



The Effects of Emotional Intelligence and  
Cultural Dimensions on  
Career Decision-Making Difficulties:  
A Sample from Mexico and Europe

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## **Abstract**

Every day, every moment, we make decisions that shape our lives entirely. But not all of them are of equal importance. Among many, the career decision is one of the most crucial and tricky, especially for young people that are going to experience for the first time such a fast-moving world of work. Difficulties involved in career decision-making process can be related to both external factors, such as culture, and internal factors, such as emotions. To better understand the influence of cultural dimensions and Emotional Intelligence (EI) in Career Decision Difficulties (CDD), this thesis involved experimental research with a heterogeneous sample of Mexican and European students. Results from bivariate correlations and mediations revealed a strong inverse relationship between three of the four main properties of EI and CDD. Furthermore, the mediation of cultural dimensions on CDD through EI was just partially supported, and no significant relations were found within culture and CDD. The results of this study have implications for multicultural organisations wishing to support the career development of their employees. Training in EI skills will lead to less indecisiveness in career decision-making and therefore more focused and committed people. Since some hypotheses were not fully supported due to some limitations, future research is suggested to improve the present findings.

**Title:** The Effects of Emotional Intelligence and Cultural Dimensions on Career Decision-Making Difficulties: A Sample from Mexico and Europe

**Author:** Stefano Tringali

**Keywords:** Emotional Intelligence, Use of Emotions, Individual differences, Culture, Career decision difficulties, National cultures

## Sumário

Todos os dias, em todos os momentos, tomamos decisões que moldam totalmente as nossas vidas. Mas nem todas têm a mesma importância. Entre muitas, a decisão de carreira é uma das mais cruciais e complicadas, especialmente para os jovens que vão experimentar pela primeira vez um mundo de trabalho em rápida evolução. As dificuldades inerentes à tomada de decisões de carreira estão relacionadas tanto com factores externos, como cultura, como com factores internos, como emoções. Para compreender melhor a influência das dimensões culturais e da Inteligência Emocional (EI) nas Dificuldades de Decisão de Carreira (CDD), esta tese realizou uma investigação experimental com uma amostra heterogénea de estudantes mexicanos e europeus. Os resultados das correlações bivariadas e das mediações revelaram uma forte relação inversa entre três dos quatro principais traços de EI e CDD. Além disso, a mediação das dimensões culturais na CDD através da EI foi apenas parcialmente apoiada e não foram encontrados efeitos significativos entre a cultura e as CDD. Os resultados deste estudo têm implicações para as organizações multiculturais que pretendem apoiar o desenvolvimento da carreira dos seus trabalhadores. A formação em competências de EI conduzirá a uma menor indecisão na CDD e, por conseguinte, a pessoas mais concentradas e empenhadas. Finalmente, uma vez que algumas hipóteses não foram totalmente confirmadas devido a algumas limitações relevantes do estudo, sugere-se a realização de investigação futura para melhorar os resultados actuais.

**Título:** Os Efeitos da Inteligência Emocional e das Dimensões Culturais nas Dificuldades de Tomada de Decisão de Carreira: Uma Amostra de Mexico e Europa

**Autor:** Stefano Tringali

**Palavras-chave:** Inteligência emocional, Utilização das emoções, Diferenças individuais, Cultura, Dificuldades de decisão de carreira, Culturas nacionais

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*Stefano*

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## List of Abbreviations

&	And
$\alpha$	Cronbach's alpha reliability
b	Unstandardise regression coefficient
CDD	Career Decision-making Difficulties
CDDQ	Career Decision-making Difficulties Questionnaire
CI	Confidence Interval
EI	Emotional Intelligence
H1	Hypothesis 1 (2,3 respectively)
M	Simple mean
N	Number of total cases
OEA	Others' Emotional Appraisal
p	p-value
r	Pearson correlation coefficient
ROE	Regulation of Emotions
SD	Standard Deviation
SE	Standard Error
SEA	Self Emotional Appraisal
UOE	Use of Emotions
WLEIS	Wong and Law Emotional Intelligence Scale

## **1 Introduction**

The decisions we make every day shape our entire lives. Career decisions are one of the most important since they can permanently guide our future. From the time we attend kindergarten, we are asked what we want to do when we grow up, and our answers, in most of the cases, change dramatically over the years. Going through the various stages of personal and professional growth, the college period is undoubtedly the most decisive in our career choice and the variables that condition it are multiple (Ran et al., 2022). The complexity of the numerous factors influencing career decisions has been a topic of great interest to scholars and researchers in such a fast-moving world of work (Albion & Fogarty, 2002).

Recent literature has highlighted the role of emotions in career decision-making processes, paying close attention to the importance of Emotional Intelligence (EI). EI refers to a structured system for classifying skills related to perceiving, handling, and applying emotions made popular by Goleman's (1995) book. EI has been studied as a fundamental variable in decision-making processes in general (Hess et al., 2011) and career-related ones in particular (Brown, George-Curran, & Smith, 2003). Several streams of research have analysed the impact of EI on career decision-making, and they have shown how Career Decision-Making Difficulties (CDD) are highly associated with personality, finding EI as the best predictor of low indecision, for both women and men (Di Fabio & Palazzeschi, 2009).

The way emotions are expressed and managed in various countries has been shown to be influenced by culture (Gunkel et al., 2014; Matsumoto, 1989). Culture has been compared to software in human minds, which is able to differentiate a large of group from another one (Hofstede, 1991). The software we host shapes every aspect of our reality and its multifaceted nature makes it a complex variable to explain, but historical frameworks such as Hofstede's one (1991) make it easier to analyse.

The focus of the current thesis was to work with a group of students coming from two quite different areas geographically and culturally, namely Mexico and four European countries (Portugal, Italy, France, and Germany). First of all, the goal was measure whether, in this heterogeneous sample, EI is significant inversely related to CDD. Furthermore, to evaluate whether EI can be considered as a mediating factor in the relationship between cultural dimensions and CDD, thus analysing direct or indirect relationships between cultural dimensions and CDD.

## **1.1 Problem Statement**

Due to the difficulties of young adults to establish their future career paths, I wanted to understand if EI can influence CDD within a heterogeneous sample of students from different countries through a survey-based approach. Additionally, studying whether EI can mediate the relation between cultural dimensions and CDD, I aimed also to analyse the direct and indirect relationships between culture and CDD. In the first part of the survey, I intended to evaluate the individual levels of EI following Wong and Law's (2002) EI definition and related scale (WLEIS). Furthermore, I wanted to study the CDD of respondents using Gati and Saka's (2001) questionnaire (CDDQ). Collecting demographic data such as age, gender, employment status, and in particular data about nationalities and current living country was crucial to assess each person's exposure to certain cultural dimensions. This latter data was inputted using Hofstede insights official website (Country Comparison Tool, n.d.), source of these secondary data which refers to Hofstede's (2001) cultural dimension index scores. In doing so, this research aims to contribute to the growing body of literature regarding not only the effects of EI on career decision-making but also cultural dimensions as variables able to influence both concepts. This poses the foundation for a better comprehension of career choices between students and how eventually develop their decision-making processes by training their EI.

Therefore, the present paper tries to answer the question: "How does cultural background impact EI, career-decision making difficulties, and their relationship, in a sample of university students from Mexico and European countries?" To address the identified problem statement, this study is focused on the following research question:

Does emotional intelligence mediate how culture dimensions impact career decision-making difficulties in a sample of Mexican and European students?

## **1.2 Academic and Managerial Relevance**

Most of the studies in previous literature focus on these variables separately. For example, some of them aimed to investigate the relations between EI dimensions and CDD through the mediation of other variables, such as self-efficacy (Santos et al., 2018; Ran et al., 2022). Previous studies were also focused on European students from one or two countries at a time (e.g., Di Fabio & Kenny, 2011; Di Fabio et al., 2013) or from Asian ones (Ran et al., 2022). Some others wanted to understand whether culture and its dimensions have a significant impact on how people show their emotions or how they make career decisions

(e.g., Gunkel et al., 2014). Thus, the relationships between these three dimensions were mainly studied two at a time, and whenever the cultural variable was absent, they concentrated on culturally homogenous samples. The novelty of the present research, instead, is to explore these three variables together with mediation analysis and also separately with bivariate correlations in a heterogeneous sample made of Mexican and European students. The present study contributes to the existing literature on EI, career decision-making, CDD, and cultural dimensions.

From the managerial side, by analysing the relationship between these variables, the dissertation will provide managers knowledge on university students' CDD, and subsequently, will lead managers to better understand EI's relevance on career choices and how diverse cultural backgrounds can lead to different career choices. Being aware of this information in multicultural teams can have an impact on the company. Organisations can use the insights gained from this research to recruit and identify candidates with high levels of EI since they will have less difficulties in recognising their more suitable career paths. By addressing the impact of EI and cultural dimensions on career decisions, firms can provide tailored support, such as mentoring and coaching, to help employees make conscious career choices that meet their personal and professional goals. Moreover, it can contribute by showing the importance of career counsellors being aware of their students' EI and CDD when supporting students' career decision-making processes and the relevance for schools and organizations to provide EI training opportunities.

### **1.3 Structure of the Dissertation**

The structure of this dissertation follows the classical structure of empirical research papers. The introduction has already defined the general topic, the problem statement, the research question, and its relevance. The rest of the paper is organised as follows: Chapter 2 presents a more in-depth analysis of the concepts that will be investigated in this research, postulating the research hypotheses. Chapter 3 defines the sample, describes the survey instruments used and explains the choice of method to analyse data and what was hypothesised. Chapter 4 shows the results, by assessing the scales and verifying their reliability, the characteristics of the sample, and testing the hypotheses to evaluate their significance. Chapter 5 presents a discussion of main conclusions, implications of this dissertation, limitations, and suggestions for future research. Finally, Chapter 6 offers the reader a brief conclusion.

## **2 Literature Review**

The present chapter aims to go over relevant literature for the formulated research question. Starting with an overview of emotional intelligence, followed by career decision-making difficulties and linkage with the first content, and finally, disclosing cultural dimensions and their relationships with emotional intelligence and career decision-making difficulties.

### **2.1 Emotional Intelligence (EI)**

EI has been recognised in recent decades as a key component of emotional regulation, individual well-being, social relationships, and general success in a wide range of contexts (Fernandez-Berrocal & Ruiz, 2008), and over the years various definitions have been developed. Overall, literature divide three different EI approaches: ability, multifactorial and trait approach.

In 1990, Salovey and Mayer identified EI as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (p.189). The model of Salovey and Mayer (1990) includes three categories of adaptive abilities: appraisal and expression of emotion, regulation of emotion, and utilization of emotions in solving problems. This was the very first definition of EI, which was then redefined in 1997 as the ability to perceive and articulate emotions, to use emotions in thinking, to comprehend and reason with emotions, and to regulate emotions in oneself and others (Mayer et al., 1997). The Mayer-Salovey concept of EI has been recognised in the literature as the ability model. In order to measure an individual's ability to perceive, understand, respond to, and manage emotional information, these authors built the Mayer-Salovey-Caruso EI Test (Mayer et al., 2002).

In contrast to the ability approach set out by Mayer and collaborators (2002), the multifactorial approach, known as the mixed approach, is the second conceptual framework for the EI construct. Mixed models describe EI as a concept that involves not only mental abilities (i.e., emotional self-awareness, empathy, problem-solving, impulse control) but also personality traits (e.g., genuineness, kindness; Sternberg et al., 2000) and these models are represented by Bar-On (2002) and Goleman (2001). According to Bar-On (2002), EI encompasses the emotional, personal, social, and survival dimensions of intelligence as impulse control, optimism, and stress tolerance. Bar-On Emotional Quotient Inventory (Bar-

On, 1997) assesses an individual's social and emotional strengths and weaknesses, including dimensions not directly related to EI, such as problem-solving and social responsibility.

Furthermore, Petrides and Furnham (2000) argued that the type of measurement defines the different EI models more than the concepts behind them. They developed a trait model of EI (or trait-emotional self-efficacy) as a group of self-reported assessments based on emotions and located at the lower levels of personality. Thus, their distinction is not connected to the ability model and the mixed model previously cited. These authors built the Trait EI Questionnaire (Petrides & Furnham, 2001), based on trait EI theory.

A review of the literature suggests that Salovey and Mayer's definition (1990) of EI is recognised and approved by most of the scholars around the world (Gayathri & Meenakshi, 2013) and the EI model applied in this research is closely related to their classical definition, further developed by Wong and Law (2002), as it also underlies scale used to measure EI.

Wong and Law (2002) provided a description of EI as a set of traits that include: a) self-emotional appraisal (SEA), b) others' emotional appraisal (OEA), c) emotion regulation (ROE), and d) emotion use (UOE), as abbreviated by the authors. According to these authors (Wong and Law, 2002), SEA refers to the ability to understand and spontaneously manifest one's own internal emotions; OEA refers to the ability to understand and be sensitive to the emotions of others; ROE concerns the skills involved in regulating one's emotions, such as managing one's mood or recovering quickly from a state of psychological distress; and UOE refers to the skill of harnessing emotions into performance and action.

Wong and Law (2002) theorized and designed the Wong and Law EI Scale (WLEIS), an EI measurement scale in organizational psychology. In line with the classical definition of EI by Mayer and Salovey, this scale has also been tested and retested in different cultures and for different demographics evidencing its validity. Given the proven reliability of the main EI scales in the literature, the WLEIS scale (Wong & Law, 2002) was chosen instead of Mayer-Salovey-Caruso EI Test (Mayer, Salovey, & Caruso, 2002) or Bar-On's one (1997), mainly due to the lower number of items (16 items vs. 141 of Mayer et al. and 133 of the Bar-on) and its use in previous studies that are highly comparable to the present one. In conclusion, WLEIS is one of the most famous and reliable scales related to the present research and it can provide an accurate overview of each individual's EI competencies.

In general, people with high degrees of EI can effectively use emotion regulatory strategies to generate beneficial emotions as well as to develop explicit emotional

knowledge of oneself and others (Mayer & Salovey, 1995). In contrast, people with low scores of EI are unable to adopt both antecedent- and response-focused emotion regulation effectively, and they have limited emotional growth (Wong & Law, 2002). However, people's EI is not immutable. Several researchers have argued that EI skills can be taught, trained and that individuals can enhance their competence in each of the four areas of EI (Penrose et al., 2007) Studies on how to change EI have shown notable positive differences in academic and work performance, dynamic leadership, and also workplace performance (Abraham, 2005).

### **2.1.1 Outcomes of EI**

The concept of EI revolves around understanding oneself and others, making connections with individuals, and effectively adapting to and managing environmental pressures (BarOn, 2002). This skill serves as an important indicator of success in various aspects of life, such as academic and professional achievement (Saarni 1999; Goleman 1995; BarOn, 2002), and supports personal well-being (Law, Wong, & Song, 2004).

Existing literature on EI examines one or more of the following four areas of research and objectives: 1) assessing the efficacy of various EI variables (e.g., Kerr et al., 2006), for instance demonstrating how EI acts as a predictor of leadership effectiveness; 2) Comparing EI scales and evaluating their reliability and legitimacy (e.g., O'Connor et al., 2019); 3) investigating the influence of EI on academic or professional performance and on general well-being, which includes both physical and mental health (e.g., Por et al., 2011), showing feelings of control and emotional competence assist students to adopt effective coping strategies when dealing with stress; 4) Examining the relationship between EI and other intelligence assessments or related variables (e.g., Santos et al., 2018).

As a result of this literature, several studies have verified the importance of EI as a useful resource in educational, occupational, and career-related settings (Stough, Saklofske, & Parker, 2009). For example, Carmeli (2003) found that EI influences positive work attitudes, altruistic behaviours, and work results. EI is also related to notable achievements in academic contexts, since high levels of EI are related to lower anxiety, stress, burnout, and to upper levels of life satisfaction (Cazan & Năstasă, 2003).

In closer connection with the present study, recent research has shown that EI has a significant and inverse influence on Career Decision-making Difficulties (CDD; Di Fabio et al., 2012; Di Fabio & Saklofske, 2014). In fact, lower levels of EI have been associated with

increases in CDD and its developing leads to less indecisiveness (Di Fabio & Palazzeschi, 2009). Emmerling and Cherniss (2003) argued that being able to manage one's own emotions is a crucial skill to predict emotional consequences due to a career path and avoid jobs that involve unpleasant responsibilities and tasks for them.

## **2.2 Career Decision Making**

Career theory often declares that a conscious process of deliberate career decision-making, including stages such as orientation, investigation, and engagement, is essential to achieve long-lasting career ambitions (Gati and Asher, 2001). Characteristics such as a well-developed vocational identity and well-calibrated personal interests have positive effects on the stability of career development generally and career interests more specifically (Holland, 1997).

Career decision-making models is usually described as a process with several stages or phases. For example, Germeijs and Verschueren (2006) developed the concept of career decision-making as a process of six consecutive tasks: 1) orientation to choice (i.e., awareness of the need to make a decision and motivation to engage in the career decision-making process), 2) self-exploration (i.e., understanding one's self interests, competences, and values), 3) exploration of the environment (i.e., career alternatives), 4) an in-depth exploration of the environment (i.e., details about a specific set of career alternatives), 5) decisional status, and 6) commitment. As another example, Gati and Asher (2001) described the career decision-making process as starting with 1) a broad screening of possible career alternatives, 2) an in-depth exploration of a few promising alternatives, and 3) a choice of the most appropriate career path.

The term career decision-making process in the current study is used in line with Gati and Asher 's (2001) definition as “the process people go through when they search for viable career alternatives, compare them, and then choose one” (p.7)

Career decision-making is an essential process since it determines the direction of a person's working life that may have a significant impact on their overall happiness and satisfaction (Lent & Brown, 2013). Making career choices can be extremely challenging due to some problems described by Campbell and Cellini (1981), which are: Challenges in career decision-making, obstacles to the effective implementation of career plans, difficulties in organizational performance, and finally, barriers to institutional adaptation. Approaching career decision-making with patience and developing skills such as EI has

proven to be a promising approach to better understand career decision-making processes and their difficulties (Emmerling & Cherniss, 2003).

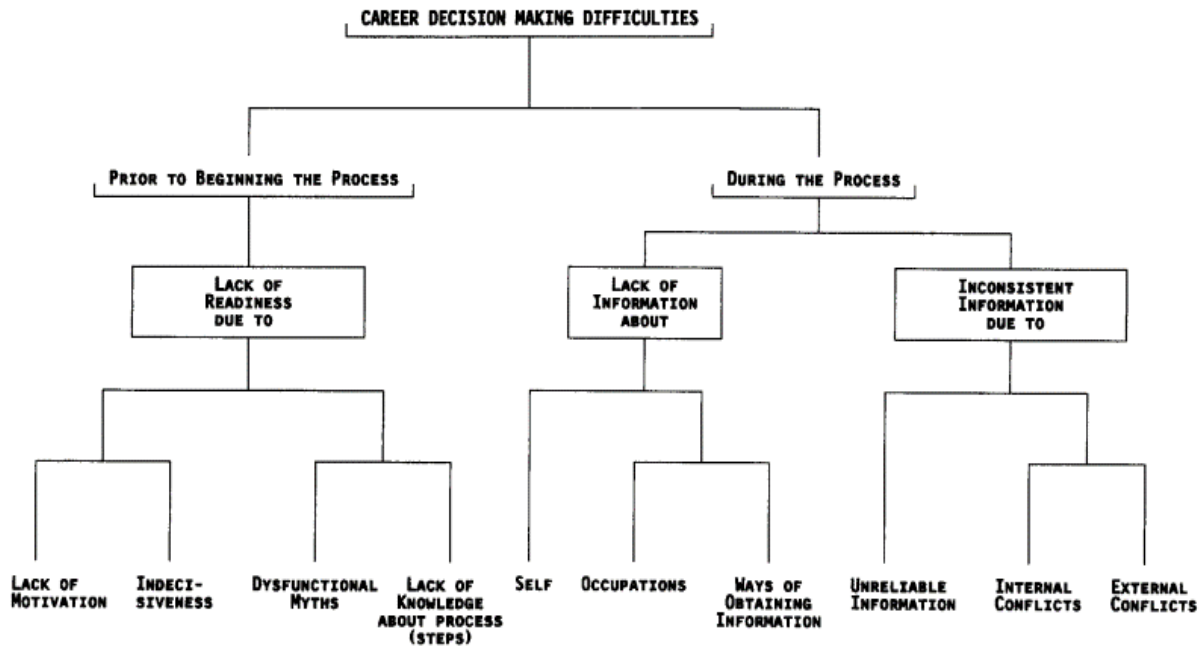
### **2.2.1 Career indecision and Career Decision-making Difficulties (CDD)**

A significant amount of research on career decision-making has focused on categorising the various aspects of career indecision. Tinsley (1992) identified two distinct research approaches, one theoretical and the other empirical, aimed at creating tools to identify career indecision (Di Fabio, 2012).

In 1996, Gati and collaborators introduced a taxonomy based on decision theory, which became crucial in studying processes and issues about career decision-making. Their work is centred on a model that takes into consideration the ideal career decision maker: a person conscious about their goals and resources and willing and able to make a career decision. All the possible divergences from the ideal career decision-making are considered as possible difficulties affecting this process. Individuals experiencing CDD can be categorised according to the nature of their challenges, allowing similar difficulties to be grouped together in the same category (Campbell & Cellini, 1981).

The mentioned taxonomy (Gati et al., 1996) uses a tree structure (see Figure 1) that distinguishes between two main categories of difficulties based on the timing of their occurrence: those that may precede the career decision-making process and those that may occur during the process itself. This taxonomy further includes three major categories of difficulties, divided into 10 sub-categories, to finally reach 44 specific difficulties. Lack of readiness is the first major category that contains three difficulty sub-categories leading the phase before the career decision: a) lack of motivation, b) general indecisiveness, and c) dysfunctional beliefs. Lack of information and inconsistent information are the other two major categories of CDD that may appear during the process. The first is related to four different sub-categories which involves lack of information or knowledge about: a) the career decision-making process, b) the self, c) the variety of occupations, d) how to obtain information. Lastly, the information is inconsistent due to three main sub-categories of difficulties: a) unreliable information, b) internal conflicts, and c) external conflicts.

Figure 1: The initial theoretical taxonomy of CDD (Gati et al., 1996)



To properly analyse their theoretical taxonomy, Gati et al. (1996) developed the CDD Questionnaire (CDDQ), and research has supported its reliability and validity (e.g., Albion & Fogarty, 2002; Kelly & Lee, 2002; Morgan & Ness, 2003). In 2001, Gati and Saka re-designed the CDDQ scale, to assess CDD, creating an abbreviated version with 34 items based on the same number of major categories and subcategories.

In the present study Gati and Saka's (2001) CDDQ scale was used, although alternative scales were feasible. For example, the General Decision-Making Style questionnaire designed in 1995 to assess how individuals approach decision situations and evaluating decision-making styles by Scott and Bruce (5 sub-scales and 25 items) or the Adult Decision-Making Competence created to describe how well individuals make decisions (7 sub-scales for a total of 87 items) are both highly reliable but not specifically related to career decision-making (de Bruin et al., 2007). CDDQ (Gati & Saka, 2001) was selected for this research since it is recognised as a more specific, reliable, and valid tool for assessing and diagnosing CDD across various cultural contexts (Santos et al., 2018), a relevant characteristic in the present study. The entire score of CDDQ provides information concerning the person's overall level of career indecision (Sovet et al., 2015).

### **2.2.2 Impact of EI on Career Decision-making**

In recent years, there has been a growing emphasis on recognising the importance of individual differences in the career decision-making process, as highlighted by Gati and collaborators (2011) and Savickas (2004). Research has also noted that understanding an individual's unique characteristics is essential to comprehend their approach to career decision-making (Gati et al., 2010). Considering this, numerous studies have explored EI as a critical new factor in the career decision-making process (e.g., Di Fabio & Blustein, 2010; Di Fabio & Kenny, 2011; Emmerling & Cherniss, 2003).

The career decision-making process is significantly influenced by emotions and, as such, the field of career development has increasingly recognised the importance of emotions in this context. However, the impact of emotions is often underestimated and overlooked (Emmerling & Cherniss, 2003; Young, 2010). Alongside cognition, emotions are an important determinant of career choice and behaviour (Kidd, 1998). Furthermore, Cooper (1997) found that individuals who trust and are guided by their emotions tend to have more successful careers.

According to Young and collaborators' (1996), everyone's emotions are linked to their goals, aspirations, and needs. These authors present three arguments to support the importance of emotions in career development, which are that those emotions: provide motivation for action, regulate action, and facilitate the formation of narratives about one's chosen career. Young and Valach (1996) also emphasise the link between emotions and career development, highlighting that self-awareness of emotions is a crucial aspect of constructing a career path.

In their work, Emmerling and Cherniss (2003) claim that people with high levels of EI have a greater awareness of their own career interests and values. Such individuals are able to effectively communicate these interests and values during career counselling sessions, while managing their emotions during the decision-making process (Emmerling & Cherniss, 2003). The authors suggest that those with EI can better predict the emotional consequences of different career choices, thereby avoiding job opportunities that involve unpleasant tasks and choosing options that lead to greater job and life satisfaction. As such, EI is a key factor in understanding the career decision-making process. Empirical research has examined the relationship between EI and several career decision-making variables, including CDD,

decision-making styles, and indecisiveness (Di Fabio & Blustein, 2010; Di Fabio & Kenny, 2011; Di Fabio & Palazzeschi, 2009).

All these studies have proven the relevance of EI as a variable in the career decision-making processes. For this reason, I could enrich the analysis by describing in detail studies that focus on the relationship of EI with CDD.

### **2.2.3 Narrow down to studies on EI and CDD with similar scales**

From the analysis of the literature, it has been found that difficulties in making career decisions are negatively correlated with EI (e.g., Di Fabio & Kenny, 2011; Di Fabio, Palazzeschi, & Bar-On, 2012). The research papers on EI and its relation to career decision-making that come closest to the present study due to the scales used are those by Santos and collaborators (2018) and Di Fabio with Palazzeschi (2008) as representative of Di Fabio's extensive work in these topics (e.g., Di Fabio et al., 2012; Di Fabio & Saklofske, 2014).

Santos et al. (2018) investigated the crucial role of emotions in career decision-making process through three main aims. First, they aimed to determine how ability-based EI and its various components influence CDD and career decision-making self-efficacy. Secondly, the study sought to investigate whether career decision-making self-efficacy plays a mediating role in the relationship between EI and its components and CDD and its primary categories. Finally, the study pointed to test the relevance of existing measures of EI, career decision-making self-efficacy, and CDD among university students in the UK. These authors used the Wong and Law (2002) scale to measure EI and the Gati and Saka (2001) questionnaire to measure CDD. Their findings highlight the relevance of ability-based EI in the process of career exploration and decision-making (Emmerling & Cherniss, 2003), such that ability-based EI is associated with fewer CDD.

As another example of previous studies relating EI with CDD, Di Fabio & Palazzeschi (2008), found that less EI is strongly associated with a greater lack of readiness, the first major category of CDD and the only one of the pre-decisional processes (Gati et al., 1996); a greater lack of information and its connected sub-categories; and a bigger inconsistency of information. Their research also reveals that the intrapersonal dimensions of EI, namely SEA, ROE, and UOE, of the Wong and Law (2002) scale used, explains the three major dimensions of CDD (Gati et al., 1996) emphasising the importance of emotions in the formation of a career.

According to Wong and Law's (2002) theory of EI, people who score high on SEA are more likely to have better awareness of their personal preferences and strengths. Santos and collaborators (2018) discovered that people with high SEA led to a more focused pursuit of knowledge and easy for them to make career decisions. In addition, they found that people with high UOE tend to be more driven to achieve their career goals and to use their emotions constructively in relation to their careers (Santos et al., 2018). Conversely, they did not investigate the link between ROE and CDD. In the current study, I wanted to study whether ROE is a significant dimension inversely associated with CDD because how much people are able to auto-regulate their emotions may shape their career decision-making processes. Furthermore, I aimed to verify if SEA and UOE are also important components of EI contributing to career decision-making process in the heterogenous population of my study. Santos and collaborators focused only on students coming from a large university in the United Kingdom, whereas I intended to test students from several universities, mainly in Mexico City, Lisbon, and Lyon. Thus, based on Santos and collaborators' study, the current dissertation advances the following set of hypotheses:

*H1: EI and CDD are inversely associated.*

*H1a: SEA is inversely associated with CDD.*

*H1b: ROE is inversely associated with CDD.*

*H1c: UOE is inversely associated with CDD.*

### **2.3 Culture definitions**

Every aspect of our societies has been infiltrated by different cultures. Culture influences our emotions, thoughts, and behaviours (Ford and Mauss, 2015). Typically, individuals acquire and encounter culture in their family, school, and work environments. However, the definition of culture is multi-faceted and varies depending on the source of information.

Anthropologists widely accept Kluckhohn's (1951) definition of culture as a set of patterned ways of thinking, feeling, and responding communicated through symbols, including traditional ideas and their associated values. Furthermore, Triandis (1972) draws a distinction between subjective culture and its expression in objective artifacts. He defines the former as the unique way in which a cultural group perceives the man-made components of its environment. The subjective idea of culture, with which Hofstede is closely associated,

(1980, p. 25) describes culture as “the collective programming of the human mind based on shared values that distinguish one group from another”.

In all the main culture descriptions there are many parallel characteristics: culture is a characteristic of a particular group, acquired through learning and often passed down through generations (Lowe et al., 2002). It has a profound influence on the basic thought processes of the group and encompasses the shared values and behaviours that they display, particularly under certain conditions (Lowe et al., 2002).

### **2.3.1 Hofstede’s Cultural Dimensions**

Out of the numerous definitions, the current research focused on Hofstede’s culture definition and their cultural dimensions. These dimensions received endorsements from managerial research, several studies support their solidity (e.g., Helmreich & Merritt, 1998; Jones & Alony, 2007), and, nowadays, they are one of the major descriptors of culture.

Hofstede (1991) developed the theory of cultural dimensions, a framework for multicultural communication that reveals the impact of culture on the values and behaviour of society’s members. Power distance, individuality vs. collectivism, masculinity vs. femininity, uncertainty avoidance, long-term vs. short-term orientation are the five dimensions that facilitate cross-cultural comparisons. In this theory, the power distance dimension measures the degree to which societies accept unequal distribution of power, for example, high power distance cultures are more hierarchical; the individualism vs. collectivism dimension defines the degree of networking in society, and more individualistic cultures value more personal goals than collectivistic ones; the masculinity vs. femininity dimension assesses how much emphasis cultures place on typically masculine traits like rivalry or feminine ones such as cooperation; the uncertainty avoidance dimension refers to the extent to which individuals in a culture perceive threats from ambiguity and have created customs and beliefs to avoid them; and the long-term vs. short-term dimension assesses the extent to which a culture prioritises long-term planning over short-term goals. In 2010, a sixth dimension was added in the 3<sup>rd</sup> edition of Hofstede’s book, the indulgence vs. restraint dimension, which reveals the extent to which a society allows for the satisfaction of basic human needs (Hofstede et al., 2010). Hofstede's theory of cultural dimensions provides a powerful structure for understanding how different cultures are affected and how they can influence organizational and individual behaviours. Culture can shape goals, decision-

making processes, reward systems, and much more, as it is our mental programming (Hofstede, 1980).

The dimensions described in the milestone book are representative of fundamental aspects of society and they first took into consideration differences in national cultures among more than 50 modern nations (Hofstede, 2001). It is important to note that the scores assigned to countries are relative and that the concept of culture can only be meaningfully applied through comparison (McSweeney, 2002) but the term culture is not synonymous with nation (Spencer-Oatey, 2005). Hofstede's framework provides a comprehensive approach to understanding cultural differences, enabling organisations to effectively manage diversity in the workplace, predicting why people behave as they do (Chiang, 2005). However, the framework also contains some limitations as it oversimplifies cultural differences by relying on national stereotypes, ignoring individual differences within cultures, as well as failing to account for cultural change over time and having inconsistencies between categories (Signorini et al., 2009).

There are several other ways to explore cultural characteristics beyond Hofstede's model. For example, the GLOBE model is a cultural framework (House et al., 2004) that extended Hofstede's six cultural dimensions to nine and measured each dimension twice: "as is" (practices) and "as should be" (values; Javidan et al., 2006). The Trompenaars-Hampden-Turner model highlights seven dimensions, including universalism versus particularism, individualism versus communitarianism, and achievement versus attribution (Hampden-Turner & Trompenaars, 1993). What distinguishes Trompenaars' approach is the focus on trans-cultural business management thanks to his wide experience in consulting. The Hall model, in contrast, emphasises communication styles as an important factor in cultural differences and identifies dimensions related to how people communicate in their culture (Hall, 1976).

As mentioned, Hofstede's cultural model was chosen in the present thesis as the primary descriptor of culture, mainly because it provides a widely accepted typology that is supported by the literature, offers a common language for researchers in management, psychology, sociology, anthropology, and marketing (Beugeldijk et al., 2016; Soares et al., 2007), and allows comparisons with previous research when interacting within or across disciplines (Gunkel et al., 2014).

### 2.3.2 Cultural dimensions and Emotional Intelligence

Hofstede's (2001) dimensions and index scores are fundamental for understanding and comparing the cultures of different countries and these dimensions have formed the basis for research on the influence of culture on emotions (e.g., Fernández-Berrocal et al., 2005; Matsumoto et al., 2007). Recent cross-culture research found relevant differences in the understanding and expression of emotion (Matsumoto et al., 2008) and I wanted to briefly present next the studies which directly focus on relationship between cultural dimensions and EI: Matsumoto (1989), Gunkel et al. (2014), and Taras, Kirkman, and Steel (2010).

The first article tests the effects of culture on the perception of emotion by analysing how Hofstede's dimensions of cultural variability are associated with emotions. These dimensions were then compared with three types of data regarding judgments of facial expressions in 15 different countries (Matsumoto, 1989). Their findings suggested that cultural differences in the perception of emotions indicate the need to conceptualise stable dimensions of to explain such differences. In the study conducted by Gunkel, Schlägel, and Engle (2014), the researchers surveyed a sample of 2067 individuals in nine countries applying a multi-country approach and found that cultural values, particularly in the dimensions of power distance, collectivism, uncertainty avoidance, and long-term orientation, had significant effects on EI.

Furthermore, according to Ang et al. (2007), an individual who demonstrates EI in one culture may not do so in another. This is because the norms and values of a culture determine what is considered important and thus affect the way emotions are perceived, identified, and used. In addition, the meta-analysis conducted by Taras, Kirkman, and Steel (2010) using data from 598 studies representing over 200,000 people and related to Hofstede's cultural dimensions provided support for the belief that cultural differences influence emotions at different levels. Thus:

*H2: Different cultural dimensions have different impacts in certain proprieties of EI.*

Different cultures have distinct approaches to expressing and perceive emotions, with power distance being an important factor (Matsumoto, 1998). High power distance cultures tend to place less importance on self-emotions and prioritise emotional control at an individual level and this can lead to the suppression of emotions, SEA (Matsumoto et al., 2008). Furthermore, studies have shown that individuals in cultures with lower power distance tend to be more tolerant and observant of others' emotions than those in cultures

with higher power distance (Miao et al., 2018). Respect for hierarchy and deference to authority figures is more prevalent in these cultures (Hofstede, 2001), which may affect individuals' willingness to question their own emotions or those of authority figures. Therefore, as demonstrated by Gunkel and collaborators' (2014), people in high power distance cultures may regulate their emotions (ROE) to conform to social norms or authority figures and suppress self-emotions, thus:

*H 2.1a: Power distance is positively related with ROE.*

*H 2.1b: Power distance is negatively related with SEA.*

Matsumoto et al (2008) found that collectivistic cultures tend to suppress emotions more than individualistic cultures (SEA). Furthermore, Gunkel and collaborators' (2014) results show that, in collectivistic countries, people are better able to channel their emotions in beneficial ways that affect not only the individual (ROE and UOE) but also the group, since people tend to look more after others (OEA). Thus:

*H 2.2a: Individualism is positively correlated with SEA.*

*H 2.2b: Individualism is negatively correlated with ROE, OEA, and UOE.*

More feminine cultures show greater emotional expression than masculine ones (Paez and Vergara, 1995) while Hofstede (2001) states that in more masculine cultures, emotions are less regulated than in more feminine cultures. I considered the latter statement due to the reference author and more recent study. Therefore, a positive correlation between masculinity and UOE is plausible. In cultures that prioritise femininity, people tend to emphasise positive emotions (Basabe et al., 2000), which could find a relation with ROE. In contradiction with what Gunkel and collaborators (2014) hypothesised, masculinity was positively related to OEA and for the other EI's properties was found limited support, thus:

*H 2.3a: Masculinity is positively correlated with UOE and OEA.*

*H 2.3b: Masculinity is negatively correlated with ROE.*

High uncertainty avoidance cultures tend to express their emotions openly and clearly (Palmer et al., 2008; Sharma et al., 2009) and overall, it may have a negative impact on ROE. According to Hofstede (2001), expressing emotions is considered acceptable in such cultures as it can reduce anxiety levels, which may be positively correlated with SEA and UOE. Schimmack (1996) revealed that high uncertainty avoidance cultures are more

effective to recognise the correct emotion, so OEA, but Gunkel et al. (2014) did not find a strong support therefore I avoid this hypothesis. Thus:

*H 2.4a: Uncertainty avoidance is positively correlated to SEA and UOE.*

*H 2.4b: Uncertainty avoidance is negatively correlated to ROE.*

In a study conducted by Matsumoto and colleagues in 2007, they found evidence that people with a long-term orientation tend to be less emotionally expressive. Long-term-oriented cultures are focused on building relationships (Hofstede, 2001). In relation to long-term orientation, Gunkel et al. (2014) found strong positive connections between long-term orientation countries and the following three EI dimensions hypothesized.

*H 2.5: Long-term orientation is positively correlated to SEA, OEA and UOE.*

### **2.3.3 Impact of Culture on Career Decision-making**

Decision-making processes are quite different across different cultures (Thomas, 2008) and this explains why culture has an influence on career decision-making (Mau, 2001). Several studies have shown that cultural dimensions significantly influence the factors that impact career choices (e.g., Mau, 2004; Wambu et al., 2017; Hui and Lent, 2018; Tao et al., 2018). The results found in another study by Gunkel and collaborators' (2013) show that national culture has a significant effect on career planning. Research suggests that differences in young people's career decisions can be explained mainly by individualistic and collectivist dimensions (Mau, 2004; Amit and Gati, 2013; Sinha, 2014). Implying that this specific cultural dimension plays a crucial role in shaping young people's career choices (Akosah-Twumasi et al., 2018). Following the focus of literature on individualism, I aimed to investigate principally this dimension in relation to career decision-making.

In cultures that emphasise individualism, young people base their career decisions on a combination of intrinsic factors such as personal interests and self-efficacy, extrinsic factors such as job security and high salaries, and, to a lesser extent, interpersonal factors such as parental guidance (Mau, 2004, as cited in Akasoah-Twumasi et al., 2018). These cultures encourage young people to make their own career choices, to prioritise careers that provide higher earnings and match their aims (Wüst & Leko Šimic, 2017; Polenova et al., 2018). Conversely, in cultures that prioritise collectivism, young people are primarily influenced by factors, such as meeting parental and societal expectations, attaching importance to

significant others' opinions, and following prescribed career paths (Sawitiri et al., 2014), and extrinsic factors, such as pursuing admired careers (Mau, 2000; Gunkel et al., 2013). In contrast, young people in individualistic cultures tend to prioritise careers that offer higher income and match their personal interests (Mau, 2004). It has been hypothesized that people of an individualistic culture would be less likely to report CDD than people of a collective culture (Akasoah-Twumasi et al., 2018). To set the last hypotheses, I wanted to test whether, on the whole cultural dimensions are connected to CDD and, from literature, whether individualism is negatively correlated with CDD, thus:

*H 3.1: Cultural dimensions are directly/indirectly correlated with CDD.*

*H 3.2: Individualism is negatively correlated with CDD.*

### **3 Method**

This chapter explains the research methodology used to test the previously proposed hypotheses. Firstly, there is a general overview of the participants involved in this study, followed by a description of the procedure used and a complete explanation of how each variable was measured to assess the relationship between them.

#### **3.1 Participants**

At the very beginning, 178 answers from university students were collected for this study. Participants in the survey were from culturally different environments. Composed mainly of university students, as was aimed, the research respondents mainly came from three universities: ITAM - Instituto Tecnológico Autónomo de México, Católica-Lisbon School of Business and Economics, and IEP - Institut d'Etudes Politiques, Lyon. Overseas students joined the study thanks to the support of local professors. Students aged 20 to 25 were the target segment since they are living this crucial phase of life, remarkably close to a career choice and developing certain soft skills (e.g., EI) that will guide them to all the next stages of their lives.

Data collection occurred between the dates of April 22<sup>nd</sup> and May 1<sup>st</sup>. Attention check, in which a specific number had to be selected in the middle of the questionnaire, and validity items included already in CDDQ scale were used to guarantee sufficient attention to the questions as further explained in section 4.1.

The total final sample was composed of 121 (57% female, 43% male) participants. Their age ranged from 18 to 59 years ( $M_{\text{age}} = 23$ ,  $SD_{\text{age}} = 4.64$ ) and most of the students were Bachelors (53%) or Masters (23%). Respondents' nationalities were spread around 16 countries, however Mexico (33%), Portugal (21%), France (16%), Italy (12%) and Germany (8%) were the most represented. In terms of living countries, 39% of the sample lived in Mexico and 36% in Portugal, the rest was divided between France (12%) and other European countries (13%). Most of the participants lived in the same country they were born ( $n = 92$ ). See Appendix 2 for more details on population statistics.

### **3.2 Materials and Variables**

The full survey can be found in Appendix 1.

#### **Emotional Intelligence**

To quantify the level of EI, the Wong and Law EI scale (WLEIS; 2002) was chosen, which comprises the following four distinct properties: 1) self-emotional appraisal (SEA), 2) others' emotional appraisal (OEA), 3) regulation of emotion (ROE), and 4) use of emotion (UOE). EI scale is comprised of 16 items, with four items for each property. The responses of the WLEIS are made on a 7-point Likert-like scale from 0 (*totally disagree*) to 6 (*totally agree*). All the scores for each of 16 items are summed up to obtain the EI total score. The reliability of the entire scale observed in the Wong and Law study was  $\alpha = .88$ . The Cronbach's  $\alpha$  reliability for the subscales was .79, .76, .83, and .86 for SEA, OEA, ROE, and UOE, respectively. The WLEIS was specifically designed as a short measure of EI for use in organizational and behavioural research. Prior studies also showed good measurement invariance of the measure across countries (e.g., Gunkel et al., 2016; LaPalme et al., 2016; Libbrecht et al., 2014).

#### **Career Decision-Making Difficulties**

For the career decision-making variable, Gati and Saka's (2001) questionnaire (CDDQ) was chosen. The objective of the scale is to assess the difficulties in the career decision-making processes and the entire score of the CDDQ provides information concerning the person's overall level of career indecision (Sovet et al., 2015). The original CDDQ was initially developed by Gati et al. (1996) to test their theoretical taxonomy of CDD and it consisted of 44 items. It can be conceptualised as a hierarchical model consisting of three overarching major categories: 1) lack of readiness, 2) lack of information, and 3) inconsistent information, and including ten total subcategories, deeply described in the literature review.

Confirming the taxonomy of 10 categories of CDD, Gati and Saka (2001) revised and reduced the CDDQ to 34 items using a 9-point reaction scale from 1 (*does not describe me personally*) to 9 (*explains me well*), which is applied in the current paper. In their research, Gati and Saka (2001) found diverging Cronbach's  $\alpha$  reliabilities of the 10 sub-categories scores, ranging from .40 for the scale of dysfunctional beliefs to .82 for external conflicts. Among the three major categories, lack of readiness had, in the original study, the lowest reliability (.62); the reliability of the two other major categories was higher (.88 for lack of information, and .87 for inconsistent information). The reliability of the overall questionnaire score was .91 (Gati & Saka, 2001).

### Cultural Dimensions

Hofstede (2001) proposed a compact method for analysing human culture, arguing that a limited number of cultural dimensions influence different facets of social behaviour and thought. Therefore, Hofstede's five cultural dimensions were used as external research data to test how cultural differences are reflected in different levels of EI and CDD. Power Distance, Individualism, Masculinity, Uncertainty avoidance, and Long-term orientation are the dimensions used in my analysis, the dimension of Indulgence was not included since it is the most recent dimension (Hofstede, 2010), and therefore there was a lack of available data. Using Hofstede Insights' website (Country Comparison Tool, n.d.), I was able to impute the five cultural dimensions at national level to each individual participant in a scale from 0 to 100. Table 1 lists the main five nationalities in the present study and their cultural values.

*Table 1: Hofstede Cultural Dimensions per country*

Countries	Cultural Dimensions				
	Power Distance	Individualism	Masculinity	Uncertainty-Avoidance	Long-Term Orientation
Mexico	81	30	69	82	24
Portugal	63	27	31	99	28
Italy	50	76	70	75	61
France	68	71	43	86	63
Germany	35	67	66	65	83

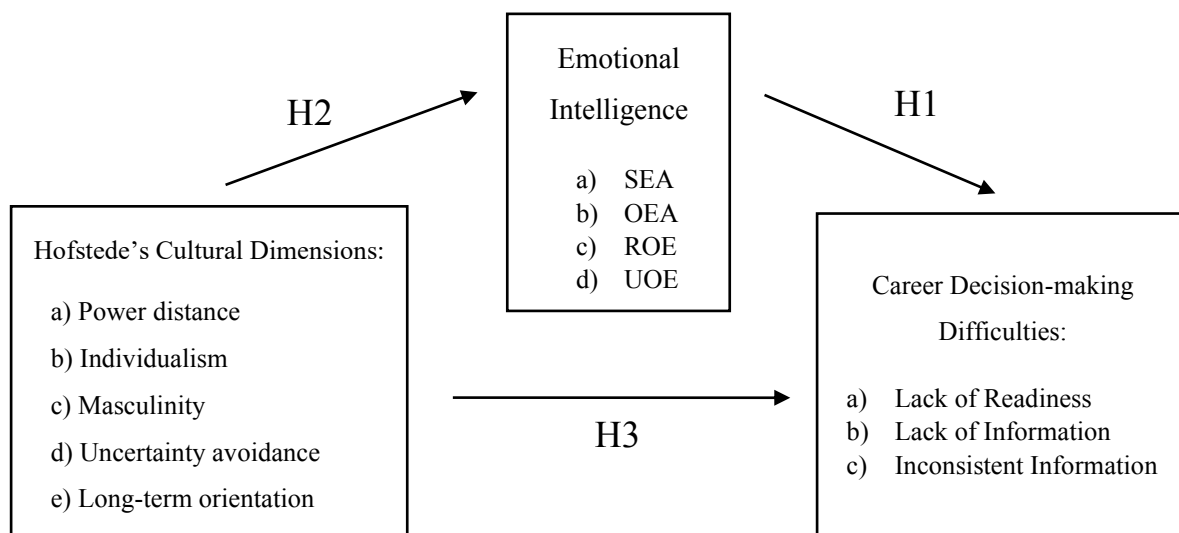
### 3.3 Survey Delivery and Procedure

To collect data for the present study, an online survey was generated using Qualtrics software and mainly shared through academic pathways rather than on social media platforms (e.g., Instagram, WhatsApp, LinkedIn, and email) since I aimed to study mainly university students from different cultures. The median time to fill out the full questionnaire was 9.60 minutes. In the first block, applicants were informed about the objectives and procedure of the task, as well as their rights as participants. They were also informed regarding confidentiality rights and were asked for their consent before beginning with the study.

Moving forward, participants were first requested to fill out the 16 items of Wong and Law (2002) questionnaire (WLEIS). In the next four blocks, participants completed the 34 items, around 9 per block, according to the CDDQ provided by Gati and Saka (2001). Each item of the two scales, WLEIS and CDDQ, was carefully randomized to prevent order effects. Finally, participants answered demographic questions, with some being strongly relevant to this research, namely: age, gender, country of birth, the current country, since when they are living there, and employment status.

Figure 2 provides the conceptual model to better understand how the three main variables are related in the present paper, considering that H1, H2, H3, and their sub-hypotheses connect specific dimensions at a time. To verify H1 and H3, correlation analysis was done obtaining the significance and strength of their interactions. H2, instead, was analysed as part of the whole mediation analysis. Knowing that mediations would describe the entire picture, including somehow H1 and H3, I wanted to focus on some sections because I deemed, from literature, they deserved more emphasis and awareness.

Figure 2: Conceptual Model



## 4 Results

The following chapter will focus on the results of the quantitative research analysed using IBM SPSS Statistics (Version 28).

### 4.1 Data Cleaning and Preparation

A total of 178 questionnaires were initiated. Furthermore, the completeness of the survey was checked, and 39 participants did not complete it, so I had to drop them from the analysis. Additionally, 11 more answers were excluded for not passing the attention check item where the number “8” had to be selected. Furthermore, Items 7 and 12 of CDDQ are considered validity items, specifically, the rating of the first validity item (“I like to do things my own way”) was expected to be at the upper end of the response scale, whereas the rating of the second validity item (“I always do what I am told to do, even if it is against my will”) is expected to be at the lower end of the response scale. These validity items were used to locate low quality responses therefore I had to delete in total 7 participants for not passing these validations. At the end, I could work with a sample of 121 people.

### 4.2 Scale assessment

Although EI and CDD scales have been previously validated in literature, it is still necessary to assess their reliability considering the sample under analysis. Since all items in the two scale were all positively worded, no reverse coding was necessary. In relation to the EI Scale (WLEIS), I first ran a factor analysis to verify the factorial structure of these measures and their suitability for the current sample reducing them to four factors, corresponding to SEA, OEA, ROE, UOE, which explained 72% of the total variance. Thus, I calculated the mean total score of EI, as well as the means of the four EI factors (see Appendix 8 for EI factorial analysis). On average, participants rated their score of EI  $M_{EI} = 20.37$  ( $SD_{EI} = 3.00$ ).

In relation to CDDQ, the factor analysis aimed to extract 10 factors, one for each subcategory of the scale, knowing that they are grouped into three major categories: lack of readiness, lack of information, and inconsistent information. Trying to extract only three factors the total variance explained was just 45% which is below the minimum the acceptable level of 60% (Hair et al., 2009). The analysis with 10 factors explained 74% of the total variance but issues were found. Items 18 of lack of information and item 32 of inconsistent information were deleted because their factor loadings have similar values in different factors

columns. This choice was made in line with literature (Santos et al., 2018), where six items were removed due to low standardized factor loadings. Moreover, loadings were relevant ( $>.5$ ) only in seven factors instead of 10, so I had to merge the sub-categories belonging to same factors. To calculate each of the three categories I found the means considering their subcategories, whether modified or not. For example, lack of information, which originally counted four subcategories and 12 items, in this case is made of two merged subcategories (stages of career decision-making process plus self and occupations plus way of obtaining information) and 11 items due to the factor analysis' findings. The resulting modified categories of CDD were thus adopted in the subsequent bivariate correlations but not in the mediation analyses because only in the first case I used and analysed the different categories. Additionally, testing bivariate correlations with the full scale or the mediations with modified total score of CDD no significant differences were found. See Appendix 9 for CDDQ factor analysis. The total modified score of CDD ( $M_{\text{modCDD}} = 4.43$ ;  $SD_{\text{modCDD}} = 1.25$ ) was the mean of the new seven sub-categories while the total score of CDD ( $M_{\text{CDD}} = 4.29$ ;  $SD_{\text{CDD}} = 1.36$ ) used in the mediations was the mean of all the 10 sub-categories (Gati & Saka, 2001).

### **4.3 Scale reliability**

To measure the internal consistency between the items in the scales, a Cronbach's  $\alpha$  test was conducted, and its quality was assessed based on the guidelines proposed by Vale and collaborators (1997), where a Cronbach's  $\alpha$  coefficient between .7 and .8 is considered satisfactory and a coefficient above .9 is considered as excellent. Only in a case was considered acceptable a coefficient lower than .7 (Griethuijzen et al., 2014).

For WLEIS, Cronbach's  $\alpha$  for the entire scale was .85, for its four major properties, SEA, OEA, ROE, and UOE, it was .87, .84, .88, .81, respectively. Each of them counted four items for a total of 16.

CDDQ Cronbach's  $\alpha$  for the entire scale was .92. The first category, lack of readiness, counted 10 items and had a reliability of .60, which is just .02 less than the original reliability found by Gati and Saka (2001) in this category, and still considered acceptable (Griethuijzen et al., 2014). Modified lack of information with 11 items (instead of 12) had a reliability of .92 and modified inconsistent information with 9 items (instead of 10) had an  $\alpha$  of .88.

In conclusion, apart from lack of readiness, all the constructs had Cronbach's  $\alpha$  above 0.8, meaning that they are reliable enough to predict the variables and proceed with the data analysis. See Appendix 3 for Cronbach's  $\alpha$ , quality and number of items of each scale.

## 4.4 Hypothesis testing

### 4.4.1 Correlational hypotheses

Hypotheses H1 and H3 were addressed using bivariate correlations (see Table 3 for the bivariate correlations between EI and CDD). I found that the relationship between EI and the modified CDD was significantly and negatively associated ( $r = -.38, p < .001$ ), thus supporting H1. Furthermore, the relationship between SEA and CDD was also significant ( $r = -.33, p < .001$ ), thus supporting H1a, as was the one between ROE and CDD ( $r = -.19, p < .05$ ), and UOE also displayed a significant correlation with CDD ( $r = -.43, p < .001$ ), thus supporting H1b and H1c.

Table 2: Bivariate correlations between EI and CDD

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 SEA	5.15	1.09	-								
2 OEA	5.43	0.97	.19*	-							
3 ROE	4.64	1.27	.25**	.095	-						
4 UOE	5.15	1.18	.45**	.21*	.31**	-					
5 EI	20.37	3.00	.71**	.51**	.67**	.75**	-				
6 LOR	4.90	1.08	-.25**	-.075	-.26**	-.41**	-.39**	-			
7 Mod LOI	4.34	1.82	-.28**	-.048	-.17	-.36**	-.33**	.55**	-		
8 Mod II	3.81	1.71	-.30**	.033	-.08	-.31**	-.25**	.42**	.75**	-	
9 Mod CDD	4.43	1.25	-.33**	-.035	-.19*	-.43**	-.38**	.77**	.92**	.86**	-

Note. \* $p < .05$ , \*\* $p < .01$ , two-tailed.  $N = 121$ . SEA = self-emotional appraisal; OEA = other emotion appraisal; ROE = regulation of emotion; UOE = use of emotion; EI = Emotional Intelligence score; LOR = Lack of Readiness; Mod LOI = Modified Lack of Information; Mod II = Modified Inconsistent Information; Mod CDD = Modified Career Decision-making Difficulties score.

To test H3.1, which assumed that cultural dimensions have a correlation with CDD I used bivariate correlations. As well as to test H3.2, that specifically supposed a negative correlation between individualism and CDD. Individualism and any other dimension were not significantly correlated with CDD; therefore, I found no support for H3.1 and H3.2. See Appendix 7 for the correlations between cultural dimensions and CDD.

Observing the bivariate correlation tables (see Appendix 4), some curious information was found. First of all, the significant and positive correlation between gender and EI ( $r = .29, p < .001$ ), thus males had higher EI. People from Mexico were positively correlated with ROE

( $r = .21, p < .015$ ) while France negatively ( $r = -.22, p < .02$ ). People with Master's degrees had significantly higher CDD ( $r = .18, p < .05$ ), and also the relationship between Master students and lack of readiness was significant and positive ( $r = .22, p < .02$ ). The appendices contain more detailed about the descriptive statistics and bivariate correlations between demographics and EI (Appendix 4), demographics and CDD (Appendix 5), EI and cultural dimensions (Appendix 6), cultural dimensions and CDD (Appendix 7).

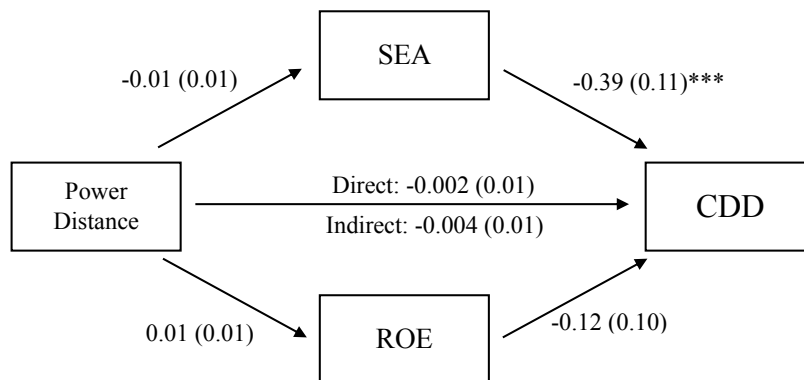
#### 4.4.2 Mediation Analyses

To test the second group of hypotheses, which aimed to verify the correlation between cultural dimensions and EI, mediation analyses were ran. They tested overall whether EI mediated the relationship between cultural dimensions and the score of CDD containing all the items. In doing so, H3.1 and H3.2 were also checked. Therefore, a statistical analysis was conducted using the bootstrapping approach PROCESS macro for SPSS (Hayes, 2018). The macro is based on regression-path analyses to reveal mediation effects using a bootstrapping approach (Hayes, 2018) and the appropriate model for the mediation analysis is the number 4. In this model, I assumed that the effects of culture and its dimensions (independent variable) upon CDDs (dependent variable) operate through the mediation of EI properties. Specifically, for each cultural dimension, I hypothesised the mediation of specific traits of Wong and Law's EI model (2002). For the following hypotheses, PROCESS macro was employed with 95% confidence intervals based on a bootstrap sample of with 5,000.

In the first mediation, power distance was the predictor, SEA and ROE were the parallel mediators, and CDD was the outcome variable (see Figure 3 for the model). There was no significant mediation of SEA,  $b < 0.01, SE = 0.003, 95\% CI [-0.003, 0.008]$ , and no significant mediation of ROE,  $b = -0.001, SE = 0.001, 95\% CI [-0.005, 0.001]$ , thus the mediation hypotheses were not supported.

Furthermore, as can be seen in Figure 3, only SEA was a significant predictor of CDD. Therefore H2.1b and H2.1a, which included power distance in relation with ROE and SEA were not supported while the mediation between power distance and CDD through SEA was partially supported, since there was a link between SEA and CDD. See Appendix 10.1 for the entire PROCESS mediation 1.

Figure 3: Mediation 1- Parallel double mediation of power distance on CDD through SEA and ROE.

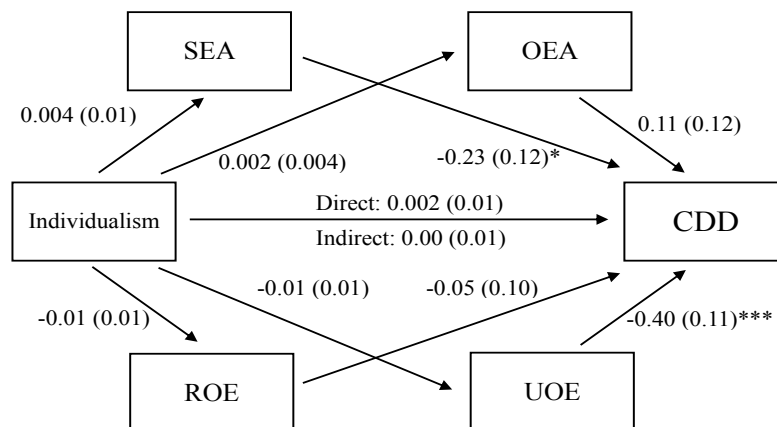


Note. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . SEA = Self-emotional appraisal; ROE = Regulation of emotions; UOE = Use of emotions; CDD = Career Decision-making Difficulties

In the second mediation analysis, individualism was the predictor variable, all EI traits were parallel mediators, and CDD was the outcome variable. The mediation model can be found in Figure 4. There was no mediation of SEA,  $b = -0.001$ ,  $SE = 0.001$ , 95% CI [-0.004, 0.001], OEA,  $b < 0.01$ ,  $SE = 0.001$ , 95% CI [-0.001, 0.002], ROE,  $b < 0.01$ ,  $SE = 0.001$ , 95% CI [-0.002, 0.003], and UOE,  $b < 0.01$ ,  $SE = 0.002$ , 95% CI [-0.002, 0.007], thus these mediation hypotheses were not supported.

Moreover, UOE was a significant predictor of CDD and SEA had a marginal significance level ( $b = -0.23$ ,  $SE = 0.12$ ,  $p = .06$ ). In one hand, H2.2a and H2.2b which reference the relationship between individualism with EI's properties were not supported. On the other hand, the mediations between individualism and CDD through SEA and UOE were partially supported as these dimensions of EI were related to CDD. Lastly, the absence of any type of significant relationship between individualism and CDD not supported also H3.2. See Appendix 10.2 for the entire PROCESS mediation 2.

Figure 4: Mediation 2 - Parallel quadruple mediation of individualism on CDD through SEA, ROE, OEA, and UOE.

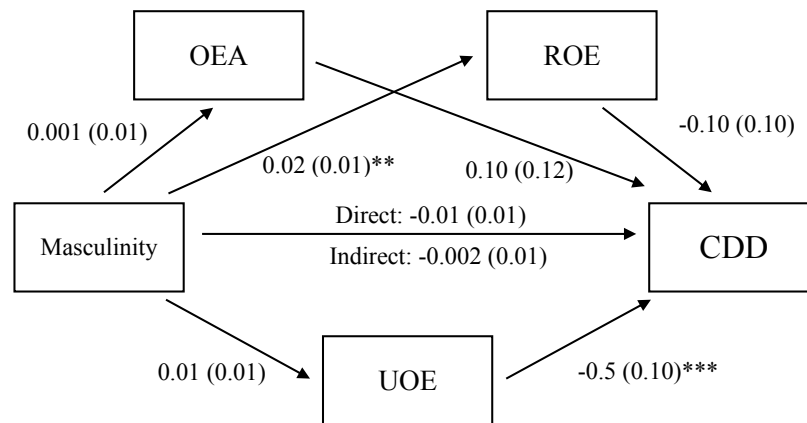


Note. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . SEA = Self-emotional appraisal; OEA = Others emotional appraisal; ROE = Regulation of emotions; UOE = Use of emotions; CDD = Career Decision-making difficulties

In the third mediation, masculinity was the predictor variable, OEA, ROE, UOE were the parallel mediators, and CDD was the outcome variable. The mediation model can be found in Figure 5. There was no support for the mediation hypotheses of OEA,  $b = 0.000$ ,  $SE = 0.001$ , 95% CI [-0.002, 0.002], UOE,  $b = -0.005$ ,  $SE = 0.004$ , 95% CI [-0.013, 0.001], and ROE,  $b = -0.001$ ,  $SE = 0.001$ , 95% CI [-0.006, 0.002]).

Figure 5 describes the third mediation. A positive relationship between masculinity and ROE was found ( $p = .015$ ) instead of the assumed negative one, thus H2.3b was rejected. In addition, since only UOE was a significant predictor of CDD in this case, the mediation between masculinity and CDD through UOE was partially supported. Both H2.3a and H2.3b were rejected. See Appendix 10.3 for the entire PROCESS mediation 3.

Figure 5: Mediation 3 - Parallel triple mediation of masculinity on CDD through UOE, ROE, and OEA.

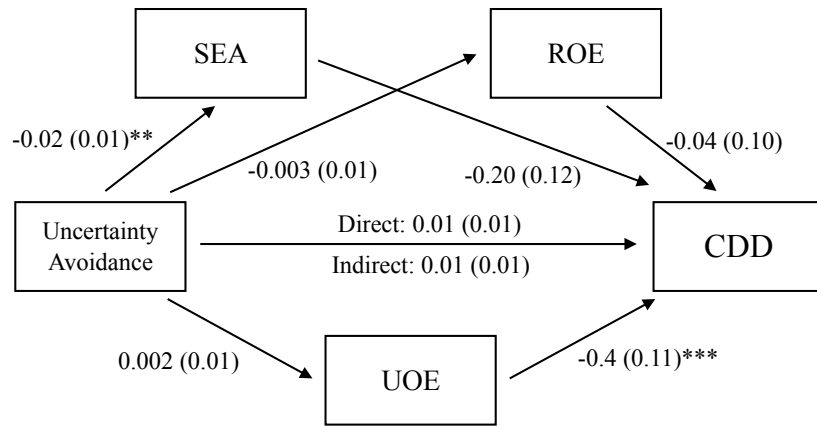


Note. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . OEA = Others emotional appraisal; ROE = Regulation of emotions; UOE = Use of emotions; CDD = Career Decision-making difficulties.

The goal of the fourth mediation was to find how three dimensions of EI (SEA, ROE, and UOE) mediate the effects of uncertainty avoidance on CDD, the outcome variable. The mediation model can be found in Figure 6. There was no support for the mediation of ROE,  $b = 0.001$ ,  $SE = 0.001$ , 95% CI [-0.002, 0.003], UOE,  $b = -0.001$ ,  $SE = 0.003$ , 95% CI [-0.006, 0.005], and SEA,  $b = 0.003$ ,  $SE = 0.002$ , 95% CI [-0.000, 0.009], thus these mediation hypotheses were not supported.

Moreover, the significant and negative relationship between uncertainty avoidance and SEA not supported H2.4a because the sign was opposite than expected, and only UOE was a significant predictor of CDD. Therefore, the mediations between uncertainty and CDD through UOE and SEA were partially supported due to the links found. H2.4b was rejected because no negative relationship was found between uncertainty avoidance and ROE. See Appendix 10.4 for the entire PROCESS mediation 4.

Figure 6: Mediation 4 - Parallel triple mediation of uncertainty avoidance on CDD through SEA, UOE, and ROE

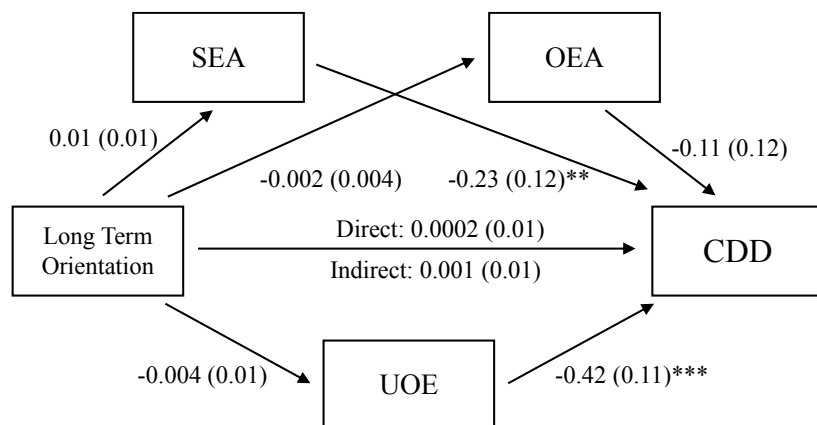


Note. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . SEA = Self emotional appraisal; ROE = Regulation of emotions; UOE = Use of emotions; CDD = Career Decision-making difficulties.

Finally, in the fifth and last mediation, long-term orientation was the predictor variable, SEA, ROE, and UOE were the parallel mediators, and CDD was the outcome variable. The mediation model can be found in Figure 5. There was no mediation of SEA ( $b = -0.001$ ,  $SE = 0.001$ , 95% CI  $[-0.004, 0.001]$ ), OEA ( $b = 0.01$ ,  $SE = 0.01$ , 95% CI  $[-0.01, 0.02]$ ), and UOE ( $b = 0.002$ ,  $SE = 0.002$ , 95% CI  $[-0.002, 0.007]$ ) thus the mediation were not supported.

Furthermore, UOE was a significant predictor of CDD as well as SEA. Therefore, the mediation between long-term orientation and CDD through UOE and SEA was only partially supported. In the end, H2.5 which references the relationship between long term and SEA, OEA, and UOE was not supported. See Appendix 10.5 for the entire PROCESS mediation 5.

Figure 7: Mediation 5 - Parallel triple mediation of long-term orientation on CDD through SEA, OEA, and UOE.



Note. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.001$ . SEA = Self emotional appraisal; OEA = Others' Emotional Appraisal; UOE = Use of emotions; CDD = Career Decision-making Difficulties.

Mediations analyses also confirmed the absence of significant relationship between cultural dimensions and CDD, not supporting H3.1 as well as the previous correlations.

## **5 Discussion**

### **5.1 Research Findings and Literature implications**

The first set of hypotheses proposed an inverse relationship between EI and CDD and the results supported it: EI, SEA, UOE, and ROE were all significantly and negatively related with CDD. These results are strongly in line with the literature which, since decades, debates about the influence of EI on CDD (Emmerling & Cherniss, 2003) and through the use of different scales and measurement methods confirmed the relevance of this association (e.g., Di Fabio & Palazzeschi, 2009; Di Fabio et al., 2013; Jiang, 2014). This group of hypotheses was also supported by some results found in the mediations analyses. UOE was correlated to CDD all the times it was involved in the mediation. SEA instead only three times out of four, having a marginal significance when it played a mediator rule between individualism and CDD. ROE, instead, was not relevant in the mediations. Results also confirmed how OEA, did not have any significant influence on CDD.

The second group of hypotheses aimed to verify the correlations between cultural dimensions and EI through mediation analyses. These hypotheses were not confirmed. Only twice a cultural dimension was linked with a feature of EI: uncertainty avoidance negatively correlated with SEA, and masculinity positively correlated with ROE but in both cases, they were related oppositely than assumed. The first correlation found went against literature probably due to a bias in cultural context. The main five countries in the present study have all high levels of uncertainty avoidance, between 65 and 99 (Country Comparison Tool, n.d.; Hofstede, 2001) while the ones in Gunkel's paper (2014) were more diversified. Masculinity's positive relation with ROE, instead, was neither strongly supported by literature. Therefore, individuals in masculine cultures that stress more on self-confidence and self-control (Hofstede, 2001) may be more likely to adopt and practice emotion regulation behaviours. In general, past literature found strong and significant relationships between cultural dimensions and EI (Gunkel et al., 2014), mainly because they used primary data to collect information about cultural dimensions. In their study, Gunkel and collaborators (2014) measured cultural dimensions at the individual level using the scale from Yoo et al. (2011). Afterwards, they tried to compare their primary data with Hofstede's secondary ones (Hofstede, 2001) for each country but in only two dimensions moderate correlations were found. These differences were justified by the dissimilarities in samples, measurements, and cultural changes (Gunkel et al., 2014). The usage of primary data and larger samples were the main difference between this study and others which also studied Hofstede's cultural

dimensions (e.g., Caputo et al., 2018; Mamatha & Geetanjali, 2020). Time constraints of the survey limited the possibility of including more items and larger samples. Overall, as mentioned, all the other significant relations observed in the mediation analyses connected only EI properties (SEA, UOE) with CDD, as a further demonstration of the first group of hypotheses.

The third hypothesis intended to study the relationship between cultural dimensions and CDD. Testing if these two variables were connected through bivariate correlations and through the mediation analysis both tests did not support H3.1 and H3.2. Individualism was the only dimension hypothesised to be negatively connected to CDD, but the mediation analyses used to verify H2 revealed there was no significant link, neither direct or indirect, between cultural dimensions and CDD. According to the related literature, to assess the impact of culture on career decision-making, it is also relevant to investigate other factors. In their systematic review, Akosah-Twumasi and collaborators (2018), after splitting the cultures into individualistic and collectivistic, as I also assumed to be the most relevant dimension from literature review, they found that intrinsic, extrinsic, and interpersonal factors affect career choices overall. These factors can have really different degrees of influence according to the culture of origin, for example, opinions of significant others are more likely influence career decision-making in collectivistic countries, while in individualistic ones, people aim to follow more their personal interests (Polenova et al., 2018). Therefore, not analysing these personal factors, deeply connected to culture, may impacted H3s' non-significant outcomes.

Apart from the proper hypotheses' tests, as explorations, some interesting and significant correlations were found. For example, Mexican were significant and positively related with ROE, while French negatively. From the H2.1b and H2.2b, power distance and individualism were assumed to have a positive and negative correlation with ROE, respectively. Therefore, considering the Hofstede (2001) cultural scores in which Mexico has higher Power distance and lower Individualism than France I could vaguely find out that Mexican people are more collectivistic and more likely to accept the hierarchy of power and authority, vice-versa for French. Apart from that, no other significant data were found regarding the different nationalities and EI or CDD's categories. Additionally, Master's students had a significant relationship with CDD ( $r = .18, p < .05$ ) and with lack of readiness ( $r = .22, p < .02$ ) likely due to their proximity to choose a career path and clearly more pressured to take this decision than Bachelors' peers.

Finally, an interesting significant positive relationship was found between gender and EI. Previous research (e.g., Petrides & Furnham, 2000; Van Rooy et al., 2005) suggests that women have higher scores of EI than men but males have a higher self-estimation of their EI than females (Petrides & Furnham, 2000) and this is confirmed also by the present results. Additionally, the literature has shown that cerebral processing of emotions differs between men and women, therefore, there are some divergences between the two genders (Craig et al., 2009; Jausovec & Jausovec, 2005).

## **5.2 Implications**

The findings of this dissertation, although limited, do offer some contributions to the academic and managerial context. Research on the fields of EI and career decision-making are mostly focus on samples of specific countries or contexts (e.g., Di Fabio & Palazzeschi, 2009; Ran et al., 2022). This research proved how also in a heterogenous sample of students from different countries in Europe and Mexico, EI features like SEA and UOE are strongly connected with CDD. Therefore, this may lead to emphasize the importance of programs aimed at improving EI soft skills in these countries to reduce career difficulties. As demonstrated from previous studies (e.g., Kotsou et al., 2019; Lopes et al., 2006), EI trainings are effective and contribute to better work performance. Since the abilities to perceive accurately and express and use emotions to facilitate performance was demonstrated to have a direct impact on choosing the best career path, organizations may focus on implementing EI training programs for their employees to ensure they are working on the best career path for them. In addition, companies should match these programs with open career days to let teams discover other potential internal opportunities.

Other real-life applications linked to this study are mainly concerned with cultural dimensions. Differences in national cultures appeared to enhance the opportunities for companies to be unique (Gerhart, 2009). It is crucial to consider the differences in contextual factors between countries when developing and implementing human resource management strategies and practices effectively (Jackson & Schuler, 1995). Given the stability of national cultures, organisations need to adapt their human resource strategies to the specific circumstances of each national setting. Although this paper focuses primarily on national culture as a differentiating factor, it is important to point out that it is only one of the various dimensions along which people might differ.

### **5.3 Limitations & future studies**

The limitations of this study need to be noted and potential solutions suggested for future research. One prominent limitation is the relatively small sample analysed in the experiment, which may have affected the results. Research testing the effects of culture on EI relied on samples of thousands of people from several different countries to test cultural diversity. Collecting as much respondents as possible from several different countries was the main challenge and the method of recruitment was different according to the country. For example, to collect data from Mexico I asked for help from local professors to deliver questionnaires and they ensured students would complete the study with attention. In France, instead, the questionnaire was shared around the student network of the selected university and the level of commitment was obviously lower than Mexican one. The sample was a big limitation also because not all the main five countries were represented by the same number of people, and this limited the effects of their cultural dimensions' values in the whole analysis. Furthermore, the participants composing this sample were not chosen randomly, they had to be university students or recent postgraduates, this limited the variability of possible answers since people living other life's stages would experience different CDD or have different levels of EI.

Secondly, since my study is a Master's dissertation, there were considerable time constraints that limited what could be done. Above all, the absence of primary research about cultural dimensions may have lowered the significance of certain relations between variables. The survey of this paper, which aimed to study EI and CDD, was based on reliable but short scales and its duration (10-15 min) already exceeded the Qualtrics' recommended timing (<9 min) for volunteer samples. To not lose the attention of the respondents and ensure their maximum fairness I could not extend this duration also analysing the cultural dimensions. Time limitations were encountered also in how in-depth the analysis of certain hypotheses was, the amount of data collected, and the number of variables involved.

Thirdly, the method for this research, an online survey, has some advantages, but it also comes with limitations. For instance, it is known that respondents may be biased when self-judging their abilities to perceive and be aware of their own feelings or others' ones (Ciuk et al., 2015). They may be too optimistic in evaluating not only their emotional intelligence skills but also too confident in assessing the difficulties they may face during career decision-making processes. Consequently, for future research, it is advised to include also qualitative research with few interviews per culture to capture how their cultural backgrounds impact

their lives in relationship with EI and CDD. The survey method also does not imply a direct live contact between the researcher and respondents. Therefore, this limitation also linked to the duration affected the number of dropouts before the end of the survey.

Fourthly, the scales used to measure the different variables had some relevant limitations. Considering CDDQ (Gati and Saka, 2001), the scale used was a reduced version of the original (Gati et al., 1996). Therefore, the adjustments made in the scale assessment and its moderate  $\alpha$  in one category demonstrate how probably the usage of more items might improve reliability.

Another limitation was linked to the language used in the research. Within all countries, English was the only language adopted to provide information about the study and in the survey itself. This could be a strong limitation when conducting research in countries like Mexico, Portugal or France where English is not an official language. This limited probably the participation of certain students since half of the participants who dropped out the survey completed only 2% of it. Translations of the study were not done to follow the original scales from literature and because they are a resource-intensive process outside the scope of my thesis.

Regarding future avenues to expand on this study, researchers should directly measure the levels of cultural dimensions of each participant for example using the 23 items of Yoo and collaborators (2011). Following the same model of mediation as the present study but with primary data about culture could provide more significant results on the second and third groups of hypotheses. Moreover, follow-up research should consider bigger scales with good reliability in all their subcategories (e.g., Gati et al., 1996) to measure CDD or in general career decision-making. These suggestions would lead to longer surveys but surely more accurate outcomes. In addition, future research should consider bigger samples and with more cultural heterogeneity to better understand differences in terms of personal factors influenced by a certain culture and leading not only EI but also CDD.

Future studies could analyse the interactions between cultural dimensions, EI, CDD, and Career Decision-making Self-Efficacy. The usage Career Decision Making Self-Efficacy Short-Form developed by Betz, Klein, and Taylor (1996) as moderating variable or significant factor in some others is considered by most of the research conducted in the fields of EI and career decision-making (e.g., Brown et al., 2003; Di Fabio et al., 2013). This scale has been used to assess individuals' overall self-efficacy expectations for specific tasks necessary in

career decision making and therefore could be interesting to combine these four variables in the future.

Future streams of research may analyse also how older people, like young adults, from different cultures may change their career decision making processes after starting their careers and how much they feel the culture pressure in the decision they made in young age. Considering that the main papers on these fields highlighted more students from high schools or universities. I consider that, in current societies, jobs and careers are more subject to great changes along the way than ever before, therefore analysing these variables in adults can be particularly useful to study potential new behaviours and attitudes.

## **6 Conclusion**

The Nobel Prize-winning writer Albert Camus reportedly said that “life is a sum of all your choices” and, therefore, how we make certain decisions can influence all the equation. Career choices are relevant to shape our future and the difficulties we may find in experiencing this decision-making process could be affected by internal and external variables. The current thesis confirms how Emotional Intelligence, and its dimensions can affect Career decision-making difficulties also in a multicultural sample of students and suggests how cultural dimensions may play a ground role with those variables. Being emotionally intelligent, no matter where we come from, could lead to less uncertainty in making career choices that is connected to a life straightforward to our goals.

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## Appendixes

### Appendix 1: Survey

Thank you for joining this study!

My name is **Stefano Tringali**, I am conducting this research as an essential part of my Master's Thesis at Católica-Lisbon School of Business & Economics. The purpose of the research is to gather information about the relationship between **Emotional Intelligence and Career decision-making**.

Completing the survey will take approximately **10 minutes**.

All answers are **anonymous and confidential**, which means that there will be no way to link your responses to your identity. The collected data will exclusively be used for **research purposes**.

Participation in this study is **voluntary** and you may stop your participation now or at any point after starting without consequences in declining or withdrawing from this research.

**Transparency** and **honesty** are expected when answering questions.

Please contact me for any comments or questions at:

[s-stringali@ucp.pt](mailto:s-stringali@ucp.pt) .

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#### Part 1: Emotional Intelligence Questionnaire

“Please indicate your agreement with the statements.”

	Totally disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Totally agree
I have a good sense of why I have certain feelings most of the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have good understanding of my own emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I really understand what I feel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always know whether or not I am happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Totally disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Totally agree
I always know my friends emotions from their behaviour.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a good observer of others emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am sensitive to the feelings and emotions of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have good understanding of the emotions of people around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Totally disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Totally agree
I am able to control my temper and handle difficulties rationally.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am quite capable of controlling my own emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can always calm down quickly when I am very angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have good control of my own emotions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Totally disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Totally agree
I always set goals for myself and then try my best to achieve them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always tell myself I am a competent person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am a self-motivated person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would always encourage myself to try my best.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Part 2: Career Decision Making Questionnaire

This part of the study aims to locate possible difficulties and problems related to making career decisions.

Have you considered what field you would like to major in or what occupation you would like to choose?

- Yes
- No

If so, to what extent are you confident of your choice?

1 (Not confident at all)	2	3	4	5	6	7	8	9 (Very confident)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Next, you will be presented with a list of statements concerning the **career decision-making process**.

Please rate the degree to which each statement applies to you on the following scale:

**Does not describe me** 1 2 3 4 5 6 7 8 9 **Describes me well**

Circle 1 if the statement does not describe you and 9 if it describes you well. Of course, you may also circle any of the intermediate levels.

Please do not skip any question.

1. I know that I have to choose a career, but I don't have the motivation to make the decision now ("I don't feel like it").

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

2. Work is not the most important thing in one's life and therefore the issue of choosing a career doesn't worry me much.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

3. I believe that I do not have to choose a career now because time will lead me to the "right" career choice.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

4. It is usually difficult for me to make decisions.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

5. I usually feel that I need confirmation and support for my decisions from a professional person or somebody else I trust.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

6. I am usually afraid of failure.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

7. I like to do things my own way.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

8. I expect that entering the career I choose will also solve my personal problems.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

9. I believe there is only one career that suits me.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

10. I expect that through the career I choose I will fulfill all my aspirations.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

11. I believe that a career choice is a one-time choice and a life-long commitment.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

12. I **always** do what I am told to do, even if it goes against my own will.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

13. I find it difficult to make a career decision because I do not know what steps I have to take.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

14. I find it difficult to make a career decision because I do not know what factors to take into consideration.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

15. I find it difficult to make a career decision because I don't know how to combine the information I have about myself with the information I have about the different careers.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

16. I find it difficult to make a career decision because I still do not know which occupations interest me.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

17. I find it difficult to make a career decision because I am not sure about my career preferences yet (for example, what kind of a relationship I want with people, which working environment I prefer).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

18. I find it difficult to make a career decision because I do not have enough information about my competencies (for example, numerical ability, verbal skills) and/or about my personality traits (for example, persistence, initiative, patience).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

19. I find it difficult to make a career decision because I do not know what my abilities and/or personality traits will be like in the future.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

20. I find it difficult to make a career decision because I do not have enough information about the variety of occupations or training programs that exist.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

21. I find it difficult to make a career decision because I do not have enough information about the characteristics of the occupations and/or training programs that interest me (for example, the market demand, typical income, possibilities of advancement, or a training program's prerequisites).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

22. I find it difficult to make a career decision because I don't know what careers will look like in the future.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

23. I find it difficult to make a career decision because I do not know how to obtain additional information about myself (for example, about my abilities or my personality traits).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

24. I find it difficult to make a career decision because I do not know how to obtain accurate and updated information about the existing occupations and training programs, or about their characteristics.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

25. I find it difficult to make a career decision because I constantly change my career preferences (for example, sometimes I want to be self-employed and sometimes I want to be an employee).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

26. I find it difficult to make a career decision because I have contradictory data about my abilities and/or personality traits (for example, I believe I am patient with other people but others say I am impatient).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

27. I find it difficult to make a career decision because I have contradictory data about the existence or the characteristics of a particular occupation or training program.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

28. I find it difficult to make a career decision because I'm equally attracted by a number of careers and it is difficult for me to choose among them.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

29. I find it difficult to make a career decision because I do not like any of the occupation or training programs to which I can be admitted.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

30. I find it difficult to make a career decision because the occupation I am interested in involves a certain characteristic that bothers me (for example, I am interested in medicine, but I do not want to study for so many years).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

31. I find it difficult to make a career decision because my preferences cannot be combined in one career, and I do not want to give any of them up (e.g., I'd like to work as a free-lancer, but I also wish to have a steady income).

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

32. I find it difficult to make a career decision because my skills and abilities do not match those required by the occupation I am interested in.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

33. I find it difficult to make a career decision because people who are important to me (such as parents or friends) do not agree with the career options I am considering and/or the career characteristics I desire.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

34. I find it difficult to make a career decision because there are contradictions between the recommendations made by different people who are important to me about the career that suits me or about what career characteristics should guide my decisions.

*Does not describe me* 1 2 3 4 5 6 7 8 9 *Describes me well*

Finally, how would you rate the degree of your difficulty in making a career decision?

*Low* 1 2 3 4 5 6 7 8 9 *High*

---

### Part 3: Demographics

How old are you?

What is your gender?

- Male
- Female
- Non-binary
- Prefer not to say

Where were you born?

Where do you currently live?

Since when are you living in this country?

- Less than 6 months
- 6 months or more but less than 1 year
- 1 year or more but less than 3 years
- 3 years or more but less than 5 years
- More than 5 years

What best describes your employment status?

- Bachelor's student
- Master's student
- Employed Part-Time
- Employed Full-Time
- Unemployed looking for work
- Unemployed not looking for work
- Retired
- Disabled
- Other

## Appendix 2: Population Statistics

Baseline Characteristic	Full sample		
	<i>N</i>	%	<i>SD</i>
<b>Gender</b>			
Male	52	43.00	.51
Female	69	57.00	.51
<b>Employment status</b>			
Bachelor	64	52.00	.50
Master	28	23.00	.42
Part Time	11	9.10	.29
Full Time	21	17.40	.38
Working Stud	11	9.10	.29
Others	10	8.30	.28
<b>Nationality</b>			
Mexico	40	33.06	.47
Portugal	25	20.66	.41
Italy	14	11.57	.37
France	19	15.70	.32
Germany	10	8.26	.28
Other (World)	13	10.75	.31
<b>Current Country</b>			
Same Country	92	76.00	.43
Mexico	47	38.84	.49
Portugal	43	35.54	.48
France	15	12.40	.33
Other (EU)	16	16.22	.34
<b>Time living in the Current Country</b>			
Less than 1 year	13	10.70	.31
Less than 5 years	16	13.30	.34
More than 5 years	92	76.00	.43

Note. *N* = 121. Participants were on average 23 years old (*SD* = 4.61)

### Appendix 3: Scales Reliability

Scales	Cronbach's $\alpha$	Quality	Number of Items
EI			
SEA	.87	Good	4
OEA	.84	Good	4
ROE	.88	Good	4
UOE	.81	Good	4
WLEIS	.85	Good	16
CDD			
Lack of motivation	.66	Moderate	3
General indecisiveness	.69	Moderate	3
Dysfunctional beliefs	.60	Moderate	4
Lack of readiness	.60	Moderate	10
Stages of Career Decision-making process and Self	.88	Good	6
Occupation and Obtaining additional information	.83	Good	5
Mod Lack of Information	.92	Excellent	11
Unreliable Information	.71	Good	3
Internal and External Conflicts	.80	Good	6
Mod Inconsistent Information	.88	Good	9
CDDQ	.92	Excellent	30

*Note:* EI = Emotional Intelligence; SEA = Self-Emotional Appraisal; OEA = Others' Emotional Appraisal; ROE = Regulation of emotions; UOE = Use of Emotions; WLEIS = Wong al Law Emotional Intelligence Scale; CDDQ = Career Decision-making Difficulties Questionnaire.

## Appendix 4: Descriptive Statistics and Correlations between demographics and EI

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26									
1 Gender	.43	.50	-																																		
2 Under 24	.79	.41	-.11	-																																	
3 25 years and more	.21	.41	.11	-1.00**	-																																
4 MEX	.33	.47	.17	.15	-.15	-																															
5 PT	.21	.41	.01	.07	-.07	-.36**	-																														
6 ITA	.16	.37	.05	-.13	.13	-.25**	-.19*	-																													
7 FRA	.12	.32	-.19*	.06	-.06	-.30**	-.22*	-.16	-																												
8 GER	.08	.28	.04	-.35**	.35**	-.21*	-.15	-.11	-.13	-																											
9 Rest of the world	.11	.31	-.14	.05	-.05	-.24**	-.18	-.13	-.15	-.10	-																										
10 Living in MEX	.39	.49	.16	.21*	-.21*	.88**	-.41**	-.29**	-.16	-.24**	-.11	-																									
11 Living in PT	.36	.48	.09	-.24**	.24**	-.52**	.69**	.11	-.32**	.22*	-.03	-.53**	-																								
12 Living in FRA	.12	.33	-.23*	.01	-.01	-.26**	-.19*	-.06	.80**	-.11	-.13	-.30**	-.28**	-																							
13 Living in EUR	.13	.34	-.14	.03	-.03	-.27**	-.20*	.32**	-.10	.15	.34**	-.31**	-.29**	-.15	-																						
14 Less than 1 year	.11	.31	.08	-.08	.08	-.13	-.18	.12	.07	.09	.14	.11	-.03	-.05	-.06	-																					
15 Less than 5 years	.13	.34	.01	-.39**	.39**	-.27**	-.14	.32**	-.10	.32**	.10	-.31**	.42**	-.15	-.01	-.14	-																				
16 More than 5 years	.76	.43	-.06	.36**	-.37**	.31**	.24**	-.34**	.03	-.32**	-.18*	.17	-.31**	.15	.05	-.62**	-.69**	-																			
17 Bachelor Student	.53	.50	-.05	.47**	-.47**	.34**	-.05	-.33**	-.09	-.20*	.17	.45**	-.30**	-.20*	-.02	.01	-.32**	.25**	-																		
18 Masters Student	.23	.42	.00	-.24**	.24**	-.34**	.11	.11	.03	.33**	-.06	-.40**	.45**	.09	-.16	.06	.36**	-.34**	-.58**	-																	
19 Part Time job	.09	.29	.02	-.11	.11	.14	-.09	-.02	-.06	-.09	.08	.10	-.11	.06	-.04	.17	-.12	-.02	-.10	.03	-																
20 Full Time	.17	.38	.22*	-.29**	.29**	-.18*	.04	.32**	.04	-.06	-.09	-.23*	.07	.09	.14	-.09	.08	.00	-.35**	-.20*	-.14	-															
21 Other Status	.08	.28	-.14	-.06	.06	.11	-.15	-.01	.12	-.09	-.01	.13	-.22*	.07	.06	-.01	-.03	.03	-.20*	-.16	-.09	-.14	-														
22 Work Student	.09	.29	.13	-.11	.11	.08	-.09	-.02	.02	-.09	.08	.04	-.05	.06	-.04	.08	-.04	-.02	.07	.10	.60**	.16	-.09	-													
23 SEA	5.15	1.09	.09	.04	-.04	.01	-.15	.02	-.03	.06	.15	.02	-.10	-.07	.19*	-.08	.08	-.01	.02	-.02	-.04	.05	-.03	.00	-												
24 OEA	5.43	.97	.03	-.08	.08	-.04	.00	.05	-.06	.06	.03	-.04	.08	-.08	-.02	.08	.09	-.13	-.06	.01	.13	.12	-.08	.12	.19*	-											
25 ROE	4.64	1.27	.44**	.04	-.04	.22*	-.07	.02	-.22*	.05	-.06	.24**	-.05	-.25**	-.03	.02	-.07	.04	.08	-.20*	.08	.14	.06	.13	.25**	.09	-										
26 UOE	5.15	1.18	.15	.09	-.09	.14	-.03	.00	-.11	.05	-.09	.13	-.09	-.17	.10	.09	-.03	-.04	.11	.02	.00	.03	-.209*	.06	.45**	.21*	.31**	-									
27 EI	20.37	3.00	.29**	.05	-.05	.14	-.10	.04	-.17	.08	.00	.15	-.07	-.22*	.10	.04	.01	-.04	.07	-.08	.06	.13	-.09	.11	.71**	.51**	.67**	.75**	-								

Note: \*p < .05, \*\*p < .01, two-tailed, N = 121. MEX = born in Mexico; PT = born in Portugal; ITA = born in Italy; FRA = born in France; GER = born in Germany; SEA = self-emotional appraisal; OEA = other emotion appraisal; ROE = regulation of emotion; UOE = use of emotion; EI = Emotional Intelligence score.

## Appendix 5: Descriptive Statistics and Correlations between demographics and CDD

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1 Gender	.43	.50	-																								
2 Under 24	.79	.41	-.11	-																							
3 25 years and more	.21	.41	.11	-1.00**	-																						
4 MEX	.33	.47	.17	.15	-.15	-																					
5 PT	.21	.41	.01	.07	-.07	-.36**	-																				
6 ITA	.16	.37	.05	-.13	.13	-.25**	-.19*	-																			
7 FRA	.12	.32	-.19*	.06	-.06	-.30**	-.22*	-.16	-																		
8 GER	.08	.28	.04	-.35**	.35**	-.21*	-.15	-.11	-.13	-																	
9 Rest of the world	.11	.31	-.14	.05	-.05	-.24**	-.18	-.13	-.15	-.10	-																
10 Living in MEX	.39	.49	.16	.21*	-.211*	.88**	-.41**	-.29**	-.16	-.24**	-.11	-															
11 Living in PT	.36	.48	.09	-.24**	.24**	-.52**	.69**	.11	-.32**	.22*	-.03	-.53**	-														
12 Living in FRA	.12	.33	-.23*	.01	-.01	-.26**	-.19*	-.06	.80**	-.11	-.13	-.30**	-.28**	-													
13 Living in EUR	.13	.34	-.14	.03	-.03	-.27**	-.20*	.32**	-.10	.15	.34**	-.31**	-.29**	-.15	-												
14 Less than 1 year	.11	.31	.08	-.08	.08	-.13	-.18	.12	.07	.09	.14	.11	-.03	-.05	-.06	-											
15 Less than 5 years	.13	.34	.01	-.39**	.39**	-.27**	-.14	.32**	-.10	.32**	.10	-.31**	.42**	-.15	-.01	-.14	-										
16 More than 5 years	.76	.43	-.06	.36**	-.37**	.31**	.24**	-.34**	.03	-.32**	-.18*	.17	-.31**	.15	.05	-.62**	-.69**	-									
17 Bachelor Student	.53	.50	-.05	.47**	-.47**	.34**	-.05	-.33**	-.09	-.20*	.17	.45**	-.30**	-.20*	-.02	.01	-.32**	.25**	-								
18 Masters Student	.23	.42	.00	-.24**	.24**	-.34**	.11	.11	.03	.33**	-.06	-.40**	.45**	.09	-.16	.06	.36**	-.34**	-.58**	-							
19 Part Time job	.09	.29	.02	-.11	.11	-.14	-.09	-.02	-.06	-.09	.08	.10	-.11	.06	-.04	.17	-.12	-.02	-.10	.03	-						
20 Full Time	.17	.38	.22*	-.29**	.29**	-.18*	.04	.32**	.04	-.06	-.09	-.23*	.07	.09	.14	-.09	.08	.00	-.35**	-.20*	-.14	-					
21 Other Status	.08	.28	-.14	-.06	.06	.11	-.15	-.01	.12	-.09	-.01	.13	-.22*	.07	.06	-.01	-.03	.03	-.20*	-.16	-.09	-.14	-				
22 Work Student	.09	.29	.13	-.11	.11	.08	-.09	-.02	.02	-.09	.08	.04	-.05	.06	-.04	.08	-.04	-.02	.07	.10	.60**	.16	-.09	-			
23 LOR	4.90	1.08	-.16	.07	-.07	.06	.03	-.09	.13	-.06	-.16	.06	.03	.14	-.27**	-.11	-.04	.11	-.05	.22*	-.01	-.18*	.01	-.03	-		
24 Mod LOI	4.34	1.82	-.10	-.06	.06	-.16	.11	.11	.07	-.04	-.06	-.13	.20*	.05	-.14	.00	.17	-.13	-.06	.15	.05	-.05	-.08	.07	.55**	-	
25 Mod II	3.81	1.71	-.06	-.05	.05	-.08	.08	.09	-.02	.00	-.06	-.11	.15	.04	-.09	.03	.09	-.10	-.07	.15	.03	-.08	-.03	.02	.42**	.75**	
26 Mod CDD	4.43	1.25	-.12	-.02	.02	-.09	.10	.06	.04	-.02	-.09	-.09	.17	.06	-.17	-.02	.11	-.07	-.06	.20*	.03	-.12	-.04	.04	.69**	.94**	.88**

Note. \*p < .05; \*\*p < .01, two-tailed. N = 121. MEX = born in Mexico; PT = born in Portugal; ITA = born in Italy; FRA = born in France; GER = born in Germany; LOR = Lack of readiness; Mod LOI = Modified Lack of Information; Mod II = Modified Inconsistent Information; Mod CDD = Modified Career Decision-making Difficulties score.

## Appendix 6: Descriptive Statistics and Correlations between EI and Cultural Dimensions

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1 SEA	5.15	1.09	-									
2 OEA	5.43	0.97	.19*	-								
3 ROE	4.64	1.27	.25**	.09	-							
4 UOE	5.15	1.18	.44**	.21*	.31**	-						
5 EI	20.37	3.00	.70**	.51**	.67**	.75**	-					
6 Power Distance	64.52	14.59	-.08	-.09	.09	.07	.01	-				
7 Individualism	46.35	20.07	.08	.03	-.13	-.08	-.05	-.60**	-			
8 Masculinity	54.89	15.72	.11	.02	.22*	.13	.19*	.15	.13	-		
9 Uncertainty avoidance	80.49	14.18	-.21*	-.05	-.03	.02	-.10	.49**	-.42**	-.46**	-	
10 Long-term orientation	42.90	20.17	.09	.05	-.13	-.07	-.04	-.78**	.93**	.04	-.48**	-

Note. \* $p < .05$ , \*\* $p < .01$ , two-tailed.  $N = 121$ . SEA = self-emotional appraisal; OEA = other emotion appraisal; ROE = regulation of emotion; UOE = use of emotion; EI = Emotional Intelligence score.

## Appendix 7: Descriptive Statistics and Correlations between Cultural dimensions and CDD

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 Power Distance	64.52	14.59	-								
2 Individualism	46.35	20.07	-.60**	-							
3 Masculinity	54.89	15.72	.15	.13	-						
4 Uncertainty avoidance	80.49	14.18	.49**	-.42**	-.46**	-					
5 Long-term orientation	42.90	20.17	-.78**	.93**	.04	-.48**	-				
6 LOR	4.90	1.08	.15	-.04	-.06	.17	-.06	-			
7 Mod LOI	4.34	1.82	-.08	.09	-.13	.10	.07	.55**	-		
8 Mod II	3.81	1.71	-.06	.03	-.05	.06	.02	.42**	.75**	-	
9 Mod CDD	4.43	1.25	.00	.03	-.09	.13	.01	.76**	.91**	.86**	-

Note. \* $p < .05$ , \*\* $p < .01$ , two-tailed.  $N = 121$ . LOR = Lack of readiness; Mod LOI = Modified Lack of Information; Mod II = Modified Inconsistent Information; Mod CDD = Modified Career Decision-making Difficulties score.

## Appendix 8: Factor Analysis WLEIS

EI ITEMS	FACTOR LOADING			
	1	2	3	4
<b>Factor 1: SEA</b>				
1. I have a good sense of why I have certain feelings most of the time	<b>0.89</b>	0.12	0.04	0.19
2. I have good understanding of my own emotions.	<b>0.87</b>	0.06	0.13	0.08
3. I really understand what I feel.	<b>0.86</b>	0.20	0.02	0.21
4. I always know whether or not I am happy.	<b>0.77</b>	0.01	-0.05	-0.06
<b>Factor 2: OEA</b>				
5. I always know my friends' emotions from their behaviour.	0.12	<b>0.85</b>	0.03	0.09
6. I am a good observer of others' emotions.	0.11	<b>0.85</b>	0.12	0.26
7. I am sensitive to the feelings and emotions of others.	0.18	<b>0.80</b>	0.19	0.15
8. I have good understanding of the emotions of people around me.	-0.02	<b>0.78</b>	-0.02	0.18
<b>Factor 3: ROE</b>				
8. I am able to control my temper and handle difficulties rationally.	0.09	0.03	<b>0.88</b>	0.11
9. I am quite capable of controlling my own emotions.	-0.03	0.07	<b>0.82</b>	0.04
10. I can always calm down quickly when I am very angry.	-0.04	0.13	<b>0.80</b>	-0.08
11. I have good control of my own emotions.	0.11	0.01	<b>0.77</b>	0.19
<b>Factor 4: UOE</b>				
12. I always set goals for myself and then try my best to achieve them.	-0.02	0.16	0.03	<b>0.87</b>
13. I always tell myself I am a competent person.	0.06	0.13	0.02	<b>0.84</b>
13. I am a self-motivated person.	0.17	0.30	0.05	<b>0.74</b>
14. I would always encourage myself to try my best.	0.32	0.15	0.29	<b>0.58</b>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 5 iterations.

Note: SEA = Self-Emotional Appraisal; OEA = Others' Emotional Appraisal; ROE = Regulation of emotions; UOE = Use of Emotions.

## Appendix 9: Factor Analysis CDDQ

CDD ITEMS	FACTOR LOADING									
Factor 1:										
Lack of Readiness	1	2	3	4	5	6	7	8	9	10
<b>1</b>	0.05	0.31	0.30	0.11	0.22	<b>0.56</b>	0.18	-0.20	0.25	0.22
<b>2</b>	0.24	0.07	-0.05	-0.05	-0.13	<b>0.76</b>	0.16	0.09	-0.12	-0.10
<b>3</b>	0.17	0.13	0.21	0.14	0.04	<b>0.74</b>	-0.10	0.02	-0.11	-0.08
<b>4</b>	0.10	0.38	0.03	0.30	<b>0.61</b>	0.06	-0.24	-0.08	0.27	0.28
<b>5</b>	0.12	-0.02	0.13	0.06	<b>0.81</b>	0.16	-0.02	-0.02	-0.09	0.12
<b>6</b>	0.06	0.09	0.16	-0.09	<b>0.73</b>	-0.31	0.23	0.20	0.05	-0.06
<b>8</b>	0.08	0.01	0.18	-0.01	0.01	-0.18	0.13	<b>0.76</b>	0.28	0.10
<b>9</b>	0.22	-0.20	-0.14	-0.26	0.09	-0.09	0.28	<b>0.57</b>	0.20	0.07
<b>10</b>	-0.24	-0.08	0.02	0.04	0.03	0.11	-0.18	<b>0.81</b>	0.10	0.05
<b>11</b>	0.01	0.00	0.12	0.03	0.31	-0.25	0.06	<b>0.51</b>	0.13	0.31
Factor 2:										
Lack of Information	13	14	15	16	17	18	19	20	21	22
<b>13</b>	0.30	0.28	<b>0.52</b>	0.23	0.26	0.11	0.00	-0.08	0.17	-0.19
<b>14</b>	0.28	0.22	<b>0.65</b>	0.23	0.20	0.12	0.18	-0.12	0.23	-0.10
<b>15</b>	0.30	0.36	<b>0.46</b>	0.16	0.27	0.23	0.18	-0.20	0.03	0.00
<b>16</b>	0.22	0.23	<b>0.66</b>	-0.03	0.17	0.29	0.25	-0.18	0.12	0.12
<b>17</b>	0.11	0.31	<b>0.59</b>	0.00	0.28	0.22	0.14	-0.26	0.06	0.02
<b>18</b>	0.45	0.13	0.42	0.16	0.20	0.08	0.26	-0.17	0.24	0.37
<b>19</b>	0.11	0.24	<b>0.75</b>	0.14	0.10	0.11	0.01	0.04	0.10	0.25
<b>20</b>	<b>0.62</b>	0.02	0.38	0.21	0.15	0.22	0.08	-0.09	-0.12	-0.26
<b>21</b>	<b>0.82</b>	0.07	0.24	0.14	0.08	0.10	0.02	-0.03	-0.03	0.10
<b>22</b>	<b>0.59</b>	0.36	0.32	0.06	0.03	-0.06	0.00	0.23	-0.39	0.13
<b>23</b>	<b>0.61</b>	0.25	0.37	0.07	0.03	0.04	0.21	0.02	0.18	0.38
<b>24</b>	<b>0.82</b>	0.14	0.05	0.13	0.12	0.18	0.04	-0.15	-0.04	0.02
Factor 3:										
Inconsistent Information	25	26	27	28	29	30	31	32	33	34
<b>25</b>	0.16	<b>0.59</b>	0.20	0.41	0.00	0.10	0.17	0.01	-0.22	0.11
<b>26</b>	0.41	<b>0.52</b>	0.11	0.14	0.06	-0.06	0.26	0.12	0.30	0.29
<b>27</b>	0.42	<b>0.66</b>	-0.05	0.14	-0.08	0.17	0.22	0.14	0.07	-0.04
<b>28</b>	0.23	<b>0.74</b>	0.21	0.23	-0.03	0.04	0.01	-0.05	-0.02	-0.01
<b>29</b>	0.20	0.09	0.07	<b>0.76</b>	0.03	0.18	0.19	-0.07	0.07	0.17
<b>30</b>	0.25	0.02	0.14	<b>0.82</b>	-0.04	0.10	0.21	-0.04	0.10	0.12
<b>31</b>	0.15	0.41	0.25	<b>0.57</b>	0.04	0.13	0.11	-0.08	-0.04	-0.08
<b>32</b>	0.20	0.33	0.17	0.33	0.17	-0.04	0.46	-0.06	-0.29	0.42
<b>33</b>	0.04	0.37	0.12	<b>0.63</b>	0.01	-0.07	0.35	0.03	0.17	-0.19
<b>34</b>	0.30	0.36	0.07	<b>0.60</b>	0.29	-0.08	0.24	0.01	-0.11	0.06

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 23 iterations.

Note: CDD Items = Career Decision-making Difficulties items

# Appendix 10: PROCESS Macro Mediations Analyses for SPSS

## Appendix 10.1: Mediation 1

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.                      www.afhayes.com  
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

\*\*\*\*\*

Model : 4  
Y : TotCDD  
X : PowerDis  
M1 : SEA\_mean  
M2 : ROE\_mean

Sample  
Size: 121

\*\*\*\*\*

OUTCOME VARIABLE:

SEA\_mean

Model Summary

R	R-sq	MSE	F	df1	df2	p
,080	,006	1,183	,769	1,000	119,000	,382

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,536	,450	12,303	,000	4,645	6,427
PowerDis	-,006	,007	-,877	,382	-,019	,008

Standardized coefficients

coeff  
PowerDis        -,080

\*\*\*\*\*

OUTCOME VARIABLE:

ROE\_mean

Model Summary

R	R-sq	MSE	F	df1	df2	p
,086	,007	1,619	,885	1,000	119,000	,349

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,161	,526	7,906	,000	3,119	5,204
PowerDis	,007	,008	,941	,349	-,008	,023

Standardized coefficients

coeff  
PowerDis        ,086

\*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
,351	,123	1,681	5,472	3,000	117,000	,001

Model

	coeff	se	t	p	LLCI	ULCI
constant	7,064	,843	8,377	,000	5,394	8,734
PowerDis	-,004	,008	-,466	,642	-,020	,012
SEA_mean	-,387	,113	-3,415	,001	-,611	-,162

ROE\_mean        -,116        ,097        -1,198        ,233        -,307        ,076

Standardized coefficients

                  coeff  
 PowerDis        -,041  
 SEA\_mean        -,307  
 ROE\_mean        -,108

Test(s) of X by M interaction:

	F	df1	df2	p
M1*X	2,094	1,000	116,000	,151
M2*X	,345	1,000	116,000	,558

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,025	,001	1,884	,077	1,000	119,000	,782

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,442	,568	7,824	,000	3,318	5,566
PowerDis	-,002	,009	-,277	,782	-,019	,015

Standardized coefficients

                  coeff  
 PowerDis        -,025

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_cs
-,002	,009	-,277	,782	-,019	,015	-,025

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_cs
-,004	,008	-,466	,642	-,020	,012	-,041

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,001	,003	-,006	,008
SEA_mean	,002	,003	-,003	,008
ROE_mean	-,001	,001	-,005	,001

Completely standardized indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,015	,035	-,061	,081
SEA_mean	,025	,029	-,033	,082
ROE_mean	-,009	,015	-,050	,010

\*\*\*\*\* 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

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

## Appendix 10.2: Mediation 2

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
 Documentation available in Hayes (2022). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model : 4  
 Y : TotCDD  
 X : Individ  
 M1 : SEA\_M  
 M2 : OEA\_M  
 M3 : ROE\_M  
 M4 : UOE\_M

Sample  
 Size: 121

\*\*\*\*\*

OUTCOME VARIABLE:  
 SEA\_M

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,077	,006	1,184	,716	1,000	119,000	,399

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,957	,250	19,848	,000	4,462	5,451
Indiv	,004	,005	,846	,399	-,006	,014

Standardized coefficients

coeff  
 Indiv ,077

\*\*\*\*\*

OUTCOME VARIABLE:  
 OEA\_M

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,033	,001	,941	,129	1,000	119,000	,720

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,354	,223	24,049	,000	4,913	5,795
Indiv	,002	,004	,359	,720	-,007	,010

Standardized coefficients

coeff  
 Indiv ,033

\*\*\*\*\*

OUTCOME VARIABLE:

ROE\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,132	,017	1,603	2,107	1,000	119,000	,149

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,032	,291	17,315	,000	4,457	5,607
Indiv	-,008	,006	-1,452	,149	-,020	,003

Standardized coefficients

	coeff
Indiv	-,132

\*\*\*\*\*

OUTCOME VARIABLE:

UOE\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,079	,006	1,404	,742	1,000	119,000	,391

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,362	,272	19,714	,000	4,823	5,900
Indiv	-,005	,005	-,861	,391	-,015	,006

Standardized coefficients

	coeff
Indiv	-,079

\*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
,463	,214	1,533	6,263	5,000	115,000	,000

Model

	coeff	se	t	p	LLCI	ULCI
constant	7,145	,871	8,202	,000	5,419	8,870
Indiv	,000	,006	,076	,939	-,011	,012
SEA_M	-,226	,119	-1,900	,060	-,462	,010
OEA_M	,106	,121	,878	,382	-,133	,344
ROE_M	-,045	,095	-,470	,640	-,233	,144
UOE_M	-,404	,111	-3,634	,000	-,624	-,184

Standardized coefficients

	coeff
Indiv	,006
SEA_M	-,180
OEA_M	,075

ROE\_M        -,042  
 UOE\_M        -,350

Test(s) of X by M interaction:

	F	df1	df2	p
M1*X	,783	1,000	114,000	,378
M2*X	,229	1,000	114,000	,634
M3*X	,193	1,000	114,000	,661
M4*X	,294	1,000	114,000	,589

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,028	,001	1,883	,093	1,000	119,000	,761

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,200	,315	13,333	,000	3,576	4,824
Indiv	,002	,006	,305	,761	-,010	,014

Standardized coefficients

	coeff
Indiv	,028

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_cs	
	,002	,006	,305	,761	-,010	,014	,028

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_cs	
	,000	,006	,076	,939	-,011	,012	,006

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,001	,003	-,005	,009
SEA_M	-,001	,001	-,004	,001
OEA_M	,000	,001	-,001	,002
ROE_M	,000	,001	-,002	,003
UOE_M	,002	,002	-,002	,007

Completely standardized indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,022	,050	-,071	,123
SEA_M	-,014	,020	-,059	,021
OEA_M	,002	,010	-,017	,026
ROE_M	,005	,016	-,025	,043
UOE_M	,028	,033	-,032	,100

\*\*\*\*\* 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

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

### Appendix 10.3: Mediation 3

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.      www.afhayes.com

Documentation available in Hayes (2022). www.guilford.com/p/hayes3

\*\*\*\*\*

Model : 4  
Y : TotCDD  
X : Mascul  
M1 : OEA\_M  
M2 : ROE\_M  
M3 : UOE\_M

Sample  
Size: 121

\*\*\*\*\*

OUTCOME VARIABLE:

OEA\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,024	,001	,941	,070	1,000	119,000	,791

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,346	,322	16,626	,000	4,709	5,982
Mascul	,001	,006	,265	,791	-,010	,013

Standardized coefficients

coeff  
Mascul ,024

\*\*\*\*\*

OUTCOME VARIABLE:

ROE\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,220	,048	1,552	6,047	1,000	119,000	,015

Model

	coeff	se	t	p	LLCI	ULCI
constant	3,668	,413	8,883	,000	2,850	4,486
Mascul	,018	,007	2,459	,015	,003	,032

Standardized coefficients

coeff  
Mascul ,220

\*\*\*\*\*

OUTCOME VARIABLE:

UOE\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,128	,016	1,389	1,984	1,000	119,000	,162

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,618	,391	11,819	,000	3,844	5,391
Mascul	,010	,007	1,408	,162	-,004	,023

Standardized coefficients

coeff  
Mascul ,128

\*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
,436	,190	1,567	6,792	4,000	116,000	,000

Model

	coeff	se	t	p	LLCI	ULCI
constant	6,753	,846	7,978	,000	5,076	8,429
Mascul	-,002	,007	-,306	,760	-,017	,013
OEA_M	,081	,121	,669	,505	-,159	,321
ROE_M	-,064	,096	-,660	,511	-,254	,127
UOE_M	-,482	,104	-4,653	,000	-,688	-,277

Standardized coefficients

	coeff
Mascul	-,026
OEA_M	,057
ROE_M	-,059
UOE_M	-,418

Test(s) of X by M interaction:

	F	df1	df2	p
M1*X	,168	1,000	115,000	,683
M2*X	,260	1,000	115,000	,611
M3*X	,007	1,000	115,000	,933

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
,091	,008	1,869	1,002	1,000	119,000	,319

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,725	,453	10,427	,000	3,828	5,622

Mascul            -,008            ,008        -1,001            ,319        -,024            ,008

Standardized coefficients

                  coeff  
Mascul            -,091

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_cs
-,008	,008	-1,001	,319	-,024	,008	-,091

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_cs
-,002	,007	-,306	,760	-,017	,013	-,026

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	-,006	,004	-,014	,001
OEA_M	,000	,001	-,002	,002
ROE_M	-,001	,002	-,006	,002
UOE_M	-,005	,004	-,013	,001

Completely standardized indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	-,065	,044	-,163	,007
OEA_M	,001	,009	-,019	,019
ROE_M	-,013	,024	-,069	,026
UOE_M	-,053	,040	-,142	,015

\*\*\*\*\* 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

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

## Appendix 10.4: Mediation 4

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)  
 Documentation available in Hayes (2022).  
[www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model : 4  
 Y : TotCDD  
 X : UncerA  
 M1 : UOE\_M  
 M2 : SEA\_M  
 M3 : ROE\_M

Sample  
 Size: 121

\*\*\*\*\*

OUTCOME VARIABLE:  
 UOE\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,019	,000	1,412	,044	1,000	119,000	,835

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,018	,625	8,029	,000	3,781	6,256
UncerA	,002	,008	,209	,835	-,014	,017

Standardized coefficients

	coeff
UncerA	,019

\*\*\*\*\*

OUTCOME VARIABLE:  
 SEA\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,206	,042	1,140	5,257	1,000	119,000	,024

Model

	coeff	se	t	p	LLCI	ULCI
constant	6,419	,562	11,430	,000	5,307	7,531
UncerA	-,016	,007	-2,293	,024	-,029	-,002

Standardized coefficients

coeff  
 UncerA      -,206

\*\*\*\*\*

OUTCOME VARIABLE:

ROE\_M

Model Summary

R	R-sq	MSE	F	df1	df2	p
,034	,001	1,629	,137	1,000	119,000	,711

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,890	,671	7,284	,000	3,561	6,219
UncerA	-,003	,008	-,371	,711	-,019	,013

Standardized coefficients

coeff  
 UncerA      -,034

\*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
,465	,216	1,516	7,992	4,000	116,000	,000

Model

	coeff	se	t	p	LLCI	ULCI
constant	6,840	,985	6,946	,000	4,890	8,790
UncerA	,009	,008	1,044	,299	-,008	,025
UOE_M	-,406	,110	-3,696	,000	-,623	-,188
SEA_M	-,184	,120	-1,536	,127	-,422	,053
ROE_M	-,043	,094	-,461	,646	-,229	,142

Standardized coefficients

coeff  
 UncerA      ,088  
 UOE\_M      -,351  
 SEA\_M      -,146  
 ROE\_M      -,040

Test(s) of X by M interaction:

	F	df1	df2	p
M1*X	,573	1,000	115,000	,451
M2*X	1,188	1,000	115,000	,278
M3*X	,003	1,000	115,000	,960

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
,113	,013	1,861	1,544	1,000	119,000	,216

Model

	coeff	se	t	p	LLCI	ULCI
constant	3,411	,717	4,754	,000	1,990	4,831
UncerA	,011	,009	1,243	,216	-,006	,028

Standardized coefficients

	coeff
UncerA	,113

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_cs
,011	,009	1,243	,216	-,006	,028	,113

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_cs
,009	,008	1,044	,299	-,008	,025	,088

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,002	,004	-,005	,012
UOE_M	-,001	,003	-,006	,005
SEA_M	,003	,002	,000	,009
ROE_M	,000	,001	-,002	,003

Completely standardized indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,025	,043	-,056	,114
UOE_M	-,007	,030	-,066	,053
SEA_M	,030	,024	-,003	,089
ROE_M	,001	,010	-,016	,026

\*\*\*\*\* 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

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

## Appendix 10.5: Mediation 5

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.2 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.      www.afhayes.com  
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

\*\*\*\*\*

Model : 4  
 Y : TotCDD  
 X : LongTerm  
 M1 : SEA\_mean  
 M2 : OEA\_mean  
 M3 : UOE\_mean

Sample  
 Size: 121

\*\*\*\*\*

OUTCOME VARIABLE:  
 SEA\_mean

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,0863	,0075	1,1818	,8933	1,0000	119,0000	,3465

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,9514	,2330	21,2478	,0000	4,4899	5,4128
LongTerm	,0046	,0049	,9452	,3465	-,0051	,0144

Standardized coefficients

	coeff
LongTerm	,0863

\*\*\*\*\*

OUTCOME VARIABLE:  
 OEA\_mean

Model Summary

	R	R-sq	MSE	F	df1	df2	p
	,0484	,0023	,9394	,2790	1,0000	119,0000	,5984

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,3283	,2078	25,6454	,0000	4,9169	5,7397
LongTerm	,0023	,0044	,5282	,5984	-,0064	,0110

Standardized coefficients

coeff  
LongTerm ,0484

\*\*\*\*\*

OUTCOME VARIABLE:

UOE\_mean

Model Summary

R	R-sq	MSE	F	df1	df2	p
,0743	,0055	1,4047	,6597	1,0000	119,0000	,4183

Model

	coeff	se	t	p	LLCI	ULCI
constant	5,3336	,2541	20,9934	,0000	4,8305	5,8366
LongTerm	-,0044	,0054	-,8122	,4183	-,0150	,0063

Standardized coefficients

coeff  
LongTerm -,0743

\*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
,4609	,2124	1,5228	7,8208	4,0000	116,0000	,0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	7,0517	,8215	8,5844	,0000	5,4247	8,6787
LongTerm	,0002	,0057	,0347	,9724	-,0110	,0114
SEA_mean	-,2330	,1175	-1,9833	,0497	-,4656	-,0003
OEA_mean	,1049	,1202	,8731	,3844	-,1331	,3429
UOE_mean	-,4160	,1084	-3,8392	,0002	-,6306	-,2014

Standardized coefficients

coeff  
LongTerm ,0029  
SEA\_mean -,1852  
OEA\_mean ,0742  
UOE\_mean -,3601

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

OUTCOME VARIABLE:

TotCDD

Model Summary

R	R-sq	MSE	F	df1	df2	p
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,0172 ,0003 1,8842 ,0354 1,0000 119,0000 ,8511

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,2385	,2942	14,4045	,0000	3,6558	4,8211
LongTerm	,0012	,0062	,1881	,8511	-,0111	,0135

Standardized coefficients

	coeff
LongTerm	,0172

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_cs
,0012	,0062	,1881	,8511	-,0111	,0135	,0172

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_cs
,0002	,0057	,0347	,9724	-,0110	,0114	,0029

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,0010	,0032	-,0049	,0079
SEA_mean	-,0011	,0014	-,0044	,0014
OEA_mean	,0002	,0007	-,0008	,0019
UOE_mean	,0018	,0025	-,0023	,0075

Completely standardized indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
TOTAL	,0143	,0472	-,0720	,1142
SEA_mean	-,0160	,0205	-,0639	,0213
OEA_mean	,0036	,0096	-,0124	,0270
UOE_mean	,0267	,0360	-,0341	,1081

\*\*\*\*\* 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

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