Systematic Reviews*. ESRC Methods Programme: University of Lancaster.
- Post, M. W. (2016). What to do with "moderate" reliability and validity coefficients?. *Archives of physical medicine and rehabilitation*, 97(7), 1051-1052.
- Primecz, H. (2020). Positivist, constructivist and critical approaches to international human resource management and some future directions. *German Journal of Human Resource Management*, 34(2), 124-147. https://doi.org/10.1177/2397002220909069
- Prottas, D. J., & Nummelin, M. R. (2018). Behavioral integrity, engagement, organizational citizenship behavior, and service quality in a healthcare setting. *Journal of Healthcare Management*, 63(6), 410-424. https://doi.10.1097/JHM-D-17-00134
- Qian, Y. X. (2006). The difference of Chinese and Western cultural thinking modes on negative influence and coping strategies on English Learners. *Journal of Changchun University of Technology (Higher education study edition)*, 27(2), 93-94
- Qiu, S., Alizadeh, A., Dooley, L. M., & Zhang, R. (2019). The effects of authentic leadership on trust in leaders, organizational citizenship behavior, and service quality in the Chinese hospitality industry. *Journal of Hospitality and Tourism Management*, 40, 77-87. <a href="https://doi.10.1016/j.jhtm.2019.06.004">https://doi.10.1016/j.jhtm.2019.06.004</a>
- Qu, Y. and Bai, K. (2015). Friend relationship in the context of visiting friends tourism and its long-term orientation mechanism: theoretical construction and empirical analysis, *Tourism Tribune*, 30(6),46-56.
- Rau, P. L. P., Choong, Y. Y., & Salvendy, G. (2004). A cross cultural study on knowledge representation and structure in human computer interfaces. *International Journal of Industrial Ergonomics*, 34(2), 117-129. <a href="https://doi.org/10.1016/j.ergon.2004.03.006">https://doi.org/10.1016/j.ergon.2004.03.006</a>
- Richards, E. L. (2014). Contracting from East to West: Bridging the cultural divide. *Business Horizons*, *57*(5), 677-684. <a href="https://doi.org/10.1016/j.bushor.2014.04.003">https://doi.org/10.1016/j.bushor.2014.04.003</a>
- Riding, R., & Cheema, I. (1991). Cognitive styles—an overview and integration. *Educational psychology*, 11(3-4), 193-215. https://doi.org/10.1080/0144341910110301
- Rosen, M. A., DiazGranados, D., Dietz, A. S., Benishek, L. E., Thompson, D., Pronovost, P. J., & Weaver, S. J. (2018). Teamwork in healthcare: Key discoveries enabling safer, high-

- quality care. *American Psychologist*, 73(4), 433-450, <a href="https://doi.org/10.1037/amp0000298">https://doi.org/10.1037/amp0000298</a>.
- Roulleau-Berger, L., & Peilin, L. (Eds.). (2018). *Post-Western Sociology-From China to Europe*. Routledge.
- Rubenstein, A. L., Eberly, M. B., Lee, T. W., & Mitchell, T. R. (2018). Surveying the forest: A meta analysis, moderator investigation, and future oriented discussion of the antecedents of voluntary employee turnover. *Personnel Psychology*, 71(1), 23-65. https://doi.org/10.1111/peps.12226
- Ruotsalainen, S., Jantunen, S., & Sinervo, T. (2020). Which factors are related to Finnish home care workers' job satisfaction, stress, psychological distress and perceived quality of care?-a mixed method study. *BMC Health Services Research*, 20(1), 1-13.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of personality and social psychology*, 39(6), 1161-1178. <a href="https://doi.org/10.1037/h0077714">https://doi.org/10.1037/h0077714</a>
- Sadler-Smith, E. (2001). The relationship between learning style and cognitive style. *Personality and individual differences*, 30(4), 609-616. <a href="https://doi.org/10.1016/S0191-8869(00)00059-3">https://doi.org/10.1016/S0191-8869(00)00059-3</a>
- Sadler-Smith, E. U. G. E. N. E., Zhang, L., & Sternberg, R. (2009). A duplex model of cognitive style. In: Zhang, L.F., Sternberg, R.J. (Eds.), *Perspectives on the Nature of Intellectual Styles*. Springer, Heidelberg, 3–28 SAGE Publications, Inc.
- Santa, R., Borrero, S., Ferrer, M., and Gherissi, D. (2018). Fostering a healthcare sector quality and safety culture. *International journal of health care quality assurance*, 31(7), 796-809.
- Saracho, O. N., & Spodek, B. (1993). Professionalism and the preparation of early childhood education practitioners. *Early child development and care*, 89(1), 1-17.
- Schmeck, R. R. (Ed.). (2013). *Learning strategies and learning styles*. Springer Science & Business Media.
- Schnakenberg Martin, A. M., & Lysaker, P. H. (2020). Individuals with psychosis and a lifetime history of cannabis use show greater deficits in emotional experience compared to non-using peers. *Journal of Mental Health*, 29(1), 77-83. <a href="https://doi.org/10.1080/09638237.2018.1487540">https://doi.org/10.1080/09638237.2018.1487540</a>

- Schwadel, P., Hardy, S. A., Van Tongeren, D. R., & DeWall, C. N. (2021). The values of religious nones, dones, and sacralized Americans: Links between changes in religious affiliation and Schwartz values. *Journal of Personality*. <a href="https://doi.org/10.1111/jopy.12620">https://doi.org/10.1111/jopy.12620</a>
- Schwartz, S. H. (1992). *Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries*. In M. Zanna (ed). Advances in experimental social psychology (Vol. 25, pp. 1-65). New York: Academic Press.
- Schwartz, S. H. (2007). Value orientations: Measurement, antecedents and consequences across nations. In R. Jowell, C. Roberts, R. Fitzgerald, & G. Eva (Eds.), *Measuring attitudes cross-nationally: Lessons from the European Social Survey* (p. 169–203). Sage Publications.
- Schwartz, S. H. (2012). An overview of the Schwartz Theory of Basic Values. *Online Readings* in *Psychology and Culture*, 2(1), 1-20. <a href="https://doi.org/10.9707/2307-0919.1116">https://doi.org/10.9707/2307-0919.1116</a>
- Schwartz, S. (2013). National Culture as Value Orientations: Consequences of value differences and cultural distance. In Victor Ginsburgh & David Thorsby (ed). Handbook of the Economics of Art and Culture, Vol. 2, 547-586, Amsterdam: Elsevier.
- Schwartz, S. H. (2016). *Basic individual values: Sources and consequences*. In T. Brosch & D. Sander (Eds.), Handbook of value: Perspectives from economics, neuroscience, philosophy, psychology and sociology (pp. 63–84). Oxford University Press
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lonnqvist, J-E, Demirutku, K., Dirilen-Gumus, O. & Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663-688. <a href="https://doi.org/10.1037/a0029393">https://doi.org/10.1037/a0029393</a>
- Seijts, G. H. (1998). The importance of future time perspective in theories of work motivation.

  The Journal of psychology, 132(2), 154-168.

  <a href="https://doi.org/10.1080/00223989809599156">https://doi.org/10.1080/00223989809599156</a>
- Selden, S. C., & Sowa, J. E. (2015). Voluntary turnover in nonprofit human service organizations: The impact of high-performance work practices. *Human Service Organizations: Management, Leadership and Governance*, 39(3), 182-207.
- Semnani-Azad, Z., & Adair, W. L. (2013). Watch your tone... relational paralinguistic messages in negotiation: The Case of East and West. *International Studies of*

- *Management & Organization*, 43(4), 64-89. <a href="https://doi.org/10.2753/IMO0020-8825430404">https://doi.org/10.2753/IMO0020-8825430404</a>
- Sent, E. M., & Kroese, A. L. (2020). Commemorating Geert Hofstede, a pioneer in the study of culture and institutions. *Journal of Institutional Economics*, 1-13.
- Seth, N., Deshmukh, S. G., and Vrat, P. (2005). Service quality models: a review. *International journal of quality and reliability management*, 22(9), 913-949. https://doi.org/10.1108/02656710510625211
- Shaiq, H. M. A., Khalid, H. M. S., Akram, A., & Ali, B. (2011). Why not everybody loves Hofstede? What are the alternative approaches to study of culture?. *European Journal of Business and Management*, 3(6), 101-111.
- Shanker, M. (2018). Organizational citizenship behavior in relation to employees' intention to stay in Indian organizations. *Business Process Management Journal*, 24(6), 1355-1366, <a href="https://doi.10.1108/BPMJ-02-2018-0048">https://doi.10.1108/BPMJ-02-2018-0048</a>
- Shao, Z., & Pan, Z. (2019). Building Guanxi network in the mobile social platform: A social capital perspective. *International Journal of Information Management*, 44, 109-120. https://doi.org/10.1016/j.ijinfomgt.2018.10.002
- Shaw, W. S., Patterson, T. L., Semple, S. J., Dimsdale, J. E., Ziegler, M. G., & Grant, I. (2003). Emotional expressiveness, hostility, and blood pressure in a longitudinal cohort of Alzheimer caregivers. *Journal of Psychosomatic Research*, 54, 293–302. https://doi.org/10.1016/S0022-3999(02)00412-9
- Sherf, E. N., Tangirala, S., & Venkataramani, V. (2019). Why managers do not seek voice from employees: The importance of managers' personal control and long-term orientation. *Organization Science*, 30(3), 447-466. <a href="https://doi.org/10.1287/orsc.2018.1273">https://doi.org/10.1287/orsc.2018.1273</a>
- Shi, M. (2007). The Influence of Chinese and Western Thinking Modes on English Discourse Reading, *Science Education and Culture*, *5*, 80-81
- Shore, L. M., Tetrick, L. E., Lynch, P., & Barksdale, K. (2006). Social and economic exchange: Construct development and validation. *Journal of applied social psychology*, 36(4), 837-867. https://doi.org/10.1111/j.0021-9029.2006.00046.x
- Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational research methods*, 13(3), 456-476. https://doi.org/10.1177/1094428109351241

- Simon, M., Muller, B. H., & Hasselhorn. H. M. (2010). Leaving the organization or the profession—a multilevel analysis of nurses' intentions. *Journal of Advanced Nursing*, 66(3), 616-626. https://doi.org/10.1111/j.1365-2648.2009.05204.x
- Singh, J. (1991). Redundancy in constructs: Problem, assessment, and an illustrative example. *Journal of Business Research*, 22(3), 255-280. <a href="https://doi.org/10.1016/0148-2963(91)90006-J">https://doi.org/10.1016/0148-2963(91)90006-J</a>
- Smith, C. A. O. D. W. N. J. P., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of applied psychology*, 68(4), 653–663, <a href="https://doi.org/10.1037/0021-9010.68.4.653">https://doi.org/10.1037/0021-9010.68.4.653</a>
- Smith, J. D. (2013). Analytic and holistic processes in categorization, *in* B. Shepp & S. Ballesteros (ed). *Object perception: Structure and process* (297-323), Psychology Press.
- Smith, W. K., Jarzabkowski, P., Lewis, M. W., & Langley, A. (Eds.). (2017). *The Oxford handbook of organizational paradox*. Oxford University Press.
- Song, W., Li, H., Ding, N., Zhao, W., Shi, L., & Wen, D. (2019). Psychometrics properties of the Team Interaction Scale and influencing factors of team interaction of tertiary hospital physicians in China: a cross-sectional study. *BMJ open*, 9(8), 9(8), 1-10. <a href="https://doi:10.1136/bmjopen-2018-026162">https://doi:10.1136/bmjopen-2018-026162</a>.
- Soto, J. A., Perez, C. R., Kim, Y. H., Lee, E. A., & Minnick, M. R. (2011). Is expressive suppression always associated with poorer psychological functioning? A cross-cultural comparison between European Americans and Hong Kong Chinese. *Emotion*, 11(6), 1450-1455. https://doi.org/10.1037/a0023340
- Spruit, M., & Lytras, M. (2018). Applied data science in patient-centric healthcare: Adaptive analytic systems for empowering physicians and patients. *Telematics and Informatics*, 35(4), 643-653. https://doi:10.1016/j.tele.2018.04.002
- Srivastava, S., Singh, S., & Dhir, S. (2020). Culture and International business research: a review and research agenda. *International Business Review*, 29(4), <a href="https://doi.org/10.1016/j.ibusrev.2020.101709">https://doi.org/10.1016/j.ibusrev.2020.101709</a>
- Staw, B. M. (1980). The consequences of turnover. *Journal of occupational Behaviour*, 253-273.

- Stern, Z., Katz-Navon, T., & Naveh, E. (2008). The influence of situational learning orientation, autonomy, and voice on error making: The case of resident physicians. *Management Science*, 54(9), 1553-1564. https://doi.org/10.1287/mnsc.1080.0862
- Sternberg, R. J. (1988). Mental self-government: A theory of intellectual styles and their development. *Human Development*. 31, 197–224. <a href="https://doi.org/10.1159/000275810">https://doi.org/10.1159/000275810</a>
- Sternberg, R. J. (1997). *Thinking styles*. New York: Cambridge University Press.
- Sternberg, R. J., & Grigorenko, E. L. (1997). Are cognitive styles still in style? *American Psychologist*, 52, 700 –712. https://doi.org/10.1037/0003-066X.52.7.700
- Sternberg, R. J., & Wagner, R.K. (1992). Thinking styles inventory, Yale University.
- Sternberg, R. J., Wagner, R. K., & Zhang, L. F. (2003). Thinking Styles Inventory-Revised.Unpublished Test, Yale University.
- Sternberg, R. J.; Wagner, R. K.; Zhang, L. Thinking Styles Inventory-Revised II. Unpublished test. New Haven, CT: Yale University, 2007.
- Storey, J., Ulrich, D., & Wright, P. M. (2019). *Strategic Human Resource Management: A Research Overview*. Abingdon: Routledge.
- Strobel, M., Tumasjan, A., Sporrle, M., & Welpe, I. M. (2013). The future starts today, not tomorrow: How future focus promotes organizational citizenship behaviors. *Human Relations*, 66(6), 829-856. <a href="https://doi.org/10.1177/0018726712470709">https://doi.org/10.1177/0018726712470709</a>
- Suveg, C., Raley, J. N., Morelen, D., Wang, W., Han, R. Z., & Campion, S. (2014). Child and family emotional functioning: A cross-national examination of families from China and the United States. *Journal of Child and Family Studies*, 23(8), 1444-1454. https://doi.org/10.1007/s10826-013-9800-8
- Tafel H, & Turner J C. *The social identity theory of intergroup behavior*. In: Worchel S, Austin W(eds). Psychology of Intergroup Relations. Chicago: Nelson Hall, 1986. 7~24
- Taras, V., Rowney, J., & Steel, P. (2009). Half a century of measuring culture: Review of approaches, challenges, and limitations based on the analysis of 121 instruments for quantifying culture. *Journal of International Management*, 15(4), 357–373. <a href="https://doi.org/10.1016/j.intman.2008.08.005">https://doi.org/10.1016/j.intman.2008.08.005</a>

- Thammasitboon, S., and Cutrer, W. B. (2013). Diagnostic decision-making and strategies to improve diagnosis. *Current problems in pediatric and adolescent health care*, 43(9), 232-241. https://doi.org/10.1016/j.cppeds.2013.07.003
- Tinsley, C. H., Taylor, M. S., & Adair, W. L. (2012). Culture and international negotiation failure. *Saving Negotiations from Failure*, 185-200. Vienna: Int. Inst. Appl. Syst. Anal. Press
- Torlak, N. G., Kuzey, C., Sait Dinç, M., & Budur, T. (2021). Links connecting nurses' planned behavior, burnout, job satisfaction, and organizational citizenship behavior. *Journal of Workplace Behavioral Health*, 36(1), 77-103. <a href="https://doi.org/10.1080/15555240.2020.1862675">https://doi.org/10.1080/15555240.2020.1862675</a>
- Torrance, E. P. (1988). *SOLAT administrator's manual*. Bensenville, IL: Scholastic Testing Service
- Traylor, A. M., Tannenbaum, S. I., Thomas, E. J., & Salas, E. (2020). Helping healthcare teams save lives during COVID-19: Insights and countermeasures from team science. *American psychologist*. 76(1), 1–13. <a href="https://doi.org/10.1037/amp0000750">https://doi.org/10.1037/amp0000750</a>
- Triandis, H. C. (1972). The analysis of subjective culture. Wiley-Interscience
- Trompenaars, F. and Hampden-Turner, C. (1993). *Riding the Waves of Culture: Understanding Cultural Diversity in Business*, McGraw-Hill, New York, NY.
- Tsai, W. H. S., & Men, L. R. (2012). Cultural values reflected in corporate pages on popular social network sites in China and the United States. *Journal of Research in Interactive Marketing*, 6(1), 42-58. https://doi.org/10.1108/17505931211241369
- Tsaur, S. H., & Lin, Y. C. (2004). Promoting service quality in tourist hotels: the role of HRM practices and service behavior. *Tourism management*, 25(4), 471-481. <a href="https://doi.org/10.1016/S0261-5177(03)00117-1">https://doi.org/10.1016/S0261-5177(03)00117-1</a>
- Tu, B. Y. (2015). A study of the difference about Chinese and western thinking, *Journal of Henan Mechanical and Electrical Engineering College*, 23(2), 67-70
- Turnley, W. H., & Feldman, D. C. (2000). Re examining the effects of psychological contract violations: unmet expectations and job dissatisfaction as mediators. *Journal of organizational behavior*, 21(1), 25-42. <a href="https://doi.org/10.1002/(SICI)1099-1379(200002)21:1<25::AID-JOB2>3.0.CO;2-Z">https://doi.org/10.1002/(SICI)1099-1379(200002)21:1<25::AID-JOB2>3.0.CO;2-Z</a>

- Ullah, I., Akhtar, K. M., Shahzadi, I., Farooq, M., & Yasmin, R. (2016). Encouraging knowledge sharing behavior through team innovation climate, altruistic intention and organizational culture. *Knowledge Management & E-Learning*, 8(4), 628-645. <a href="https://doi.org/10.34105/j.kmel.2016.08.038">https://doi.org/10.34105/j.kmel.2016.08.038</a>
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management journal*, 41(1), 108-119. https://doi.org/10.5465/256902
- Vance, C. M., Groves, K. S., Paik, Y., & Kindler, H. (2007). Understanding and measuring linear—nonlinear thinking style for enhanced management education and professional practice. *Academy of Management Learning & Education*, 6(2), 167-185. https://doi.org/10.5465/amle.2007.25223457
- Varnum, M. E. W., Grossmann, I., Kitayama, S., & Nisbett, R. E. (2010). The origin of cultural differences in cognition: The social orientation hypothesis. *Current Directions in Psychological Science*, 19, 9–13. <a href="https://doi.org/10.1177/0963721409359301">https://doi.org/10.1177/0963721409359301</a>
- Veilleux, J. C., Pollert, G. A., Skinner, K. D., Chamberlain, K. D., Baker, D. E., & Hill, M. A. (2021). Individual beliefs about emotion and perceptions of belief stability are associated with symptoms of psychopathology and emotional processes. *Personality and Individual Differences*, 171, <a href="https://doi.org/10.1016/j.paid.2020.110541">https://doi.org/10.1016/j.paid.2020.110541</a>
- Venaik, S., Zhu, Y., & Brewer, P. (2013). Looking into the future: Hofstede long term orientation versus GLOBE future orientation, *Cross Cultural Management: An International Journal*, 20(3), 361-385. <a href="https://doi.org/10.1108/CCM-02-2012-0014">https://doi.org/10.1108/CCM-02-2012-0014</a>
- Vroom, V., (1964). Work and Motivation. New York: Wiley.
- Wang, L., Wang, Z., Ma, Q., Fang, G., & Yang, J. (2019). The development and reform of public health in China from 1949 to 2019. *Globalization and health*, 15(1), 1-21.
- Wang, J. (2010). On the Differences of Social Appellations between Chinese and Americans from the Perspective of Values, *Journal of Huaihua University*, 29(3), 129-130.
- Wang, P. & Liu, W. J. (2001). Chinese and western thinking difference and college English writing, *Foreign Language World*, 85(5), 66-72.
- Wang, R. (2004). The influence of Chinese and Western thinking difference on syntactic structure of college English writing. *Journal of Chongqing Jiaotong University (Social Sciences Edition)*. 4(1), 109-111.

- Wang, T., & Bansal, P. (2012). Social responsibility in new ventures: profiting from a long term orientation. *Strategic Management Journal*, 33(10), 1135-1153. <a href="https://doi.org/10.1002/smj.1962">https://doi.org/10.1002/smj.1962</a>
- Wang, X., Wu, S., Song, Q., Tse, L. A., Yu, I. T., Wong, T., & Griffiths, S. (2011). Occupational health and safety challenges in China—focusing on township-village enterprises. *Archives of Environmental and Occupational Health*, 66(1), 3–11.
- Weber, E. U., Ames, D. R., & Blais, A. R. (2005). 'How do I choose thee? Let me count the ways': A textual analysis of similarities and differences in modes of decision-making in China and the United States. *Management and Organization Review*, 1(1), 87-118. https://doi.org/10.1111/j.1740-8784.2004.00005.x
- Wei, H. (2013). Chinese and western thinking mode difference and English writing. *Journal of Inner Mongolia Normal University*, 2, 90-92.
- Wei, M., Su, J. C., Carrera, S., Lin, S. P., & Yi, F. (2013). Suppression and interpersonal harmony: A cross-cultural comparison between Chinese and European Americans. *Journal of counseling psychology*, 60(4), 625-633. https://doi.org/10.1037/a0033413
- Weller, J., Boyd, M., & Cumin, D. (2014). Teams, tribes and patient safety: overcoming barriers to effective teamwork in healthcare. *Postgraduate medical journal*, 90(1061), 149-154. <a href="http://dx.doi.org/10.1136/postgradmedj-2012-131168">http://dx.doi.org/10.1136/postgradmedj-2012-131168</a>
- West, M. A., and Farr, J. L. (Eds.). (1990). *Innovation and creativity at work: Psychological and organizational strategies*. John Wiley.
- West, M. A., Guthrie, J. P., Dawson, J. F., Borrill, C. S., & Carter, M. (2006). Reducing patient mortality in hospitals: the role of human resource management. *Journal of Organizational Behavior*, 27(7), 983-1002. <a href="https://doi.org/10.1002/job.396">https://doi.org/10.1002/job.396</a>
- Westjohn, S. A., Roschk, H., & Magnusson, P. (2017). Eastern versus western culture pricing strategy: Superstition, lucky numbers, and localization. *Journal of International Marketing*, 25(1), 72-90. <a href="https://doi.org/10.1509/jim.16.0022">https://doi.org/10.1509/jim.16.0022</a>
- Widianti, T., Sumaedi, S., Bakti, I. G. M. Y., Rakhmawati, T., Astrini, N. J., & Yarmen, M. (2015). Factors influencing the behavioral intention of public transport passengers. *International Journal of Quality & Reliability Management.* 32(7), 666-692. <a href="https://doi.org/10.1108/IJQRM-01-2013-0002">https://doi.org/10.1108/IJQRM-01-2013-0002</a>

- Wiesenfeld, B. M., Reyt, J. N., Brockner, J., & Trope, Y. (2017). Construal level theory in organizational research. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 367-400. <a href="https://doi.org/10.1146/annurev-orgpsych-032516-113115">https://doi.org/10.1146/annurev-orgpsych-032516-113115</a>
- Wiklund, J. & Shepherd, D. (2003). Knowledge based resources, entrepreneurial orientation, and the performance of small and medium sized businesses. *Strategic Management Journal*, 24(13), 1307-1314. https://doi.org/10.1002/smj.360
- Wilkinson, A., Gollan, P., Marchington, M., and Lewin, D. (2010). *The Oxford handbook of participation in organizations*. Oxford University Press.
- Wilson, D. D., & Collier, D. A. (2000). An empirical investigation of the Malcolm Baldrige National Quality Award causal model. *Decision sciences*, 31(2), 361-383. https://doi.org/10.1111/j.1540-5915.2000.tb01627.x
- Wirtz, J., & Zeithaml, V. (2018). Cost-effective service excellence. *Journal of the Academy of Marketing Science*, 46(1), 59-80.
- Witkin, H. A. (1964). Origins of cognitive style. In C. Scheerer (Ed.), *Cognition: Theory*, *research, promise* (pp. 172–205). New York: Harper & Row
- Witkin, H. A., & Goodenough, D. R. (1981). *Cognitive styles: Essence and origins*. New York: International Universities Press.
- Witkin, H. A., Dyk, R. B., Fattuson, H. F., Goodenough, D. R., & Karp, S. A. (1962). Psychological differentiation: Studies of development. Oxford: Wiley.
- Witkin, H. A., Moore, C. A., Oltman, P. K., Goodenough, D. R., Friedman, F., Owen, D. R., & Raskin, E. (1977). Role of the field-dependent and field-independent cognitive styles in academic evolution: A longitudinal study. *Journal of Educational Psychology*, 69(3), 197-211. https://doi.org/10.1037/0022-0663.69.3.197
- Wright, P. M., & Kehoem, R. (2008). Human resource practices and organizational commitment: A deeper examination. *Asia Pacific Journal of Human Resources*, 46, 6–20. https://doi.org/10.1177/1038411107086540
- Xiao, S. Q. (2009). From the perspective of cultural value of Hofstede to see the cultural differences between Chinese and American in the movie "Gua Sha". *Journal of Suihua University*, 29(6), 127-129.

- Ye, P., O'Brien, J., Carnes, C. M., & Hasan, I. (2020). The Influence of Bondholder Concentration and Temporal Orientation on Investments in R&D. *Journal of Management*. https://doi.org/10.1177/0149206320902531
- Yi, X., Ribbens, B., Fu, L., & Cheng, W. (2015). Variation in career and workplace attitudes by generation, gender, and culture differences in career perceptions in the United States and China. *Employee Relations*, *37*(1), 66-82. <a href="https://doi.org/10.1108/ER-01-2014-0005">https://doi.org/10.1108/ER-01-2014-0005</a>
- Yoon, M. H., & Suh, J. (2003). Organizational citizenship behaviors and service quality as external effectiveness of contact employees. *Journal of business research*, 56(8), 597-611. <a href="https://doi.org/10.1016/S0148-2963(01)00290-9">https://doi.org/10.1016/S0148-2963(01)00290-9</a>
- Yu, Y. (2010). The embodiment of the difference of Chinese and Western thinking in discourse. *Oriental Corporate Culture*, 8, 230.
- Yuan, W., Zhang, L. F., & Fu, M. (2017). Thinking styles and academic stress coping among Chinese secondary school students. *Educational psychology*, 37(8), 1015-1025. https://doi.org/10.1080/01443410.2017.1287343
- Zhang, L. F. (2002a). Thinking styles and cognitive development. *The Journal of Genetic Psychology*, 163(2), 179-195.
- Zhang, L. F. (2002b). Thinking styles: their relationships with modes of thinking and academic performance. *Educational Psychology*, 22 (3), 331-348
- Zhang, L. F. (2002). Thinking styles and modes of thinking: Implications for education and research. *The Journal of psychology*, 136(3), 245-261. https://doi.org/10.1080/00223980209604153
- Zhang, L. F. (2010). Do thinking styles contribute to metacognition beyond self rated abilities?. *Educational Psychology*, 30(4), 481-494. <a href="https://doi.org/10.1080/01443411003659986">https://doi.org/10.1080/01443411003659986</a>
- Zhang, L. F., & He, Y. F. (2011). Thinking styles and the Eriksonian stages. *Journal of Adult Development*, 18(1), 8-17.
- Zhang, L. F. (2006). Does student–teacher thinking style match/mismatch matter in students' achievement?. *Educational psychology*, 26(3), 395-409. <a href="https://doi.org/10.1080/01443410500341262">https://doi.org/10.1080/01443410500341262</a>

- Zhang, L. F., & Postiglione, G. A. (2001). Thinking styles, self-esteem, and socio-economic status. *Personality and Individual Differences*, 31(8), 1333-1346. https://doi.org/10.1016/S0191-8869(00)00227-0
- Zhang, L. F., & Sternberg, R. (2001). Thinking styles across cultures: Their relationships with student learning. *Perspectives on thinking, learning, and cognitive styles*, 197-226.
- Zhang, L. F., & Sternberg, R. J. (2005). A threefold model of intellectual styles. *Educational Psychology Review*, 17(1), 1–53.
- Zhang, L. F., & Sternberg, R. J. (2006). *The nature of intellectual styles*. Mahwah, NJ: Lawrence Erlbaum.
- Zhang, L. F., & Sternberg, R. J. (2012). Culture and intellectual styles. in L. Zhang, R. Sternberg, and S. Rayner (eds), *Handbook of Intellectual Styles: Preferences in Cognition, Learning and Thinking*, (131-152), New York: Springer.
- Zhang, X., Liu, Y., Tarba, S. Y., & Del Giudice, M. (2020). The micro-foundations of strategic ambidexterity: Chinese cross-border M&As, Mid-View thinking and integration management. *International Business Review*, 29(6), 1-11. <a href="https://doi.org/10.1016/j.ibusrev.2020.101710">https://doi.org/10.1016/j.ibusrev.2020.101710</a>
- Zhang, Y. P. (2007). A Comparative Study of Confucian Mind Science and Western emotional intelligence Education. *Chinese Journal of Special Education*, 88(10), 35-40.
- Zhao, A. (2015). On the Cultivating of English Thinking Model—From the Perspective of Chinese and "Westerm" Cultural Differences, *Overseas English*, 6, 6-7.
- Zhao, H.M. (2014). The difference of English and Chinese language and thinking modes, *Journal of Jilin Radio and TV University*, 152(8), 157-158.
- Zhao, S.M; Zhang, M; Zhao, Y.X. (2019). A Century of Human Resource Management: Evolution and Development. *Foreign Economics & Management*, 41(12), 50-73
- Zhao, X; Zhang, B.R; Zhou, W; Ding, X.B. (2015).Reliability and Validity Test of Chinese Version of the Berkley Expressivity Questionnaire in College Students. *Chinese Journal of Clinical Psychology*, 23(3),406-409. <a href="http://doi.10.16128/j.cnki.1005-3611.2015.03.006">http://doi.10.16128/j.cnki.1005-3611.2015.03.006</a>

- Zhou, K., Zhang, X., Ding, Y., Wang, D., Lu, Z., & Yu, M. (2015). Inequality trends of health workforce in different stages of medical system reform (1985-2011) in China. *Human resources for health*, 13(1), 1-8.
- Zhou, T., & Bishop, G. D. (2012). Culture moderates the cardiovascular consequences of anger regulation strategy. *International Journal of Psychophysiology*, 86(3), 291-298. https://doi.org/10.1016/j.ijpsycho.2012.10.010
- Zhu, C. (2013). Students' and teachers' thinking styles and preferred teacher interpersonal behavior. *The Journal of Educational Research*, 106(5), 399-407. <a href="https://doi.org/10.1080/00220671.2012.736431">https://doi.org/10.1080/00220671.2012.736431</a>
- Zhu, H. Y. (2015). The influence of cultural value on Chinese and western business negotiation conflict-solving styles. *Modern communication*, 416(9), 49-50.
- Zhu, T. Q. (2016). View the differences of emotional expression between China and America from film "The Wedding Banquet", *Culture Journal*, *4*, 82-84.

# **Appendix1 - Reference List (Articles for Study 1)**

- 1. Akhtar, S. (2000). Influences of cultural origin and sex on work values. *Psychological Reports*, 86(3), 1037-1049.
- 2. Albaum, G., Yu, J., Wiese, N., Herche, J., Evangelista, F. & Murphy, B. (2010). Culture-based values and management style of marketing decision makers in six Western Pacific Rim countries. *Journal of Global Marketing*, 23(2), 139-151.
- 3. Allen, J.A., Diefendorff, J.M. & Ma, Y. (2014). Differences in emotional labor across cultures: A comparison of Chinese and US service workers. *Journal of Business and Psychology*, 29(1), 21-35.
- 4. Baggio, R. (2013). Oriental and occidental approaches to complex tourism systems. Tourism Planning & Development, 10(2), 217-227.
- 5. Bai, X.D. (2014). Two Points and One Line" and "Trinity": Differences between English and Chinese Ideographic Symbols and Thinking Modes. *Education and Teaching Forum*, 1, 154-155. [in Chinese]
- 6. Bo, J. (2012). Impacts of Chinese and western thinking way mode difference on dieting culture. *Knowledge Economy*, 15, 50-51. [in Chinese]
- 7. Camras, L., Kolmodin, K. & Chen, Y. (2008). Mothers' self-reported emotional expression in Mainland Chinese, Chinese American and European American families. *International Journal of Behavioral Development*, 32(5), 459-463.
- 8. Cao, S.Q. (2018). The cognitive difference of Chinese and Western interpersonal relationships in cross-cultural communication, *Modern Communication*, 11, 55-56. [in Chinese]
- 9. Cao, L.S. (2012). The rhetoric mode of English writing from the perspective of Chinese and Western thinking modes difference. *Shaanxi Education*, *10*,20-21. [in Chinese]
- 10. Chai, Q. (2013). View the difference of Chinese and American value from the commercial advertisement slogans, *Modern Women*, *12*, 372-373. [in Chinese]
- 11. Chan, H.M. & Yan, H.K. (2007). Is there a geography of thought for east-west differences? Why or why not?. *Educational Philosophy and Theory*, *39*(4), 383-403.
- 12. Chang, Y.W., Hsu, P.Y., Shiau, W.L. & Tsai, C.C. (2015). Knowledge sharing intention in the United States and China: a cross-cultural study. *European Journal of Information Systems*, 24(3), 262-277.
- 13. Chen, C.C., Meindl, J.R., & Hui, H. (1998). Deciding on equity or parity: A test of

- situational, cultural, and individual factors. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 19*(2), 115-129.
- 14. Chen, F.Z. (2003). A comparative analysis of Chinese and Western thinking differences and writing styles. *Journal of China Three Gorges University*. 25(3), 95-97. [in Chinese]
- 15. Chen, L. (2005). Explore the Chinese and Western cultural difference between colour yellow and blue, *Journal of Taiyuan Normal University*, 4(4), 25-27. [in Chinese]
- 16. Chen, L. (2009). Interpretation of difference and integration of Chinese and American culture by use of Hall model. *Journal of Chifeng College*, *1*, 146-148. [in Chinese]
- 17. Chen, P. & Partington, D. (2004). An interpretive comparison of Chinese and Western conceptions of relationships in construction project management work. *International Journal of Project Management*, 22(5), 397-406.
- 18. Chen, P., Chen, B., Münte, T.F., Lu, C., Liu, L. & Guo, T. (2019). Neural correlates of processing emotions in words across cultures. *Journal of Neurolinguistics*, *51*, 111-120.
- 19. Chen, R. & Li, M. (2014). The Negative Transfer of Chinese Thinking Mode in English Writing. *Journal of Inner Mongolia Polytechnic University*. 2, 68-71. [in Chinese]
- 20. Chen, T.Y. (2004). Thinking, culture, and college English writing. *Journal of Chongqing Engineering College*, *1*, 110-112. [in Chinese]
- 21. Chen, X.G & Hu, D.N. (2010). View the teaching of college English discourse from the Differences of Chinese and Western Thinking. *Century Bridge*, *15*, 120-121. [in Chinese]
- 22. Cheng, H., Andrade, H.L. & Yan, Z. (2011). A cross-cultural study of learning behaviours in the classroom: From a thinking style perspective. *Educational Psychology*, 31(7), 825-841.
- 23. Cheng, Y.W. (2012). Impacts of Chinese and western thinking difference on translations. *Journal of Wanxi University, 6*, 124-127. [in Chinese]
- 24. Cheong, Y., Kim, K. & Zheng, L. (2010). Advertising appeals as a reflection of culture: a cross-cultural analysis of food advertising appeals in China and the US. *Asian Journal of Communication*, 20(1), 1-16.
- 25. Chiesi, F., Lau, C., Marunic, G., Sanchez-Ruiz, M.J., Plouffe, R.A., Topa, G. & Saklofske, D.H. (2020). Emotional intelligence in young women from five cultures: A TEIQue-SF invariance study using the omnicultural composite approach inside the IRT framework. *Personality and Individual Differences*, 164, 110-128.
- 26. Chiu, L.H. (1972). A cross-cultural comparison of cognitive styles in Chinese and American children. *International journal of psychology*, 7(4), 235-242.

- 27. Choong, Y.Y. & Salvendy, G. (1999). Implications for design of computer interfaces for Chinese users in mainland China. *International Journal of Human-Computer Interaction*, 11(1), 29-46.
- 28. Chow, C.W., Harrison, P., Lindquist, T. & Wu, A. (1997). Escalating commitment to unprofitable projects: Replication and cross-cultural extension. *Management Accounting Research*, 8(3), 347-361.
- 29. Chu, X., Luo, X.R. & Chen, Y. (2019). A systematic review on cross-cultural information systems research: Evidence from the last decade. *Information & Management*, 56(3), 403-417.
- 30. Cui, G., Chan, T.S. & Joy, A. (2008). Consumers' attitudes toward marketing: a cross-cultural study of China and Canada. *Journal of International Consumer Marketing*, 20(3-4), 81-93.
- 31. Cui, T., Wang, X. & Teo, H.H. (2015). Building a culturally-competent web site: a cross-cultural analysis of web site structure. *Journal of Global Information Management*, 23(4), 1-25.
- 32. Dai, M.T. & Shang, D.F. (2008). View the concept of "self" in Chinese traditional philosophy from the perspective of comparison between China and west. *Journal of Hubei University*, 35(2), 1-4. [in Chinese]
- 33. Davies, M.A. & Tikoo, S. (2019). Motives driving the choice of a business concentration: A four-country study of marketing, accounting and finance, and management undergraduates. *Journal of Marketing Education*, 41(3), 185-201.
- 34. Davis, E., Greenberger, E., Charles, S., Chen, C., Zhao, L. & Dong, Q. (2012). Emotion experience and regulation in China and the United States: how do culture and gender shape emotion responding?. *International Journal of Psychology*, 47(3), 230-239.
- 35. de Oliveira, S., & Nisbett, R.E. (2017). Beyond east and west: Cognitive style in Latin America. *Journal of Cross-Cultural Psychology*, 48(10), 1554-1577.
- 36. Deng, X., An, S. & Cheng, C. (2019). Cultural differences in the implicit and explicit attitudes toward emotion regulation. *Personality and Individual Differences*, 149, 220-222.
- 37. Ding, W.W. (2009). The influence of Chinese and English language and thinking difference on Chinese students' translation, *Jiangsu Foreign Language Teaching Research*, 2, 47-51. [in Chinese]
- 38. Dollinger, M.J. & Danis, W. (1998). Preferred decision-making styles: a cross-cultural comparison. *Psychological Reports*, 82(3), 755-761.

- 39. Dong, L. (2000). The difference of English and Chinese thinking ways and its influence on translations. *Journal of Shijiazhuang normal college*, *2*(1), 48-50,88. [in Chinese]
- 40. Dong, Y. & Lee, K.P. (2008). A cross-cultural comparative study of users' perceptions of a webpage: With a focus on the cognitive styles of Chinese, Koreans and Americans. *International Journal of Design*, 2(2).19-30
- 41. Dou, R.F. (2001). The influence of English and Chinese difference on English writing. *Journal of Liaocheng Normal College*, *5*, 105-106. [in Chinese]
- 42. Du, D.A. & Bo, C.L. (2018). Comparison between China and the West on the "Altruistic" Principle of Social Work. *Journal of Changehun University of Science and Technology*, 31(5), 72-76. [in Chinese]
- 43. Duan, E.X. (2004). The Differences of Chinese and English Thinking Modes and College English Writing Course Teaching. *Journal of Hubei Nationalities College*, *5*, 107-109. [in Chinese]
- 44. English, T. & John, O.P. (2013). Understanding the social effects of emotion regulation: The mediating role of authenticity for individual differences in suppression. *Emotion*, 13(2), 314-329
- 45. Faiola, A. & Macdorman, K.F. (2008). The influence of holistic and analytic cognitive styles on online information design: Toward a communication theory of cultural cognitive design. Information, *Community & Society*, 11(3), 348-374.
- 46. Faiola, A. & Matei, S.A. (2005). Cultural cognitive style and web design: Beyond a behavioral inquiry into computer-mediated communication. *Journal of computer-mediated communication*, 11(1), 375-394.
- 47. Fan, H. & Huang, R.X. (2005). Cultural Values in Chinese and Western Advertising—Symbols, Discourse and Cultural Value Orientation. *Contemporary Communication*, 6, 63-65. [in Chinese]
- 48. Fan, M.S. (1993). The initial exploration of Chinese and western thinking modes. Journal of the Shanghai Academy of Social Sciences Quarterly, 2, 42-49. [in Chinese]
- 49. Fan, Y. (2014). View The Conflicts of Values Between China and Western Countries Through the Movie Pushing Hands: from the Perspective of Kluckhohn's Value Dimensions, *Overseas English*, 7X, 169-171. [in Chinese]
- 50. Feher, A., Yan, G., Saklofske, D.H., Plouffe, R.A. & Gao, Y. (2019). An investigation of the psychometric properties of the Chinese trait emotional intelligence questionnaire short form (Chinese TEIQue-SF). *Frontiers in psychology, 10*, 1-8.
- 51. Felfe, J., Yan, W. & Six, B. (2008). The impact of individual collectivism on

- commitment and its influence on organizational citizenship behaviour and turnover in three countries. *International Journal of Cross Cultural Management*, 8(2), 211-237.
- 52. Feng, K.L. (2002). English writing thinking modes and the IELTS examination writing. *Journal of Guangxi Normal College, 2*, 98-101. [in Chinese]
- 53. Feng, W.L. (2003). Comparison of Chinese and western thinking modes and translations. *Journal of Qinzhou Normal Higher Education College*, 2, 58-59. [in Chinese]
- 54. Feng, W.L. (2009). The impact of Chinese and western thinking modes difference on translations. *Chinese Teachers*, *S2*, 13. [in Chinese]
- 55. Fu, Z.H. (2012). A Comparative Study of the Roots of Thinking in Chinese and English Languages. *Journal of Hubei Second Normal College*, *6*, 20-22. [in Chinese]
- 56. Gabrenya Jr, W.K., Latané, B. & Wang, Y.E. (1983). Social loafing in cross-cultural perspective: Chinese on Taiwan. *Journal of Cross-Cultural Psychology*, 14(3), 368-384.
- 57. Gao, Q.Q. (2007). The comparison between Chinese and western thinking difference and Chinese and English scientific and technological styles. *Journal of Inner Mongolia Agricultural University*, 4, 396-397. [in Chinese]
- 58. Gao, X.H. (2004). The difference of thinking modes between China and west. *Study and Exploration*, 6. 86-87. [in Chinese]
- 59. Gao, Y. & Wang, T. (2015). Discuss the solutions to solve the problem of Chinese traditional medicine HuiGe from the Differences of Chinese and Western Thinking. *China Association of Traditional Chinese Medicine*, 30-32. [in Chinese]
- 60. Garcia, F., Mendez, D., Ellis, C. & Gautney, C. (2014). Cross-cultural, values and ethics differences and similarities between the US and Asian countries. *Journal of Technology Management in China*, 9(3), 303-322.
- 61. Geren, B.L. (2003). *Universality: Exploring work value differences in the transitional economy of China. PhD dissertation*, The University of Tennessee, Knoxville, TN
- 62. Gong, W.F. & You, H.N. (2004). The influence of difference of Chinese and western thinking on Chinese students' English writing. *Journal of Jiangxi Agricultural University*, 2, 144-146. [in Chinese]
- 63. Gong, Y. (2017). The impacts of Chinese and western cultural thinking difference on translations. *Frontier Economy and Culture*, *4*, 99-100. [in Chinese]
- 64. Grabell, A.S., Olson, S.L., Miller, A.L., Kessler, D.A., Felt, B., Kaciroti, N., Wang., L. & Tardif, T. (2015). The impact of culture on physiological processes of emotion regulation: A comparison of US and Chinese preschoolers. *Developmental Science*, 18(3), 420-435.

- 65. Gu, X., Wang, H. & Mason, J. (2017). Are they thinking differently: A cross-cultural study on the relationship of thinking styles and emerging roles in computer-supported collaborative learning. *Journal of Educational Technology & Society, 20*(1), 13-24.
- 66. Guan, L.H. & Wu, P. (2006). The influence of difference of Chinese and western thinking modes on discourse styles. *Journal of Jingdezhen High School.* 4, 42-45. [in Chinese]
- 67. Guan, X.J. (2006). Comparison of Chinese and American value in Cross-cultural communications and its significance on English teaching. *University English*, *3*(1), 137-139. [in Chinese]
- 68. Guang, J.L. (2014). Analysis of Chinese and American cultural values from the film <Gua, Sha>. *Journal of Linguistics*, 11, 35-36. [in Chinese]
- 69. Hampton, R.S., Kwon, J.Y. & Varnum, M.E. (2019). Variations in the regulation of affective neural responses across three cultures. *Emotion*, 21(2), 283–296.
- 70. Han, S. & Ma, Y. (2014). Cultural differences in human brain activity: a quantitative meta-analysis. *NeuroImage*, 99, 293-300.
- 71. Hao, A.W., Liu, X., Hu, M. & Guo, X. (2020). Cultural differences in vertical brand extension evaluations: the influence of thinking styles. *Cross Cultural & Strategic Management*, 27(2), 245-263
- 72. Hao, L.L. & Yang, X.F. (2007). Discus the differences of Chinese and Western Thinking Modes and the language effects. *Journal of Wuhan Electric Power Vocational and Technical College*, *1*, 109-111. [in Chinese]
- 73. He, W. (2016). View cross-cultural communications from cultural values between China and western take the film "pushing hands" as an example. *Journal of Linguistics*, 22, 88-89. [in Chinese]
- 74. He, X.J. (2012). The Discrepancies between Chinese and English Modes of Thinking and the English Composition Teaching of Vocational College Students. *Journal of Fujian Higher Commercial College*, 1. 43-47. [in Chinese]
- 75. He, Y., Chen, Q. & Alden, D.L. (2012). Social presence and service satisfaction: The moderating role of cultural value-orientation. *Journal of Consumer Behaviour, 11*(2), 170-176.
- 76. He, Q. (2007). Differences of Chinese and Western Thinking and Discourse Information Arrangement. *Journal of Mudanjiang University*, 11, 152-155. [in Chinese]
- 77. Holt, D.H. (1997). A comparative study of values among Chinese and US entrepreneurs: Pragmatic convergence between contrasting cultures. *Journal of Business*

- Venturing, 12(6), 483-505.
- 78. Holt, J. & Keats, D.M. (1992). Work cognitions in multicultural interaction. *Journal of cross-cultural psychology*, 23(4), 421-443
- 79. Hou, X.J. (2008). The influence of thinking difference on college English writing from the perspective of Chines and western, *Science and Technology Information*, *5*, 526. [in Chinese]
- 80. Hou, X.J. (2008). The impact of thinking difference on college English writing from Chinese and western perspective. *Science & Technology Information*, 15, 188. [in Chinese]
- 81. Hou, X.J. (2008). The Influence of Thinking Differences on College English Writing from Different Perspectives of Chinese and Western Thinking. *Science & Technology Information*, 15, 188. [in Chinese]
- 82. Hu, C., Chand, P. & Evans, E. (2013). The effect of national culture, acculturation, and education on accounting judgments: A comparative study of Australian and Chinese culture. *Journal of International Accounting Research*, 12(2), 51-77.
- 83. Hu, T., Zhang, D., Wang, J., Mistry, R., Ran, G. & Wang, X. (2014). Relation between emotion regulation and mental health: a meta-analysis review. *Psychological reports*, 114(2), 341-362.
- 84. Hu, B. & Zhang, J. (2012). Analysis the Chinese and western cultural difference in cross-cultural communication. *Hebei Journal*, *6*, 201-203. [in Chinese]
- 85. Huang, C.M., Doole, R., Wu, C.W., Huang, H.W. & Chao, Y.P. (2019). Culture-related and individual differences in regional brain volumes: A cross-cultural voxel-based morphometry study. *Frontiers in human neuroscience*, *13*, 1-9.
- 86. Huang, D.H., Duan, Y.C. & Liu, A.M. (2000). View emotional intelligence education from the perspective of Chinese and western traditional cultures and personality dimension difference, *Comparative Education Studies*, S1, 109-111. [in Chinese]
- 87. Huang, J. & Chao, L. (1996). Category width and sharpening versus leveling cognitive styles of Chinese and American university students. *Perceptual and motor skills*, 82(3), 1183-1186.
- 88. Huang, J. & Chao, L. (1998). A study of reflectivity and impulsivity of Chinese and American university students. *Perceptual and motor skills*, 86(2), 440-442.
- 89. Huang, J. & Sisco, B.R. (1994). Thinking styles of Chinese and American adult students in higher education: A comparative study. *Psychological Reports*, 74(2), 475-480.
- 90. Huang, X.D., Li, Z.Q.; Zhou, Y.H. (2005). Chinese and western thinking mode

- difference and analysis of English-Chinese travel chapter. *China Science and Technology Information*, 20A, 138-139. [in Chinese]
- 91. Huang, Z.Q. (2008). Comparison of Chinese and American traditional values. *Journal of Inner Mongolia Agricultural Universitym*, 6, 216-217. [in Chinese]
- 92. Hui, M.K. & Au, K. (2001). Justice perceptions of complaint-handling: A cross-cultural comparison between PRC and Canadian customers. *Journal of Business research*, *52*(2), 161-173.
- 93. Huo, L.R. (2017). The influence of Chinese and English thinking modes difference on translation. *Overseas English*, *24*, 123-124. [in Chinese]
- 94. Jaw, B.S., Wang, C.Y.P., Ya-Hui, L. & Wen-Ching, C. (2006). Cross-cultural determinants of Chinese employees' work values. *Asia Pacific Management Review*, 11(2),73-81
- 95. Ji, L.J., McGeorge, K., Li, Y., Lee, A. & Zhang, Z. (2015). Culture and gambling fallacies. *SpringerPlus*, 4(1), 1-8.
- 96. Ji, Q.F. (2004). Impacts of Chinese and western thinking difference on translations. *Journal of Chengdu Education University*, 18(4), 28-29. [in Chinese]
- 97. Ji, X.H. (2008). The influence and coping strategies of Chinese and English thinking difference on the college English writing. *Liaoning Education Research*, 7. 86-88. [in Chinese]
- 98. Jiang, Q. (2014). The "hemisphere style" of Eastern and Western scientific thinking. *Studies In Dialectics of Nature*, 1, 71-77. [in Chinese]
- 99. Jiang, Z., Gollan, P. J. & Brooks, G. (2015). Moderation of doing and mastery orientations in relationships among justice, commitment, and trust. *Cross Cultural Management*, 22(1), 42-67.
- 100. Jin, L.H. (2016). The Influence of Chinese Thinking Mode on English Teaching. *Technology Information*, 17, 147-148. [in Chinese]
- 101. Kang, Z.C. & Jiang, X.P. (2009). Imagery and abstract thinking in cross-cultural translation. *Science and Education*, *2*, 261-262. [in Chinese]
- 102. Kelley, L., MacNab, B. & Worthley, R. (2006). Crossvergence and cultural tendencies: A longitudinal test of the Hong Kong, Taiwan and United States banking sectors. *Journal of International Management*, 12(1), 67-84.
- 103. Kwon, H. & Kim, Y.H. (2019). Perceived emotion suppression and culture: Effects on psychological well-being. *International Journal of Psychology*, *54*(4), 448-453.
- 104. Laborde, S., You, M., Dosseville, F., & Salinas, A. (2012). Culture, individual

- differences, and situation: Influence on coping in French and Chinese table tennis players. *European Journal of Sport Science*, 12(3), 255-261.
- 105. Ladegaard, H.J. (2011). Negotiation style, speech accommodation and small talk in Sino-Western business negotiations: A Hong Kong case study. *Intercultural Pragmatics*, 8(2), 197-226.
- 106. Lan, L. & Kaufman, J.C. (2012). American and Chinese similarities and differences in defining and valuing creative products. *The Journal of Creative Behavior*, 46(4), 285-306.
- 107. Laroche, M., Vinhal Nepomuceno, M. & Richard, M.O. (2014). Congruency of humour and cultural values in print ads: Cross-cultural differences among the US, France and China. *International Journal of Advertising*, 33(4), 681-705.
- 108. Lee, S.H., Workman, J. & Jung, K. (2016). Perception of time, creative attitudes, and adoption of innovations: A cross-cultural study from Chinese and US college students. *Sustainability*, 8(11), 1193.
- 109. Lee, Y.T., Beddow, M., Chan, X.N. & Xu, C. (2015). Evolutionary and cross-cultural investigation of Totemism and Daoism. *Psychology of Religion and Spirituality*, 7(4), 278-285.
- 110. Li, B.Y. (2018). Emotional Expression and Cultural Identity in Cross-cultural Network Communication. *Youth Journalist*, *27*, 27-28. [in Chinese]
- 111. Li, D. (2016). The Influence of the Differences between Chinese and Western Thinking Modes on Chinese and English Texts. *Education Modernization*, 27, 169-171. [in Chinese]
- 112. Li, D.J. (2012). A brief talk of the Conflict of Chinese and Western Cultures in Intercultural Communication. *Journal of Hetao University*, *4*, 42-45. [in Chinese]
- 113. Li, F. (2000). The difference of Chinese and western logical thinking modes and its influence on translations. *Journal of Lianyungang Technical College*, 1, 69-72. [in Chinese]
- 114. Li, F.F. (2013). Comparison of Chinese and western thinking ways. *Anhui Literature*, 4, 55-56. [in Chinese]
- 115. Li, H.Y. (2017). A Study on the English Translation of Tourism Texts from the Perspective of Intercultural Communication—Taking the Differences between Chinese and Western Thinking Modes as an Example. *English Square*, 4, 27-28. [in Chinese]
- 116. Li, H.Y. & Jia, S.Q. (2015). The transformation of thinking modes in the process of

- English-Chinese translation—by the example of imagery and abstract thinking. *Journal of Hetao College*, 12(1), 44-47. [in Chinese]
- 117. Li, H.L. (1990). Grafting, Excavating, and Combining the Thinking Mode merging Chinese and Western Cultures at the end of the 19th Century. *Guangdong Social Sciences*, *3*, 33-37. [in Chinese]
- 118. Li, H; Zhao, S.L. (2010). Reflection of Chinese and American thinking modes based on collectivism and individualism. *Journal of China University of Mining & Technology*, *4*, 119-124. [in Chinese]
- 119. Li, J., Canziani, B. F. & Barbieri, C. (2018). Emotional labor in hospitality: Positive affective displays in service encounters. *Tourism and Hospitality Research*, 18(2), 242-253.
- 120. Li, L. (2013). Talking about the difference in thinking styles of Chinese and western medicine from traditional Chinese and western paintings. *Journal of Anhui College of Traditional Chinese Medicine*, 2, 7-10. [in Chinese]
- 121.Li, L.M.W., Masuda, T. & Russell, M.J. (2015). Culture and decision-making: Investigating cultural variations in the East Asian and North American online decision-making processes. *Asian Journal of Social Psychology*, 18(3), 183-191.
- 122. Li, L. & Zhang, L.Y. (2015). The Differences of Social Work Values between China and the West and the Development of Localization. *Human Resource Management*, *3*, 17-18. [in Chinese]
- 123. Li, Q.Q. (2012). Discuss the differences of Eastern and Western Value Views in Intercultural Communications. *Journal of Nanchang High School*, 1, 57-58. [in Chinese]
- 124. Li, S.T. (2005). The impacts of Chinese and western thinking difference on discourse organizations of college English writing. *Foreign language education*, 26(2), 52-56. [in Chinese]
- 125. Li, W.C., Young, H.T., Wang, T., Harris, D. & Li, L.W. (2009). Approaches of Aviation Accident Investigation in Different Cultural Contexts from Human Factors Perspectives. Journal of Aeronautics, *Astronautics and Aviation*, 41(1), 53-59.
- 126. Li, Y.J. (2003). Analysis of the difference of Chinese and western law culture form the perspective of national thinking modes, *Journal of Henan Provincial Academy of Political and Legal Management Cadres*, 3, 116-120. [in Chinese]
- 127. Li, Y. (2007). Comparison of Chinese and western cultural thinking modes. *Journal of Liaocheng Normal College*, *5*, 105-106. [in Chinese]
- 128. Li, Y. (2010). The comparable analysis between the difference of English and Chinese

- thinking modes and the discourse organizational structure. *Overseas English*, 249-250. [in Chinese]
- 129. Li, Y. (2011). Comparison of "XING, DA YA" and" goal theory" under different Chinese and western thinking modes. *Journal of Nanchang Education College.* 2, 169. [in Chinese]
- 130. Li, Y., Sheldon, K.M. & Liu, R. (2015). Dialectical thinking moderates the effect of extrinsic motivation on intrinsic motivation. *Learning and Individual Differences*, 39, 89-95.
- 131. Li, Y.B. (2011). Analysis of Chinese and American cultural values from the perspective of cross-cultural communication, *Data of Culture and Education*, *4*, 68-70. [in Chinese]
- 132. Li, Y.C. & Yang, M. (2001). Chinese and Western thinking modes and discourse organization, *Journal of College of Foreign Languages of Shandong Normal University*, 1, 18-22. [in Chinese]
- 133. Li, H.Y. (2018). A Study on the English Translation of Tourism Texts from the Perspective of Intercultural Communication—Taking the Differences Between Chinese and Western Thinking Modes as Examples. *English Square*, *4*, 27-28. [in Chinese]
- 134. Lian, S.N. (2006). Chinese and western thinking modes: perception and reason---talk about the expression ways commonly used in Chinese and English languages. *Foreign Languages and Foreign Language Teaching*, 7, 35-38. [in Chinese]
- 135. Lian, S.N. (2002). Discussion of Chinese and western thinking ways. *Foreign Languages and Foreign Language Teaching*, 2, 40-46. [in Chinese]
- 136. Liang, P. (2016). View the difference in the naming of Chinese and Western brand terms from the perspective of thinking modes, *Journal of Xinjiang Vocational University*, 24(4), 45-48. [in Chinese]
- 137. Liang, Q. (2018). Research on the Cultivation of Cross-cultural Communication Business Talents Based on Chinese and Western Values. *Journal of Hebei Engineering University*, 1, 120-122. [in Chinese]
- 138. Liao, H., Proctor, R.W. & Salvendy, G. (2009). Chinese and US online consumers' preferences for content of e-commerce websites: A survey. *Theoretical Issues in Ergonomics Science*, 10(1), 19-42.
- 139. Liddell, B.J. & Williams, E.N. (2019). Cultural differences in interpersonal emotion regulation. *Frontiers in psychology*, 10, 1-15
- 140. Lin, B.Z. (2007). A Comparative Study of English and Chinese Thinking Modes and Language Structures. *Journal of Fujian Higher Commercial College*, 5, 93-96. [in

- Chinese]
- 141. Lin, C.C., Tu, R. & Tu, P. (2007). The changing expectations of consumers in cross-cultural service encounters. *International management review*, *3*(3), 27-35,106-107.
- 142. Liu, F. & Zhang, X.H. (2005). View the difference of thinking ways between Chinese and Western from the English and Chinese sentence structure. *Journal of Zaozhuang University*, 22(4), 75-77. [in Chinese]
- 143. Liu, G.Q. & Xie, J.G. (2014). A comparative analysis of Chinese and American cultural values—take Chinese women square dancing as an example. *Education and Teaching Forum*, 46, 13-15. [in Chinese]
- 144. Liu, J.D. (2013). The difference between Chinese and western cultural backgrounds and the development of English communicative competence of vocational students. *Chinese Vocational and Technical Education*, 11, 29-32. [in Chinese]
- 145. Liu, J. (2004). Chinese and western thinking mode difference and discourse reconstruction in Chines-English translations. *Journal of Institute of Zhengzhou Light Industry*, 2, 72-74. [in Chinese]
- 146. Liu, P.Y. (2018). Discuss on the influence of differences of Cultural Values on Tourism Consumption Behavior-A Case Study of Chinese and Western Tourists' Consumption in Xinjiang. *Tourism Overview*, 231-232. [in Chinese]
- 147. Liu, Q.D. (2011). A comparative analysis of Chinese and western thinking modes—from geography, culture, religion three perspectives to see Chinese and western thinking modes difference. *Learning Sea*, 191-192. [in Chinese]
- 148. Liu, R. (2010). The difference of Chinese and western thinking ways and its causes. *Cultural and Educational Materials*, *24*, 86-88. [in Chinese]
- 149. Liu, S.J. (2017). Comparison of Chinese collectivism and western individualism values. *Cultural and Educational Materials*, *6*, 94-96. [in Chinese]
- 150. Liu, Z.C. (2020). A Comparative Study of Original Thinking Patterns of Chinese and Western Medicine from Linguistic Perspective. *Ideological Front*, 4(46), 157-172. [in Chinese]
- 151. Lowe, A.C.T. & Corkindale, D.R. (1998). Differences in "cultural values" and their effects on responses to marketing stimuli: A cross-cultural study between Australians and Chinese from the People's Republic of China. *European Journal of Marketing*, 32(9/10), 843-867
- 152. Lu, L.Y. (2012). A brief talk about the difference of Chinese and western thinking ways. *Academic Theory*, *26*,23-24. [in Chinese]

- 153. Lu, Q.X. & Bo, C.L. (2019). A Comparative Study of Professional Social Work Values between China and America—Based on Hofstede's cultural dimension theory. *Journal of Changehun University of Science and Technology, 3,* 54-60. [in Chinese]
- 154. Lu, X.H. & Jia, X.Y. (2017). Interpretation of Chinese and American family values by example of <pushing hands>. *Drama House*, 16, 87-88. [in Chinese]
- 155. Lu, Y. & Luo, Y.X. (2014). A comparative study of the cultural values in Chinese and American advertisements. *Overseas English*, *21*, 202-203. [in Chinese]
- 156. Lu, Y. & Xiao, J.Y. (2012). On the Translation of Imagery and Conception in the English Translation of Tang Poems from the Perspective of Differences in Chinese and Western Thinking. *Journal of Xiangfan Institute*, *3*, 68-73. [in Chinese]
- 157. Lun, V. M. C., Fischer, R., & Ward, C. (2010). Exploring cultural differences in critical thinking: Is it about my thinking style or the language I speak?. *Learning and Individual differences*, 20(6), 604-616.
- 158. Luo, A., Guchait, P., Lee, L. & Madera, J. M. (2019). Transformational leadership and service recovery performance: The mediating effect of emotional labor and the influence of culture. *International Journal of Hospitality Management*, 77, 31-39.
- 159. Luo, M.L. (2011). Differences of Chinese-Western Thinking Patterns and Writing Planning of English Essay. *Foreign Languages*, *6*, 145-149. [in Chinese]
- 160. Luo, Y.H. (2008). The comparative study of Chinese and western thinking modes and discourse structure. *Journal of Chinese Mining and Technology University, 1,* 138-141. [in Chinese]
- 161. Lv, Q.Y., Wang, Y.Z. & Wang, Z.Y. (2010). The emotional difference under the cultural mode of individualism and collectivism, *Journal of Lanzhou University*, 38(6), 90-94. [in Chinese]
- 162. Ma, D. & Fan, S.L. (2020). A Study of Chinese and American Cultural Values in Cross-Cultural Communication. *Theoretic Observation*, *3*, 129-131. [in Chinese]
- 163. Ma, D. & Hu, Y.Y. (2019). A Comparative Analysis of Chinese and American Cultural Values in Intercultural Communication. Theory Observe, 6, 126-128. [in Chinese]
- 164. Ma, Y.H. & Liu, F.H. (2007). Comparison of the Chinese and western value in cross-cultural communication, *Academic Exchange*, 7, 132-134. [in Chinese]
- 165. Ma, Y.X. (2016). View the difference of Chinese and western thinking modes from the achievement of American famous universities. *Wisdom and wealth era*, 5X, 196-197. [in Chinese]
- 166. Ma, Z. (2010). The SINS in business negotiations: Explore the cross-cultural

- differences in business ethics between Canada and China. *Journal of Business Ethics*, 91(1), 123-135.
- 167. Ma-Kellams, C. (2020). Cultural Variation and Similarities in Cognitive Thinking Styles Versus Judgment Biases: A Review of Environmental Factors and Evolutionary Forces. *Review of General Psychology*, 24(3), 238-253.
- 168. Margavio, T., Margavio, G. W., Moses, D.R., & Hignite, M. (2016). Emotional Intelligence: A Comparison of Chinese and American Accounting Majors. *Business and Management*, 8(4), 145-158.
- 169. Mastracci, S. & Adams, I. (2019). Is emotional labor easier in collectivist or individualist cultures? An east—west comparison. *Public Personnel Management*, 48(3), 325-344.
- 170. McCarthy, M., Chen, C.C. & McNamee, R.C. (2018). Novelty and usefulness trade-off: Cultural cognitive differences and creative idea evaluation. *Journal of Cross-Cultural Psychology*, 49(2), 171-198.
- 171. Michael, J. (1997). A conceptual framework for aligning managerial behaviors with cultural work values. International *Journal of Commerce and Management*, 7(3/4), 81-101.
- 172. Michael, J. (1997). A cross-cultural comparison of Asian and American managers' dependency patterns. *Multinational business review*, *5*(1), 46-52.
- 173. Miyamoto, Y., & Ma, X. (2011). Dampening or savoring positive emotions: a dialectical cultural script guides emotion regulation. *Emotion*, 11(6), 1-45
- 174. Nam, Y., Kim, Y.H., & Tam, K.K.P. (2018). Effects of emotion suppression on life satisfaction in Americans and Chinese. *Journal of cross-cultural psychology*, 49(1), 149-160.
- 175. Nicholson, J.D., & Stepina, L.P. (1998). Cultural values: a cross-national study. *International Journal of Cross Cultural Management*, 5(1/2), 33-47
- 176. Niu, B.Y. (1997). Holistic and analytic thinking—the thinking modes difference between Chinese and American. *Journal of Sichuan Foreign Languages University*, 2, 54-59. [in Chinese]
- 177. Niu, Y.H. (2018). A comparative study of the cultural values of slogans in Chinese and American public service advertisements. *Modern communication*, *1*, 38-39. [in Chinese]
- 178. Okudan, G.E., Thevenot, H., Zhang, Y., & Schuurman, M. (2008). Cultures and systems of thought: A preliminary investigation on implications for the design process and its artifacts. *International Journal of Engineering Education*, 24(2), 295-303.

- 179. Oyserman, D., Coon, H.M. & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological bulletin*, 128(1), 3-72.
- 180. Pan, Y., Song, X., Goldschmidt, A. & French, W. (2010). A cross-cultural investigation of work values among young executives in China and the USA. *Cross Cultural Management: An International Journal*, 17(3), 283-298
- 181. Papadopoulos, C., Foster, J. & Caldwell, K. (2013). 'Individualism-collectivism' as an explanatory device for mental illness stigma. *Community mental health journal*, 49(3), 270-280.
- 182. Parekh, R. & Beresin, E.V. (2001). Looking for Love?. *Academic Psychiatry*, 25(4), 223-233.
- 183. Pelled, L.H. & Xin, K.R. (1997). Work values and their human resource management implications: A theoretical comparison of China, Mexico, and the United States. *Journal of Applied Management Studies*, 6(2), 185-198.
- 184. Peng, K., Nisbett, R.E. & Wong, N.Y. (1997). Validity problems comparing values across cultures and possible solutions. *Psychological methods*, *2*(4), 329-344.
- 185. Peng, T. (2016). Impacts of Chinese and western thinking difference on translations. *Overseas English*, *24*, 139-140. [in Chinese]
- 186. Peng, X.M. (2010). Value Differences in Chinese and Western Luxury Wine Advertising, *Overseas English*, *11X*, 203-204. [in Chinese]
- 187.Qi, X.Q. (2009). English writing and Chinese-western thinking modes. *General Science*, 8, 143. [in Chinese]
- 188. Qian, F.L. & Li, B.J. (2011). Discuss the Differences of Values between China and America From the Perspective of College English Text "Mr. Doherty Builds His Dream Life". *Contemporary Educational Theory and Practice*, 2, 153-154. [in Chinese]
- 189. Qian, X. (2006), The difference of Chinese and Western cultural thinking modes on negative influence and coping strategies on English Learners, *Journal of Changchun University of Technology*, 2, 93-94. [in Chinese]
- 190. Qiao, Y. (2008). Comparison of Thinking Modes and Discourse Differences between Chinese and Western Societies. *Journal of Southwest Nationalities University, 11*, 152-155. [in Chinese]
- 191. Qu, Y. & Telzer, E.H. (2017). Cultural differences and similarities in beliefs, practices, and neural mechanisms of emotion regulation. *Cultural Diversity and Ethnic Minority Psychology*, 23(1), 36-44.

- 192. Quan, X.Y. (2003). View world universal ethics form the universal and special thinking modes of Chinese and western philosophy. *Economic and Social Development*, *1*(11), 126-132. [in Chinese]
- 193. Rahim, M.A. & Psenicka, C. (2005). Relationship between emotional intelligence and effectiveness of leader role: A dyadic study in four countries. *International Journal of Organizational Analysis*, 13(4), 327-342
- 194. Ralston, D.A., Holt, D.H. & Terpstra, R.H. (1995). The impact of culture and ideology on managerial work values: a study of the United States, Russa, Japan, and China. *Academy of Management*, 1, 187-191
- 195. Ralston, D.A., Holt, D.H., Terpstra, R.H., & Kai-Cheng, Y. (1997). The impact of natural culture and economic ideology on managerial work values: a study of the United States, Russia, Japan, and China. *Journal of international business studies*, 28(1), 177-207.
- 196. Ralston, D.A., Pounder, J., Lo, C.W., Wong, Y.Y., Egri, C.P. & Stauffer, J. (2006). Stability and change in managerial work values: A longitudinal study of China, Hong Kong, and the US. *Management and Organization Review*, 2(1), 67-94.
- 197. Ran, Y.H. & Bao, C.Q. (2012). Plato's idealism and Confucius' philosophy of the world--- A Comparative Analysis of the Origin of Chinese and Western Thinking. *Theory Monthly, 4,* 44-46. [in Chinese]
- 198. Rau, P.L.P., Choong, Y.Y. & Salvendy, G. (2004). A cross cultural study on knowledge representation and structure in human computer interfaces. *International journal of industrial ergonomics*, 34(2), 117-129.
- 199. Ren, D. (2019). The cause of Chinese and western thinking difference and analysis of its influence on translations, *Talent*, *19*, 239. [in Chinese]
- 200. Ren, H. (2008). The cultural thinking difference in the system of English and Chinese language. *Literature Education*, *5*, 38-40. [in Chinese]
- 201. Ren, H. (1999). Associate the Chinese and western thinking modes from the transformation of English words. *Journal of Tianjin Foreign Language University*, 2, 72-75. [in Chinese]
- 202. Richards, E.L. (2014). Contracting from East to West: Bridging the cultural divide. *Business Horizons*, *57*(5), 677-684.
- 203. Roets, A., Soetens, B., Au, E.W., & Yanjun, G. (2014). Personal choice: A blessing or a burden, or both? A cross-cultural investigation on need for closure effects in two Western and two East-Asian societies. *International Journal of Psychology*, 49(3), 216-

- 204. Ross, M. & Wang, Q. (2010). Why we remember and what we remember: Culture and autobiographical memory. *Perspectives on Psychological Science*, *5*(4), 401-409.
- 205. Shang, J. (2008). Trace the difference of Chinese and western philosophy from the difference of Chinese and western language. *Journal of Hangzhou Normal College*, *5*, 9-15. [in Chinese]
- 206. Shao, B., Doucet, L., & Caruso, D.R. (2015). Universality versus cultural specificity of three emotion domains: Some evidence based on the cascading model of emotional intelligence. *Journal of Cross-Cultural Psychology*, 46(2), 229-251.
- 207. Shavitt, S. & Barnes, A. J. (2020). Culture and the consumer journey. *Journal of Retailing*, 96(1), 40-54.
- 208. Shen, J.W. (2011). The influence of thinking modes difference on Chinese and western science tradition. *People Forum*, *A08*, 188-189. [in Chinese]
- 209. Shen, J.X. (2020). English-Chinese difference related thinking modes. Modern *Foreign Languages*, 43(1), 1-17. [in Chinese]
- 210. Shen, L.X. (2015). The implications of Chinese and western thinking modes on foreign language education. *Technology and Economy Market*, *6*, 222. [in Chinese]
- 211. Shen, Z.H. (2004). Difference of Chinese and Western Thinking Model through the Relations between Mathematics and Music, *Journal of Hubei College of Adult Education*, 5, 45-47. [in Chinese]
- 212. Shi, M. (2007). The Influence of Chinese and Western Thinking Modes on English Discourse Reading. *Science and Education*, *14*,80-81. [in Chinese]
- 213. Shi, X.S. & Xu, W.J. (2020). Do Chinese brands culturally adapt their overseas websites: evidence from top Chinese brands' Sino-US websites?. *Asian Journal of Communication*, 30(1), 58-78.
- 214. Shi, Y. (2010). The implications of Chinese and western thinking modes difference on English teaching. *Neijiang Technology, 3*, 165-166. [in Chinese]
- 215. Shu, T.T. (2009). Discuss the Chinese and western thinking modes from the folk custom of marriage in Rural areas of China and foreign countries, *Agricultural Archaeology*, 6, 226-228. [in Chinese]
- 216. Si, X.Z. (1999). Discuss on the thinking modes, language structure and translation of English and Chinese nationalities. *Journal of Foreign Languages*. 2, 78-86. [in Chinese]
- 217. Slabu, L., Lenton, A.P., Sedikides, C. & Bruder, M. (2014). Trait and state authenticity across cultures. *Journal of Cross-Cultural Psychology*, 45(9), 1347-1373.

- 218. Song, D; Zhao, D.L; Guo, Z; Jiang, Z.H. (2011). Different between Chinese and Western Medicine Thought from Their Culture. *Bright Chinese Medicine*, *2*, 191-192. [in Chinese]
- 219. Song, H. (2002). The difference of Chinese and western thinking difference and strategies of English teaching. *Journal of Xiangtan Normal College, 3*, 119-121. [in Chinese]
- 220. Song, L., Swaminathan, S. & Anderson, R. E. (2015). Differences in customers' online service satisfaction across cultures: the role of thinking style. *Journal of Marketing Channels*, 22(1), 52-61.
- 221. Soto, J.A., Perez, C.R., Kim, Y.H., Lee, E.A., & Minnick, M.R. (2011). Is expressive suppression always associated with poorer psychological functioning? A cross-cultural comparison between European Americans and Hong Kong Chinese. *Emotion*, 11(6), 1450-1455
- 222. Su, J.C., Lee, R.M., Park, I.J., Soto, J.A., Chang, J., Zamboanga, B.L. & Brown, E. (2015). Differential links between expressive suppression and well-being among Chinese and Mexican American college students. *Asian American Journal of Psychology*, *6*(1), 15-24
- 223. Sun, C.H. (2015). View Chinese and western value from the perspective of cultural value of Hofstede. *Modern Communication*, 10, 63. [in Chinese]
- 224. Sun, L. (2009). Influence of Chinese and western different thinking modes. *Journal of Capital University of Economics and Business*, *5*, 113-117. [in Chinese]
- 225. Suveg, C., Raley, J.N., Morelen, D., Wang, W., Han, R.Z. & Campion, S. (2014). Child and family emotional functioning: A cross-national examination of families from China and the United States. *Journal of Child and Family Studies*, 23(8), 1444-1454.
- 226. Swanson, S.R., Huang, Y. & Wang, B. (2014). Hospitality-based critical incidents: a cross-cultural comparison. *International Journal of Contemporary Hospitality Management*, 26(1), 50-68
- 227. Tan, J. & Chow, I. H. S. (2009). Isolating cultural and national influence on value and ethics: A test of competing hypotheses. *Journal of Business Ethics*, 88(1), 197-210.
- 228. Tang, H.P. (2009). The Chinese and English value difference reflected by public advertisement. *Journal of Changchun University of Science and Technology, 3*, 187-188. [in Chinese]
- 229. Tang, T. (2013). The influence and coping strategies of Chinese and western thinking difference on Chinese and English writing—take the sentence structure as an example.

- Journal of Southwest Agricultural University, 6, 76-78. [in Chinese]
- 230. Tang, Y. (2014). View the difference between western individualism and Chinese benevolence thinking from the perspective of advertising, *Journal of Central South University of Forestry Science and Technology, 1*, 164-166. [in Chinese]
- 231. Taylor, Y., Everett, A.M. & Edgar, F. (2020). Work values of immigrant professionals: the New Zealand context. *The International Journal of Human Resource Management*, 1-36.
- 232. Thompson, C. & Lane, S. (2014). Intelligence and job satisfaction in the USA and China. *Journal of Technology Management in China*, *9*(3), 232-244
- 233. Tsai, W.H.S., & Men, L.R. (2012). Cultural values reflected in corporate pages on popular social network sites in China and the United States. *Journal of Research in Interactive Marketing*, 6(1), 42-58.
- 234. Tsang, A.S., & Prendergast, G. (2009). Does culture affect evaluation expressions? A cross-cultural analysis of Chinese and American computer game reviews. *European Journal of Marketing*, 43(5/6), 686-707.
- 235. Tu, B.Y. (2015). A study of the difference about Chinese and western thinking. *Journal of Henan Higher Institute of Mechanical and Electrical Science*, 2, 67-70. [in Chinese]
- 236. Villatoro, J., Chang, J. & Lane, S. (2014). Research of ethics, values and cross-cultural differences on China, Mexico or the United States. *Journal of Technology Management in China*, 9(2),133-154.
- 237. Wang, C.Y. (2017). View English translation skills of < Lanting ji xu>from the perspective of Chinese and western thinking difference. *Journal of Kaifeng College of Education*, 6, 80-81. [in Chinese]
- 238. Wang, C.L., Lin, X., Chan, A. K. & Shi, Y. (2005). Conflict handling styles in international joint ventures: A cross-cultural and cross-national comparison. MIR: Management International Review, 3-21.
- 239. Wang, C.Y. (2010). The impacts of Chinese and western thinking modes difference on English writing teaching. *Crazy English*, *4*, 29-32. [in Chinese]
- 240. Wang, J. (2010). On the Differences of Social Appellations between Chinese and Americans from the Perspective of Values. *Journal of Huaihua Institute*, *3*, 129-130. [in Chinese]
- 241. Wang, J.H. (2006). Comparison of the English Titles of Articles in Chinese and Foreign Academic Journals: Influences of Difference between China and the Foreign in Thinking and Psychology. *Journal of Integrated Chinese and Western Medicine*, 11,

- 1042-1044. [in Chinese]
- 242. Wang, K. (2018). An analysis of drama narrative structure influenced by Chinese and western thinking modes. *Drama House*, *21*, 15-16. [in Chinese]
- 243. Wang, L.H. (2012). To analyse the root and implications of the Difference of Family Education between China and America—From the perspective of Chinese Confucian culture and American individualistic culture. *Journal of Luoyang Institute of Science and Technology, 5*, 87-90. [in Chinese]
- 244. Wang, P. & Liu, W.J. (2001). Chinese and western thinking difference and college English writing. *Foreign Language World*, *5*, 66-72. [in Chinese]
- 245. Wang, Q. (2002). Thinking, Language and cross-cultural communication. *Heilongjiang social sciences, 1, 72-74.* [in Chinese]
- 246. Wang, Q., & Fivush, R. (2005). Mother–child conversations of emotionally salient events: exploring the functions of emotional reminiscing in European-American and Chinese families. *Social Development*, *14*(3), 473-495.
- 247. Wang, R. (2004). The influence of Chinese and Western thinking difference on syntactic structure of college English writing, *Journal of Chongqing Transportation Institute*, *1*, 109-111. [in Chinese]
- 248. Wang, R. (2004). The influence of Chinese and western thinking on college English writing syntactic structure. *Journal of Chongqing Transportation Institute*, *1*, 109-111. [in Chinese]
- 249. Wang, S.R. (2004). Imagery thinking form the perspective of comparisons between China and west—return to original thinking. *Arts, History, Philosophy, 6*, 108-114. [in Chinese]
- 250. Wang, T.M. (2010). The influence of Chinese subjective and western objective on the translation between Chinese and English. *Journal of Hubei University of Economics*, *1*, 126-127. [in Chinese]
- 251. Wang, W. (2012). Chinese and western thinking modes difference and English teaching. Talent, 13, 205. [in Chinese]
- 252. Wang, Y. (2010). From the sentence of the introduction--view the differences between Chinese and Western thinking models. *Journal of ABC wuhan training college, 4,* 66-67. [in Chinese]
- 253. Wang, Y.Q. (2016). Chinese and western thinking modes difference and college English teaching. *Overseas English*, 20, 163-164. [in Chinese]

- 254. Wang, Y. (2015). Analysis of influence of Chinese and western cultural difference on translation. *Learning Monthly*, 24, 31-32. [in Chinese]
- 255. Wang, Y. (2016). The relationship between the differences of Chinese and Western thinking modes and the use of Chinese and English. *Labor Security World*, 7Z, 78-81. [in Chinese]
- 256. Wang, Y., Lu, S., Liu, J., Tan, J., & Zhang, J. (2019). The Influence of Culture on Attitudes Towards Humorous Advertising. *Frontiers in psychology*, 10, 1-12.
- 257. Wang, Z.C. (2012). The impacts of Chinese and western thinking modes difference on English reading. *Journal of Jiamusi Education College*, 7, 341-342. [in Chinese]
- 258. Wang, Z.J. (2008). English writing under the comparison of Chinese and western cultural thinking. *General science*, *6*, 21. [in Chinese]
- 259. Wang, X. & Gu, X.J. (2010). Individualism and collectivism--The key point to understand the cultural difference between China and American. *Technology Information*, 27, 167-168. [in Chinese]
- 260. Weber, E.U., Ames, D.R., & Blais, A.R. (2005). 'How Do I Choose Thee? Let me Count the Ways': A Textual Analysis of Similarities and Differences in Modes of Decision-making in China and the United States. *Management and Organization Review, 1*(1), 87-118.
- 261. Wei, H. (2013). Chinese and western thinking mode difference and English writing. *Journal of Inner Mongolia Normal University*, 2, 90-92. [in Chinese]
- 262. Wei, J.H., Zhao, X. & Yu, H.G. (1999). Discuss on the differences of Cross-cultural Values between China and the America from respecting old and loving young vs emphasizing young and neglecting old. *Journal of Hunan University*, 2, 97-99. [in Chinese]
- 263. Wei, L.Z. (2003). Chinese and western thinking mode difference and cross-cultural communications. *Journal of Shangqiu Normal College*, 19(6), 137-138. [in Chinese]
- 264. Wei, M., Su, J. C., Carrera, S., Lin, S. P., & Yi, F. (2013). Suppression and interpersonal harmony: A cross-cultural comparison between Chinese and European Americans. *Journal of counseling psychology, 60*(4), 625.
- 265. Wei, Z.X. (2002). On Internal Different Between Chinese and western Culture. *Journal of Shanxi Agricultural University*, *4*, *338*-341. [in Chinese]
- 266. Wong-On-Wing, B., & Lui, G. (2013). Beyond cultural values: An implicit theory approach to cross-cultural research in accounting ethics. Behavioral Research in Accounting, 25(1), 15-36.

- 267. Woźniak, A. (2006). Managerial intuition across cultures: beyond a "West-East dichotomy". Education+ Training.
- 268. Wu, J.F. (2012). Chinese and western thinking difference and translations. *Journal of Hubei Adult Education College*, 6, 78-79. [in Chinese]
- 269. Wulf, T., Florian, S. & Meissner, P. (2020). Differences in strategic issue interpretation across cultures—A socio-cognitive perspective. *European Management Review, 17*(1), 197-208.
- 270. Xi, D.M. (2010). View "Needham Problem" from thinking modes, Extensive Reading. *Extensive Reading*, 8, 13-16. [in Chinese]
- 271.Xi, X.H. (2013). The reflection of difference of Chinese and western thinking in English and Chinese language Grammar. *Journal of Henan Institute of Science and Technology*, 3, 76-79. [in Chinese]
- 272. Xiang, L. Q. (2017), Cultural Thinking Mode of Chinese and Western Commercial Advertising. *General Technology, 6*, 215-216. [in Chinese]
- 273. Xiao, S.Q. (2009). From the perspective of cultural value of Hofstede to see the cultural differences between Chinese and American in the movie "Gua Sha". *Journal of Suihua College*, *6*, 127-129. [in Chinese]
- 274. Xu, H.M. (2008). The reflection of Chinese and western thinking modes difference on Chinese-English language. *Journal of Jilin Engineering and Technology Normal College*, 4, 23-25. [in Chinese]
- 275. Xu, X.M. (2008). The exploration of Chinese and western cultural thinking difference and cause. *Vicissitudes*, *5*, 147-148. [in Chinese]
- 276. Yan, Y.L. (2010). Impacts of Chinese and western thinking difference on translations. *Journal of Jiamusi College of Education*, 1, 137-138. [in Chinese]
- 277. Yan, Y.Q. (1996). Differences of Thinking Modes in Foreign-funded Enterprises. *Reform and Openning*, 2, 27. [in Chinese]
- 278. Yang, C.Y. (2006). Research on the Basic Values of China and the West in the Homepage--Analysis of the homepages of 40 universities in China and the United States. *Journal of Yunyang Normal Colleges*, 26(4), 112-114. [in Chinese]
- 279. Yang, H. (2008). Chinese and western cultural difference and college English teaching. *Heilongjiang Science and Technology Information*, *33*, 207. [in Chinese]
- 280. Yang, J.M. (2001). Chinese and westerns thinking modes and English and Chinese language features. *Journal of central south university of technology*, 7(4). 378-380. [in Chinese]

- 281. Yang, L. (2016). Worlds apart? Worlds aligned? The perceptions and prioritizations of civil servant values among civil servants from China and The Netherlands. *International Journal of Public Administration*, 39(1), 74-86.
- 282. Yang, L., Lin, H.F., Wang, Y.X. & Xu, K. (2012). The impacts of Chinese and western thinking modes on emotional tendencies. *Computer Science*, *10*, 203-208. [in Chinese]
- 283. Yang, M., Viladrich, C. & Cruz Feliu, J. (2019). Measuring motivation in physical education among chinese and spanish adolescents: comparing the psychometric properties of perceived locus of causality scale. *Revista de psicología del deporte*, 28(2), 87-96.
- 284. Yang, N. (1996). Effects of individualism–collectivism on perceptions and outcomes of work–family conflict: A cross-cultural perspective. Unpublished doctoral dissertation, State University of New York, Buffalo
- 285. Yang, Q., Yang R.Y & Sheng, Y.Y(2017), The reflection of difference and Chinese and Western cultural thinking on traditional architecture, *Drama House*, 4, 246-247. [in Chinese]
- 286. Yang, R. (2004). Chinese and western thinking modes and Chinese-English difference. *Journal of Hubei Socialist College*, 2, 58-59. [in Chinese]
- 287. Yang, W.H. (2011). Comparison of marriage and family value between China and American from the perspective of cross-cultural communication. *Journal of Yunnan University of Finance and Economics*, *3*, 45-46. [in Chinese]
- 288. Yang, X. (2008). The evolution of Chinese and western thinking ways and painting forms. *Journal of Yanbian College of Education*, 6, 19-22. [in Chinese]
- 289. Yang, X.F. (2014). Discussion on the formation and comparison of Chinese and western value. *Journal of Hubei Correspondence University*, 20, 84-85. [in Chinese]
- 290. Yang, X & Ma, Y.M. (2017). A brief analysis of the difference of Chinese and American cultural value—from the perspective of family value orientation by Condon and Yousef. *Contemporary Education Research and Teaching Practice*, *6*, 70-71. [in Chinese]
- 291. Yao, Y.M. (2008). Analysis difference of Chinese and western cultures from the advertising language, *Journal of Baoji University of arts and sciences*, 28(3), 99-102. [in Chinese]
- 292. Yao, Y.B. (2016). Analyze the embodiment of the difference between Chinese and American values in the movie "Guasha"---From the perspective of Hofstede's cultural dimension theory. *Talent*, 10, 202. [in Chinese]
- 293. Yi, A.W. (2009). The Influence of Chinese and Western Thinking Modes on the

- discourse Patterns. *Journal of Henan Radio and Television University*, 2, 68-69. [in Chinese]
- 294. Yi, X., Ribbens, B., Fu, L., & Cheng, W. (2015). Variation in career and workplace attitudes by generation, gender, and culture differences in career perceptions in the United States and China. *Employee Relations*, *37*(1), 66-82.
- 295. Yu, Y. (2010). The embodiment of the difference of Chinese and Western thinking in discourse, *Oriental Corporate Culture*, 8, 230. [in Chinese]
- 296. Yu, F & Peng, K.P. (2018). What are the roots of human culture? *Scientific Bulletin, 1,* 32-37. [in Chinese]
- 297. Yuan, J., Tian, Y., Huang, X., Fan, H., & Wei, X. (2019). Emotional bias varies with stimulus type, arousal and task setting: Meta-analytic evidences. *Neuroscience & Biobehavioral Reviews*, 107, 461-472.
- 298. Yuan, Y.S. (2002). The difference between English and Chinese mode of thinking—basic reason for chinglish. *Journal of Suzhou Institute of Urban Construction and Environmental Protection*, 3, 87-90. [in Chinese]
- 299. Yuan, L. (2010). The reflection of the differences between Chinese and Western thinking in paragraph writing. *Journal of Shanxi Radio and Television University*, 2, 76-77. [in Chinese]
- 300. Yukl, G., Ping Fu, P. & McDonald, R. (2003). Cross-cultural differences in perceived effectiveness of influence tactics for initiating or resisting change. *Applied Psychology*, 52(1), 68-82.
- 301. Zeng, S.H. (2010). The influence of Chinese and western thinking modes on writing discourse patterns of second language. Journal of Institute of Liaoning Science and Technology, 4, 73-75. [in Chinese]
- 302. Zhang, C.F. (2010). Discuss the differences of Thinking Modes and the Causes of Chinese English. *Journal of Wuhan Electric Power Vocational and Technical College*, 4, 32-33. [in Chinese]
- 303. Zhang, J. (2006). Discussion on the difference of Chinese and western thinking and translation. *Journal of Hubei Education University*, *4*, 131-132. [in Chinese]
- 304. Zhang, L.F. (2005). Predicting cognitive development, intellectual styles, and personality traits from self-rated abilities. *Learning and individual differences*, *15*(1), 67-88.
- 305. Zhang, X; Yao, C. & Hou, C. (2014). A Comparative Study of Values Education in Chinese and American Universities Based on the analytical perspective of human

- resource strategy. Guide of Economic Research, 24, 208-211. [in Chinese]
- 306. Zhang, Y.W & Zhen, S.P. (1996). Comparison of traditional Chinese and western thinking modes—similarities and differences between the four elements theory and the five elements theory. *Journal of Shaanxi University of Technology*, 2, 18-23. [in Chinese]
- 307. Zhang, Y. (2011). A Brief Discussion on the Differences and Reasons of Temporal Cognitive Style. *Journal of Jilin Architectural and Civil Engineering*, 6, 103-105. [in Chinese]
- 308. Zhang, Y.W. (2011). The influence of English and Chinese language thinking modes on translations. *Science information*, *32*, 217. [in Chinese]
- 309. Zhang, Z.Z. & Yang, W. (2003). The difference and integration of Chinese and western traditional philosophy thinking. *Guide of theory, 6*, 39-41. [in Chinese]
- 310. Zhang, Y.P. (2007). A Comparative Study of Confucian Mind Science and Western emotional intelligence Education. *Journal of Chinese Special Education*, 10. 35-40. [in Chinese]
- 311. Zhao, A. (2015). On the Cultivating of English Thinking Model—From the Perspective of Chinese and "Westerm" Cultural Differences. *Overseas English*, *12*, 6-7. [in Chinese]
- 312. Zhao, F. (2011). The exploration of cultural value difference between China and west. *Science and Technology Information*, *29*, 208-209. [in Chinese]
- 313. Zhao, H.M. (2014). The difference of English and Chinese language and thinking modes. *Journal of Jilin Radio and Television University*, 8, 157-158. [in Chinese]
- 314. Zhao, P. F. (2018). The heterogeneity and same structure characteristics of Chinese and western sports culture. *West Leather, 3,* 115-116. [in Chinese]
- 315. Zhao, X.H. (2011). The influence of difference of English and Chinese thinking modes on translations. *Modern communication*, *12*, 52. [in Chinese]
- 316. Zheng, S.J. (2008). The comparisons of thinking between China and west and the translation teaching. *Journal of Chifeng Institute*, *4*, 105-108. [in Chinese]
- 317. Zheng, S; Wang, H,Y(2013). Impacts of Chinese and western thinking difference on translations. *Guide of Technological creativity*, 23, 241. [in Chinese]
- 318. Zhong, Y.; Liu, D.H. (2004). The Influence of the Different Mode of Thinking Between Western and Eastern Culture on Teaching Oral English. *Journal of Chongqing University*, 10(2), 74-76. [in Chinese]
- 319. Zhou, T., & Bishop, G. D. (2012). Culture moderates the cardiovascular consequences of anger regulation strategy. *International Journal of Psychophysiology*, 86(3), 291-298.
- 320. Zhou, Y.Q. (2014). The impacts of Chinese and western thinking modes difference on

- English teaching. Journal of Suzhou Education Institute, 6, 201-202. [in Chinese]
- 321. Zhou, G.Y. (2007). The impacts of Chinese and western thinking modes difference on Chinese and American business negotiation. *Jiangsu Commercial Forum*, 12, 61-63. [in Chinese]
- 322. Zhu, F. (2014). The Chinese and English writing influenced by the difference of Chinese and western culture. *Health Professions Education*, *13*, 7-8. [in Chinese]
- 323. Zhu, H.Y. (2015). The influence of cultural value on Chinese and western business negotiation conflict-solving styles. *Modern Society*, *9*,49-50. [in Chinese]
- 324. Zhu, J.Q. (2016). View the differences of emotional expression between China and America from film "The Wedding Banquet", *Culture Journal*, 4, 82-84. [in Chinese]
- 325. Zhu, L.L. (2013). Volunteer service: difference and integration of Chinese and western thinking. *Youth Discovery, 2*, 50-55. [in Chinese]
- 326. Zhu, Y.Q. (2003). The difference and mutual infiltration between Chinese and Western thinking modes. *Journal of Guizhou University*, *3*, 24-27. [in Chinese]

## **Appendix 2- Scales used in the empirical studies**

#### **Thinking style R-II**

(1-does not describe me at all well, 7- describes me extremely well)

- 1. When faced with a problem, I prefer to try new strategies or methods to solve it.
- 2. I like to do things in new ways not used by others in the past.
- 3. I like to change routines in order to improve the way tasks are done.
- 4. I like to challenge old ideas or ways of doing things and to seek better ones.
- 5. I stick to standard rules or ways of doing things.
- 6. I like situations where I can follow a set routine.
- 7. When faced with a problem, I like to solve it in a traditional way.
- 8. When I'm in charge of something, I like to follow methods and ideas used in the past.
- 9. When faced with a problem, I use my own ideas and strategies to solve it.
- 10. I like to play with my ideas and see how far they go.
- 11. I like problems where I can try my own way of solving them.
- 12. I like situations where I can use my own ideas and ways of doing things.
- 13. I like to figure out how to solve a problem following certain rules.
- 14. I enjoy working on things that I can do by following directions.
- 15. I like projects that have a clear structure and a set plan and goal.
- 16. I like to follow definite rules or directions when solving a problem or doing a task.
- 17. When discussing or writing about a topic, I stick to the points of view accepted by my colleagues.
- 18. I prefer to work on a project or task that is acceptable to and approved by my peers.
- 19. When I start a task or project, I focus on the parts most relevant to my peer group.
- 20. When there are several important things to do, I pick the ones most important to my friends and colleagues.
- 21. I like to set priorities for the things I need to do before I start doing them.
- 22. When working on a task, I can see how the parts relate to the overall goal of the task.
- 23. In dealing with difficulties, I have a good sense of how important each of them is and in what order to tackle them.
- 24. When starting something, I like to make a list of things to do and to order the things by importance.
- 25. When starting a task, I like to brainstorm ideas with friends or peers.

- 26. I like to participate in activities where I can interact with others as a part of a team.
- 27. I like situations where I interact with others and everyone works together.
- 28. In a discussion or report, I like to combine my own ideas with those of others.
- 29. I like to control all phases of a project, without having to consult with others.
- 30. I like to work alone on a task or a problem.
- 31. I prefer situations where I can carry out my own ideas, without relying on others.
- 32. When trying to make a decision, I rely on my own judgment of the situation.
- 33. I tend to pay little attention to details.
- 34. I like working on projects that deal with general issues and not with nitty-gritty details.
- 35. In talking or writing down ideas, I like to show the scope and context of my ideas, that is, the general picture.
- 36. I tend to emphasize the general aspect of issues or the overall effect of a project.
- 37. I prefer to deal with problems that require me to attend to a lot of details.
- 38. In discussing or writing on a topic, I think that the details and facts are more important than the overall picture.
- 39. I like problems where I need to pay attention to details
- 40. I pay more attention to parts of a task than to its overall effect or significance.
- 41. I like situations where I can compare and rate different ways of doing things.
- 42. I like to check and rate opposing points of view or conflicting ideas.
- 43. I enjoy work that involves analyzing, grading, or comparing things.
- 44. I like projects where I can study and rate different views or ideas.
- 45. When talking or writing about ideas, I prefer to focus on one idea at a time.
- 46. If there are several important things to do, I focus on the one most important to me and disregard the rest.
- 47. I have to finish one project before starting another one.
- 48. I tend to give full attention to one thing at a time.
- 49. I can switch from one task to another easily, because all tasks seem to me to be equally important.
- 50. I tend to tackle several problems at the same time because they are often equally urgent.
- 51. I tend to give equal attention to all of the tasks I am involved in.
- 52. I find that when I am engaged in one problem, another comes along that is just as important.

### **Emotional expressivity**

- (1-strongly disagree, 7-strongly agree)
- 1. Whenever I feel positive emotions, people can easily see exactly what I am feeling.
- 2. I sometimes cry during sad movies.
- 3. People often do not know what I am feeling.
- 4. I laugh out loud when someone tells me a joke that I think is funny.
- 5. It is difficult for me to hide my fear.
- 6. When I'm happy, my feelings show.
- 7. My body reacts very strongly to emotional situations.
- 8. I've learned it is better to suppress my anger than to show it.
- 9. No matter how nervous or upset I am, I tend to keep a calm exterior.
- 10. I am an emotionally expressive person.
- 11. I have strong emotions.
- 12. I am sometimes unable to hide my feelings, even though I would like to.
- 13. Whenever I feel negative emotions, people can easily see exactly what I am feeling.
- 14. There have been times when I have not been able to stop crying even though I tried to stop.
- 15. I experience my emotions very strongly
- 16. What I'm feeling is written all over my face.

#### **Cultural value**

In choosing an ideal job/in your private life, how important would it be to you to....(1-extremely important, 5-not at all important)

- 1. ....have sufficient time for your personal or home life
- 2. ....have a boss (direct superior) you can respect
- 3. ....get recognition for good performance
- 4. ....have security of employment
- 5. ....have pleasant people to work with
- 6. ....do work that is interesting
- 7. ....be consulted by your boss in decisions involving your work
- 8. ....live in a desirable area
- 9. ....have a job respected by your family and friends
- 10. ....have chances for promotion
- 11. ....keeping time free for fun
- 12. ....moderation: having few desires
- 13. ....doing a service to a friend
- 14. ....thrift (not spending more than needed)
- 15. How often do you feel nervous or tense? (1-always, 5-never)
- 16. Are you a happy person? (1-always, 5-never)
- 17. Do other people or circumstances ever prevent you from doing what you really want to? (1-always, 5-never)
- 18. All in all, how would you describe your state of health these days?( 1-very good, 5-very poor)
- 19. How proud are you to be a citizen of your country?(1-very proud, 5- Not proud at all)
- 20. How often, in your experience, are subordinates afraid to contradict their boss (or students their teacher?)(1-never, 5-always)

To what extent do you agree or disagree with each of the following statements?(1-strongly agree,5-strongly disagree).

- 21. One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work
- 22. Persistent efforts are the surest way to results
- 23. An organization structure in which certain subordinates have two bosses should be avoided at all cost
- 24. A company's or organization's rules should not be broken -not even when the employee

thinks breaking the rule would be in the organization's best interest

#### **HPWS**

(1-strongly disagree, 7-strongly agree)

- 1. My company usually offers steady work contract to new employees
- 2. For my company job security is part of its culture
- 3. My company hires new employees based on intensive recruiting efforts resulting in many qualified applicants.
- 4. New employees are selected based on rigorous tests or interview panels.
- 5. In my company there are many self-directed/autonomous work teams.
- 6. Employees are involved in programs designed to encourage participation.
- 7. In my company employees receive above-average compensation and benefits.
- 8. In my company, employees are paid primarily based on their competency and also their group performance (e.g. profit-sharing, gainsharing, team-based)
- 9. My company is committed to the training and development of its employees.
- 10. My company offers intensive/extensive training in technical and soft skills
- 11. In my company supervisors keep open communications with employees.
- 12. In my company, there is a culture of equal treatment between everybody.
- 13. My company provides relevant operating performance information to all employees (e.g. quality, productivity, etc.)?
- 14. My company provides relevant financial performance information to all employees.
- 15. My company provides formal performance appraisals or evaluations on a routine basis.
- 16. In my company performance feedback comes from more than one source (i.e., feedback from several individuals such as supervisors, peers, etc.)?
- 17. My company provides many opportunities for career development.
- 18. In my company the opportunities to have a promotion in the career are based upon merit or performance

#### **Turnover intention**

(1-strongly disagree, 7-strongly agree)

- 1. I often talk about leaving my current employer.
- 2. I will be probably looking for a new job within one year.
- 3. I am determined to leave for a new career opportunity.
- 4. I am probably leaving because of bad prospects of this company.

#### Perceived organizational financial and non-financial performance

(1-much worse than average, 5-much better than average)

Compared to other organizations that do the same kind of work, how would you compare the organization's performance over the last 3 years in terms of...

- 1. growth in sales
- 2. financial performance
- 3. profitability (companies) / balanced budget (government / NPO)
- 4. employee satisfaction
- 5. quality of products/services
- 6. customer satisfaction
- 7. new product/service development

## **Long term orientation (LTO)**

(1-strongly disagree, 7-strongly agree)

- 1. Respect for tradition is important to me.
- 2. Family heritage is important to me.
- 3. I value a strong link to my past.
- 4. Traditional values are important to me.
- 5. I work hard for success in the future.
- 6. I do not mind giving up today's fun for success in the future.
- 7. I plan for the long term.
- 8. Persistence is important to me

#### **Participative safety**

(1-strongly disagree, 7-strongly agree)

1. We are together' attitude

- 2. People keep each other informed
- 3. People feel understood and accepted
- 4. Real attempts to share information

#### **Organizational citizenship behaviors**

(1-strongly disagree, 7-strongly agree)

- 1. to perform functions keeping in mind the benefit of teams and the organization.
- 2. volunteer to do tasks for the teams and the organization.
- 3. get involved to help their team and the organization.
- 4. share knowledge about work with others.

## **Service quality**

(1-strongly disagree, 7-strongly agree)

- 1. The entire service process has a good feedback system and management.
- 2. The entire service process allows questions to be answered easily.
- 3. The entire service process can complete service in a short period of time.
- 4. The entire service process has complete record of transaction details.
- 5. The entire service process is able to correctly complete designated service items.
- 6. The entire service process has no error.
- 7. The entire service process can fulfill its promise to customers.
- 8. The entire service process has a good security mechanism.
- 9. The entire service process is trustworthy.

#### **Analytical thinking style**

(1-strongly disagree, 7-strongly agree)

- 1. My understanding of a problem tends to come more from thorough analysis than flashes of insight
- 2. In my experience, rational thought is the only realistic basis for making decisions
- 3. The kind of work I like best is that which requires a logical step-by-step approach.

## Appendix 3 - SPSS Output for Study 3

Model 14 (LTO moderating the 2nd path between FP->ITQ and NFP->ITQ). Run MATRIX procedure: \*\*\*\*\*\*\*\*\*\*\* PROCESS Procedure for SPSS Version 3.4 \*\*\*\*\*\*\*\*\*\*\*\* Written by Andrew F. Hayes. Ph.D. www.afhaves.com Documentation available in Hayes (2018). www.quilford.com/p/hayes3 Model : 14 Y : turnov X : HPWPglob M1 : FinPerf M2 : NFinPerf W : LTO6pla Covariates: gender age educatio workexpe sizeofor Sample Size: 430 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* OUTCOME VARIABLE: FinPerf Model Summary R R-sq MSE F df1 df2
.5517 .3043 .4294 30.8395 6.0000 423.0000 .0000 
 Model

 coeff
 se
 t
 p
 LLCI
 ULC1

 constant
 -1.9525
 .2700
 -7.2327
 .0000
 -2.4832
 -1.4219

 HPWPglob
 .3606
 .0278
 12.9602
 .0000
 .3059
 .4153

 gender
 -.1140
 .0634
 -1.7962
 .0732
 -.2387
 .0107

 age
 .0282
 .0575
 .4899
 .6244
 -.0849
 .1412

 educatio
 .0363
 .0480
 .7560
 .4501
 -.0580
 .1305

 workexpe
 -.0035
 .0368
 -.0946
 .9247
 -.0758
 .0688

 .0001
 .29717
 .0031
 .0262
 .1287
 Model .4501 .9247 .0031 2.9717 .0775 sizeofor \* OUTCOME VARIABLE: NFinPerf Model Summary R R-sq MSE F df1 df2 .5167 .2887 75.3811 6.0000 423.0000 .0000 .7188 Model coeff se LLCI t. р constant -2.0464 HPWPglob .4744 .0773 .8234 .5792 .0520 -1.7709 .0472 .2234 gender -.0921 .04/2 .0393 .0302 -.0822 age .0105 .1032 -.5549 .2745 .5047 -.0218 -.0991 .0555 educatio workexpe .0083 -.0510 -.0312 sizeofor .0108 .0214 .6140 .0528 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* OUTCOME VARIABLE:

turnov

Model Summar	У					
R	R-sq		F		df2	-
.4344	.1887	1.6946	8.8394	11.0000	418.0000	.0000
Model						
	coeff	se	t	р	LLCI	ULCI
constant			9.1725		4.3177	6.6731
_			-3.5743		4472	1298
FinPerf NFinPerf			-2.2403	.0256 .5878	4808 3490	0314
LTO6pla		.0647	5424 -1.2482	.2126	2080	.1981
Int 1		.1089	.9704	.3324	1084	.3197
Int_2	2720	.1083	-2.5118	.0124	4849	0591
gender			9675	.3339	3722	.1267
age		.1144	.5186	.6043	1655	.2841
educatio		.0960	.1673	.8672	1726	.2047
workexpe sizeofor	1831 .0240	.0732	.4570	.0128 .6479	3271 - 0791	0392 .1271
51200101	.0210	.0021	. 1370	.01/3	.0731	• 12 / 1
Product term						
Int_1 :	FinPer		LTO6pla			
Int_2 :	NFinPe	rf x	LTO6pla			
Tost(s) of V	by M interac	tion.				
1630(3) OI A	F df		df2	р		
M1*X .3		0 417.00		838		
M2*X .0	023 1.000	0 417.00	.9	620		
m + ( )		11.1				
	ighest order			ction(s): df2	n	
M1*W .0			000 418.0		р 324	
	122 6.308		000 418.0		124	
	edict: FinPer					
Mo	d var: LT06pl	a (W)				
Data for win	ualizing the	condition:	ol offort o	f the fearl	nrodiator.	
	elow into a S					
rabee cene s	ciow into a b	ribb bynear	a willdow dii	a checate t	o produce p	.100.
DATA LIST FR	EE/					
FinPerf	LTO6pla	turnov	•			
BEGIN DATA.						
7801	-1.1068	4.0352				
.0000		3.7442				
.7801 7801	-1.1068 .0000	3.4532 3.8546				
.0000	.0000	3.6548				
.7801	.0000	3.4550				
7801	1.1068	3.6739				
.0000	1.1068	3.5654				
.7801	1.1068	3.4569				
END DATA.						
GRAPH/SCATTE						
FinPerf WI	TH turnov	BY	LTO6pla	•		
Focal pr	edict: NFinPe	rf (M2)				
_	d var: LTO6pl					
	1	, ,				
Conditional	effects of th	e focal p	redictor at	values of	the moderat	or(s):
	<b>-</b> 66					
LTO6pla	Effect	se	t 1 2155	p	LLCI	ULCI
-1.1068 .0000	.2256 0755	.1856 .1392	1.2155 5424	.2249 .5878	1392 3490	.5904 .1981
1.1068	0755 3765	.1392	-2.0722	.0389	7337	0194
1.1000	. 5 / 05	• + 0 + /	2.0122	.0309	. / 55 /	• 0 1 9 4
Moderator va	lue(s) defini	ng Johnson	n-Neyman si	gnificance	region(s):	
Value	% below	% above	-		=	
-2.4876	2.0930	97.9070				

.9689 86.2791 13.7209

Conditional effect of focal predictor at values of the moderator: LTO6pla Effect se t -4.3775 1.1153 .4969 2.2444 t p LLCI 444 .0253 .1385 2.0920 

 .4969
 2.2444
 .0253
 .1385

 .4658
 2.2190
 .0270
 .1180

 .4349
 2.1891
 .0291
 .0972

 .4043
 2.1532
 .0319
 .0758

 .3739
 2.1096
 .0355
 .0538

 .3440
 2.0560
 .0404
 .0311

 .3146
 1.9890
 .0474
 .0073

 .3058
 1.9657
 .0500
 .0000

 .2858
 1.9038
 .0576
 -.0177

 .2579
 1.7932
 .0737
 -.0445

 .2312
 1.6473
 .1003
 -.0736

 .2062
 1.4514
 .1474
 -.1060

 .1835
 1.1859
 .2363
 -.1431

 .1642
 .8285
 .4079
 -.1867

 -4.0775 1.0337 .1180 1.9493 -3.7775 .9521 1.8070 .8705 -3.4775 1.6651 .7889 .7073 -3.1775 1.5239 .3739 2.1096 .3440 2.0560 .3146 1.9890 .3058 1.9657 .2858 1.9038 .2579 1.7932 .2312 1.6473 .2062 1.4514 .1835 1.1859 .1642 .8285 .1495 .3640 .1409 -.1930 .1395 -.7799 .1455 -1.3081 .1582 -1.7196 -2.8775 1.3834 .6256 -2.5775 1.2439 -2.4876 .6012 1.2024 -2.2775 .5440 1.1058 .4624 .3808 .2992 -1.9775 -1.6775 .8353 -1.3775 .7045 .2176 -1.0775 
 .1035
 1.1839
 .2363
 -.1431

 .1642
 .8285
 .4079
 -.1867

 .1495
 .3640
 .7160
 -.2394

 .1409
 -.1930
 .8471
 -.3041

 .1395
 -.7799
 .4359
 -.3830

 .1455
 -1.3081
 .1916
 -.4765

 .1582
 -1.7196
 .0862
 -.5829

 .1725
 -1.9657
 .0500
 -.6781

 .1760
 -2.0094
 .0451
 -.6995
 -.7775 .1360 .4587 -.4775 .0544 .3483 -.1775 -.0272 .2497 -.1088 .1654 .1225 .4225 -.1904 .0957 .7225 -.2720 .0389 .9689 .0000 -.3390 .1760 -2.0094 .0451 .1975 -2.2031 .0281 .2218 -2.3302 .0203 .1760 -.3536 -.4352 1.0225 -.6995 -.0077 1.3225 -.8235 -.0469 -.5168 1.6225 -.9528 -.0808

Data for visualizing the conditional effect of the focal predictor: Paste text below into a SPSS syntax window and execute to produce plot.

#### DATA LIST FREE/

NFinPerf	LTO6pla	turnov
BEGIN DATA.		
7675	-1.1068	3.5711
.0000	-1.1068	3.7442
.7675	-1.1068	3.9173
7675	.0000	3.7127
.0000	.0000	3.6548
.7675	.0000	3.5969
7675	1.1068	3.8544
.0000	1.1068	3.5654
.7675	1.1068	3.2764

END DATA.

GRAPH/SCATTERPLOT=

NFinPerf WITH turnov BY LTO6pla .

\*\*\*\*\*\*\*\* OIRECT AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*\*\*\*\*\*\*\*\*\*

Direct effect of X on Y

Effect se t p LLCI ULCI -.2885 .0807 -3.5743 .0004 -.4472 -.1298

Conditional indirect effects of  ${\tt X}$  on  ${\tt Y}$ :

#### INDIRECT EFFECT:

HPWPglob -> FinPerf -> turnov

LTO6pla	Effect	BootSE	BootLLCI	BootULCI
-1.1068	1345	.0673	2692	0058
.0000	0923	.0434	1814	0103
1.1068	0502	.0653	1753	.0824

Index of moderated mediation:

Index BootSE BootLLCI BootULCI LTO6pla .0381 .0453 -.0469 .1317

---

```
INDIRECT EFFECT:
 HPWPglob -> NFinPerf -> turnov
              Elfect BootSE BootLLCI
.1070 .0949 - 0766
-.0358 .0606
            Effect
   LTO6pla
                         .0949 -.0769
.0696 -.1722
                                           .2955
   -1.1068
                                             .1026
    1.1068
              -.1786
                         .0959
                                  -.3731
                                             .0073
     Index of moderated mediation:
           Index BootSE BootLLCI BootULCI -.1290 .0589 -.2499 -.0162
LTO6pla
          -.1290
******************* ANALYSIS NOTES AND ERRORS *****************
Level of confidence for all confidence intervals in output:
Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
W values in conditional tables are the mean and \pm SD from the mean.
NOTE: The following variables were mean centered prior to analysis:
       LTO6pla FinPerf NFinPerf
NOTE: Standardized coefficients not available for models with moderators.
NOTE: Variables names longer than eight characters can produce incorrect output.
     Shorter variable names are recommended.
----- END MATRIX ----
Run MATRIX procedure:
******* PROCESS Procedure for SPSS Version 3.4 **********
         Written by Andrew F. Hayes. Ph.D.
                                             www.afhayes.com
   Documentation available in Hayes (2018). www.guilford.com/p/hayes3
****************
Model : 14
  Y : turnov
X : HPWPglob
M1 : FinPerf
  M2 : NFinPerf
   W : LTO6tra
Covariates:
gender age educatio workexpe sizeofor
Sample
Size: 430
********************
OUTCOME VARIABLE:
FinPerf
Model Summary
                R-sq Mag-
                          MSE F df1 df2
.4294 30.8395 6.0000 423.0000
        R
                                                                 .0000
     .5517
               .3043
```

LLCI

.0000 -2.4832 -1.4219

p

ULCI

Model

coeff se t constant -1.9525 .2700 -7.2327

HPWPglob gender age educatio workexpe	.3606 1140 .0282 .0363 0035	.0278 .0634 .0575 .0480	12.9602 -1.7962 .4899 .7560 0946	.0000 .0732 .6244 .4501	.3059 2387 0849 0580 0758	.4153 .0107 .1412 .1305 .0688
sizeofor	.0775	.0261	2.9717	.0031	.0262	.1287
**************OUTCOME VARI	**************************************	*****	******	*****	******	****
Model Summar	сĀ					
R .7188	R-sq .5167	MSE .2887		df1 6.0000	df2 423.0000	.0000
Model						
Model	coeff	se	t	р	LLCI	ULCI
constant	-2.0464	.2214	-9.2450	.0000	-2.4815	-1.6113
HPWPglob	.4744	.0228	20.7948	.0000	.4296	.5192
gender	0921	.0520	-1.7709	.0773	1944	.0101
age	.0105	.0472	.2234	.8234	0822	.1032
educatio	0218	.0393	5549	.5792	0991	.0555
workexpe	.0083	.0302	.2745	.7838	0510	.0676
sizeofor	.0108	.0214	.5047	.6140	0312	.0528
	****	*****	*****	****	* * * * * * * * * * * *	*****
OUTCOME VARI	IABLE:					
turnov						
Model Summar	^**					
R R	R-sq	MSE	F	df1	df2	n
.4234	.1793	1.7143	=	11.0000	418.0000	.0000
• 120 1	• 1 / 3 3	1.7110	0.3011	11.0000	110.0000	.0000
Model						
	coeff	se	t	р	LLCI	ULCI
constant	5.6395	.6001	9.3975	.0000	4.4599	6.8191
HPWPglob	3148	.0813	-3.8725	.0001	4746	1550
FinPerf	3010	.1192	-2.5241	.0120	5354	0666
NFinPerf	0499	.1431	3486	.7276	3311	.2314
LTO6tra	0132	.0706	1867	.8520	1520	.1256
Int 1	.1294	.1219	1.0617	.2890	1102	.3690
Int 2	2330	.1216	-1.9160	.0561	4720	.0060
gender	1339	.1279	-1.0472	.2956	3852	.1174
age	.0677	.1155	.5857	.5584	1594	.2947
educatio	.0279	.0962	.2897	.7722	1613	.2171
workexpe	2110	.0743	-2.8396	.0047	3570	0649
sizeofor	.0276	.0528	.5221	.6019	0762	.1314
Product term	_					
Int_1 :		rf x	LTO6tra			
Int_2 :	NFinF	erf x	LTO6tra			
Test(s) of X by M interaction:						
M1 *V (		.f1	df2	p		
	0541 1.00			162 288		
M2*X .2	2341 1.00	00 41/.	.62	400		
Test(s) of h	nighest order	uncondit F		ction(s):	n	
	0022 1.12		0000 418.00		р 2890	
	0072 1.12		0000 418.00		2890 0561	
vv . (	J.012 J.01	U.J.	JU.U.		, J U I	
_	redict: FinPe					

Data for visualizing the conditional effect of the focal predictor: Paste text below into a SPSS syntax window and execute to produce plot.

#### DATA LIST FREE/ FinPerf LTO6tra turnov BEGIN DATA. 3.9979 3.6530 -.7801 -1.0906 -1.0906 .0000 .7801 -1.0906 3.3081 -.7801 .0000 3.8734 3.6386 .0000 .0000 .7801 .0000 3.4038 -.7801 3.7489 1.0906 1.0906 .0000 3.6242 .7801 1.0906 3.4995 END DATA. GRAPH/SCATTERPLOT= FinPerf WITH turnov BY LTO6tra . Focal predict: NFinPerf (M2)

Mod var: LTO6tra (W)

Conditional effects of the focal predictor at values of the moderator(s):

LTO6tra	Effect	se	t	р	LLCI	ULCI
-1.0906	.2042	.2153	.9484	.3435	2190	.6275
.0000	0499	.1431	3486	.7276	3311	.2314
1.0906	3040	.1725	-1.7623	.0788	6430	.0351

There are no statistical significance transition points within the observed range of the moderator found using the Johnson-Neyman method.

Conditional effect of focal predictor at values of the moderator:

COMMICTORIAL	CIICCE OI IOCE	i preares	or ac varac.	O OI CIIC MO	acracor.	
LTO6tra	Effect	se	t	р	LLCI	ULCI
-4.5364	1.0071	.5994	1.6800	.0937	1712	2.1854
-4.2364	.9372	.5640	1.6615	.0974	1715	2.0459
-3.9364	.8673	.5288	1.6402	.1017	1721	1.9066
-3.6364	.7974	.4937	1.6152	.1070	1730	1.7678
-3.3364	.7275	.4588	1.5856	.1136	1744	1.6293
-3.0364	.6576	.4242	1.5502	.1218	1762	1.4914
-2.7364	.5877	.3899	1.5072	.1325	1788	1.3541
-2.4364	.5178	.3561	1.4540	.1467	1822	1.2178
-2.1364	.4479	.3229	1.3873	.1661	1867	1.0825
-1.8364	.3780	.2904	1.3017	.1937	1928	.9488
-1.5364	.3081	.2590	1.1896	.2349	2010	.8172
-1.2364	.2382	.2291	1.0396	.2991	2122	.6886
9364	.1683	.2014	.8356	.4039	2276	.5642
6364	.0984	.1769	.5562	.5784	2494	.4462
3364	.0285	.1572	.1814	.8562	2805	.3375
0364	0414	.1441	2872	.7741	3247	.2419
.2636	1113	.1396	7971	.4258	3857	.1631
.5636	1812	.1445	-1.2540	.2105	4652	.1028
.8636	2511	.1579	-1.5904	.1125	5614	.0592
1.1636	3210	.1778	-1.8048	.0718	6706	.0286
1.4636	3909	.2025	-1.9304	.0542	7889	.0071

Data for visualizing the conditional effect of the focal predictor: Paste text below into a SPSS syntax window and execute to produce plot.

### DATA LIST FREE/

DAIA TISI LVI	7E/	
NFinPerf	LTO6tra	turnov
BEGIN DATA.		
7675	-1.0906	3.4963
.0000	-1.0906	3.6530
.7675	-1.0906	3.8097
7675	.0000	3.6769
.0000	.0000	3.6386
.7675	.0000	3.6003
7675	1.0906	3.8575
.0000	1.0906	3.6242
.7675	1.0906	3.3909

END DATA.

GRAPH/SCATTERPLOT=

NFinPerf WITH turnov BY LTO6tra .

\*\*\*\*\*\*\*\*\*\* OIRECT AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*\*\*\*\*\*\*\*\*\*

Direct effect of X on Y

Effect se t p LLCI ULCI -.3148 .0813 -3.8725 .0001 -.4746 -.1550

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

HPWPglob -> FinPerf -> turnov

Effect BootSE BootLLCI BootULCI LTO6t.ra -.3127 -.2012 -.1728 .0756 -1.0906 -.1594 -.0206 -.1085 .0454 .0000 1.0906 -.0576 .0567 .0517

Index of moderated mediation:

Index BootSE BootLLCI BootULCI LTO6tra .0467 .0449 -.0393 .1373

\_\_\_

INDIRECT EFFECT:

HPWPglob -> NFinPerf -> turnov

LTO6tra Effect BootSE BootLLCI BootULCI
-1.0906 .0969 .1110 -.1210 .3208
.0000 -.0237 .0711 -.1641 .1197
1.0906 -.1442 .0810 -.3037 .0143

Index of moderated mediation:

Index BootSE BootLLCI BootULCI LTO6tra -.1105 .0607 -.2322 .0052

---

\*\*\*\*\*\*\*\*\*\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: The following variables were mean centered prior to analysis: LTO6tra FinPerf NFinPerf

NOTE: Standardized coefficients not available for models with moderators.

NOTE: Variables names longer than eight characters can produce incorrect output. Shorter variable names are recommended.

----- END MATRIX -----

# **Appendix 4- SPSS Output for Study 4**

```
Run MATRIX procedure:
 ******** PROCESS Procedure for SPSS Version 3.5 ************
                   Written by Andrew F. Hayes, Ph.D. www.afhayes.com
        Documentation available in Hayes (2018). www.quilford.com/p/hayes3
 ******************
 Model : 11
       Y : SQual
X : PartSaf
M : OCB
        W : LTO
        Z : AnThink
Covariates:
  Gender Age ProTenur OrgTenur
 Sample
 Size: 293
 ********************
 OUTCOME VARIABLE:
  OCB
Model Summary
            R R-sq MSE F df1 df2 p
,7145 ,5105 ,2566 26,6453 11,0000 281,0000 ,0000

        Model
        coeff
        se
        t
        p
        LLCI
        ULCI

        constant
        5,6624
        ,1459
        38,8050
        ,0000
        5,3751
        5,9496

        PartSaf
        ,1344
        ,0405
        3,3170
        ,0010
        ,0546
        ,2141

        LTO
        ,2135
        ,0543
        3,9290
        ,0001
        ,1065
        ,3205

        Int_1
        ,1062
        ,0480
        2,2135
        ,0277
        ,0118
        ,2006

        AnThink
        ,1481
        ,0511
        2,8972
        ,0041
        ,0475
        ,2487

        Int_2
        ,0481
        ,0508
        ,9467
        ,3446
        -,0519
        ,1481

        Int_3
        -,0579
        ,0528
        -1,0966
        ,2738
        -,1618
        ,0460

        Int_4
        ,2078
        ,0417
        4,9811
        ,0000
        ,1257
        ,2899

        Gender
        ,0902
        ,0611
        1,4755
        ,1412
        -,0301
        ,2105

        Age
        -,0444
        ,0670
        -,6637
        ,5074
        -,1763
        ,0874

        ProTenur
        ,1296<
Model
 Product terms key:
 Int_1 : PartSaf x LTO
Int_2 : PartSaf x AnThink
  Int_3 :
                                  LTO
                                                                    AnThink
                                   PartSaf x
  Int_4 :
                                                                    LTO x
                                                                                                     AnThink
 Test(s) of highest order unconditional interaction(s):
 R2-chng F df1 df2
X*W*Z ,0432 24,8109 1,0000 281,0000
                                                                                                      ,0000
        Focal predict: PartSaf (X)
                   Mod var: LTO
                                                      (W)
                   Mod var: AnThink (Z)
 Test of conditional X*W interaction at value(s) of Z:
      AnThink Effect F df1 df2 p
-,7802 -,0559 1,1015 1,0000 281,0000 ,2948
```

,0000	<b>,</b> 1062	4,8996	1,0000	281,0000	<b>,</b> 0277
,7802	<b>,</b> 2683	18,5570	1,0000	281,0000	,0000

Conditional effects of the focal predictor at values of the moderator(s):

	LTO	AnThink	Effect		se	t	р	LLCI
ULCI								
	-,7644	-,7802	<b>,</b> 1396	,0518	2,6943	,0075	<b>,</b> 0376	,2416
	-,7644	,0000	,0532	<b>,</b> 0557	,9562	<b>,</b> 3398	- <b>,</b> 0563	<b>,</b> 1628
	<b>-,</b> 7644	<b>,</b> 7802	<b>-,</b> 0332	,0843	<b>-,</b> 3936	,6942	<b>-,</b> 1992	<b>,</b> 1328
	,0000	<b>-,</b> 7802	,0969	,0518	1,8708	,0624	<b>-,</b> 0051	<b>,</b> 1988
	,0000	,0000	,1344	,0405	3,3170	,0010	,0546	,2141
	,0000	,7802	,1719	,0612	2,8094	,0053	,0515	,2924
	,7644	-,7802	,0541	,0774	,6985	,4854	-,0983	,2065
	,7644	,0000	,2156	,0536	4,0202	,0001	,1100	,3211
	,7644	,7802	,3770	,0701	5,3819	,0000	,2391	,5149

Moderator value(s) defining Johnson-Neyman significance region(s):

Value % below % above -1,0805 8,8737 91,1263 -,0599 45,3925 54,6075

Conditional X\*W interaction at values of the moderator Z:

CONTAICIONAI	7 W INCCIACCION	ac vai	.ucb of the	moderator 2.		
AnThink	Effect	se	t	р	LLCI	ULCI
-2,7349	-,4622	,1162	-3,9774	,0001	<b>-,</b> 6909	- <b>,</b> 2334
-2,5349	-,4206	,1086	-3,8719	,0001	-,6344	-,2068
-2,3349	-,3790	,1012	-3,7461	,0002	-,5782	<b>-,</b> 1799
-2,1349	-,3375	,0939	-3,5945	,0004	<b>-,</b> 5223	- <b>,</b> 1527
-1,9349	- <b>,</b> 2959	,0868	-3,4099	,0007	- <b>,</b> 4667	<b>-,</b> 1251
-1,7349	-,2544	,0799	-3,1828	,0016	-,4117	- <b>,</b> 0970
-1,5349	- <b>,</b> 2128	,0734	-2,9007	,0040	<b>-,</b> 3572	-,0684
-1,3349	- <b>,</b> 1712	,0672	-2,5482	,0114	-,3035	- <b>,</b> 0390
-1,1349	- <b>,</b> 1297	,0616	-2,1067	,0360	-,2508	- <b>,</b> 0085
-1,0805	- <b>,</b> 1183	,0601	-1,9684	,0500	- <b>,</b> 2367	,0000
- <b>,</b> 9349	-,0881	,0566	-1,5572	,1205	<b>-,</b> 1995	,0233
- <b>,</b> 7349	-,0465	,0525	- <b>,</b> 8871	<b>,</b> 3758	<b>-,</b> 1498	,0567
- <b>,</b> 5349	-,0050	,0494	-,1007	<b>,</b> 9199	-,1023	,0923
<b>-,</b> 3349	,0366	,0477	,7672	,4436	<b>-,</b> 0573	,1304
- <b>,</b> 1349	,0781	,0474	1,6500	,1001	-,0151	,1714
- <b>,</b> 0599	,0937	,0476	1,9684	,0500	,0000	<b>,</b> 1875
,0651	<b>,</b> 1197	,0485	2,4684	,0142	,0242	,2152
,2651	,1613	,0510	3,1629	,0017	,0609	,2616
,4651	,2028	,0547	3,7112	,0002	,0952	,3104
,6651	,2444	,0593	4,1231	,0000	<b>,</b> 1277	,3611
,8651	,2860	,0646	4,4234	,0000	<b>,</b> 1587	,4132
1,0651	,3275	,0706	4,6392	,0000	,1886	,4665
1,2651	,3691	,0770	4,7935	,0000	,2175	<b>,</b> 5206

Data for visualizing the conditional effect of the focal predictor: Paste text below into a SPSS syntax window and execute to produce plot.

DITTI DIOI LIG	J L /		
PartSaf	LTO	AnThink	OCB
BEGIN DATA.			
-,9624	-,7644	-,7802	5,4074
,0000	-,7644	-,7802	5,5418
<b>,</b> 9624	-,7644	- <b>,</b> 7802	5 <b>,</b> 6762
-,9624	-,7644	,0000	5 <b>,</b> 6407
,0000	-,7644	,0000	5 <b>,</b> 6919
<b>,</b> 9624	-,7644	,0000	5,7431
-,9624	-,7644	,7802	5 <b>,</b> 8739
,0000	-,7644	,7802	5,8420
,9624	-,7644	<b>,</b> 7802	5,8100
-,9624	,0000	- <b>,</b> 7802	5,6463
,0000	,0000	- <b>,</b> 7802	5 <b>,</b> 7395
<b>,</b> 9624	,0000	- <b>,</b> 7802	5,8328
- <b>,</b> 9624	,0000	,0000	5,7258
,0000	,0000	,0000	5 <b>,</b> 8551

```
,9624 ,0000 ,0000 5,9844
-,9624 ,0000 ,7802 5,8052
,0000 ,0000 ,7802 5,9707
,9624 ,0000 ,7802 6,1361
-,9624 ,7644 -,7802 5,8852
,0000 ,7644 -,7802 5,9373
,9624 ,7644 -,7802 5,9893
-,9624 ,7644 ,0000 5,8109
,0000 ,7644 ,0000 6,0183
,9624 ,7644 ,0000 6,2258
-,9624 ,7644 ,7802 5,7365
,0000 ,7644 ,7802 5,7365
,0000 ,7644 ,7802 6,0993
,9624 ,7644 ,7802 6,0993
,9624 ,7644 ,7802 6,4622
END DATA.
GRAPH/SCATTERPLOT=
  PartSaf WITH OCB BY LTO /PANEL ROWVAR= AnThink .
 ******************
OUTCOME VARIABLE:
  SQual
Model Summary
       R R-sq MSE F df1 df2 p
,7075 ,5005 ,3766 47,7673 6,0000 286,0000 ,0000
Model

        Model
        coeff
        se
        t
        p
        LLCI
        ULCI

        constant
        4,1909
        ,3863
        10,8496
        ,0000
        3,4306
        4,9512

        PartSaf
        ,4626
        ,0446
        10,3777
        ,0000
        ,3749
        ,5504

        OCB
        ,2974
        ,0598
        4,9742
        ,0000
        ,1797
        ,4151

        Gender
        -,1146
        ,0735
        -1,5588
        ,1201
        -,2593
        ,0301

        Age
        -,2505
        ,0802
        -3,1238
        ,0020
        -,4084
        -,0927

        ProTenur
        ,1613
        ,1344
        1,2003
        ,2310
        -,1032
        ,4257

        OrgTenur
        -,0514
        ,1352
        -,3802
        ,7041
        -,3175
        ,2147

Test(s) of X by M interaction:
           F df1 df2 p
6,1174 1,0000 285,0000 ,0140
 ******* OIRECT AND INDIRECT EFFECTS OF X ON Y **********
 Direct effect of X on Y
                                    se t p LLCI ULCI ,0446 10,3777 ,0000 ,3749 ,5504
        Effect se
             ,4626
Conditional indirect effects of X on Y:
INDIRECT EFFECT:
  PartSaf -> OCB -> SQual
                LTO AnThink Effect BootSE BootLLCI BootULCI 7644 -,7802 ,0415 ,0208 ,0078 ,0907 7644 ,0000 ,0158 ,0173 -,0142 ,0542 7644 ,7802 -,0099 ,0278 -,0621 ,0470 0000 -,7802 ,0288 ,0233 -,0044 ,0880 0000 ,0000 ,0400 ,0154 ,0161 ,0763 0000 ,7802 ,0511 ,0212 ,0147 ,0975 7644 -,7802 ,0161 ,0356 -,0428 ,1009 7644 ,0000 ,0641 ,0251 ,0237 ,1231 7644 ,7802 ,1121 ,0316 ,0556 ,1792
           -,7644
           -,7644
            -,7644
             ,0000
             ,0000
             ,0000
             ,7644
             ,7644
             ,7644
             Index of moderated moderated mediation
             Index BootSE BootLLCI BootULCI ,0618 ,0200 ,0238 ,1030
            Indices of conditional moderated mediation by W
         AnThink Index BootSE BootLLCI BootULCI - 7802 - 0166 0230 - 0630 0282
                                                         ,0230 -,0630
                                                                                                     ,0282
                                  -,0166
           -,7802
```

,0000 ,0316 ,0198 -,0050 ,0738 ,7802 ,0798 ,0273 ,0289 ,1361

---

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Level of confidence for all confidence intervals in output: 95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

W values in conditional tables are the mean and  $\pm$  SD from the mean.

 ${\tt Z}$  values in conditional tables are the mean and +/-  ${\tt SD}$  from the mean.

NOTE: The following variables were mean centered prior to analysis: LTO  $$\operatorname{AnThink}$$  PartSaf

NOTE: Standardized coefficients not available for models with moderators.

----- END MATRIX -----