



The Relationship of Cultural Values to Coping Styles, Perceived Stress,  
and Emotional Well-being of Master's Level Business Students at a European University

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## **Abstract**

Title: The Relationship of Cultural Values to Coping Styles, Perceived Stress, and Emotional Well-being of Master's Level Business Students at a European University

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The study examined the relationships between coping strategies, emotional well-being and perceived stress under the aspect of cultural values among 226 university students. Participants completed questionnaires relating to their cultural values, emotional well-being, perceived stress, and their coping strategies. The main objective was to explore the effect of a potential mediating effect of coping styles on cultural values and well-being. It was found that cultural values had a significant effect on an individual's preferred coping style and well-being, while coping also showed to correlate with well-being. Especially long-term orientation showed to be the strongest predictor for both coping styles and well-being. No mediating effect of coping on cultural values and well-being using a mediation analysis could be found. Additionally, it was examined whether the results for participants from Germanic European countries significantly differed from participants of Latin European origin in regard to well-being, coping styles and cultural values. It was found that uncertainty avoidance, long-term orientation and task-oriented coping differed among the two groups. Based on the study's findings, it is suggested to implement self-discipline interventions and/or tools to help students cope with stress.

*Keywords:* Hofstede's cultural values, power distance, long-term orientation, masculinity, uncertainty avoidance, collectivism, perceived stress, emotional well-being, coping, cross-cultural stud, mediation

## Resumo

Título: A Relação de Valores Culturais com Estilos de Enfrentamento, Stresse Percebido e Bem-estar Emocional de Estudantes de Administração de Mestrado numa Universidade Europeia

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Este estudo examinou as relações entre estratégias de enfrentamento, bem-estar emocional e stresse percebido sob o aspeto de valores culturais entre 226 estudantes universitários. Os participantes completaram questionários referente aos seus valores culturais, bem-estar emocional e as suas estratégias de enfrentamento. O principal objetivo era explorar o efeito de um potencial efeito mediador de estilos de enfrentamento em valores culturais e bem-estar. Verificou-se que valores culturais tinham um efeito significativo no estilo preferencial de enfrentamento individual e de bem-estar, enquanto que o enfrentamento também demonstrou estar correlacionado com o bem-estar. Especialmente, a orientação a longo prazo demonstrou ser o preditor mais forte tanto para estilos de enfrentamento como para o bem-estar. Não foi encontrado nenhum efeito mediador de estilos de enfrentamento em valores culturais e bem-estar utilizando uma análise de mediação. Adicionalmente, foi examinado se os resultados de participantes de países europeus germânicos se diferenciaram significativamente de participantes dos países europeus de origem latina no que se refere a bem-estar, estilos de enfrentamento e valores culturais. Constatou-se que a evitação de incerteza, a orientação de longo prazo e o enfrentamento orientado às tarefas diferenciaram-se entre os dois grupos. Com base nos resultados deste estudo, sugere-se a implementação de intervenções de autodisciplina e/ou ferramentas que ajudem o estudante a lidar com stresse.

*Palavras chaves:* Valores culturais de Hofstede, distância de poder, orientação de longo prazo, masculinidade, evitação de incerteza, coletivismo, stresse percebido, bem-estar emocional, enfrentamento, estudo intercultural, mediação

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# **1 The Relationship of Cultural Values to Coping, Perceived Stress, and Emotional Well-being of Master's Level Business Students at a European University**

## **1.1 Importance of the Study**

Globalization has forced the current labor market to go through significant changes that call for organizations to adapt (Blancero, Mouriño-Ruiz, & Padilla, 2018; Pasca & Wagner, 2011). The term globalization refers to “the context of economic and academic trends that are part of the reality of the 21<sup>st</sup> century” (Altbach & Knight, 2007, p. 290) and manifests itself as people from different generations, age groups, and cultures coming together and working side by side (Blancero, Mouriño-Ruiz, & Padilla, 2018). Consequently, the increase in workplace diversity not only imposes a challenge for the organizational leaders but also for the workers (Pasca & Wagner, 2011). Organizational changes (Pasca & Wagner, 2011) and intercultural challenges (Brett, 2018) have caused an increase in stress and negative emotions. Ultimately, however, the employees’ and the company’s well-beings are intertwined. A recent study has shown that poor emotional well-being in the workplace significantly affects productivity, considering that the majority of people who suffer from poor emotional well-being are of working age. For example, the World Health Organization reported that depression and anxiety disorders cost the global economy US\$ 1 trillion per year in lost productivity, US\$ 140 billion of which are in the European region alone (“Mental health at the workplace”, 2017).

Another effect of globalization is the pursuit of “internationalization” that academic institutes find themselves in. The term has been coined by Altbach and Knight (2007) who emphasize that internationalization is different from globalization, yet the two are still connected. Internationalization refers to the efforts that academic institutions undertake to keep up with the impact of globalization and includes initiatives such as internationally-focused programs, campuses around the world, or cross-border collaborative arrangements among universities (Altbach & Knight, 2007; Jibeen & Asad Khan, 2015). With the internationalization of higher education comes an increase in human diversity at universities never experienced before. As of 2015, approximately two million students were studying abroad, and the number is expected to rise to 15 million by 2025 (Jibeen & Asad Khan, 2015). According to Gill (2016), this means an exchange of “worldview, religion, culture, social status, values, ethnicity, race, gender-orientation, physical ability, and so forth” (p.484). This can result in a rich learning experience for the parties involved or, on the contrary, can cause conflict due to the “otherness” of people (Gill, 2016). Additionally, international students also face different

needs and challenges in comparison to their domestic peers. It is argued that international students experience greater adjustment challenges and stressors due to the new cultural and social environments (Ross, Niebling, & Heckert, 1999) besides the lack of emotional and social support (Chavajay, 2013). As a result, more students have been reporting to suffer from stress which has shown to have an impact on their mental health and academic performance (Durand-Bush, McNeill, Harding, & Dobransky, 2015).

To offer a solution for students, the future leaders, and employees, it is crucial to understand the complexity of stress and how to cope with it and learn more about one of its most impacting consequences, namely poor health. This study aims to research the interconnected relationship between stress, coping and well-being in regard to cultural differences, while taking into account the advantages and disadvantages of cultural differences. Ultimately this paper aims to contribute to a healthier society and workforce.

## **1.2 Purpose of the Study**

In this study, I investigate how cultural differences affect students individual coping styles and exactly how, in turn, their emotional well-being and perceived stress might be influenced thereby. Although interest in studying the effects of cultural aspects has increased over the past years, there is still little variety in research. For instance, critics decry that a lot of the cultural-coping research has been conducted in North America and is subsequently mono-cultural (Kuo, 2011). As a result, there is a need for a greater variety of countries represented in cross-cultural research, not only in terms of countries but also in terms of cultural differences. According to Oyserman, Coon, and Kimmelmeier (2002), the majority of research on Hofstede's cultural dimensions focuses only on one of his six dimensions, specifically "individualism vs. collectivism", instead of including all of his dimensions at equal value. Particularly in relation to well-being, relationships, and self-concept the research on individualism vs. collectivism is predominant. Consequently, it comes as no surprise that Taras, Kirkman, and Steel (2010) strongly encourage researchers to explore Hofstede's other cultural dimensions and to not discount or ignore them but to include them as topics of value. They argue that "assessing the relative predictive power of all of the values could help researchers with their choice to include other theoretically supported values" (p.406). For this reason, I intend to collect research as comprehensively as possible and look at the effect of the main five cultural dimensions in relation to coping and well-being. For this study well-being has been broken down to emotional well-being and perceived stress. By surveying students from

primarily European countries I build upon previous cross-cultural research and aim to offer new insights into this subject. Additionally, this study aims to contribute to the literature and research on Geert Hofstede's cultural dimensions by investigating five of the six cultural dimensions: power distance, uncertainty avoidance, masculinity vs. femininity, individualism vs. collectivism and long-term orientation.

### **1.3 Research Questions**

Considering all the aspects mentioned above, I came up with the following two research questions:

1. How do cultural values influence coping, perceived stress, and emotional well-being?
2. Does coping mediate the effect of cultural values on perceived stress and emotional well-being?

### **1.4 Thesis Structure**

The first chapter of this dissertation, the Introduction, provides the reader with a short overview of the current situation and highlights why this research is important. To follow is the Literature Review, a chapter that highlights current knowledge on the topics of culture, perceived stress, emotional well-being and coping. This is followed by the Methodology chapter, which describes the methods that were used during the study. Afterward, the results are presented in the Analysis of Results chapter, followed by a discussion of the results. The dissertation ends with a chapter on research limitations and suggestions for further research.

## **2 Related Literature**

In the following chapters, I discuss established research findings on the topics of stress, coping, emotional well-being, and their respective relationships to ground this study within conceptual frameworks. Furthermore, the chapters are going to explore how these topics relate to culture.

### **2.1 An Overview of the Research on Stress and its Effect on Well-being**

Stress has been referred to as a global public health problem and an issue of modern society (Sharma & Rush, 2014). Indeed, stress has been linked to a number of physical and mental health issues (Cohen, Janicki-Deverts, & Miller, 2007) that cause greater damage to our health than smoking, consuming alcohol or not engaging in physical exercise (Holt-Lunstad, Smith, & Layton, 2010). Under those circumstances, it comes as no surprise that we are flooded

with advertisements for stress-relievers, promising to improve our well-being and lower the risk for disease (Slavich, 2016).

At the same time, it is interesting to observe the various effects of stress on different people. Whereas some appear to be more “laid-back,” others react highly emotionally. The same demanding situation might cause anxiety in a few and no reactions in others. It appears that our reaction to demanding situations is related to a range of individual differences that need to be considered during the stress response to have a better understanding. Ultimately, this allows for better person-environment focused interventions and eventually leads to a healthier society. The following chapters are going to highlight some of the most important findings on stress, its effect on our health, and how our coping style relates.

**2.1.1 What is stress?** The endocrinologist Hans Selye was the first to describe stress as a biological response and defined it as “the non-specific response of the body to any demand made upon it” (Selye, 1976, p. 137). He explains that stress is part of our everyday life and is “anything, pleasant or unpleasant, that speeds up the intensity of life.” This might be a passionate kiss or a deadline at work. It could even be the baseball player trying his best on the field or the baseball fan rooting for his team (Selye, 1976).

Selye goes on to explain that stress is a biological defensive mechanism that undergoes three phases: alarm, resistance, and exhaustion. During the alarm stage, the body becomes aware of a threat – the stressor – and reacts with a “fight-or-flight” response. The sympathetic nervous system is activated and prepared to meet the stressor. In the resistance stage, the body fights the threat and the body remains on alert. Lastly, if the body is not able to adapt to the stressor and this state persists, the body’s resources are used to capacity, and finally, result in exhaustion. He referred to the combination of these three phases as General Adaption Syndrome (GAS) (Selye, 1976).

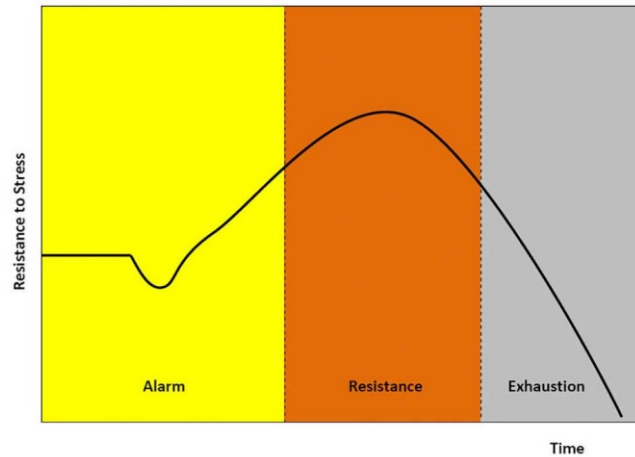


Figure 1. Selye's GAS model explaining the three stages of the stress response: alarm, resistance and exhaustion.

When Selye described the stress response, he differentiated between two types of stress: eustress and distress. Eustress refers to the experience of stress enhancing our functions, and distress has negative effects and causes serious damage to our health, relationships and overall quality of life. Whether people experience stress as helpful (eustress) or damaging (distress) depends on their perception of the stressor (Selye, 1976).

After Selye introduced the GAS model, plenty of researchers developed a number of theoretical models, following his framework, while focusing on different aspects of the stress response. The following chapter explains the theoretical models in more detail and highlights their differences.

**2.1.2 The different theoretical models of stress.** The researchers Holmes and Rahe (1967) theorized that stress is a stimulus and according to their theory, stress is the change that requires adapting, e.g. divorce, marriage, or death. People are no more than passive receptors of stress and have little say in its intensity. In later research, Rahe included the idea of interpretation to the model, suggesting that stressful life events can, in fact, be interpreted as negative or positive (Rahe & Arthur, 1978) which is similar to Lazarus and Folkman's *transactional theory of stress and coping*.

According to Lazarus and Folkman's theory, stress is the outcome of a person - including the cognitive, physiological, affective, psychological, and neurological system - and his/her complex surroundings (Lazarus, 1966; Lazarus & Folkman, 1984). The researchers explain that the relationship between a person and their surroundings is transactional in nature and mediated by (1) cognitive appraisal and (2) coping (Lazarus & Folkman, 1987). Appraisal

refers to the interpretation of stressors and consists of primary and secondary appraisal, as well as reappraisal. During the primary appraisal stage, the stressor is categorized as either threatening or non-threatening. During the secondary appraisal stage, the available resources or coping strategies to address the stressor are evaluated. And lastly, the reappraisal stage reevaluates the stressor and the identified available resources (Lazarus & Folkman, 1984). Phillips (2013) however, argues that the *actual experience* of stress is different. Whereas the transactional model refers to a person’s appraisal of a stressful life situation, perceived stress refers to the *experience* of feelings and thoughts regarding the stressful situation. In fact, two people might experience the same stressful event but feel very different about it. This is a relevant point to consider when examining the relationship between individual differences and how it impacts our well-being.

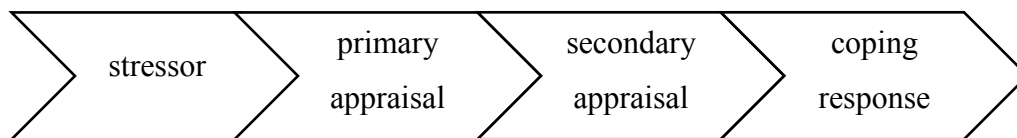


Figure 2. The Transactional Theory of Stress and Coping (Stangor & Jennifer, 2014).

**2.1.3 The effects of stress on our well-being.** A lot of stress research focuses on the negative aspects of stress when it is important to remember that actually, from an evolutionary point of view, biological stress did not intend to kill us but rather to keep us alive (Dhabhar, 2014). More researchers have pointed out the positive effects of stress (Folkman & Moskowitz, 2000; Sutherland, 2000). In fact, it has been suggested that “stressful situations may lead to personal changes which might be beneficial to individuals” (Gadzella, Baloglu, Masten, & Wang, 2012, p. 82). Part of that reason is that people can improve their coping skills and learn from their mistakes (Calhoun & Tedeschi, 2001).

Most notably, from a biological perspective, research has shown that stress can be beneficial. However, at this point, I want to mention the importance of differentiating between short-term and long-term stress. Short-term stress refers to stress that is experienced for a period of minutes up to hours. In contrast, chronic or long-term stress is experienced for several hours a day for a period of weeks and months (Dhabhar & McEwen, 1997). While short-term stress has shown to improve e.g., immunoprotective responses of wound healing, vaccination, and cancer (Dhabhar, 2014), the consequences of long-term stress look quite different.

The findings on long-term stress (also referred to as chronic stress), demonstrated the physical or mental concerns one might suffer if left untreated (Ader, 2007; Dhabhar, 2009; Selye, 1975). A number of major physical health conditions, such as migraine (Morillo, 2002), cardiovascular disease (Kivimäki et al., 2006; Li, Zhang, Loerbroks, Angerer, & Siegrist, 2015), stroke (Bakris, 2007), breast cancer (Bower, Crosswell, & Slavich, 2014), obesity (Kuo et al., 2007), and ovarian cancer (Lutgendorf et al., 2013) have been linked to stress. Additionally, it has been implied that stress predicts accelerated biological aging (Epel et al., 2004). In summary, it can be argued that stress is complex in a way that “the same responses that permit survival during stress can ultimately promote disease” (Meaney, 2001, p. 1163).

It was also suggested that stress causes for a decrease in emotional well-being (Charles, Piazza, Mogle, Sliwinkis, & Almeida, 2013). Kahneman and Deaton (2010, p.1) define emotional well-being as “the emotional quality of an individual’s everyday experience—the frequency and intensity of experiences of joy, stress, sadness, anger, and affection that make one’s life pleasant or unpleasant”. Consistent research has shown that a decrease in emotional well-being results in depressive symptoms (Grant, Guille, & Sen, 2013; Monroe, Slavich, Torres & Gotlib, 2007), anxiety disorder, insomnia (Baum & Posluszny, 1999), decrease in happiness (Schiffirin & Nelson, 2010) and other mental health disorders (Grant, Guille, & Sen, 2013). Some of the reasons that cause for a decrease in emotional well-being have been said to be academic stress (Zhang & Zheng, 2017), as well as occupational stress (Wang et al., 2014; Wang et al., 2017). Interestingly nevertheless, the research found that there was a strong connection between individual differences mediating the effect of well-being and stress.

**2.1.4 Individual differences in the stress response.** Over the years, researchers have examined the relationship between stress and individual differences to get a better understanding of the stress response. Research shows that our sensitivity to stressors differs among individuals because of cognitive predispositions, inherited characteristics, and what we experience early in life (Lecic-Tosevski, Vukovic, & Stepanovic, 2011). This might explain how we handle stress as adults is predetermined (Flinn, Nepomnaschy, Muehlenbein, & Ponzi, 2011; Matthews & Phillips, 2012; Meaney, 2001). Known as *transgenerational stress inheritance*, researchers describe the harmful effect stress-exposed parents can have on their offspring caused by epigenetic changes<sup>1</sup> to genes related to the hypothalamic-pituitary-adrenal

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<sup>1</sup> “Used to refer to heritable alterations that are not due to changes in DNA sequence. Rather, epigenetic modifications [...] alter DNA accessibility and chromatin structure, thereby regulating patterns of gene expression” (Handy, Castro, & Loscalzo, 2011).

(HPA) axis<sup>2</sup>. These deregulations make it more difficult for the offspring to adapt to stress later in life and not only affects the immediate generation but persists over several generations (Matthews & Phillips, 2012). For example, studies on patients with posttraumatic stress disorder (PTSD) and its effects on their children have confirmed the modifications of the HPA axis and its functions (Daskalakis et al., 2016). Children of PTSD patients are often exposed to careless and violent behavior which causes the genes to deregulate (Yahyavi, Zarghami, & Marwah, 2014). Meaney (2001) explains that variations in maternal care due to stress influence the offspring's gene expression responsible for the behavioral and endocrine response to stress, which in turn influences a child's ability to form healthy individual differences in their reaction to stress.

Vukovic and Stepanovic (2011) on the other hand argue that the intensity to which stress is experienced greatly depends on a person's age, gender, intelligence, and other personality traits such as self-efficacy. Self-efficacy describes a person's belief regarding their capacity to accomplish certain results (Flynn & Chow, 2017). For example, studies on self-efficacy and stress have shown that people who score high on self-efficacy also display fewer symptoms of stress and depression (Flynn & Chow, 2017). Whereas the research findings on self-efficacy and stress have been consistent, the findings on stress and gender have been rather indistinctive. Earlier research on this matter shows no correlation between gender (male/female) and perceived stress and attributes a difference in stress level to personality rather than gender (Fontana & Abouserie, 1993). In the meantime, more recent research shows that males and females react differently to stress with females reporting a higher level of perceived stress (Kononovas & Dallas, 2009; Verma, Balhara, & Gupta, 2011). According to Verma, Balhara, and Gupta (2011), these differences can be traced back to neurobiological differences.

## **2.2 Coping Styles and their Impact on Well-being**

Coping is defined as “cognitive and behavioral efforts to master, reduce, or tolerate the internal and/or external demands that are created by the stressful transaction” (Lazarus & Folkman, 1984, p.843). There are many ways that people chose to cope with stressors which are particularly important given that they influence our emotional well-being (Monaghana &

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<sup>2</sup> “The hypothalamic-pituitary-adrenal (HPA) axis is our central stress response system. The HPA axis is an eloquent and every-dynamic intertwining of the central nervous system and endocrine system” (Alschuler, 2016).

Hausmann, 2015) and overall satisfaction with life (Gautam & Madnawat, 2017). In the following chapter, I am going to discuss further details.

According to Lazarus and Folkman's early research (1980), two coping styles exist: emotion-focused coping and problem-focused coping. Emotion-focused coping focuses on the emotions caused by the stressor and results among others in drug consumption, eating, and/or distracting oneself to deal with the stress (McLeod, 2009). Contrarily, problem-focused coping focuses on the problem caused by the stressor (Folkman & Lazarus, 1980) which might look like time management or making a plan of action (McLeod, 2009). Although Lazarus and Folkman's framework of stress and coping is still widely recognized and applied (Biggs, Brough, & Drummon, 2017), more recent research offers a broader variety of coping styles. For instance, Cohan, Jang, and Stein's (2006) research on coping resulted in the differentiation of four coping styles: task-oriented coping, emotion-oriented coping, contacting a friend, and/or distracting oneself. Yet task-oriented and emotion-oriented coping is comparable to Lazarus and Folkman's differentiation.

Many studies on coping and its impact on emotional well-being have demonstrated correlations. For instance, Cohan, Jang, and Stein's (2006) study on coping styles, anxiety, depression, and traits of the Five-Factor personality theory revealed that emotion-oriented coping was linked to anxiety and depression. In accordance with previous findings, it has been implied that higher levels of anxiety correlate with lower scores on problem-focused coping (Tuncay, Musabak, Engin Gok, & Kutlu, 2008). Although research has shown that in most cases, both emotion - and problem-focused coping are applied in combination, emotion-focused coping is often less successful than problem-focused coping (Penley, Tomaka, & Wiebe, 2002). Interestingly, women are more likely to engage in emotion-focused and avoidant coping styles compared to men (Cohan, Jang, & Stein, 2006; Matud, 2004). To summarize, it can be expected that emotion-focused coping will prompt a decrease in emotional well-being, whereas task-oriented coping encourages an increase in well-being.

### **2.3 Stress, Coping, and Emotional Well-being under the Aspect of Culture**

A substantial amount of research that is dedicated to stress, coping and emotional well-being focuses on individual differences such as personality traits (Afshar et al., 2015; Lecic-Tosevski et al., 2011; Studer et al., 2016) and gender (Hickey, Fitzgerald, & Dooley, 2017; Madhyastha, Latha, & Kamath, 2010; Nelson & Burke, 2018). Tweed, White, and Lehman (2004) however argue that little attention has been given to the impact of culture, when in fact

it plays such a significant role in the way we perceive our own “self” and that of others (Markus & Kitayama, 1991). To further examine this point, following chapters explain the effect of cultural differences on stress, coping and emotional wellbeing.

**2.3.1 Hofstede’s cultural dimensions theory.** In 2014 the word “culture” was named *Word of the Year* by Merriam-Webster. The word culture has also been discussed as confusing because of its many meanings (Berger, 2000; Rothman, 2014). In the following context, I refer to culture as “the set of shared knowledge and implicit theories about the world including beliefs, values, attitudes, and other constructs needed to interpret and navigate various environments” (Sharma, 2010, p.788). The value and belief part is of particular importance for this study. For this reason, the *Hofstede’s cultural dimensions theory* introduced by the social psychologist Geert Hofstede was used. The framework describes cultural dimensions and values of countries and allows for comparison between countries based on these dimensions (Yoo, Donthu, & Lenartowicz, 2011). The theory consists of six dimensions, although the fifth and sixth dimensions have only been proposed later. This study focuses on the main five dimensions of the framework, which are as follows:

- **Power Distance (PD):** indicates to what degree the less powerful residents of a country expect and accept the unequal distribution of power (Yoo, Donthu, & Lenartowicz, 2011) and believe this to be normal (Bergiel, Bergiel, & Upson, 2012). In countries that are considered high in power distance, it is frowned upon to criticize or talk back to superiors and expected to show respect. On the contrary, individuals of low power distance countries challenge their superiors with all due respect (Bergiel, Bergiel, & Upson, 2012).
- **Collectivism (vs. Individualism) (IDV):** refers to “the degree to which people in a society are integrated into groups” (Hofstede, 2011). Countries with strong collectivistic characteristics value tightly-knit relationships and caring for one another; the “we” is more important than the “I” (Hofstede Insights, 2018). Contrary, countries that score high on individualism value self-realization and taking care of oneself and close family.
- **Uncertainty Avoidance Index (UAI):** “deals with a society’s tolerance for ambiguity. It indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations” (Hofstede, 2011, p.10). Countries with high UAI scores stick to certain behaviors and beliefs and do not tolerate unconventional behavior. Countries with low scores aim for easier going approaches (Hofstede Insights, 2018).

- **Masculinity (vs. Femininity) (MAS):** refers to a “preference in society for achievement, heroism, assertiveness, and material rewards for success” (Hofstede, 2011, p.12). Femininity, on the other hand, explains “the preference for cooperation, modesty, caring for the weak and quality of life” (Hofstede, 2011, p.12). A masculine society is characterized by competition whereas a feminine society is described as consensus-oriented (Hofstede Insights, 2018).
- **Long-term Orientation (LTO):** indicates cultures embracing future-oriented values and holding off on short-term gratification to ensure rewards in the future (Taras, Kirkman, & Steel, 2010). Meanwhile, short-term orientation refers to a culture that is tradition-oriented with a view on the present and the past and values social obligations (Taras, Kirkman, & Steel, 2010).

Although the framework is widely recognized, it has been criticized for allocating a nation’s cultural dimensions to an individual’s cultural orientation when in fact these two might differ (Yoo, Donthu, & Lenartowicz, 2011). Sharma (2010, p.787) argues that “Hofstede’s nation-level cultural dimensions are conceptually and empirically quite different from individual cultural values as conceptualized and measured by others because all the citizens of a country may not share similar cultural characteristics”. For example, not all Americans are individualistic and not all Japanese or Koreans are collectivistic (Sharma, 2010; Yoo, Donthu, & Lenartowicz, 2011). For this reason, several researchers have attempted to develop scales to measure Hofstede’s dimensions on an individual level but were only somewhat successful (Erdem, Swait, & Valenzuela, 2006; Furrer, Liu, & Sudharshan, 2000; Sharma, 2010). The most recent scale was proposed by the researchers Yoo, Donthu, and Lenartowicz (2011) and showed acceptable reliability and usefulness. Although Hofstede’s model has been criticized, it remains widely accepted and applied in today’s research across multiple fields (Arrindell et al., 2013; Bhakta et al., 2016; Yoo, Donthu, & Lenartowicz, 2011).

**2.3.2 Culture and its influence on stress.** Rapoport (1978) argues that the subjective effect of culture has been neglected in the stress response when in fact it plays such an important role. According to Sammons (n.d.) for example, what cultures perceive as stressful depends largely on the geographical region they inhabit, and the corresponding economic and political surroundings. To clarify his point, he delivers the following example: In the UK, typical stressors are related to money and work. In other parts of the world, sources of stress are safety, food, and water. Another example: In Eastern cultures, stress is perceived as a lack of inner peace whereas Western cultures perceive stress as the loss of control (Verma, Balhara, & Gupta,

2011). As such it appears that the way we perceive, experience and approach stress is influenced by our cultural background.

According to Kononovas and Dallas (2009), different cultures have different advantages or disadvantages when approaching challenges. In their cross-cultural study on perceived stress, they were able to prove that cultures scoring high on collectivism also showed higher levels of perceived stress; whereas individualistic cultures demonstrated lower levels of perceived stress. Interestingly though, they argue that the variations in perceived stress are affected by self-efficacy rather than culture. Yet, different cultures demonstrated various degrees of self-efficacy: collectivistic cultures displayed low self-efficacy and individualistic cultures were associated with high self-efficacy (Kononovas & Dallas, 2009). A study on culture and perceived stress conducted by Shavitt et al., (2016) found different results. Their findings showed that collectivistic cultures who seek for social support, e.g. Mexican-Americans, experienced lower levels of stress. Nonetheless, this was not the case for all collectivistic cultures they researched: Korean-Americans did not benefit from the collectivistic nature of their culture. Their research confirmed findings from previous studies, which state that East-Asians cultures, despite their collectivistic nature, are less likely to benefit from social support because the latter is associated with an obligation of returning the help and a sense of indebtedness (Shavitt et al., 2016; Wang & Lau, 2015).

Given that masculine cultures are achievement-oriented, it can be argued that individuals with masculine-oriented values suffer from higher levels of perceived stress. A study on sex differences in the stress response observed that men were subject to higher cortisol levels when exposed to achievement-related tasks (Stroud, Salovey, & Epel, 2002). Moreover, achievement is often accompanied by competition (Lam, Yim, Law, & Cheung, 2004). Hofstede himself explained that masculine societies as a whole are more competitive (Hofstede Insights, 2018) and competition leads to higher levels of stress (Boos, Franiel, & Belz, 2015). Thus, it can be expected that individuals who identify with the achievement-oriented masculine values encounter intensified levels of perceived stress.

**2.3.3 Culture and its influence of coping.** The way a person evaluates their available resources for coping depends on their “internalized cultural values, beliefs, and norms” (Kuo, 2011, p.1). In fact, this has been confirmed by Kuo’s findings; he argues that cultural factors limit a person’s access to coping resources during stressful periods and differences in coping styles have been attributed to cultural beliefs (2011).

A study comparing East-Asian students with Western English-speaking students found that East-Asian students were more likely to engage in internally targeted control strategies such as distancing, accepting, and waiting to cope with stress. Students with Western-English speaking backgrounds, on the other hand, engaged in externally targeted control such as planful problem solving and confrontation (Tweed, White, & Lehman, 2004). Another study on Japanese and British students and their preference for coping showed that Japanese students have a stronger tendency towards emotion-focused strategies compared to their British peers. However, both Japanese and British students had a similar tendency in their application of problem-focused coping strategies (O'Connor & Shimizu, 2002). Noticeably, Asian countries, such as Japan, have been characterized as collectivistic, whereas Western countries, like the ones mentioned above, show individualistic tendencies (Schreier et al., 2010). Therefore, I argue that people with collectivistic values engage in emotion-oriented coping.

Further research on collectivism has shown that collectivistic cultures are more likely to turn to friends and family for social support and as a result enjoy better mental and physical health (Ariapooran, Heidari, Asgari, Ashtarian, & Khezeli, 2018; Shavitt et al., 2016), which is contrary to previous findings. Results from an earlier study explained that it is less common for collectivistic cultures to seek social support out of fear of disrupting the general good (Jimenez, Bartels, Cardenas, Daliwal, & Alegria, 2012). Nonetheless, given that collectivism is characterized by close-knit relationships and tending towards another, I argue that collectivistic individuals turn to social support as a form of coping.

Another form of coping as described by Cohan, Jang, and Stein (2006) is “treating oneself” which is a form of distractive behavior. Distraction is defined as “the deliberate focusing on neutral or pleasant thoughts or engaging in activities that divert attention in more positive directions” (Broderick, 2005, p. 502). Findings on the use of distraction-oriented coping observed that women were more likely to distract themselves during stressful periods in comparison to men. Applying this to the idea of masculine vs. feminine cultures, I assume that distraction-oriented coping decreases with an increase in masculinity.

Lastly, Cohan, Jang, and Stein (2006) speak of task-oriented coping as a form of dealing with stressful situations. As noted earlier, task-oriented coping can be compared to Lazarus and Folkman’s problem-focused coping (Cohan, Jang, & Stein, 2006) and involves actions directed towards changing the situation or reducing the amount of experienced stress (Kariv & Heiman, 2005). Taking action is often considered a way of gaining control over a situation, even if just

perceived, and establishing a feeling of optimism (Fontaine, Manstead, & Wagner, 1993). Given the definitions and characteristics of masculinity (“achievement, heroism, assertiveness”; Hofstede, 2011, p.12), uncertainty avoidance (“rules and laws to cover unpredictable situations”; Ye, Ng, & Lian, 2015, p. 526), and long-term orientation (“self-discipline”; Hofstede & Minkov, 2010, p. 497), it can be expected that the mentioned cultural dimensions naturally prompt task-oriented coping.

**2.3.4 Culture and its influence on emotional well-being.** One of the previous chapters on stress and emotional well-being discussed how stress is the cause of multiple health problems which are subject to individual differences (Chapter 2.1.4). In the following chapter, I want to discuss how cultural values function as individual differences in the relationship to emotional well-being.

Research on culture and emotional well-being have found that culture plays a significant role in the way we understand emotional well-being or lack thereof (Gopalkrishnan & Babacan, 2015; Kline & Huff, 2007). According to Andrade (2017), each culture has its own understanding of emotional well-being, whether it is mental or physical, and any stigma attached to it. Gopalkrishnan and Babacan (2015, p.6) claim that "one aspect of difference across cultures relates to what the cause or nature of disease or illness is perceived to be". For example, a study found that Latinos, African-Americans, and Asian-Americans had a different idea of the cause for mental illness compared to Non-Latino Whites (Jimenez et al., 2012). In fact, many cultures link a lack of emotional-wellbeing to dark magic, being controlled by evil spirits, or an imbalance in yin/yang (Gopalkrishnan & Babacan, 2015). More specifically, there is a clear difference between the Western world, where scientific factors (genetic inheritance, psychosocial trauma, etc.) are the cause for mental illnesses, and Asian and African countries, where supernatural forces (as the one mentioned above) are blamed (Group, 2017). Not only does culture influence the cause of emotional well-being, but it also influences the way we talk about it. Often what is considered “culturally appropriate” differs among the cultures. For example, Asian-Americans are less likely to speak about emotional well-being and express their distress through somatic symptoms because of the stigma attached to a lack of emotional health (Jimenez et al., 2012).

Given that our cultural backgrounds play a key role in our emotional well-being I expect that the cultural dimensions studied in this paper do affect a person’s emotional quality of everyday life. For example, long-term orientation explains a culture’s future-oriented mindset,

willing to forgo instant gratification for future rewards; besides Hofstede and Minkov's explanation that the main work values for a long-term oriented culture are "learning, honesty, adaptiveness, accountability, and self-discipline" (2010, p. 497). In previous studies, some of these traits have been linked to an increase in life satisfaction (self-discipline; Salami, 2010; adaptiveness; Park & Jeong, 2015). Also, I assume that the anticipation of future rewards contributes to an enhanced state of well-being, given that anticipation is defined as the "changes in happiness that precede the occurrence of major life events" (Angeles, 2010, p. 3). For these reasons, I expect long-term oriented individuals to experience better emotional well-being.

In the same way, I presume for collectivistic individuals to enjoy enhanced levels of emotional well-being. Collectivism is characterized by prioritizing the needs of the group over the needs of the individual, and supporting each other is vital (Hofstede, 2011). As mentioned in the previous chapter, individuals who turn to friends and family for support during stressful situations show better mental and physical health (Ariapooran, Heidari, Asgari, Ashtarian, & Khezeli, 2018; Shavitt et al., 2016). In fact, as stated by Abramis, "the greater the amount of social support respondents received from 'people' in their personal lives the less anxiety, depression, and interpersonal sensitivity they experienced, and the more pleasant the quality of their lives (1985, p.118). Hence, while taking note of the considerable amount of previous research done on collectivism and well-being, I expect that individuals with collectivistic values will have better emotional well-being as a result of social support. Although, there is little variety in the countries represented in previous studies (Kuo, 2011).

Lastly, this paper researches the effects of uncertainty avoidance on emotional well-being. According to Hofstede, uncertainty avoidant societies are more nervous, less ambitious and pessimistic regarding work-related problems (Ye, Ng, & Lian, 2015). Previous results on uncertainty avoidance are ambiguous. While Kogan, Sasaki, Zou, Kim, and, Cheng (2013), found a link between high uncertainty avoidance, enhanced emotional well-being, and faith in God, other findings report the opposite. Stowers (2013) for example observed that uncertainty avoidance was correlated with work stress and high anxiety. Based on Hofstede's view of uncertainty avoidance, it can be expected that individuals struggle with lower emotional well-being as a result of uncertainty avoidant characteristics.

In conclusion, previous research has shown consistent findings regarding the effect of culture on perceived stress, coping and emotional well-being. Yet, the relationships of the mentioned have been viewed independently of each other. Given that previous research also

demonstrated that coping affects one's well-being, it can be assumed that coping, perceived stress, and emotional well-being are connected. This leaves me with the assumption that coping styles mediate cultural values and well-being as a result of individual differences in cultural values. Furthermore, it raises the question of whether coping styles and well-being differ not only because of cultural values but also because of one's country of origin. To answer these questions, the hypotheses, with the literature review in mind, were concluded as follows:

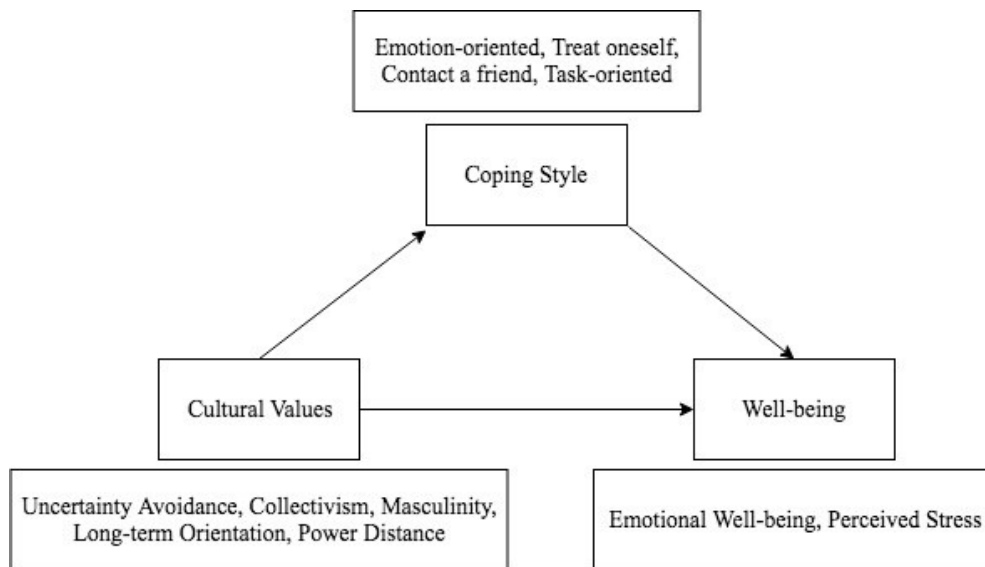


Figure 3. Mediation model for the effect of coping style between cultural values and well-being.

*(H1) Cultural values will significantly impact well-being.*

*(H2) Cultural values will significantly impact coping style.*

*(H3) Coping style mediates the effect of cultural values on well-being.*

*(H4) There is no significant difference in cultural values, coping style, emotional well-being and perceived stress between the participant's country of origin.*

### 3 Methodology

The aim of this study was to analyze the effect of cultural differences on coping styles and well-being. For this reason, a cross-sectional survey method was conducted. To ensure the survey was not too long, the short versions of the scales, if existing, were used. This chapter describes the participants, measures, and procedures for this study.

### 3.1 Procedure

The data reported for this study was collected at the Católica-Lisbon School of Business and Economics in cooperation with the Academic Director of the school's Master's programs. The university's Master's programs receive a number of international applications each year and for this reason, offered itself as a good fit for this study. The Academic Director's university e-mail account was used to distribute the survey and to ensure maximum reach as well as responses. In exchange for using the university's student database, the Academic Director added questions to the survey which have no influence on the study and can be viewed as separate. The questions were not included in the Appendix. I used the online survey platform Qualtrics to design the survey. The data collection took place in mid-August, which marks the end of the semester break. Participants were asked to reflect on the past 12 months and answer the survey based on their personal experience. The collected data were analyzed with SPSS.

### 3.2 Instruments

***Socio-demographics.*** To gather information on the socio-demographic background of survey participants, I asked them about their nationality, age, and gender (male/female). Additionally, the students had to report their intake year (2016/2017 or 2017/2018) and whether the spring semester 2018 was a “coursework semester, exchange semester, thesis semester or other”.

***Cultural Values.*** To assess the survey participants' cultural values, the *Cultural Values at the Individual Level (CVSCALE)* (Yoo, Donthu, & Lenartowicz, 2011) scale was used. The instrument is based on Hofstede's renowned five-dimensional measure of cultural values and measures cultural values on an individual level. The CVSCALE consists of 26 items with five dimensions: power distance, uncertainty avoidance, collectivism, long-term orientation, and masculinity. The reliability of the CVSCALE was measured in different countries and samples. Each reliability test reported satisfactory results demonstrating across-sample and across-nation generalizability. The Polish sample, for example, showed reliability alphas of .84 for power distance, .76 for uncertainty avoidance, .85 for collectivism, .78 for long-term orientation, and .71 for masculinity.

The students indicated how much they believed in statements such as “People in higher positions should make the most decisions without consulting people in lower positions” (power distance) or “It is more important for men to have a career than it is for women” (masculinity). Yoo, Donthu, & Lenartowicz (2011) state that job performance is associated with assertiveness

and success and as such connects with Hofstede's definition of masculinity. The responses for power distance, uncertainty avoidance, collectivism, and masculinity are given on a 5-point-Likert scale from 1 (strongly disagree) to 5 (strongly agree). The dimension of long-term orientation was measured from 1 = "Not important" to 5 = "Very important".

**Coping.** Participants completed a short form of the *Coping Inventory for Stressful Situations (CISS-SF)* (Cohan, Jang, & Stein, 2006) to assess their coping styles. The original CISS (Endler & Parker, 1999) consists of 48 items and measures three types of coping styles (task-oriented, emotion-oriented and, avoidant) as a response to stressful life-events. Cohan, Jang, & Stein (2006) came up with a shorter form by eliminating items with the lowest correlations. The result was a 21-item scale with four subscales, suggesting four types of coping styles by dividing the avoidant style into "contact a friend" and "treat oneself" (leaving task-oriented, emotion-oriented, contact a friend, and treat oneself). The original study for the scale reported a satisfactory Cronbach's Alpha on the emotion-oriented, task-oriented, and contact a friend subscales with values ranging between .76 – .88; The treat oneself variable, on the other hand, showed lower internal consistency (.61 – .72). The CISS-SF has been used in multiple studies to measure correlations with anxiety, and depression (Cohan, Jang, & Stein, 2006) as well as trait personality such as resilience, agreeableness and self-efficacy (Cohan, Jang, & Stein, 2006; Campbell-Sills, Cohan, & Stein, 2006; Pisanti, Lombardo, Lucidi, Lazzari, & Bertini, 2008).

Survey respondents indicated how much they engaged in these types of activities when they encountered a difficult, stressful, or upsetting situation in the past 12 months. Answers included statements such as "blame myself for not having a solution" (emotion-oriented), "focus on the problem" (task-oriented), "treat myself to a snack" (treat oneself) and "spend time with a special person" (contact a friend) (Cohan, Jang, & Stein, 2006). Responses were reported on a 4-point Likert scale ("Never, 1 – 2 times per week, 3 – 4 times per week, 4 – 5 times per week") that was retrieved from the *Dialectical Behavior Therapy Ways of Coping Checklist (DBT-WCCL)* (Neacsiu, Rizvi, Vitaliano, Lynch, & Linehan, 2010). The DBT-WCCL Likert scale presented a better fit for the coping questions asked during the survey.

**Emotional Well-being.** To find out more about the participant's well-being, I used the *Short Warwick Edinburgh Mental Well-being Scale (SWEMWBS)*<sup>3</sup> (Tennant et al., 2007). The scale was developed with the purpose of creating a short tool to capture a wider concept of well-being which includes "affective-emotional aspects, cognitive-evaluative dimensions, and psychological functioning" (Tennant et al., 2007). The long version of the WEMWBS consists of 14 positively worded items including statements on positive energy, self-confidence, and satisfying relationships with oneself and others. The short version (SWEMWBS) of the WEMWBS consists of only 7 items. Both, the long and short version, have been used in a number of studies worldwide (Cleland, Kearns, Tannahill, & Ellaway, 2016; Vaingankar et al., 2017; Stewart-Brown et al., 2011), including a cross-cultural study (Taggart et al., 2013), and have been translated into Spanish (Andrée López et al., 2013).

Survey participants were asked how often they had been "feeling optimistic about the future; feeling useful; feeling close to other people; feeling relaxed;" and how often they had been "dealing with problems well; thinking clearly; and able to make up their own mind about things" in the past 12 months. All items were scored on a 5-point Likert scale from 1 = "None of the time" to 5 = "All of the time". The scores ranged from 7 (lowest possible score) to 35 (highest possible score). Previous studies have reported a Cronbach's Alpha in the acceptable range of reliability (0.89; Stewart-Brown et al., 2011; 0.89; Vaingankar et al., 2017).

**Stress.** To measure the perceived stress, participants were asked to respond to questions of the *Perceived Stress Scale (PSS)*, developed by Cohen, Kamarck, & Mermelstein (1983). The instrument measures how stressful an individual perceives their life to be. Although the instrument was introduced in 1983 and might appear outdated, the scale is still widely used in today's stress research (Remor, 2006; Roddenberry & Renk, 2010; Samaha & Hawi, 2016; Stoliker & Lafreniere, 2015) including cross-sectional studies (Kononovas & Dallas, 2009; Tang & Oei, 2011).

The scale consists of 10 items that are scored on a 5-point Likert scale anchored at 0 = "never" and 4 = "very often". Each item is assessed for the past 12 months, with questions like "In the past 12 months, how often have you felt that you were unable to control the important things in life?" (Cohen, Kamarck, & Mermelstein, 1983). Although the original scale consists

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<sup>3</sup> The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) was funded by the Scottish Executive National Program for improving mental health and well-being, commissioned by NHS Health Scotland, developed by the University of Warwick and the University of Edinburgh, and is jointly owned by NHS Health Scotland, the University of Warwick and the University of Edinburgh.

of 10 items, a shorter, 4-item version, can be used with items 2, 4, 5 and 10. For this study, the short version was consulted. The scores were retrieved by adding the responses across all scale items; For two of the four items (item 4 and 5) the responses had to be reverse-scored (0 = 4, 1 = 3, 2 = 2, 3 = 1 and 4 = 0). In the original study, the instrument showed high reliability with a Cronbach Alpha between 0.84 – 0.86 (Cohen, Kamarck, & Mermelstein, 1983).

### **3.3 Participants**

Participants for this survey were recruited at the Católica-Lisbon School of Business and Economics. During a one-week data collection period, the survey was sent to 690 full-time Master's students. Erasmus students were excluded from this study. A total of 18 double entry responses were recognized and eliminated since the answers would have impacted the analysis. This left a total sample of 226 valid completions (given that no missing data entries were reported) for analysis which amounts to a response rate of 33%.

The sample consisted of nearly half female (54%) and half male (46%) participants. The youngest survey participant was 20 years old and the oldest 36 years old. The biggest sample was represented by the age group of 22 - 24 by 66%. However, the mean age for participants was reported at 24 years ( $SD = 1.75$ ). More than half (58%) of the participants started their Master's program in September 2017, compared to the 42% who started a year prior in 2016. A little over half (54%) of the participants were attending classes during the Spring semester of 2018 followed by approximately 40% of students who were working on their Master thesis. An additional 3% of participants defended their Master thesis during the Spring semester and 2% were doing an internship during this time while less than 1% of participants were abroad on exchange.

The greater majority of respondents were Portuguese with reported participation of 64%, followed by 21% of German participants; the third biggest group of participants were Italians (4%). Few responses were reported from Austria (2%), Brazil (2%), Russia (1%), Netherlands (1%), Norway (1%), and Denmark (1%).

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INSERT TABLE 1 HERE

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## 4 Analysis of Results

### 4.1 Reliability Analysis

Before testing the hypothesis, it was necessary to check the Likert-scales for internal consistency reliability by measuring the Cronbach's alpha coefficient<sup>4</sup>.

The Cronbach's Alpha coefficient for this study was calculated using SPSS. The majority of scales showed questionable to good internal consistency, according to George & Mallery's rule of thumb (2003). The subscales that showed high reliability were uncertainty avoidance consisting of 5 items ( $\alpha = .78$ ), collectivism consisting of 6 items ( $\alpha = .82$ ), task-orientation consisting of 7 items ( $\alpha = .85$ ), the emotion-oriented coping subscale consisting of 7 items ( $\alpha = .86$ ), as well as perceived stress with 4 items ( $\alpha = .78$ ), and emotional well-being ( $\alpha = .79$ ). These subscales showed values greater than .70 and are considered reliable with good internal consistency and used for analysis without concern.

The scale with the lowest Cronbach's Alpha coefficient was power distance ( $\alpha = .55$ ) and as such presented itself as unreliable. The subscale was re-evaluated using SPSS's "Alpha if item deleted"-function but no sufficient improvement was noted. For this reason, any statistical analysis for this study related to power distance should be interpreted with caution. The same accounts for the subscales long-term orientation ( $\alpha = .63$ ), contact a friend ( $\alpha = .69$ ) and the treat oneself subscale ( $\alpha = .66$ ). No sufficient improvement could be reported after re-evaluation, consequently, any analysis should be interpreted with caution. The only measure that showed improvement after a re-evaluation was the masculinity subscale, which reported a "questionable" coefficient of  $\alpha = .68$ . After deleting the item "I believe there are some jobs men can do better than women", the value increased to  $\alpha = .71$ .

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INSERT TABLE 2 HERE

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<sup>4</sup> The lowest value for the coefficient is 0 and the highest 1.0.; the closer the Cronbach's alpha coefficient is to 1.0 the greater the internal consistency for the calculated scale (Gliem & Gliem, 2003). As a general rule of thumb introduced by George & Mallery (2003) the coefficient can be interpreted as " $> .9$  – Excellent,  $> .8$  – Good,  $> .7$  – Acceptable,  $> .6$  – Questionable,  $> .5$  – Poor, and  $< .5$  – Unacceptable" (p. 231). According to Pallant (2001), scales should report a coefficient of .7 to be reliable. As such, this value was used for basis.

## 4.2 Hypothesis Testing

The mediation model as displayed in Figure 3 was analyzed in three steps, following Baron and Kenny's (1986) example. The first step required analyzing the correlation between the causal variable (i.e., cultural values) and the outcome variable (i.e., well-being). This step is crucial because it established whether an effect that may be mediated exists or not. This was captured in H1. The second step analyzed the correlation between the causal variable (i.e., cultural values) and the mediating variable (i.e., coping style). This was captured in H2. Lastly, the third step required to prove the effect of the mediating variable (i.e., coping style) on the outcome variable (i.e., well-being). This was captured in H3. It is important to mention that the variables of *cultural values*, *coping style*, and *well-being* were a composite of several variables. For instance, the variable cultural values consisted of uncertainty avoidance, collectivism, masculinity, long-term orientation; coping style of task-oriented coping, emotion-oriented coping, contact a friend, and treat oneself; well-being of perceived stress, and emotional wellbeing. For a graphical representation of the mediation analysis please refer to Figure 3.

*(H1) Cultural values will significantly impact well-being.*

The first hypothesis focused on the relationship of cultural values to emotional well-being, whereas cultural values were used as the predictor variable and well-being as the criterion variable. Figure 4 shows an illustrative representation that identifies the causal relationship among the variables; a so-called *path diagram*. To measure this, a path analysis<sup>5</sup> using Amos was conducted. According to the findings, long-term orientation positively predicts emotional well-being ( $p < .001$ ;  $\beta = .34$ ) while negatively predicting perceived stress ( $p < .001$ ;  $\beta = -.35$ ). The same was found for power distance which showed to negatively predict emotional well-being ( $p < .04$ ;  $\beta = -.15$ ). No significant results could be found for the other cultural values, uncertainty avoidance, collectivism, and masculinity. Hence, it is safe to say that, although not all cultural values had a significant impact on well-being, H1 can be accepted. For a detailed representation of the path analysis results, please refer to Table 4.

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<sup>5</sup> A path analysis "is a method for examining causal patterns among a set of variables" (Frances, Hasani, & Amaury, 2010, p.5) and consists of a variation of multiple-regression analysis.

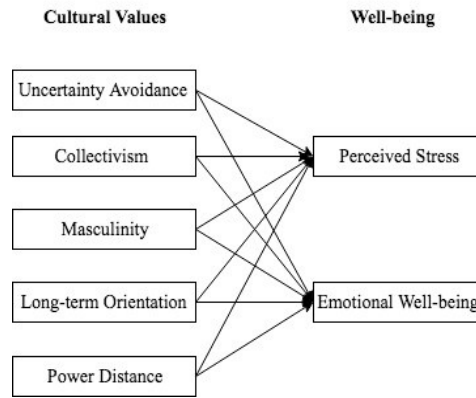


Figure 4. Path Diagram for the first step of the mediation analysis, analyzing the effect of cultural values on well-being.

*(H2) Cultural values will significantly impact coping style.*

In order to test the second hypothesis, a path analysis using the statistical software Amos was conducted. In the model, cultural values have a direct effect on coping style. The mediating variable coping style was used as the criterion variable, whereas cultural values represented the predictor variable. Essentially, it was important to treat the mediating variable, coping style, as the outcome variable. The results showed that long-term orientation positively predicts task-oriented coping ( $p < .001$ ,  $\beta = .41$ ) and that uncertainty avoidance had a positive effect on emotion-oriented coping ( $p < .001$ ;  $\beta = .29$ ), while collectivism had a negative direct effect on treating oneself ( $p = .01$ ;  $\beta = -.15$ ). Additionally, the path analysis showed negative effects between masculinity and contacting a friend ( $p = .002$ ;  $\beta = -.13$ ). The only variable to not report significant results was power distance. Although not all cultural values showed significant impact on coping styles, H2 can be accepted. Please refer to Table 5 for a detailed listing of the path analysis results.

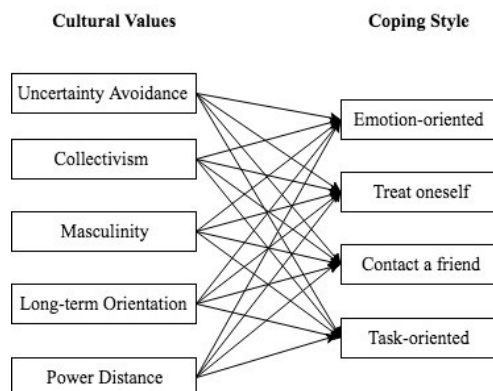


Figure 5. Path Diagram for the second step of the mediation analysis, analyzing the effect of cultural values on coping style.

*(H3) Coping style mediates the effect of cultural values on well-being.*

Based on the results of step 1 (H1) and step 2 (H2) the variables for H3 were derived. To prove a mediating effect occurred, it was necessary to show for a statistically significant effect for the predictor variable X (cultural values) and the outcome variable Y (well-being) as well as predictor variable X and mediating variable M (coping style). The only variables to prove such significances were long-term orientation and task-oriented coping in addition to long-term orientation and well-being. Hence, following hypotheses were conducted:

*(H3a) Task-oriented coping mediates the effect of long-term orientation on perceived stress.*

Mediation analysis (PROCESS, model 4, Hayes, 2013) was used to carry out the hypothesis that task-oriented coping mediates the effect of long-term orientation on perceived stress. Results indicate no indirect effect as the confidence interval includes zero (Indirect = 0.03,  $SE = 0.04$ , 95% CI -0.05, 0.09). Consequently, H3a was rejected.

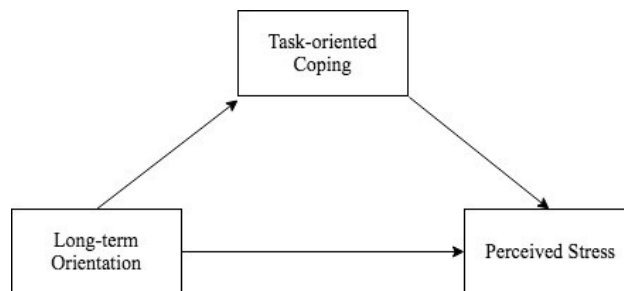


Figure 6. Mediation model for the effect of task-oriented coping between long-term orientation and perceived stress.

*(H3b) Task-oriented coping mediates the effect of long-term orientation on emotional well-being.*

Mediation analysis (PROCESS, model 4, Hayes, 2013) was used to investigate the hypothesis that task-oriented coping mediates the effect of long-term orientation on emotional well-being. Results indicate no indirect effect as the confidence interval includes zero (Indirect = 0.01,  $SE = 0.03$ , 95% CI -0.06, 0.07). Consequently, H3b was rejected.

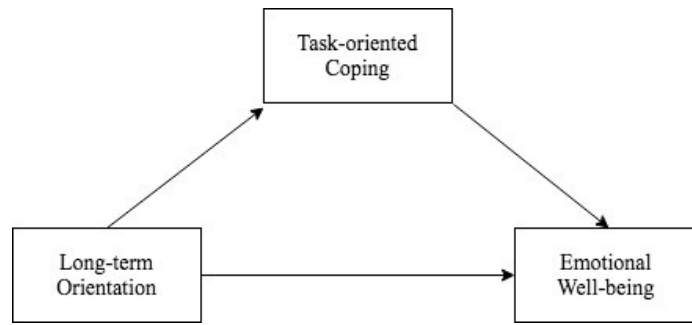


Figure 7. Mediation model for the effect of task-oriented coping between long-term orientation and emotional well-being.

*(H4) There is no significant difference in cultural values, coping style, or well-being between participants from Latin European countries and participants from Germanic European countries.*

In order to examine the last hypothesis an independent samples t-test was conducted to compare cultural values (power distance, uncertainty avoidance, individualism, masculinity, long-term orientation), coping style (task-oriented coping, emotion-oriented coping, treat oneself, contact a friend), and well-being (perceived stress, emotional well-being) in participants from Latin European countries and participants from Germanic European countries conditions. Prior to testing the relations among the variables, a new variable *Country* was computed. The variable was divided into two groups, the first group consisted of Latin European participants (group 1: Portuguese and Italians) whereas the second group consisted of Germanic European participants (group 0: Germans). The grouping was based on Gupta, Hanges, and Dorfman's (2002) research on cultural values and beliefs of which 10 cultural clusters originated. Next, the independent samples t-test was conducted.

**Cultural Values.** In terms of cultural values, the results showed that there was a significant difference in uncertainty avoidance for participants from Latin European countries ( $M = 3.83$ ,  $SD = 0.61$ ) than participants from Germanic European countries ( $M = 3.53$ ,  $SD = 0.61$ ;  $t(198) = 2.99$ ,  $p = 0.03$ ,  $MD = 0.3$ , 95% CI 0.1, 0.5, Cohen's  $d = 0.49$ ). The same result was derived for long-term orientation, which showed that there was also a significant difference for Latin European countries ( $M = 4.08$ ,  $SD = 0.46$ ) in comparison to Germanic European countries ( $M = 3.82$ ,  $SD = 0.5$ ;  $t(198) = 3.36$ ,  $p = 0.01$ ,  $MD = 0.26$ , 95% CI 0.11, 0.145, Cohen's  $d = 0.62$ ). Regarding power distance, individualism and masculinity, the t-test showed that there was no significant difference for the respective groups. Please see Table 6 for details.

**Coping Style.** Additionally, the t-test showed that the only coping style to report significant difference was task-oriented coping for participants from Latin European countries ( $M = 2.79$ ,  $SD = 0.58$ ) than participants from Germanic European countries ( $M = 2.5$ ,  $SD = 0.63$ ;  $t(198) = 2.95$ ,  $p = .004$ ,  $MD = 0.29$ , 95% CI 0.1, 0.48, Cohen's  $d = 0.48$ ). The other variables such as emotion-oriented coping did not differ for participants from Latin European countries ( $M = 2.18$ ,  $SD = 0.72$ ) to participants from Germanic European countries ( $M = 2.02$ ,  $SD = 0.64$ ;  $t(198) = 1.43$ ,  $p = 0.15$ ,  $MD = 0.17$ , 95% CI  $-0.06$ , 0.4; the same results were obtained for treat oneself and contact a friend — please see Table 6 for details).

**Well-being.** Following, the t-test showed that perceived stress did not differ significantly for participants from Latin European countries ( $M = 1.39$ ,  $SD = 0.71$ ) than participants from Germanic European countries ( $M = 1.33$ ,  $SD = 0.71$ ;  $t(198) = 0.95$ ,  $p = 0.58$ ,  $MD = 0.06$ , 95% CI  $-0.17$ , 0.3; the same results were obtained for emotional well-being — please see Table 6 for details).

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INSERT TABLE 6 HERE

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The results suggest that different countries of origin do not make a difference for most of the cultural values, coping styles and make no difference at all for well-being. In sum, the majority of the hypotheses were rejected, which is discussed in the following section. Given the number of hypotheses, Table 7 provides an overview of all the hypotheses and their results.

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INSERT TABLE 7 HERE

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## **5 Conclusion and Managerial Implications**

### **5.1 Discussion and Conclusion**

The aim of this study was to examine the effect of cultural values on coping styles, perceived stress, and emotional well-being. Furthermore, it aimed to find out more about a potential mediating effect of coping styles on cultural values and well-being. For this reason, the analysis was divided into three steps according to Baron and Kenny's (1986) model of mediation. The first step of the analysis, captured as H1, aimed to answer the question: What is

the effect of cultural values on emotional well-being and perceived stress? As hypothesized, the findings showed that long-term orientation positively predicted emotional well-being. For every unit increase in long-term orientation, there is a  $\beta = .34$  increase in emotional well-being. These findings confirm observations from previous studies expressing that a future-oriented mindset increases one's felt control over future uncertainties and a higher sense of happiness due to anticipating future rewards (Ye, Ng, & Lian, 2015). Simultaneously, long-term orientation also showed to have a negative effect on perceived stress. For every unit increase in long-term orientation, a decrease of  $\beta = -.35$  in perceived stress occurred, which makes perfect sense considering that emotional well-being enhances through long-term orientation. A possible explanation for this could be that future-oriented individuals show greater self-control in the present moment. Studies on self-control and perceived stress presented findings that indicate a positive correlation among the variables. Connecting the findings, it appears that long-term orientation helps individuals in feeling emotionally better and less stressed at the same time. Furthermore, the results showed that power distance negatively predicted emotional well-being. Findings from this study on power distance and well-being are consistent with previous research findings on this matter. For example, outcomes from a study comprising 36 nations presented a negative correlation between power distance and subjective well-being. The researchers concluded that a society's acceptance of inequalities, which is evident in their policies, leads to a decrease in well-being (Daniels & Greguras, 2014). To find out what the underlying factor that causes the relationship for this study is, further research would be necessary. It is evident that three out of five cultural values did not report significant results for their relationship to well-being; nonetheless, the findings were clear in showing a relationship between cultural values and well-being.

The second part of the analysis aimed to answer the questions regarding the effect of cultural values on coping styles. The findings showed that four out of five cultural values had an effect on coping styles; these are long-term orientation, masculinity, collectivism, and uncertainty avoidance. No statistically significant findings were reported for power distance. Long-term orientation showed to have an effect on coping styles by positively predicting task-oriented. The findings showed that for every unit increase in long-term orientation, there is an increase of  $\beta = .41$  in task-oriented coping. This implies that survey participants who value self-discipline and future gratification are more likely to cope in an active hands-on approach during stressful periods. A possible explanation for this could be the role of self-discipline. Kohn defines self-discipline as the "marshaling of one's willpower to accomplish things that are

generally regarded as desirable” (2008, p. 169). And indeed, previous research has been studying the brain to explore strategies in order to overcome distractive behavior and work smarter (Rock, 2010). Also, the results showed that masculinity is negatively correlated with meeting with a friend. For every unit increase in masculinity, meeting with a friend decreases by  $\beta = -.13$ . The reported findings indicate that individuals with masculine values are less likely to meet with a friend during stressful periods. Certainly, this has been confirmed by a number of foregoing research stating that men are less likely than women to seek for help for problems such as “depression, substance abuse, physical disabilities, and stressful life events” (Mahalik, 2003, p. 5). Additional findings on the effect of cultural values showed that collectivism has a negative direct effect of  $\beta = -.15$  on treat oneself. It is unclear what the connecting link between these two variables is and further research would be necessary to find out. Lastly, the empirical results showed a positive correlation between emotion-oriented coping and uncertainty avoidance. Every unit increase in uncertainty avoidance means a  $\beta = .30$  increase in emotion-oriented coping. It has been suggested that uncertainty avoidant cultures are more nervous by nature and exhibit less ambition for personal development (Ye, Ng, & Lian, 2015). Similarly, uncertainty avoidant behavior has shown strong correlations with the personality trait neuroticism (Hofstede & McCrae, 2004) while recent efforts indicated that neuroticism is interrelated to emotion-oriented coping (Afshar et al., 2015). In conclusion, although the majority of hypothesized presumptions got rejected, other findings of the analysis observed that cultural values have an effect on the coping styles that one chooses during stressful periods.

Last but not least, the third part of the analysis aimed at answering the question: Does coping mediate the effect of cultural values on perceived stress and emotional well-being? Based on the significant results from H1 and H2 it was possible to come up with two sub-hypotheses of H3 researching the mediating effect of task-oriented coping on long-term orientation and well-being. For this, a PROCESS macro analysis in SPSS was conducted. The results showed that there was no mediating effect and for this reason, the hypotheses were rejected. In other words, the findings showed that a person’s cultural values do not influence the coping style the person chooses, which on the other hand influences well-being. But instead, only direct causal relationships could be found between the independent variable and the dependent variable.

Finally, a t-test was conducted to examine whether any differences in cultural values, well-being, and coping styles exist across European countries. For this, the survey responses were divided into the two largest groups of responses, namely Latin European and Germanic

European. For the majority of findings, no significant difference among the groups was reported. Which implies, that the cultural values and belief systems are more similar than diverse across Latin Europeans and Germanic Europeans. This cannot be generalized, but instead, can be explained by the university student sample for this study. Keeping in mind that the Master's university courses are taught in English, it can be assumed that the attending students have a rather open and international mindset. Also, the students who answered the survey were very similar in age. However, there was a difference in responses to uncertainty avoidance, long-term orientation, and task-oriented coping. For all three variables, Latin Europeans reported on average higher values than Germanic European which implies that Portuguese and Italians work in a task-oriented way to eliminate any uncertainties about the future.

## **5.2 Managerial Implications**

The idea behind this study was to examine and learn from the differences in cultural values, well-being, and coping styles to offer managerial implications from the observed results. For example, the findings of this study reveal that long-term oriented individuals enjoy healthier coping mechanisms and, subsequently, enhanced levels of emotional well-being and lower levels of perceived stress. According to the results, long-term oriented individuals are more likely to apply task-oriented coping, which has been associated with enhanced levels of emotional well-being. A possible explanation for this could be that long-term orientation is characterized by self-discipline which, according to recent studies, improves one's satisfaction with life.

For this reason, I suggest that corporate organizations and universities should consider educating their employees and students about the different coping styles and their impact. Specifically, on the positive effect of task-oriented coping. As a next step, employers can implement tools and/or interventions to teach employees about task-oriented strategies that encourage self-discipline. Offering employees such interventions means offering them the opportunity to develop healthy coping skills which, in turn, have a benefit for both employer and employee. Also, it implies that the workplace is a safe space for learning and developing and employees must not be afraid to feel stressed without support.

## **6 Limitations and Further Research**

Firstly, the limitations of this research are related to the time period in which the data was collected. The survey was sent out in mid-August, which marks the end of the semester break. It can be assumed that students went on vacation during their time off and as such had a distorted perception of past events in the previous 12 months. For example, Cohen, Kamarck, and Mermelstein report that the validity of perceived stress decreases after four to eight weeks given that appraised stress should be influenced by daily hassles (1983).

Also, I want to bring to attention the five variables that reported a poor Cronbach's Alpha: power distance, masculinity, long-term orientation, treat oneself and contact a friend. The alpha value for masculinity could be adjusted after eliminating one item; but nevertheless, all statistically derived results using the mentioned variables should be considered with caution. Especially power distance stood out during the research because of its poor alpha value but also because it showed little significant results, which could have several reasons. One of them being, that students were not honest in their survey responses. Another possible explanation for this could be that Germans and Portuguese, who account for the majority of the sample, had a different understanding of the item statements. For this reason, I propose that the CVSCALE should be tested and adjusted for internal consistency among European countries. Another explanation for this could be that a person's individual culture differs from their country's culture. Something the Hofstede model has been criticized for in previous research.

Regarding future research, I propose to consider and improve the above-mentioned limitations. Furthermore, I encourage further research on Hofstede's cultural dimensions and coping while considering other factors such as personality traits. On an organizational level, it would be advisable to focus on work stress, work stressors, and coping resources made available from the organization to address their needs more specifically. Seen from a university perspective, I suggest conducting further research on the matters of bridging the cultural gap among students and how this can contribute to a healthier, less stressful time at university. Research of how the transition phase for international students to a foreign country can be facilitated is especially crucial. All in all, this paper contributes to previous research done on this topic while considering the limitations.

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Table 1

*Frequencies and percentages for sociodemographic characteristics of survey participants.*

Variable	<i>n</i>	%
<b>Gender</b>		
male	122	54
female	104	46
<b>Age</b>		
20	1	0.4
21	11	4.9
22	45	19.9
23	57	25.2
24	47	20.8
25	28	12.4
26	28	12.4
27	8	3.5
36	1	0.4
<b>Spring 2018 was my</b>		
coursework semester	123	54.4
exchange semester	2	0.9
thesis semester	87	38.5
other	14	6.2
<b>Year of Intake</b>		
2016/2017	94	41.6
2017/2018	132	58.4

Table 2

*Reliability analysis for all scale items.*

Scale Item	Number of Items	Cronbach's Alpha	
		before	adjusted
Power Distance	5-items	.55	-
Uncertainty Avoidance	5-items	.78	
Collectivism	6-items	.82	
Masculinity	4-items	.68	.71
Long-term Orientation	6-items	.63	-
Task-oriented	7-items	.85	
Emotion-oriented	7-items	.86	
Treat oneself	3-items	.66	-
Contact a friend	3-items	.69	-
Perceived Stress	4-items	.78	
Emotional Well-being	7-items	.79	

Table 3

*Summary of intercorrelations, means and standard deviations.*

Measure	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Female	0.46	0.50	–												
2. Age	23.72	1.75	.14*	–											
3. Power Distance	1.77	0.52	.1	.00	–										
4. Uncertainty Avoidance	3.76	0.63	-.15*	-.07	-.06	–									
5. Collectivism	3.30	0.76	.18**	-.06	.00	.03	–								
6. Masculinity	1.76	0.85	.32**	.10	.21**	-.02	.02	–							
7. Long-term Orientation	4.02	0.49	.08	-.13	.10	.27**	.09	.04	–						
8. Task-oriented	2.73	0.61	-.08	-.28**	-.01	.17**	.03	-.01	.35**	–					
9. Emotion-oriented	2.16	0.72	-.25**	-.18**	.00	.24**	-.04	-.01	.02	.27**	–				
10. Treat oneself	1.85	0.66	-.23**	.01	.09	.06	-.19**	.03	-.12	.24**	.32**	–			
11. Contact a friend	2.29	0.72	-.24**	-.11	-.12	.11	.11	-.17**	.09	.4**	.20**	.29**	–		
12. Perceived Stress	1.37	0.72	-.19**	-.02	.03	.06	-.05	-.09	-.20**	-.03	.51**	.18**	.04	–	
13. Emotional Well-being	3.58	0.56	.04	-.03	-.10	.00	.03	-.01	.26**	.10	-.37**	-.1	.12	-.61**	–

\* $p < .05$ . \*\* $p < .01$ .

Table 4

*Effects from the path analysis for cultural values and well-being.*

Predictor		Outcome	<i>UE</i>	<i>SD</i>	<i>p</i>
Power Distance	->	Perceived Stress	0.11	0.09	.24
Power Distance	->	Emotional Well-being	-0.15	0.07	.04
Uncertainty Avoidance	->	Perceived Stress	0.15	0.08	.05
Uncertainty Avoidance	->	Emotional Well-being	-0.08	0.06	.2
Individualism	->	Perceived Stress	-0.03	0.06	.61
Individualism	->	Emotional Well-being	-	0.05	.96
Masculinity	->	Perceived Stress	-0.08	0.06	.13
Masculinity	->	Emotional Well-being	0.01	0.04	.91
Long-term Orientation	->	Perceived Stress	-0.35	0.1	***
Long-term Orientation	->	Emotional Well-being	0.34	0.08	***

*Note.* *UE* = unstandardized estimate.

\**p* < .05. \*\**p* < .01. \*\*\**p* < .0001

Table 5

*Effects from the path analysis for cultural values and coping style.*

Predictor		Outcome	<i>UE</i>	<i>SD</i>	<i>p</i>
Power Distance	->	Task-oriented	-0.04	0.08	.62
Power Distance	->	Emotion-oriented	0.03	0.09	.76
Power Distance	->	Treat Oneself	0.14	0.08	.09
Power Distance	->	Contact a Friend	-0.13	0.09	.17
Uncertainty Avoidance	->	Task-oriented	0.08	0.06	.22
Uncertainty Avoidance	->	Emotion-oriented	0.29	0.08	***
Uncertainty Avoidance	->	Treat Oneself	0.12	0.07	.1
Uncertainty Avoidance	->	Contact a Friend	0.08	0.08	.27
Individualism	->	Task-oriented	-	0.05	.95
Individualism	->	Emotion-oriented	-0.04	0.06	.48
Individualism	->	Treat Oneself	-0.15	0.06	.01
Individualism	->	Contact a Friend	0.1	0.06	.1
Masculinity	->	Task-oriented	-0.01	0.05	.89
Masculinity	->	Emotion-oriented	-0.01	0.06	.91
Masculinity	->	Treat Oneself	0.01	0.05	.8
Masculinity	->	Contact a Friend	-0.13	0.06	.02
Long-term Orientation	->	Task-oriented	0.41	0.08	***
Long-term Orientation	->	Emotion-oriented	-0.07	0.1	.47
Long-term Orientation	->	Treat Oneself	-0.2	0.09	.06
Long-term Orientation	->	Contact a Friend	0.11	0.1	.25

*Note.* *UE* = unstandardized estimate.\**p* < .05. \*\**p* < .01. \*\*\**p* < .0001

Table 6

Summary of independent samples test between country groups and the variables cultural values, coping style and well-being.

Variable	<i>t</i> (198)	<i>df</i>	<i>p</i>	<i>MD</i>	<i>SDD</i>	95% CI	
						<i>LL</i>	<i>UL</i>
Cultural Values							
Power Distance	0.26	198	0,8	0.02	0.08	-0.13	0.17
Uncertainty Avoidance	2.99	198	**	0.3	0.1	0.1	0.5
Individualism	0.93	198	0.35	0.11	0.12	-0.12	0.35
Masculinity	-1.72	198	0.09	-0.22	0.13	-0.46	0.03
Long-term Orientation	3.36	198	**	0.26	0.08	0.11	0.41
Coping Style							
Task-oriented	2.95	198	**	0.29	0.1	0.1	0.48
Emotion-oriented	1.43	198	0.15	0.17	0.12	-0.06	0.4
Treat oneself	-0.08	198	0.93	-0.01	0.11	-0.22	0.2
Contact a friend	1.25	198	0.21	0.15	0.12	-0.09	0.4
Well-being							
Perceived Stress	0.56	198	0.58	0.06	0.12	-0.17	0.3
Emotional Well-being	0.96	198	0.34	0.09	0.09	-0.09	0.27

Note. *MD* = mean difference; *SDD* = standard deviation difference; CI = confidence interval; *LL* = lower limit; *UL* = upper limit; Country coded as 1 = Latin EU (*n* = 152) and 0 = Germanic EU (*n* = 48)

\**p* < .05. \*\**p* < .01.

Table 7

*Summary of hypotheses results.*

Hypothesis	Result
(H1) Cultural values will significantly impact well-being.	partially validated
(H2) Cultural values will significantly impact coping style.	partially validated
(H3) Coping style mediates the effect of cultural values on well-being.	
(H3a) Task-oriented coping mediates the effect of long-term orientation on perceived stress.	not validated
(H3b) Task-oriented coping mediates the effect of long-term orientation on emotional well-being.	not validated
(H4) There is no significant difference in cultural values, coping style, or well-being between participants from Latin European countries and participants from Germanic European countries.	partially validated

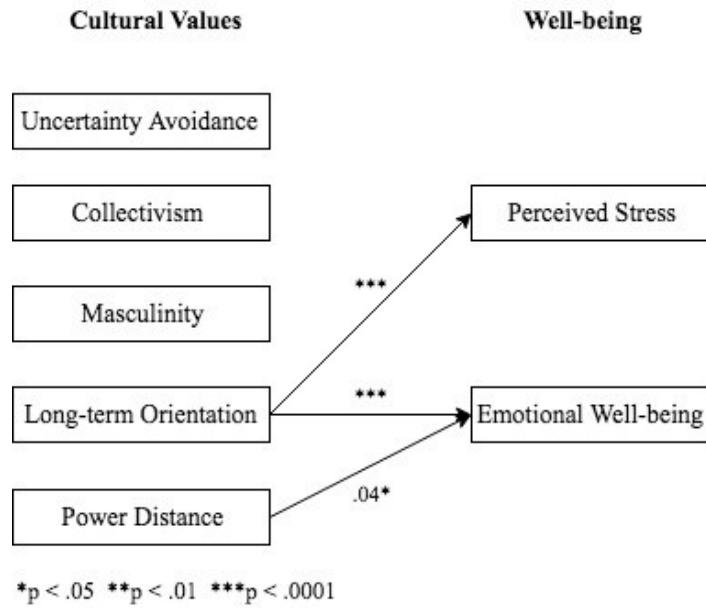


Figure 8. Path diagram depicting the statistically significant results for the first step of the mediation analysis, analyzing the effects of cultural values on well-being.



## Appendix

### STUDY QUESTIONNAIRE

Item	Description	Scale	Source
<b><i>Block I: Sociodemographic</i></b>			
Q1	What is the year of your intake?	2016/2017 2017/2018	
Q2	Spring 2018 was your...	Coursework semester Exchange semester Thesis semester Other	
Q3	What is your nationality?		
Q4	Age		
Q5	Gender	male female	
<b><i>Block II: Hofstede's Cultural Dimensions on an Individual Level</i></b>			
<b><i>Power Distance</i></b>			
Q6 - I believe	people in higher positions should make most decisions without consulting people in lower positions.	Strongly disagree	Yoo, Donthu, & Lenartowicz, 2011
	people in higher positions should not ask the opinions of people in lower positions too frequently.	Somewhat disagree	
	people in higher positions should avoid social interaction with people in lower positions.		

people in lower positions should not disagree with decisions by people in higher positions.

Neither disagree nor agree

people in higher positions should not delegate important tasks to people in lower positions.

Somewhat agree  
Strongly agree

### ***Uncertainty Avoidance***

Q7 - I believe

it is important to have instructions spelled out in detail so that I always know what I'm expected to do.

Strongly disagree

Yoo, Donthu, & Lenartowicz, 2011

it is important to closely follow instructions and procedures.

Somewhat

rules and regulations are important because they inform of what is expected of me.

disagree

standardized work procedures are helpful to clearly understand my role.

Neither disagree nor agree

strict instructions for operations are important to avoid risks.

Somewhat agree

Strongly agree

### ***Collectivism***

Q8 - I believe

individuals should sacrifice self-interest to preserve the interests of the important groups they belong to (family, friends, firm, ...).

Strongly disagree

Yoo, Donthu, & Lenartowicz, 2011

individuals should stick with the group even through difficulties.

Somewhat

group welfare is more important than individual rewards.

disagree

group success is more important than individual success.

Neither

individuals should only pursue their goals after considering the welfare of the group.

disagree nor agree

	Somewhat agree	
	Strongly agree	

***Masculinity***

Q9 - I believe	<p>it is more important for men to have a professional career than it is for women.</p> <p>men usually solve problems with logical analysis; women usually solve problems with intuition.</p> <p>solving difficult problems usually requires an active, forcible approach, which is typical of men. (3)</p> <p>there are some jobs that a man can always do better than a woman.</p>	<p>Strongly disagree</p> <p>Somewhat disagree</p> <p>Neither disagree nor agree</p> <p>Somewhat agree</p> <p>Strongly agree</p>	<p>Yoo, Donthu, &amp; Lenartowicz, 2011</p>
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***Longterm Orientantion***

Q10 - To me	<p>careful management of money is</p> <p>going on determinedly in spite of resistance is</p> <p>personal steadiness and stability is</p> <p>long-term planning is</p> <p>giving up today's fun for success in the future is</p> <p>working hard for success in the future is</p>	<p>Not important</p> <p>Slightly important</p> <p>Moderately important</p> <p>Important</p> <p>Very important</p>	<p>Yoo, Donthu, &amp; Lenartowicz, 2011</p>
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**Block III: Coping Style****Task-oriented**

Q10 - Whenever I felt stressed in the last 12 months, I	Focused on the problem.	Never	Cohan, Jang, & Stein, 2006
	Considered similar problems.	1-2 times per week	
	Determined course of action.	3-4 times per week	
	Worked to understand the situation.	week	
	Took corrective action immediately.	4-5 times per week	
	Thought about and learned from mistakes.	week	
Analyzed the problem.			

**Emotional**

Q11 - Whenever I felt stressed in the last 12 months, I	Blamed myself for the situation.	Never	Cohan, Jang, & Stein, 2006
	Worried about being unable to cope.	1-2 times per week	
	Blamed myself for being too emotional.	3-4 times per week	
	Became very upset.	week	
	Blamed myself for not having a solution.	4-5 times per week	
	Wished I could change things.	week	
Focused on my inadequacies.			

**Distraction**

Q12 - Whenever I felt stressed in the last 12 months, I	Treated myself to a snack.	Never	Cohan, Jang, & Stein, 2006
	Bought myself something.	1-2 times per week	
	Went out for a meal.	3-4 times per week	

4-5 times per week

***Social Diversion***

Q13 - Whenever I felt stressed in the last 12 months, I

Visited a friend.  
Spent time with a special person.  
  
Phoned a friend.

Never  
1-2 times per week  
3-4 times per week  
4-5 times per week

Cohan, Jang, & Stein, 2006

***Block IV: Perceived Stress***

Q14 - In the last 12 months, I felt

confident about my ability to handle personal problems. that things were going my way. difficulties were piling up so high that I **could not** overcome them. that I was **unable** to control the important things in life.

Never  
Almost never  
Sometimes  
Fairly Often  
Very Often

Cohen, Kamarck, & Mermelstein, 1983

***Block V: Emotional Well-being***

Q15 - In the last 12 months, I	felt optimistic about the future.	Never	Tennant et al., 2007
	felt useful.	Rarely	
	felt relaxed.	Some of the time	
	dealt with problems well.	Often	
	was thinking clearly.	All the time	
	felt close to other people.		
	was able to make up my own mind about things.		

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