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Coping Styles and Well-Being in International Students: The Role of Cultural Factors

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Master in Psychology of Intercultural Relations

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Abstract

Despite a high prevalence of stress in the globalised world, our understanding of cross-cultural differences in coping styles and their impact on well-being remains limited. Some researchers argue for universal effectiveness of specific coping styles, while others suggest that coping styles congruent with cultural factors are the most beneficial for well-being. This study investigated the effects of cultural orientations (individualism and collectivism) on coping styles and well-being of international students ($N = 110$) in Portugal using an online questionnaire. Our study aimed to compare the universal and culturally specific perspectives on coping in a collectivist context. According to the dominant literature, we expected collectivist participants to use more emotional and avoidant coping styles, and we expected these coping styles to be associated with negative well-being outcomes. We compared this prediction to the culturally specific perspective, which proposed that emotional and avoidant coping would be related to positive well-being outcomes, due to cultural congruence. We found a significant association between one cultural orientation (individualism) and coping styles, which partially corroborated the culture-specific perspective. However, we did not find conclusive support for cultural coping models, as emotional coping style was associated with negative well-being, despite cultural congruence, and the mediating role of culturally congruent coping styles in well-being was not supported. Our study highlighted the important role of culture in stress and coping, and we concluded that cross-cultural differences in coping are relatively well-supported, however more insight is needed into culture-specific outcomes of coping.

Keywords:

Coping, stress, well-being, international students, cross-cultural differences, social psychology, group & interpersonal processes, culture & ethnology

Resumo

Apesar da elevada prevalência das perturbações de stress no mundo globalizado, o nosso entendimento das diferenças transculturais nos estilos de *coping* e do seu impacto no bem-estar é relativamente limitado. Alguns investigadores argumentam que existem estilos de *coping* que são universalmente mais eficazes, enquanto outros sugerem que os estilos de *coping* coerentes com a cultura são os mais benéficos e resultam em maior bem-estar. O presente estudo investiga os efeitos da orientação cultural (individualismo e coletivismo) nos estilos de coping e no bem-estar de estudantes internacionais em Portugal ($N = 110$), através de um questionário online. O estudo procura comparar as perspetivas universal e de especificidade cultural no que diz respeito à eficácia da estratégia de *coping* usada num macro contexto cultural coletivista. De acordo com a literatura dominante, esperávamos que os participantes coletivistas usassem estilos de coping de evitamento cognitivo e que este estilo de coping prejudicasse o bem-estar. Comparámos esta predição com a que deriva da perspetiva da especificidade cultural, que propõe os estilos de coping evitante e emocional, dominantes em culturas coletivistas, deveriam resultar em maior bem-estar. Encontrámos uma associação significativa entre a orientação cultural dos estudantes (individualismo) e o estilo de coping (instrumental), o que corrobora parcialmente a perspetiva de especificidade cultural. Contudo, não encontrámos resultados que apoiassem de forma conclusiva os modelos de coping cultural, uma vez que o estilo de coping emocional se associou a um prejuízo no bem-estar, para além da coerência cultural. O papel mediador do uso de estilos de coping coerentes com a cultura na relação entre orientação cultural e bem-estar também não se verificou. O estudo sublinhou o importante papel da cultura na gestão do stress e coping e concluiu pela existência de diferenças culturais nas estratégias de coping preferenciais. No entanto, salienta a necessidade de obter mais insight sobre os efeitos culturalmente específicos das diferentes estratégias de coping no bem-estar dos indivíduos.

Palavras-chave:

Coping, stress, bem-estar, diferenças transculturais, psicologia social, grupos & processos interpessoais, cultura & etnologia

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Introduction

In today's globalised world, intercultural mobility is more prevalent than ever. In the past decade, the number of international students in Portuguese higher education has more than doubled, and the numbers continue to rise each year (Oliveira & Gomes, 2019). Compared to domestic students, international students face an increased amount of difficulties, including a lack of social support system, language barriers and acculturative stress (Rajab et al., 2014; Sherry et al., 2010). As a result, they show higher levels of distress, anxiety, and are at a higher risk of mental health problems than domestic students (Hechanova-Alampay et al., 2002; Skromanis et al., 2018). It is estimated that up to 20% of international students may experience psychological problems during their stay abroad (Leong & Chou, 2002). In addition, there is a scarcity of culturally sensitive intervention strategies which are necessary to support students' coping with stress (Mesidor & Sly, 2016; Olivas & Li, 2006).

Coping strategies refer to the cognitive and behavioural efforts which people employ in order to manage and resolve stressors (Lazarus, 1993; Lazarus & Folkman, 1984). Coping is also imperative to alleviate acculturative stress, which occurs during any relocation (Berry, 2006). In order to address the multiple stressors and risks faced by international students, research should be informed about which coping styles are associated with most favourable well-being outcomes. In addition, stress and coping are deeply embedded within sociocultural context, and research on coping must take cultural factors into consideration (Heppner, 2008; Wong et al., 2006). Compared to monocultural contexts, there are still relatively few studies on coping in intercultural contexts, and many gaps remain in understanding how culture affects coping (Kuo, 2011). Building a strong theoretical and empirical foundation of cultural coping is necessary to inform culturally sensitive intervention strategies, and thus to improve international students' well-being.

The aim of this study is to increase our understanding of culture's role in coping strategies and well-being in international students. The present study will examine how cultural factors affect coping styles and well-being, and whether the use of culturally congruent coping styles is associated with favourable outcomes in student well-being.

Chapter I – Literature Review

Coping Styles and Well-Being

Research on coping styles was pioneered by Lazarus and Folkman (1984) and later developed by Parker and Endler (1992), who created one of the most established taxonomies

of coping styles to this day, which categorises coping into three main styles. Firstly, task-oriented coping describes a proactive strategy aimed directly at the problem, such as increased efforts to resolve the situation. Secondly, emotion-oriented coping aims to alleviate the problem by focusing on the underlying negative emotions. Finally, avoidance coping is considered a passive strategy, which does not aim to directly resolve the issue but to avoid it via distraction and denial. Research has shown that any individual uses a preferred coping style or set of styles, which remain relatively stable over time and can be measured (Carver et al., 1989; Lazarus & Folkman, 1984), for example, using the Coping Inventory for Stressful Situations (CISS) by Endler and Parker (1990).

Coping plays a central role in resolving stress, and researchers have established its significant impact on individuals' well-being. Coping styles were shown to significantly predict health, as well as psychological and physical well-being (e.g. Lazarus, 1974; Mayordomo-Rodriguez et al., 2015; for review see Penley et al., 2002). Individuals who cope effectively report overall better well-being and psychological adjustment (Selmer, 1999; Somerfield & McCrae, 2000).

Most commonly, researchers have argued that direct, task-oriented coping is the most effective in resolving stress, and that it has the most beneficial outcomes on well-being. Seiffge-Krenke's (1993) model differentiates between functional coping, which refers to direct, task-oriented coping, and dysfunctional coping which entails internal repression or withdrawal such as avoidant coping. The rationale behind this perspective is that individuals using task-oriented coping expend more effort, take actions and generate solutions to the problem. In contrast, subjects using emotion- and avoidant-oriented coping are assumed to be more passive, and to ruminate or withdraw from the problem without resolving it (Parker & Endler, 1996; Seiffge-Krenke 1993, 2000).

In accordance with the universal perspective on functional coping, task-oriented style has been linked to lower stress, depression, anxiety and overall better psychological outcomes (Bouteyre et al., 2007; Endler, 1997; Endler et al., 2000; Higgins & Endler, 1995; Smith et al., 2016). In contrast, emotional coping style has been linked to negative outcomes, including higher stress, increased acculturative stress and poorer mental well-being (Deatherage et al., 2013; Kosic, 2004; Smith et al., 2016; Völlink, 2013). Similarly, avoidance coping was found to have a negative impact on well-being, and it was linked to poor adjustment and health, and even considered counter-effective, because it generated further stressors (Ben-Zur, 2009; Chao, 2011; Dyson, 2006; Holahan et al., 2005).

However, despite the converging results on functional coping, many of the existing studies have overlooked cultural and contextual factors, and research on stress and coping has been dominated by a culture-independent, intrapersonal and individualistic perspective (Heppner, 2008; Kuo, 2011). Folkman and Moskovitz (2004) criticised the existing research for its acontextuality, as it neglected culture as a fundamental context of coping. Since their seminal work, Lazarus and Folkman (1984) postulated that culture and coping with stress are interwoven. They proposed that coping strategies are affected by internalised cultural values, and that individuals use strategies valued in their given cultural context (see also, Chun et al., 2006). Despite these propositions, most of the existing studies have relied on a monocultural perspective, focusing on Caucasian American samples in a western context (Hobfoll, 2001).

Culture-Specific Coping Styles

In response to these criticisms, researchers in cross-cultural psychology have conducted comparative studies to examine if coping styles show cross-cultural differences (Kuo, 2011). In order to measure intercultural differences, researchers commonly adopt the dimensional approach to cultures, developed by Geert Hofstede (2001; as cited in Matsumoto & Yoo, 2006). According to Hofstede, countries vary in terms of their values, norms and behaviours, which can be clustered into six main cultural dimensions. Cultural dimensions remain relatively stable and can be measured, enabling a meaningful comparison and differentiation of cultures (Triandis et al., 1986).

Out of the six cultural dimensions defined by Hofstede, individualism and collectivism remain the two most examined (Cozma, 2011). Individualist cultures are described as prioritising personal goals, emphasising uniqueness and independence. In contrast, collectivist cultures tend to emphasise goals of the group, social harmony and interdependence (Hofstede, 2001; Triandis 1995, 2001). According to Hofstede, individualism and collectivism are considered two opposite poles of one bipolar dimension.

Most commonly, individualistic countries have been identified in western and northern Europe and the USA, and collectivist countries in Latin America, Latin Europe, Asia and Africa (Mensah & Chen, 2013). A meta-analysis by Oyserman et al. (2002) confirmed that Euro-Americans show higher individualism, and subjects in Asian and African countries show higher collectivism. In order to compare coping styles across cultures, Hofstede's dimension of individualism and collectivism has been used as a proxy measure of culture on a national level (Chun et al., 2006). Most of the existing studies on cross-cultural coping adopted either one

monocultural sample from a highly individualist or highly collectivist country, or two dichotomous samples from contrasting cultures (e.g. Bailey & Dua, 1999; Li et al., 2012).

Culture has been hypothesised to affect coping behaviour in multiple ways, including via cultural norms and internalised cultural values (Bardi & Guerra, 2011; Matsumoto et al., 2008; Taylor, 2004). Cultural norms prescribe which coping behaviours are deemed as appropriate, and which are discouraged (Lam & Zane, 2004; Lazarus & Folkman, 1984). In a collectivist context, cultural norms emphasise social harmony, interdependence and avoidance of conflict, and individuals are encouraged to fit into their external environment (Hofstede, 2001). For this reason, collectivist participants are expected to modify their own internal state rather than the external stressor and to show internalising strategies, such as emotion- and avoidance-oriented coping. In contrast, individualist cultural norms encourage independence, direct action and control of external environment to suit one's personal needs. Therefore, individualist participants are expected to show more direct, proactive strategies such as task-oriented coping (Chun et al., 2006).

Most of the existing research has supported this dichotomy, and found that participants from highly individualist countries, such as the UK or USA, use significantly more task-oriented strategies, whereas people from collectivist countries, such as Japan or Malaysia, use significantly more emotion- and avoidance-oriented coping (e.g. Essau & Trommsdorff, 1996; O'Connor & Shimizu, 2002; Perera & Chang, 2015; Seiffge-Krenke & Shulman, 1990). These findings were replicated in multiple comparative studies, including in Australian vs. Asian, Caucasian American vs. Korean American, and American vs. Thai samples (e.g. Bailey & Dua 1999; Lee & Mason, 2014; McCarty et al., 1999).

However, despite the emerging cross-cultural patterns, several studies showed inconsistent findings. For example, some researchers failed to find cross-cultural differences in task-oriented coping, such as between Asian American, Hispanic and European American samples (Bjorck et al., 2001; Lee & Liu, 2001; Lee & Mason, 2014; Mena et al., 1987). Furthermore, some studies failed to confirm that collectivist participants use more avoidant and emotional coping (e.g. Aldwin & Greenberger, 1987; Chang, 1996).

In addition to the mixed findings, cross-cultural studies using Hofstede's dimensional approach have been criticised for several reasons, such as for using nationality as a proxy measure of culture, and for assuming that individuals within a country share uniform cultural values (McSweeney, 2002; Taras et al., 2016). Aggregated national-level data may overlook significant within-group variations, for example as a result of subcultures, immigration status or ethnicity (Uehara et al., 1994; Yoo et al., 2011).

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Previous researchers highlighted a so-called ecological fallacy, which occurs when scores on the national level are assumed on an individual level (Brewer & Venaik, 2014). For example, in a study on cross-cultural coping, Essau and Trommsdorf (1996) considered American and German students in their sample to be high on individualism and Malaysian students to be high on collectivism, based on the national-level data by Hofstede (1983). These assumptions can be problematic, because cultural dimensions on individual and national levels do not necessarily correspond (Hofstede, 1980). Some researchers also criticised the unidimensional conceptualisation of individualism and collectivism. Rather than a single, bipolar dimension, several researchers argued that individualism and collectivism are two orthogonal dimensions and can coexist (Singelis et al., 1995). For example, Coon and Kemmelmeier (2001) found that people can score high or low on both dimensions.

In response, some researchers recommended considering individualism and collectivism as a multidimensional concept, and to measure it directly on an individual level (Matsumoto et al., 1997; Singelis et al., 1995; Yoo et al., 2011). Individual-level measures of cultural dimensions have shown relatively good psychometric properties and corroborated that the two dimensions are not negatively related (Triandis & Gelfand, 1998; Oyserman et al., 2002).

Due to the mixed results and criticisms of existing studies, research on culture-specific coping requires further examination. In order to clarify the role of culture in coping, researchers recommended to continue research in the area, using more diverse samples, measures and methodologies (Heppner et al., 2014; Kuo, 2011).

Culture-Specific Well-Being Outcomes

In light of the findings on cross-cultural differences in coping, researchers have questioned the universality of the prevailing functional-dysfunctional paradigm of coping, which argues for the effectiveness and positive impact of direct, task-oriented strategies (Seiffge-Krenke, 1993). Most research on the outcomes of coping styles was conducted in a western context, and it has emphasised problem-solving, personal agency and direct action in coping, all of which are concepts valued in individualistic cultures (Dunahoo et al., 1998). Therefore, the effectiveness of task-oriented coping has been argued to be biased towards individualistic cultural values (Heppner et al., 2014).

In response, recent models of cultural coping propose that that the effectiveness of direct coping might be limited to individualist cultural contexts, and that the most effective coping styles are those which are congruent with cultural factors (Heppner et al., 2014). For example, according to the Contingency Model by Leong and Wong (2003), coping effectiveness depends

on the congruence between coping style and cultural context. According to these proposals, task-oriented strategies may be incongruent in collectivist cultural contexts, in which direct action and confrontation is discouraged (Chun et al., 2006). Instead, the most effective strategies in a collectivist context might include emotional and avoidant coping, which entail management of internal emotions and avoidance of conflict, congruent with collectivist cultural values (Lam & Zane, 2004; Ohbuchi & Atsumi, 2010, Yeh et al., 2006).

In accordance with the culture-specific perspective, Ohbuchi and Atsumi (2010) found that avoidance strategy was effective for Japanese subjects in Japan, which can be attributed to the congruence between avoidant coping and collectivist macro-cultural context. Similarly, avoidance coping was associated with less distress and impairment in a collectivist sample in Polynesia (Allen & Smith, 2015), and with less burnout in Japanese caregivers in Japan (Okabayashi et al., 2010). A recent study focused specifically on collectivist coping styles, which included items from avoidant and emotional styles, and related them to an increased life satisfaction in a sample in China (Wang et al., 2017).

In addition to macro-cultural context, Heppner et al. (2014) included individual-level cultural factors in the Cultural and Contextual Model of Coping (CCMC) and implicated that individual cultural values can also shape coping. The CCMC theorises a complex interaction between five domains, which include individual cultural factors, coping styles and health and well-being. The model hypothesises that cultural factors affect coping, which in turn affects well-being and health outcomes, and it suggests that culturally congruent strategies are related to positive outcomes (Heppner et al., 2014).

In line with this proposal, several studies found support for the role of individual cultural factors. For example, Okamoto and Teo (2011) found that emotion- and avoidance-oriented strategies, congruent with collectivist values, significantly reduced stress in Japanese expats in Australia, despite the prevailing individualist context. The authors attributed the positive outcomes to the congruency between avoidant coping and collectivist orientation of the subjects. Furthermore, Yoshihama (2002) examined the outcomes of passive (avoidant) coping strategies in more collectivist, Japanese-born American women and in more individualist, Japanese American women. In individualistic participants, proactive coping styles were linked to lower distress and perceived as more effective, however in collectivist participants passive coping styles were associated with lower distress. In fact, proactive task-oriented strategies showed a deleterious effect on collectivist Japanese-born participants. Similarly, Chang (2001) compared coping strategies of Euro-American and Asian American students and examined their well-being outcomes. In line with prevalent research, the use of avoidant strategies was linked

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to lower life satisfaction and higher depression in Euro-American participants, however this effect did not hold for Asian American students. These results suggest that regardless of prevailing cultural context, coping styles congruent with individual cultural orientation can be related to better outcomes.

The models of cultural coping outlined above implicate the role of cultural factors in coping styles, including cultural context and individual-level cultural factors. Recent findings suggest that the effects of coping styles might not be universal, but instead that coping styles congruent with cultural factors might be most effective and related to better outcomes. In spite of these postulations, the support for cultural models of coping remains scarce. The authors of the models called for future researchers to examine the proposed relationships and to provide further insight into cultural coping (Heppner et al., 2014).

The Present Study

The present study aims to add to the body of research on cultural coping by responding to some of the criticisms of previous studies, and to fill a gap in our understanding of the complex relationship between culture and coping. In response to the criticism of monocultural samples from dichotomous cultures, the present study uses a multicultural sample of international students from 39 countries. This approach has been recommended in a recent study to effectively examine cultural differences (Bardi & Guerra, 2011). In addition, the present study responds to the call to study culture on an individual level, and it directly measures subjects' cultural orientation using an established psychometric instrument (Triandis & Gelfand, 1998). Furthermore, in contrast to most existing studies conducted in western individualistic context (Folkman & Moskowitz, 2004), this study offers an insight into coping in Portugal, which can be considered a collectivist macro-cultural context (Hofstede Insights, 2020). Taking into account the recent models of cultural coping, the present study attempts to examine coping using an intercultural and contextual approach, taking into consideration cultural factors.

The first hypothesis of the present study is proposed in line with most of the existing studies on cross-cultural differences in coping (e.g. Bailey & Dua 1999; Chang, 1996). If culture-specific perspectives are adequate, we can hypothesise that (H1) Individuals higher in collectivism orientation will use more avoidant and emotional coping styles, and individuals higher in individualism will use more task-oriented coping styles. The second hypothesis is proposed in agreement with the universal perspective on coping effectiveness, and with existing studies showing the dysfunctionality of indirect coping styles (e.g. Chao, 2011; Deatherage et al., 2013; Endler et al., 2000). If universal perspectives on coping effectiveness are adequate,

we can hypothesise that (H2) Individuals using more avoidant and emotional coping styles will show poorer well-being outcomes, such as lower quality of life, higher perceived stress and lower life satisfaction, and that individuals using direct styles will show better well-being outcomes.

However, different predictions stem from recent models of cultural coping. In accordance with recent theoretical models on cultural and contextual factors in coping (Heppner et al., 2014), we hypothesise that individuals using coping styles congruent with cultural factors will show better well-being outcomes. In contrast to the previous hypothesis, we therefore propose that (H3) Individuals using culturally congruent coping, in this case emotional and avoidant styles, will show better well-being outcomes.

Our aim is to compare both universal and culture-specific perspectives on coping styles and their effects on well-being in a collectivist cultural context. Our last aim is to test if the association between cultural orientation and well-being is mediated by culturally congruent coping styles (O1).

Chapter II – Method

Sampling and Procedure

This study used non-probability convenience sampling. The sample was self-selected, and anyone who met the selection criteria could participate. The selection criteria were to be an international student at a Portuguese university residing in Portugal. The subjects participated voluntarily for no incentive, and they were recruited online via social media (Facebook), where an advertisement for voluntary participation in an online questionnaire study was posted in international student groups. The advertisement included key information about the study including its purpose, duration and lack of risks.

Participants followed the web link and completed the online questionnaire on Google Forms, consisting of 72 multiple choice questions (see Appendix A). The questionnaire included an informed consent form, which informed the participants that their answers would be anonymous, the lack of risks in participating and right to withdraw at any time. After completion, the participants filled out sociodemographic information and they were presented with a debriefing form and the researcher's contact information. The present study involved no known risks and was approved by the ISCTE-IUL Ethical Board.

Design

This study used a quantitative, cross-sectional survey design. The variables in this study included cultural orientations, coping styles and three well-being outcomes, namely perceived stress, quality of life and life satisfaction. All of the variables were measured via survey using standardised psychometric instruments.

Participants

There were 110 participants in the present study. The sample consisted of 74 females, 34 males and 2 participants preferred not to disclose their gender. All of the participants were international students studying at universities in Portugal. The mean age of the participants was $M = 26.85$ years ($SD = 3.10$). The participants' nationalities included 39 countries in total. 72% of the participants were European, and 28% were from outside Europe including South America, Asia, North America, Africa and Australia. Three participants were excluded from the present study, because they were Portuguese and therefore did not meet the selection criteria.

Measures

Cultural Orientation (Individualism and Collectivism)

A 16-item individualism and collectivism scale (INDCOL; Triandis & Gelfand, 1998) was used to measure cultural orientations of individualism and collectivism. This scale was adopted by Triandis and Gelfand (1998) from the original by Singelis (1995), which was reduced to 16 items using factor analysis. The factor structure of the scale was confirmed in non-western samples such as in Korea, Taiwan, Argentina and Singapore (Chiou, 2001; Soh & Leong, 2002), and therefore it was considered suitable for a cross-cultural sample. This scale was reported to show higher validity and reliability than other cultural measures (Cozma, 2011), however the support for its psychometric properties remains mixed. Some authors reported moderate to high internal consistency (Cronbach Alpha from .64 to .83) and test-retest reliability (.45 to .80) (Renzhi et al., 2013), while others obtained lower scores (.38 to .73) (Hui & Yee, 1994).

The scale consists of 16 short statements rated on a 9-item Likert scale (*1 = never and definitely no, 9 = always and definitely yes*). Example items include "I rather depend on myself than others" for individualism and "I feel good when I cooperate with others" for collectivism. The scale measures four subscales of horizontal individualism ($\alpha = .57$), vertical individualism ($\alpha = .66$), horizontal collectivism ($\alpha = .53$) and vertical collectivism ($\alpha = .62$). Deleting one item from individualism and two items from collectivism improved the internal consistencies for vertical individualism to ($\alpha = .70$), vertical collectivism ($\alpha = .76$), and horizontal collectivism

(α = .61). In order to obtain an overall individualism (α = .67) and collectivism (α = .65) scores, the horizontal and vertical scores were combined in this study. Other authors previously combined the scores for the vertical and horizontal subscales, as they were found to be significantly positively correlated to each other, and they should measure the same underlying concept (Komarraju & Cokley, 2008; Oyserman et al., 2002).

Coping Styles

A brief 21-item CISS Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1990) was used to assess participants' coping styles on three subscales, namely task-oriented, emotion-oriented and avoidance-oriented coping. The original 48-item instrument was reduced to 21 items by the authors by selecting items with the highest validity. The original scale was developed in a western context, however it has shown reliability and validity cross-culturally in Japan, Korea and Malaysia (Choi et al., 2017) and therefore it was considered suitable for a cross-cultural sample. The original study showed adequate test-retest reliability (.51 to .73) as well as internal reliability using Cronbach Alpha (> .85) (Endler & Parker, 1990), and several other studies confirmed acceptable psychometric properties of this scale (Choi et al., 2017; Imran et al., 2020).

In this scale, participants were asked how they react to a stressful situation using short statements rated on a 5-item Likert scale (*1 = not at all to 5 = very much*). Example items include "I determine a course of action and follow it" for task-oriented style (α = .81), "I become very upset" for emotion-oriented style (α = .86) and "I take some time off and get away from the situation" for avoidant style (α = .75). The overall score for each coping style was obtained by adding together the scores for each subscale.

Perceived Stress

A brief 10-item version of the Perceived Stress Scale (PSS; Cohen et al. 1983) was used to measure the degree to which the subjects perceive their life situations as stressful. The authors reduced an original 14-item scale by excluding four factors using exploratory factor analysis (Cohen & Williamson, 1988). The PSS was normed against 2,378 American respondents, however its equivalence was confirmed in diverse samples including Japanese, Turkish, Thai and others, and therefore it can be considered suitable for cross-cultural studies (Lee, 2012). The PSS scale has shown good psychometric properties, including high temporal reliability (.82 to .85) (Roberti et al., 2006) and internal consistency > .70 in 12 reviewed studies (Lee, 2012).

The brief version includes 10 statements which ask how often the subject experienced certain feelings and thoughts in the last month on a 5-point Likert scale (*0 = never to 4 = very often*). There are six negative items such as "In the last month, how often have you felt anxious and stressed?", and four positive items which must be reversed during scoring, such as "In the last month, how often were you able to control the irritations in your life?". In order to produce a total score of perceived stress, the scores of four positive questions were reversed and all of the items' scores were summed up ($\alpha = .86$).

Quality of Life

A brief 26-item version of the World Health Organisation Quality of Life Scale (WHOQOL Group, 1996) was used to assess quality of life (QoL) of the subjects. The WHOQOL was developed by the World Health Organisation cross-culturally in multiple field centres and validated for international samples (Power et al., 1999, WHOQOL Group, 1998). The original scale showed high internal consistency using Cronbach alpha (.75 to .88), with the exception of social subscale (.66). Test-retest reliability, discriminant and content validity were also reported as acceptable (WHOQOL Group, 1998).

The original version included 100 items, however the reduced brief scale consists of 26 items most correlated to the total score for each subscale (WHOQOL, 1998, 2012). The scale assesses the participants' subjective judgement of their quality of life in the last two weeks across four different domains. The four subscales are namely physical health (7 items; $\alpha = .70$), psychological well-being (6 items; $\alpha = .76$), social well-being (3 items; $\alpha = .63$) and environment (8 items; $\alpha = .77$). Furthermore, there are two separate items measuring overall quality of life and general well-being. For this study, two items were excluded from the social subscale, as they asked their respondents about their sexual life which was not considered relevant for the present study. The 26 questions were measured on 5-item Likert scales. Example questions include "How healthy is your physical environment" for environmental quality of life subscale or "How satisfied are you with your health?" for the overall health domain. For each subscale, the mean score was calculated using the scoring instructions, which produced separate results for the six different quality of life domains.

Life Satisfaction

The Cantril Ladder, based on Cantril's Self-Anchoring Scale (Cantril, 1965), was used to measure the subject's self-evaluation of how satisfied they are with their life. This well-established measure of life satisfaction is used by large-scale international surveys including

the Gallup Well-Being Index in almost 150 countries (Gallup, 2020) and it has been considered suitable for cross-cultural samples (Veenhooven, 2012). It has shown good test-retest reliability (.70) and good convergent validity with other well-being scales (Levin & Currie, 2014). The original Cantril scale asks to imagine the present and future life satisfaction, however the present study only focused on the current state.

The scale is visually represented by an image of a ten-step ladder with numbers between zero to ten. In the instructions, the subjects were asked to "Imagine a ladder numbered from zero at the bottom to ten on top, which represents the worst possible to best possible life for you. Where do you stand now?" (Gallup, 2020). The subjects selected a number between zero to ten, which represented the degree of their current life satisfaction.

Sociodemographic Variables

Sociodemographic variables of the participants were collected in the demographic questionnaire. The participants were asked to report their gender, age, nationality and nationality of their parents, country of origin and country of origin of their parents. They were also asked how long they have resided in Portugal, and how long they have lived abroad before living in Portugal. Lastly, the participants were asked to report their level of speaking and understanding Portuguese on a Likert scale between 1 to 10 (*1 = none to 10= fluent*).

Statistical Analyses

Raw data were checked for duplicates and missing values, and transferred into SPSS software Version 26 (IBM Corp., 2019) for further analysis. Three of the participants were excluded from the data set because they did not meet the selection criteria, and one data set was excluded because it was a duplicate.

Sociodemographic data (gender, age, nationality) was used for descriptive analysis. If the participants indicated multiple nationalities, or a different country of origin than nationality, only the first mentioned nationality was used. Participants' nationalities were grouped together and coded into cultural dimension clusters in line with Hofstede's data (Hofstede Insights, 2020; Mensah & Chen, 2013), in order to determine whether individual cultural orientation scores correspond to country-level cultural dimensions. For example, highly individualistic countries according to Hofstede (e.g. USA, UK, Germany) were grouped together and coded into North American and North European clusters, and collectivist countries (e.g. India, Brazil) were grouped together into Asian and South American cultural clusters (Mensah & Chen, 2013). Firstly, we compared scores between cultural groups, namely whether participants from

collectivist countries showed higher levels of collectivist orientation than participants from individualist countries. Secondly, we compared scores within each cultural group, namely whether participants from collectivist countries showed higher levels of collectivist orientation than individualist orientation. However, for the following statistical analyses, we considered only individual level cultural orientation.

SPSS software was used to obtain internal reliability of the scales using Cohen's alpha, and to calculate descriptive statistics including mean values and standard deviations of sociodemographic variables, and of each of the five study variables. Pearson's bivariate correlational analysis was run between the study variables (individualism and collectivism, coping styles, perceived stress, quality of life and life satisfaction).

The PROCESS macro model (PROCESS) (Hayes, 2012, 2018) was used to conduct mediation analyses in order to examine the association between cultural orientations, coping styles and well-being. We examined whether the association between cultural orientations and well-being was mediated by coping styles. We conducted the analysis using parallel mediation model (Model 4) in order to test the three mediator variables. There were six mediational models. The first three models included collectivism as the predictor variable, three well-being variables as criterion variables (quality of life, life satisfaction, perceived stress) and three coping styles were tested as mediators (avoidant, emotional, task-oriented). The three following models tested individualism as the predictor variable, and the criterion variables and mediators remained the same. The significance of the effects was tested using bootstrapping (5000 resamples; PROCESS; Hayes, 2018).

Chapter III – Results

Sociodemographic Data

Detailed sociodemographic variables of the sample can be found in Appendix B. Results of the descriptive statistics including means and standard deviations of each variable and for each cultural cluster can be found in Table 2.1. Our results for the comparisons between individual and national levels were mixed, and the two levels did not always coincide. Participants from collectivist cultural clusters (e.g. Asian, South American) scored higher on both cultural dimensions than participants from individualist cultural clusters (e.g. North American, North European). Participants from collectivist countries scored significantly higher on collectivism ($M = 28.10$, $SD = 4.12$) than participants from individualist countries ($M = 26.70$, $SD = 3.27$), $t(108) = 1.98$, $p = .05$, however they also scored higher on individualism ($M = 23.89$, $SD = 4.45$) than participants from individualist countries ($M = 23.10$, $SD = 4.31$),

t(108) = .89, *p* = .37. Furthermore, all of the participants scored higher on collectivist orientation than on individualist orientation. Participants from collectivist countries scored significantly higher on collectivism (*M* = 28.10, *SD* = 4.12) than on individualism (*M* = 24.24, *SD* = 4.26); *t*(35) = 3.67, *p* < .00, and participants from individualist countries also scored significantly higher on collectivism (*M* = 26.70, *SD* = 3.27) than on individualism (*M* = 22.93, *SD* = 4.36); *t*(73) = 6.06, *p* < .00.

Table 2.1

Means and Standard Deviations of the Study Variables in Cultural Clusters

Cultural Cluster	*N*	Individualism	Collectivism	Task-Coping	Emotion-Coping	Avoidance-Coping	Quality of Life	Life Satisfaction	Perceived Stress
		M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
North European	68	22.93 (4.28)	26.82 (3.27)	27.50 (4.41)	22.18 (6.49)	21.63 (5.53)	4.09 (.71)	6.85 (1.28)	18.07 (7.03)
South European	9	23.94 (5.14)	26.94 (4.85)	24.67 (5.98)	23.11 (5.26)	19.44 (5.77)	3.44 (.88)	6.44 (1.42)	16.67 (6.21)
Asian	11	24.45 (4.12)	29.55 (3.63)	31.55 (2.98)	19.82 (7.11)	21.91 (6.01)	4.27 (.47)	7.27 (0.79)	14.36 (7.45)
South American	10	25.22 (4.45)	27.25 (4.05)	28.60 (2.50)	21.60 (5.50)	21.10 (6.78)	3.40 (.70)	6.30 (1.57)	18.40 (6.19)
African	6	22.50 (2.90)	29.08 (4.42)	26.00 (4.05)	20.50 (8.46)	17.50 (5.21)	3.83 (.75)	7.17 (0.75)	14.33 (6.50)
North American	4	21.88 (6.14)	26.13 (3.84)	26.75 (3.30)	18.50 (8.06)	22.50 (1.73)	4.75 (.50)	7.50 (0.58)	17.75 (1.26)
Australian	2	25.75 (6.01)	23.25 (1.06)	23.50 (3.54)	24.50 (7.78)	20.50 (9.20)	3.50 (.71)	5.50 (2.12)	26.50 (2.12)
Total	110	23.36 (4.35)	27.18 (3.65)	27.59 (4.47)	21.78 (6.47)	21.22 (5.63)	3.99 (.75)	6.83 (1.27)	17.55 (6.85)

Note. For the purpose of this descriptive analysis, Italy was added to the North European cultural cluster because it scores high on individualism according to Hofstede (Hofstede Insights, 2020)

Descriptive Analysis

For internal consistency scores of each scale, see Table 2.2. The results of Pearson's correlational analyses between the five study variables can be found in Table 2.3. Collectivism was not significantly related to any of the three coping styles. However, collectivism was significantly positively related to two well-being outcome variables, weakly to psychological QoL, $r(108) = .27$, $p = .05$ and to social QoL, $r(108) = .29$, $p = .01$. Individualism was significantly related to two coping styles, namely to task-oriented coping as predicted, $r(108) = .24$, $p = .05$, but also to emotion-oriented coping, $r(108) = .20$, $p = .05$, which was not predicted. Individualism was significantly negatively correlated to two well-being outcomes, namely to overall quality of life, $r(108) = -.21$, $p = .05$, and to social quality of life, $r(108) = -.24$, $p = .05$.

Out of the three coping styles, task-oriented coping was significantly related to two well-being outcomes, negatively to perceived stress, $r(108) = -.21$, $p = .05$, and positively to psychological QoL, $r(108) = .27$, $p = .01$. Emotion-oriented coping style was significantly correlated to most outcome variables. It showed a moderate positive correlation to perceived stress, $r(108) = .44$, $p = .01$, and negative correlation to psychological QoL, $r(108) = -.36$, $p = .01$, to social QoL, $r(108) = -.24$, $p = .05$, and to life satisfaction, $r(108) = -.35$, $p = .01$. Avoidance-oriented coping style was not significantly correlated to any well-being outcome.

Table 2.2

Internal Reliability of Measures

Measure / Subscale	Number of Items	Cronbach's Alpha	Corrected Cronbach's Alpha
INDCOL	16	-	-
Individualism	8	.67	-
Horizontal Individualism	4	.57	-
Vertical Individualism	4	.66	.70
Collectivism	8	.65	-
Horizontal Collectivism	4	.53	.61
Vertical Collectivism	4	.62	.76
CISS 21	21	-	-
Task-Oriented	7	.81	-
Emotion-Oriented	7	.86	-
Avoidance-Oriented	7	.75	-
Quality of Life	26	-	-
Environmental QoL	8	.77	-
Physical QoL	7	.70	-
Psychological QoL	6	.76	-
Social QoL	3	.63	-
Perceived Stress Scale	10	.86	-
Cantril Ladder	1	-	-

Table 2.3

Pearson's Correlations of the Study Variables

	1	2	3	4	5	6	7	8	9	10
1. Individualism	-									
2. Collectivism	.00	-								
3. Task-Coping	.24*	.16	-							
4. Emotion Coping	.20*	-.12	.32**	-						
5. Avoidant Coping	-.03	-.03	.00	.14	-					
6. Perceived Stress	.13	-.06	-.21*	.44**	.16	-				
7. Overall QoL	-.21*	.02	.06	-.10	.06	.25**	-			
8. PsychQoL	-.08	.23*	.27*	-.36**	-.03	.56**	.39**	-		
9. Social QoL	-.24*	.29**	.10	-.24*	.06	.25**	.39**	.35**	-	
10. Life Satisfaction	-.09	.18	.06	-.35**	.01	.50**	.38**	.54**	.47**	-

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

Hypothesis 1: Effects of Cultural Orientations on Coping Styles

The first hypothesis predicted a direct effect of cultural orientations (collectivism and individualism) on coping styles. It was hypothesised that collectivism would be associated with higher use of avoidant and emotional coping styles, and individualism with higher use of task-oriented style.

For collectivism, the hypothesis was not supported, and it was not significantly associated with coping styles. The analysis revealed that the direct effects of collectivism did not reach significance for any of the three coping styles, emotional coping ($\beta = -.22$, $p = .201$), task-oriented coping ($\beta = .19$, $p = .105$), or avoidant coping ($\beta = -.04$, $p = .775$).

For individualism, the hypothesis was partially supported, and individualism was significantly related to task-oriented coping style, $\beta = .25$; 95% CI [.06, .44]. Individualism accounted for 5.88% of variance in task-oriented coping style. However, individualism was also significantly related to emotional coping style, $\beta = .30$; 95% CI [.02 to .58], which was not predicted. Individualism accounted for 4.01% of variance in emotional coping style. The direct effect of individualism on avoidant coping was non-significant ($\beta = -.03$, $p = .796$).

Hypotheses H2 and H3: Effects of Coping Styles on Well-being

The second and third hypotheses predicted that coping styles would have a direct effect on well-being outcomes. In line with universal effects of coping styles, the second hypothesis predicted that avoidant and emotional coping styles would be related to poorer well-being

outcomes, such as lower life satisfaction, lower quality of life and higher perceived stress, and that task-oriented coping would be related to better outcomes. However, in line with the culture-specific perspective, the third hypothesis predicted that culturally congruent coping, in this case avoidant and emotional styles, would be related to better well-being outcomes.

The second hypothesis was partially supported for emotional coping style, which was directly related to two of the well-being outcomes, namely to lower life satisfaction and to higher perceived stress. The analysis revealed that emotional coping style significantly predicted lower life satisfaction β = -.07; 95% CI [-.11, -.04] and higher perceived stress β = .42; 95% CI [.23, .62]. Overall, coping styles accounted for 13,01% of variance in life satisfaction and for 21,6% in perceived stress. In the second model (individualism), emotional coping style also predicted lower life satisfaction β = -.07; 95% CI [-.11, -.03] and higher perceived stress β = .40; 95% CI [.19, .60].

However, neither one of the hypotheses was supported for avoidant coping style, which did not have a significant direct effect on any of the three well-being outcomes in neither collectivism nor individualism models, namely on quality of life (β = .00, p = .897; β =.00, p = 884), on life satisfaction (β = .01, p = .475; β =.01, p = 499) or on perceived stress (β = .13, p = .225; β =.14, p = 202).

Finally, task-oriented coping style did not have a significant direct effect on any of the three well-being outcomes in neither collectivism nor individualism models, namely on quality of life (β = .01, p = .476; β =.01, p = 437), life satisfaction (β = -.02, p = .432; β = -.02, p = 591) or perceived stress (β = -.13, p = .360; β = -.17, p = 250).

Objective 1: Association between Cultural Orientations, Coping and Well-Being

In order to determine whether the association between cultural orientations and well-being was mediated by coping styles, we examined six mediational models which used cultural orientations as predictors (individualism and collectivism), coping styles as mediators, and well-being outcomes as criterion variables. The mediational models examined whether collectivism and individualism would have an indirect effect on well-being via culturally congruent coping styles. However, the mediational hypotheses were not supported either for collectivism or for individualism as predictors (see Table 2.4).

The results of the parallel mediation model which used collectivism as predictor, revealed that the direct effect of collectivism on well-being was non-significant for all three outcome variables, quality of life (β_{direct} = .01, p = .543), life satisfaction (β_{direct} = .05, p = .100) and perceived stress (β_{direct} = .01, p = .972). The total effect of collectivism on well-being was non-

significant for two well-being outcome variables, quality of life ($\beta_{total} = .02, p = .355$), and perceived stress ($\beta_{total} = -.12, p = .520$). For life satisfaction, the effect of collectivism was approaching significance ($\beta_{total} = .06, p = .056$). For illustration, see Figure 2.1.

The results of the second parallel mediation model which used individualism as predictor, revealed that the direct effect of individualism on well-being was also non-significant for all three outcome variables, quality of life ($\beta_{direct} = .00, p = .930$), life satisfaction ($\beta_{direct} = .00, p = .984$) and perceived stress ($\beta_{direct} = .13, p = .395$). The total effect of individualism on well-being was non-significant for all three well-being outcome variables, quality of life ($\beta_{total} = .00, p = .848$), life satisfaction ($\beta_{total} = -.03, p = .337$) and perceived stress ($\beta_{total} = .20, p = .194$). For illustration, see Figure 2.2.

Figure 2.1

Parallel Multiple Mediator Model with Collectivism as Predictor Variable
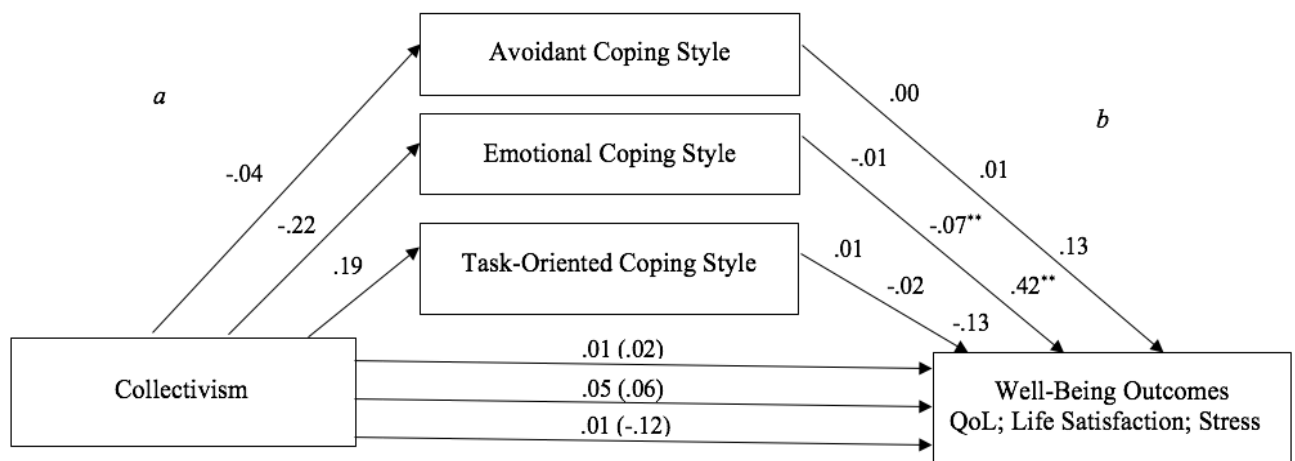
$^{**}p<.01$

Figure 2.2

Parallel Multiple Mediator Model with Individualism as Predictor Variable

	Avoidant Coping Style	

a — -.03, .30**, .25**

Emotional Coping Style

Task-Oriented Coping Style

Individualism

.00 (.00)
.00 (-.03)
.13 (.20)

b — .00, -.01, .01, -.07**, .14, .01, .40**, -.02, -.17

Well-Being Outcomes
QoL; Life Satisfaction; Stress
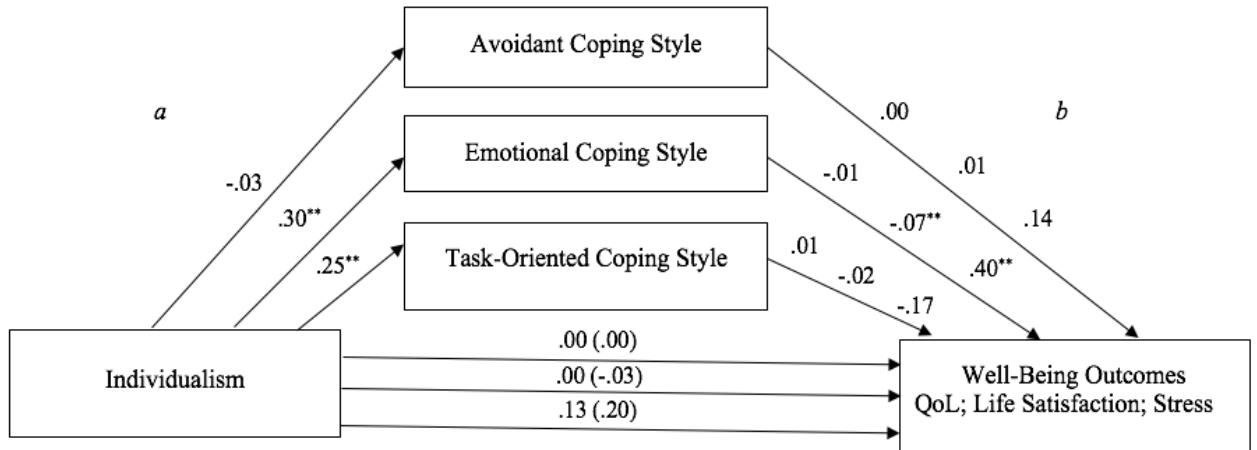
**p<.01

c'

Table 2.4

Parallel Mediations of Coping Styles on the Association between Cultural Orientations and Well-Being

Mediator Variables Model

	Avoidant Coping				Emotional Coping				Task Coping			
Predictor	b	*p*	t	CI	b	*p*	t	CI	b	*p*	t	CI
Collectivism	-.04	.775	-.29	[-.34, .25]	-.22	.201	-1.29	[-.55, .12]	.19	.105	1.64	[-.04, .42]
Individualism	-.03	.796	-.26	[-.28, .21]	.30**	.036	2.12	[.02, .58]	.25**	.011	2.60	[.06, .44]

Indirect Effects Model

	Quality of Life				Life Satisfaction				Perceived Stress			
	b	*p*	t	CI	b	*p*	t	CI	b	*p*	t	CI
Collectivism												
Col x Avoidant Coping	.00	.897	-.13	[-.02, .02]	.01	.475	.72	[-.03, .06]	.13	.225	1.22	[-.08, .34]
Col x Emotional Coping	-.01	.150	-1.45	[-.03, .01]	-.07**	<.000	-3.81	[-.11, -.04]	.42**	<.000	4.31	[.23, .62]
Col x Task Coping	.01	.476	.72	[-.02, .04]	-.02	.432	-.79	[-.08, .03]	-.13	.360	-.92	[-.41, .15]
Individualism												
Ind x Avoidant Coping	.00	.884	-.15	[-.02, .02]	.01	.499	.68	[-.03, .06]	.14	.202	1.28	[-.07, .35]
Ind x Emotional Coping	-.01	.165	-1.40	[-.03, .01]	-.07**	<.000	-3.70	[-.11, -.03]	.40**	<.000	3.86	[.19, .60]
Ind x Task Coping	.01	.437	.78	[-.02, .04]	-.02	.591	-.54	[-.07, .04]	-.17	.250	-1.16	[-.46, .12]

Total Effects Model

	Quality of Life				Life Satisfaction				Perceived Stress			
	b	*p*	t	CI	b	*p*	t	CI	b	*p*	t	CI
Collectivism												
Col Direct	.01	.543	.61	[-.02, .04]	.05	.100	1.66	[-.01, .12]	.01	.972	.04	[-.32, .33]
Col Total	.02	.355	.93	[-.02, .05]	.06	.056	1.93	[.00, .13]	-.12	.520	-.65	[-.47, .24]
Individualism												
Ind Direct	.00	.930	-.09	[-.03, .03]	.00	.984	-.02	[-.06, .06]	.13	.395	.85	[-.17, .42]
Ind Total	.00	.850	-.19	[-.03, .02]	-.03	.337	-.96	[-.08, .03]	.20	.194	1.31	[-.10, .49]

**p<.01

Chapter IV – Discussion

International students have been found to face a large number of stressors and to show high prevalence of stress and difficulties (Sherry et al., 2010). Despite this issue, gaps remain in our understanding of how culture affects stress and coping, which could inform potential culture-specific interventions (Griner & Smith, 2006; Olivas & Li, 2006). A body of research has shown that cultural factors can shape how people cope with stress, and how coping styles affect their well-being (for review, see Kuo, 2011), however the findings have been mixed. Some researchers suggested a universal pattern in coping and well-being outcomes (e.g. Seiffge-Krenke, 1993), however others argued for a more culture-specific perspective and recently proposed models of cultural coping (Heppner et al., 2014; Leong & Wong, 2003).

Our study followed several recommendations by previous researchers, in order to address the methodological shortcomings of existing research, such as using a diverse sample and examining culturally congruent coping. Unlike most previous studies, our study was conducted in a collectivist macro-cultural context. In response to the mixed results of existing studies, our study aimed to further examine the complex role of culture in coping and well-being. Furthermore, we aimed to examine recent proposals of cultural coping models, which postulated that culturally congruent coping would have favourable outcomes on well-being (Heppner, 2014), and to compare them with the universal perspective on coping.

In addition, previous researchers noted an ecological fallacy in cultural research, which occurs when scores on the national level are assumed on an individual level (Brewer & Venaik, 2014). In response, our study directly measured cultural orientation on an individual level and compared whether scores of individualism and collectivism on an individual level correspond to the national level. Our findings showed that participants' individual cultural orientations did not always correspond to national cultural dimensions. Therefore, our data supported Hofstede's (1980) notion that cultural factors coexist on multiple levels; however, they do not necessarily coincide.

With regards to the effects of cultural orientations on coping styles, this study found partial support for culture-specific coping. In accordance with a body of existing research (for review, see Chun et al., 2006), we found that participants higher on individualism used significantly more task-oriented coping styles. However, contrary to our predictions, individualist participants also employed significantly more emotional coping. Furthermore, contrary to existing studies, collectivist cultural orientation was not significantly related to any coping styles.

With respect to the second and third hypotheses, which predicted that coping styles would have significant effects on well-being, we found partial support for the second hypothesis in the case of emotional-oriented style. In this study, emotional coping was significantly related to increased perceived stress and decreased life satisfaction. These findings corroborated a number of existing studies, which have shown the negative effects of emotional coping on well-being (e.g. Deatherage et al., 2013). However, in contrast to existing studies (e.g. Bouteyre et al., 2006; Chao, 2011) and to our predictions, avoidant coping style did not show significant effects on well-being. Similarly, task-oriented coping was not significantly related to any well-being outcomes.

Finally, the present study failed to find support for our mediational models, which examined whether the association between cultural orientations and well-being was mediated by coping styles, based on the implications of recent cultural coping models (Heppner et al., 2014). We examined whether subjects higher on collectivist cultural orientation would show better well-being outcomes, as explained by the use of culturally congruent emotional and avoidant coping styles, which was not supported.

Effects of Cultural Orientations on Coping Styles

The significant relationship between individualist cultural orientation and task-oriented style corroborated a number of existing studies which found the same pattern of cross-cultural differences in coping styles (e.g. Lee & Mason, 2014). This result can be explained by the assumptions behind culture-specific coping, which suggest that individualist cultural factors, such as internalised values and norms, promote direct, proactive behaviours (Chun et al., 2006). Therefore, subjects high in individualist cultural orientation were expected to show direct, task-oriented coping behaviour, which was confirmed by the present study. This finding corroborates culture-specific perspective on coping, which suggests that individual cultural values can shape the way in which people cope with stress.

However, an unexpected finding was that individualist subjects also used significantly more emotional coping styles. This finding stands in contrast to a number of existing studies, which found higher emotional coping in collectivist samples (e.g. Chang, 1996). However, upon a closer look at the existing literature, a small number of studies also found higher emotional coping in individualist samples (Murakami 1983, as cited in Marsella & Dash-Scheuer, 1987). This finding is difficult to explain in terms of cultural norms and values, as individualist cultural context would typically not encourage controlling one's emotional responses, internalising or self-blame, which are components of emotional coping style (Parker & Endler, 1996).

In some studies, this surprising finding was explained in terms of acculturation, which coping styles have been found to be subject to (Bailey & Dua, 1999; Chun, 2003; Kuo & Gingrich, 2004). For example, Bailey and Dua (1999) found that the coping styles of Asian students in Australia started to resemble the coping styles of the host culture over time. Students who have stayed in Australia for longer than six months and were more acculturated, showed significantly more individualist coping styles. According to these proposals, the greater use of emotional coping styles in our sample could be the result of acculturation process, and adaptation of coping styles congruent to the host culture. As Portugal is considered a collectivist culture (Hofstede Insights, 2020), it could be postulated that individualist students adapted their coping styles to fit the host culture over time. This speculation is in accordance with the culture-specific approach to coping, however it cannot be confirmed without controlling for acculturation.

Alternatively, a number of studies pointed to the importance of another factor which can shape coping styles, namely the type of stressor (Mattlin et al., 1990). Several studies reported that when the stressor is perceived as uncontrollable or unavoidable, individuals tend to use more indirect strategies such as emotional or avoidant coping (Aldwin & Yancura, 2004; Folkman & Lazarus, 1980). According to these arguments, the greater use of indirect coping in the individualist subgroup could indicate that these subjects faced more uncontrollable or unavoidable stressors, as a result of which they employed indirect strategies. For instance, the present study was conducted at the time of a global pandemic, which could be considered an uncontrollable stressor for the subjects. However, without controlling for the type of stressor, the present study cannot confirm this speculation.

With regards to collectivism, which was related to emotional and avoidant coping by a number of previous studies (see Kuo, 2011), the present study failed to find a significant relationship between collectivist cultural orientation and any coping style. Some previous studies also failed to confirm this relationship (e.g. Aldwin & Greenberger, 1987; Chang, 1996), however the interpretations of these findings remain mixed and speculative.

Some researchers emphasised that just as people are not completely individualist or collectivist in their cultural orientation, individualist and collectivist coping strategies should not be viewed as dichotomous or mutually exclusive. Both cultural orientations and cultural coping styles may coexist, especially within ethnically and culturally diverse individuals (Coon & Kemmelmeier, 2001; Kuo, 2011). For example, Chinese Canadian subjects were found to use a combination of individualist and collectivist coping strategies (Kuo & Gingrich, 2004; Wester et al., 2006). In addition, some researchers identified significant within-group

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differences in coping styles in the same collectivist cultural group, based on immigration status or country of birth (Yeh & Inose, 2002; Yoshihama, 2002). In the present study, the diversity of the sample was not controlled for. Some subjects noted being born in a different country from their indicated nationality or having multiple nationalities, however in such cases only the first indicated nationality was used in data analysis. According to the findings above, which showed that coping styles can vary in bicultural participants, and show significant within-group differences based on immigration status or country of birth, our results could have been confounded by the diversity of the sample. Therefore, the lack of culture-specific strategies in the collectivist subgroup could indicate that the group was more heterogeneous than the individualist group.

Furthermore, the lack of significant effects of collectivist cultural orientation could be attributed to the coping measure used in the present study. A few recent studies criticised the use of measures developed in western context, such as CISS used in this study (Endler & Parker, 1990), and instead recommended the use of emic (culture-specific) measures to study other cultural groups (Kuo, 2011). Emically derived scales, such as the Collectivist Coping Scale, were developed based on collectivist cultural values, and proposed a different structure of coping styles in collectivist populations such as Taiwanese or Chinese (e.g. Heppner et al., 2006; Moore & Constantine, 2005; Shek & Cheung, 1990). For example, instead of the traditional direct (task-oriented) vs. indirect (avoidant) distinction, some researchers identified a five-factor structure in collectivist samples, including acceptance, social support or private emotional outlets (Heppner et al., 2006). The present study relied on CISS, because it has been validated in diverse samples (Choi et al., 2017). However, the possibility that the scales could not capture culture-specific collectivist coping styles cannot be dismissed, as collectivism failed to relate to any of the three proposed coping styles. Berry (2006) noted that it is still unclear whether the task- vs. emotion-oriented coping taxonomy is valid across all cultures. Further explorations are necessary to validate the use of culture-specific coping measures, and to integrate both emic and etic approaches in research on cultural coping (Leong & Wong, 2003; Wong et al., 2006).

Effects of Coping Styles on Well-Being

In the present sample, emotional coping style was significantly related to two well-being outcomes, namely, to increased perceived stress and to decreased life satisfaction. This finding is in accordance with a number of existing studies which related emotional coping to multiple negative effects on psychological and physical well-being (e.g. Deatherage et al., 2013). These

findings are commonly explained by the components of emotional coping, which include internalising cognitive strategies such as self-blame, preoccupation or rumination (Parker & Endler, 1996). As a result of ruminating about an issue, individuals were found to further increase the amount of stress and exacerbate the issue (Matheson & Anisman, 2003). Furthermore, a number of items in the subscale for emotional coping can be considered self-depreciative, such as blaming oneself for being unable to cope and for not knowing what to do, which can further contribute to the negative effects on well-being (Seo, 2012).

This finding is also in agreement with Seiffge-Krenke's (1993) model of functional-dysfunctional coping, which postulated that indirect strategies such as emotional and avoidant coping are universally dysfunctional. In contrast to direct strategies, a number of researchers have considered indirect strategies to be more ineffective and passive towards the issue (Higgins & Endler, 1995; Seiffge-Krenke, 1993). In fact, a small number of previous studies confirmed the negative outcomes even in collectivist contexts and claimed that there may not be many cultural differences in the functionality of coping, as the negative effects of indirect coping persisted regardless of cultural factors (Iwamoto, 2010; Lee & Liu, 2001; Nakano, 1991). The universalist perspective stands in contrast to the claims of cultural models of coping, which argue that indirect coping may be functional in collectivist contexts (Heppner et al., 2014; Leong & Wong, 2003). However, the results of the present study are convergent with the universalist perspective, as emotional coping was related to negative outcomes even in subjects with collectivist cultural orientation, and within a culturally congruent collectivist context (Portugal).

Similar to emotional coping style, avoidant coping was hypothesised to impact well-being negatively, as shown by previous studies (Chao, 2011; Dyson, 2006). The rationale behind this assumption is similar to the negative effects of emotional coping, namely that indirect strategies such as denying the presence of a stressor and not dealing with the issue exacerbates stress for the individual (Parker & Endler, 1996; Seiffge-Krenke, 1993). Despite these propositions, avoidant coping had no significant effects on well-being in the present sample. It appears that avoidance coping was not beneficial for the well-being of the present sample, but also not harmful.

The null results for avoidant coping can be interpreted from a culture-specific perspective. Some studies failed to identify the expected negative effects of avoidant coping in more collectivist participants, and speculated that avoidance could assist social relations and harmony in a collectivist context (Chang, 2001; Ohbuchi & Atsumi, 2010). In light of this speculation, it could be proposed that because this study took place in a collectivist macro-cultural context

(Portugal), the congruent cultural context could have buffered the negative effects of avoidance normally found in studies in individualist contexts. However, these speculations are inconsistent with the findings on emotional coping, which appears to be universally dysfunctional based on the present sample.

As mentioned before, previous studied also noted the importance of the type of stressor and suggested that in the case of uncontrollable stressors, avoidance coping might not be dysfunctional (Terry, 1994; Wadsworth, 2015). This could suggest that the present sample might have experienced more uncontrollable stressors at the time of the study, for which the use of avoidant coping was not harmful (Endler, 1997).

Furthermore, Hahn (2011) pointed out that some facets of avoidant coping such as "visiting a friend" might not be dysfunctional in some contexts, specifically during short-term acculturative stress in international students. While Hahn (2011) considered direct strategies to be overall more beneficial, they suggested that purposeful distraction and avoidance might momentarily alleviate stress. According to this argument, the lack of significant negative effects of avoidance could be interpreted in terms of its short-term use, a speculation which would have to be examined by longitudinal studies. Due to the cross-sectional nature of this study and the lack of control for type of stressor, the present study is unable to determine the cause of the null effects of avoidant coping.

Finally, the present study failed to identify the positive effects of task-oriented coping, which were implicated by multiple previous studies (Bouteyre et al., 2006; Endler et al., 2000) and proposed by Seiffge-Krenke's (1993) model of functional coping. However, a number of previous studies showed mixed results, and also failed to identify the positive effects of direct coping strategies. Some studies found null effects of direct coping on psychological well-being (Aldwin & Revenson, 1987; Carver & Scheier, 1994; Lee & Liu, 2001), and offered several speculative interpretations for the lack of effects.

For example, as mentioned above, this study did not control for type of stressor. As suggested by previous studies, in the case of unavoidable or uncontrollable stressors, indirect strategies such as acceptance or accommodation might be more functional (Aldwin & Yancura, 2004; Auerbach, 1989). Therefore, if the present sample faced more uncontrollable stressors, it could be postulated that direct strategies could fail to improve their well-being, as they were implicated to be effective mainly for problems perceived as controllable (Endler, 1997). Carver and Scheier (1994) suggested that while a direct coping approach when facing one focal stressor would improve well-being, using a direct approach when faced with multiple stressors could exacerbate stress and negative emotions. The authors speculated that direct focus on stressors

causes an immediate anticipation of a subsequent stressor, and the individual remains in distress. Therefore, it could be speculated that if the present sample faced a number of stressors, some of which were uncontrollable, task-oriented coping could have failed to show positive effects on well-being.

Furthermore, the lack of positive effects of direct coping could be interpreted in light of cultural theories of coping. Several researchers pointed out the role of cultural congruence in coping and suggested that the effectiveness of certain coping strategies might be limited to specific cultural contexts (Heppner et al., 2014; Leong & Wong, 2003). In line with this argument, it could be proposed that the effectiveness of task-oriented coping could be limited to a congruent individualist context. Because the present study was conducted in a collectivist macro-cultural context (Portugal), it can be speculated that the incongruence between direct coping style and collectivist context might have hindered the positive effects of this strategy. However, due to the insignificance of the results, these culture-specific interpretations await further investigations.

Association between Cultural Orientations, Coping and Well-Being

In terms of the relationships proposed by our mediational model, this study found partial support for the effects of cultural orientations on coping style in the case of individualism, which is in accordance with cultural specificity of coping styles. However, collectivism was not significantly related to any coping style, which did not support our mediational model. Furthermore, the effects of emotional coping on well-being showed an opposite pattern to the culture-specific predictions, and they failed to support our mediational model. Emotional coping was found to have negative outcomes regardless of congruent cultural orientation and context, and thus the results appeared to corroborate a universal perspective on the effects of coping. Finally, both direct and indirect effects of collectivist orientation on well-being were non-significant, and therefore the relationship between cultural orientations and well-being remains tentative.

The relationships between the variables in the mediational model were conceptually implicated by cultural models of coping. For example, in the Cultural and Contextual Model of Coping, Heppner et al. (2014) proposed an interaction between five domains including individual cultural factors, coping styles and health and well-being. The authors called for future researchers to empirically determine the exact direction and strength of the relationships as well as to explore possible moderations and mediations between the factors. However, the

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authors also noted that the links between the factors may occur in a bidirectional, transactional nature, and that the constructs in the model may represent only a fraction of the total variables.

This study followed multiple recommendations by the authors (Heppner et al., 2014), such as exploring a broader range of cultural contexts and samples, examining culturally congruent coping, and proposing a mediational relationship between the factors suggested by the cultural models. In spite of this, our study failed to find conclusive support for the cultural models of coping. Our results showed partial support for cultural specificity in coping, however contrary to the cultural models, the effects of culturally congruent coping styles on well-being were negative, and cultural orientations showed null effects on well-being.

In spite of the mixed results, we believe that our findings do not necessarily contradict the cultural models, but instead highlight the complexity of cultural coping, including the number of factors and possible interactions proposed. In addition to cultural orientation, there is a number of other cultural factors on individual level proposed to shape coping, such as cultural self-construal, locus of control and acculturation (Kuo, 2011). It cannot be ruled out that any other cultural factors suggested by the cultural models acted as extraneous variables in the present study and affected our results. The noise from other variables which this study did not control for may have made it difficult to detect an effect (Price et al., 2020).

With regards to the effects of cultural orientations on well-being, our examination remains exploratory. To our best knowledge, there is a paucity of studies in the area of coping which have examined the effects of cultural factors on well-being (e.g. Aldwin & Greenberger, 1987; Matsumoto et al., 1999). Due to the exploratory nature of this relationship, the null findings are difficult to interpret. However, some authors of the cultural coping models consider the relationship between cultural coping and well-being as problematic (Chun et al., 2006; Leong & Wong, 2003). According to Chun et al. (2006), individualistic coping might focus primarily on the self, and emphasise reduction of distress and symptom relief. However, collectivist coping might focus primarily on others, aiming to improve others' well-being and to protect interpersonal relationships. The authors use this argument to explain why many cultures use seemingly dysfunctional coping (from a western perspective), which does not reduce their stress or improve well-being (e.g. Essau & Trommsdorff, 1996; Lee & Liu, 2001). In light of these speculations, the use of well-being as an outcome measure of cultural coping might be problematic. In summary, the relationship between cultural orientations, coping and well-being remains tentative and requires further insight.

Limitations and Future Directions

This study had several methodological shortcomings, which could have limited the validity and robustness of the findings. The present study relied on an intercultural student sample, which included subjects of 39 nationalities. As a result of self-selection, the nationalities and cultural subgroups were not equally represented, and there were more participants from western cultural clusters (see Appendix B). Participants from different cultural clusters may have systematically varied on factors other than cultural orientation, which could have affected our results. This study planned to recruit a larger sample with balanced cultural groups, however as a result of the global pandemic restrictions, systematic recruitment at universities was not possible. Therefore, we instead opted for online recruitment and self-selection to obtain as many participants as possible.

In addition, as mentioned earlier, we did not control for diversity of the sample in this study. Previous research showed significant within-group differences in the same cultural group upon examination of immigration status or country of origin (e.g. Yoshihama, 2002), and found that bicultural participants can adopt coping styles from both cultures (Wester et al., 2006). Therefore, it cannot be ruled out that the diversity of our sample may have contributed to our inconclusive results.

Some limitations may arise as a result of studying culture using self-report measures. One of the main pitfalls of the use of self-report measures to study culture is that they only assess explicit aspects of culture which individuals are aware of. However, culture also consists of multiple implicit practices, which are not necessarily accessible to consciousness and linguistic expression (Oyserman et al., 2002). Therefore, people might not be able to explicitly report on their cultural values (Fiske, 2001). This can put into question whether the cultural orientations measured by the INDCOL self-report tool accurately reflected the subjects' cultural values and syndromes. Alternatively, some researchers have experimentally manipulated cultural factors using cultural priming studies (Oyserman & Lee, 2007).

With regards to the INDCOL measure, we can also mention the possibility of social desirability bias, which was noted by previous researchers (Taras et al., 2014). In this study, participants from most cultural clusters scored higher on collectivism than on individualism orientation (see Table 2.1). The individualism subscale of the INDCOL measure included multiple items emphasising competitiveness, such as "Winning is everything" or "Competition is the law of nature" (see Appendix A). In contrast, the collectivism subscale included items which emphasised caring for others and social relationships. It could be speculated that the items on the collectivist subscale may have been perceived as more socially desirable by the subjects, which may have increased their tendency to score higher on this subscale. In order to

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reduce the possibility of this bias, future studies are advised to inform the participants that their answers would be anonymous (Joinson, 1999), a practice which was employed by our study.

In addition, despite the initial support for the INDCOL scale and its psychometric properties (Cozma, 2011), other results have been mixed and reported only low to medium internal reliability, as well as issues with replicability (e.g. Soh & Leong, 2002; for review see Taras et al., 2014). In this study, three items had to be removed from three subscales in order to improve internal consistency. Despite this, the overall internal consistency of the INDCOL scale remained low, which has put the construct validity of this measure in question. Low internal reliability could indicate that the items in the scale did not accurately capture the construct which we intended to measure, in this case collectivism and individualism (Tang et al., 2014), which decreased the robustness of our findings. In light of the mixed psychometric support for INCOL, future studies are advised to take caution when employing this instrument or to use it in combination with other cultural measures (for review, see Oyserman et al., 2002).

While the instruments used in the present study have been validated on cross-cultural samples (e.g. Chiou, 2001; Choi et al., 2017), the measurement equivalence of some of them, such as the CISS Coping Scale, has been put into question. Byrne and Watkins (2003) noted that even if the factorial structure of an instrument showed a similar pattern in two or more countries, this does not guarantee that the measure would operate equivalently across cultures. The factorial structure of coping using CISS has been replicated in Japan, Korea and Malaysia (Choi, 2001), however other researchers have questioned the universal structure of coping styles and the use of etic measures, and instead recommended to use emically-derived measures for collectivist samples (e.g. Kuo et al., 2013). Indeed, emically-derived collectivist coping measures have obtained different factorial structure than CISS (Heppner et al., 2006).

Furthermore, the present study did not measure or control for several individual level cultural variables which were implicated by previous research on cultural coping, such as cultural self-construal, locus of control and acculturation (Kuo, 2011). In light of these proposals, it cannot be ruled out that our results were confounded by one or more of these variables. Another important variable which was shown to affect coping but was not taken into account by the present study is the type of stressor, which could have affected our results.

In light of the limitations discussed above, we recommend future researchers in the area of cultural coping to avoid the methodological shortcomings of the present study. With regards to sampling, future studies should take caution when using intercultural samples. It is recommended to obtain larger, more balanced samples than the present sample. In terms of measurement, our study highlighted the problematic assumptions of national cultural factors on

an individual level, and the need for measuring cultural factors using established instruments such as INDCOL. Despite this, future researchers are advised to take caution when using the INDCOL measure, which has shown mixed psychometric properties. Based on the present study, we believe that this measure requires further corroboration or that it should be used in combination with other cultural measures.

Several researchers have encouraged the use of emic-based measures of collectivist coping (e.g. Kuo, 2013). Because this study failed to find links between collectivism and any coping style measured by CISS, we recommend exploring the use of cultural coping measures such as the Collectivist Coping Scale (Heppner et al., 2006; Yeh, 2006). Finally, in light of additional factors proposed to affect coping, we suggest that future studies consider controlling for the type of stressor and acculturation in order to avoid confounding variables. With regards to obtaining further support for the cultural models of coping, we advise to follow the recommendations of authors of the models and previous researchers (Heppner et al., 2014; Leong & Wong, 2003). Due to the number of cultural factors conceptually implicated by the models, we recommend taking additional cultural factors into account, such as self-construal, locus of control or acculturation. Future studies can explore cultural factors for example as mediator or moderator variables, as the authors recommended to examine a number of possible interactions as well as directions of effects between the proposed variables (Heppner, 2014).

Practical Implications

In spite of the high prevalence of stress and risk of mental problems in international students, a number of researchers have pointed out the scarcity of culture-specific interventions which could improve student well-being (e.g. Olivas & Li, 2006). Recently, some coping interventions have been applied to student populations, such as the Resilience and Coping Intervention (RCI; First et al., 2017) or e-Coping with Academic Stress (de la Fuente et al., 2018), which aim to help students to use more effective coping strategies. Despite the emerging empirical support for cross-cultural differences in coping, these intervention tools have not yet taken cultural factors into account.

In light of the growing evidence for the role of culture in stress and coping (Chun et al., 2006), we believe that cultural factors should be taken into consideration in interventions, especially in the case of diverse student populations and international students. Recent cultural coping models emphasise the importance of congruence between coping styles and cultural factors, therefore coping interventions might not be universally effective across diverse contexts and individuals. At the moment, it cannot be concluded whether some strategies are

universally more effective or whether strategies congruent with the students' cultural orientation and context would have the most favourable impact on their well-being. Therefore, in order to inform culturally sensitive coping interventions, we would like to encourage further investigations into cultural coping and models.

Conclusion

The aim of the present study was to increase our understanding of the role of culture in coping and well-being, and to explore the effects of culturally congruent coping. This study obtained partial support for the effects of cultural orientations on coping in the case of individualism and task-oriented coping, and thus partly corroborated the culture-specific perspective on coping. In contrast, the effects of coping styles on well-being appeared to be in correspondence with a universal perspective. In this study, emotional coping showed negative effects on well-being despite culturally congruent collectivist context, suggesting that some coping styles might be more or less functional across cultural contexts. With regards to our mediational models, which explored culturally congruent coping based on recent cultural coping models, our findings were inconclusive. In summary, while empirical support for culture-specific coping is becoming relatively robust, the culture-specific effects of coping on well-being remain more tentative and require further investigations.

Despite our mixed findings and several methodological shortcomings, we believe that the present study can contribute to research on cultural coping in several ways. Firstly, we responded to multiple recommendations and gaps in existing studies, such as by measuring culture on an individual level, using a diverse sample in a collectivist context, and examining cultural congruence. Therefore, our study shifted away from the predominant focus on western, monocultural samples and acontextuality, criticised in cultural psychology (Chun et al., 2006). Secondly, the recommendations in the present study can serve to improve the robustness and methodological soundness of future research in the area. Finally, we hope that our study highlights the important and complex role of culture in stress and coping and encourages further research in the area. In light of the tentativeness of models of cultural coping, we would like to encourage researchers to further examine coping embedded within culture, and to explore diverse cultural factors and contexts. Developing a strong theoretical and empirical basis of cultural coping is necessary in order to inform culturally sensitive interventions and to improve international students' well-being

References

Aldwin, C. M., & Revenson, T. A. (1987). Does coping help? A reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology, 53*(2), 337–348. https://doi.org/10.1037/0022-3514.53.2.337

Aldwin, C., & Greenberger, E. (1987). Cultural differences in the predictors of depression. *American Journal of Community Psychology, 15*(6), 789–813. https://doi.org/10.1007/BF00919803

Aldwin, C. M., & Yancura, L. A. (2004). Coping and health: A comparison of the stress and trauma literatures. In P. P. Schnurr & B. L. Green (Eds.), *Trauma and health: Physical health consequences of exposure to extreme stress* (pp. 99–125). American Psychological Association. https://doi.org/10.1037/10723-005

Allen, G. E. K., & Smith, T. B. (2015). Collectivistic coping strategies for distress among Polynesian Americans. *Psychological Services, 12*(3), 322–329. https://doi.org/10.1037/ser0000039

Auerbach, S. M. (1989). Stress management and coping research in the health care setting: An overview and methodological commentary. *Journal of Consulting and Clinical Psychology, 57*(3), 388–395. https://doi.org/10.1037/0022-006X.57.3.388

Bailey, F. J., & Dua, J. (1999) Individualism-collectivism, coping styles, and stress in International and Anglo-Australian students: A comparative study. *Australian Psychologist. 34*(3), 177–182. https://doi.org/10.1080/00050069908257451

Bardi, A., & Guerra, V. M. (2011). Cultural Values Predict Coping Using Culture as an Individual Difference Variable in Multicultural Samples. *Journal of Cross-Cultural Psychology, 42*(6), 908–927. https://doi.org/10.1177/0022022110381119

Ben-Zur, H. (2009). Coping styles and affect. *International Journal of Stress Management, 16*(2), 87–101. https://doi.org/10.1037/a0015731

Berry, J. W. (2006). Stress perspectives on acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 43-57). Cambridge University Press. https://doi.org/10.1017/CBO9780511489891.007

Bjorck, J. P., Cuthbertson, W., Thurman, J. W., & Lee, Y. (2001). Ethnicity, coping, and distress among Korean Americans, Filipino Americans, and Caucasian Americans. *Journal of Social Psychology, 141*(4), 421-42. https://doi.org/10.1080/00224540109600563

Bouteyre, E., Maurel, M., & Bernaud, J. L. (2007). Daily hassles and depressive symptoms among first year psychology students in France: The role of coping and social support. *Stress and Health: Journal of the International Society for the Investigation of Stress, 23*(2), 93–99. https://doi.org/10.1002/smi.1125

Brewer, P., & Venaik, S. (2014). The Ecological Fallacy in National Culture Research. *Organization Studies, 35*(7), 1063-1086. https://doi.org/10.1177/0170840613517602

Byrne, B. M., & Watkins, D. (2003). The issue of measurement invariance revisited. *Journal of Cross-Cultural Psychology, 34,* 155-175. https://doi.org/10.1177/0022022102250225

Cantril, H. (1965). *The pattern of human concerns*. Rutgers University Press.

Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology, 66*(1), 184–195. https://doi.org/10.1037/0022-3514.66.1.184

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267–283. https://doi.org/10.1037/0022-3514.56.2.267

Chang, E. C. (1996). Cultural differences in optimism, pessimism, and coping: Predictors of subsequent adjustment in Asian American and Caucasian American college students. *Journal of Counseling Psychology, 43*(1), 113–123. https://doi.org/10.1037/0022-0167.43.1.113

Chang, E. C. (2001). A look at the coping strategies and styles of Asian Americans: Similar and different? In C. R. Snyder, (Ed.), *Coping with stress: Effective people and processes* (pp. 222–239). Oxford University Press. https://doi.org/10.1093/med:psych/9780195130447.003.0011

Chao, R. C. L. (2011). Managing Stress and Maintaining Well-Being: Social Support, Problem-Focused Coping, and Avoidant Coping. *Journal of Counseling & Development*, *89,* 338-348. https://doi.org/10.1002/j.1556-6678.2011.tb00098.x

Chiou, J. (2001). Horizontal and vertical individualism and collectivism among college students in the United States, Taiwan, and Argentina. *The Journal of Social Psychology, 141*, 667–678. https://doi.org/10.1080/00224540109600580

Choi, Y., Moon, E., Park, J. M., Lee, B. D., Lee, Y. M., Jeong, H. J., & Chung, Y. I. (2017). Psychometric Properties of the Coping Inventory for Stressful Situations in Korean Adults. *Psychiatry Investigation*. *14*(4): 427-433. https://doi.org/10.4306/pi.2017.14.4.427

Chun, K., M., Balls-Organista, P., Marin, G. (Eds.). (2003). *Acculturation: Advances in theory, measurement, and applied research.* American Psychological Association. https://doi.org/10.1037/10472-000

Chun, C. A., Moos, R. H., & Cronkite, R. C. (2006). Culture: A fundamental context for the stress and coping paradigm. In P. T. P. Wong, & L. C. J. Wong (Eds.), *Handbook of multicultural perspectives on stress and coping* (pp. 29–53). Springer. https://doi.org/10.1007/0-387-26238-5_2

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*, 386-396. https://doi.org/10.2307/2136404

Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the U.S. In S. Spacapam & S. Oskamp (Eds.), *The social psychology of health: Claremont Symposium on Applied Social Psychology* (pp. 31–67). Sage Publications.

Coon, H. M., & Kemmelmeier, M. (2001). Cultural orientations in the United States: (Re)examining differences among ethnic groups. *Journal of Cross-Cultural Psychology, 32*(3), 348–364. https://doi.org/10.1177/0022022101032003006

Cozma, Irina. (2011). How are individualism and collectivism measured? *Romanian Journal of Applied Psychology, 13*, 11-17.

de la Fuente, J., Martínez-Vicente, J. M., Peralta-Sánchez, F. J., González-Torres, M. C., Artuch, R., & Garzón-Umerenkova, A. (2018). Satisfaction With the Self-Assessment

of University Students Through e-Coping With Academic Stress Utility™. *Frontiers in psychology*, *9*, 1932. https://doi.org/10.3389/fpsyg.2018.01932

Deatherage, S., Servaty-Seib, H. L., Aksoz, I. (2014) Stress, coping, and internet use of college students. Journal *of American College Health*. *62*(1), 40-6. https://doi.org/10.1080/07448481.2013.843536

Dunahoo, C., Hobfoll, S. E., Monnier, J., Hulsizer, M. R., & Johnson, R. (1998). There's more than rugged individualism in coping: Part 1: Even the Lone Ranger had Tonto. *Anxiety, Stress, and Coping*, *11,* 137–165. https://doi.org/10.1080/10615809808248309

Dyson, R., Renk, K. (2006). Freshmen adaptation to university life: depressive symptoms, stress, and coping. *Journal* of *Clinical Psychology*, *62*(10), 1231-44. https://doi.org/10.1002/jclp.20295

Endler, N. S. (1997). Stress, anxiety and coping: The multidimensional interaction model. *Canadian Psychology/Psychologie canadienne, 38*(3), 136–153. https://doi.org/10.1037/0708-5591.38.3.136

Endler, N. S., & Parker, J. D. A. (1990). Multidimensional Assessment of Coping: A Critical Evaluation. *Journal of Personality and Social Psychology*, *58*(5), 844-854. https://doi.org/10.1037/0022-3514.58.5.844

Endler, N., Speer, R. L., Johnson, J. M., & Flett, G. (2000). Controllability, coping, efficacy, and distress. *European Journal of Personality, 14*, 245-264. https://doi.org/10.1002/1099-0984(200005/06)14:3<245::aid-per375>3.0.co;2-g

Endler, N. & Parker, J. (1990). Multidimensional Assessment of Coping: A Critical Evaluation. *Journal of personality and social psychology*, *58*, 844-54. https://doi.org/10.1037/0022-3514.58.5.844

Essau, C. A., & Trommsdorff, G. (1996). Coping with University-Related Problems: A Cross-cultural Comparison. *Journal of Cross-Cultural Psychology*, *27*(3), 315-28. https://doi.org/10.1177/0022022196273004

First, J. & First, N. & Houston, J. B. (2017). Resilience and Coping Intervention (RCI): A Group Intervention to Foster College Student Resilience. *Social Work With Groups*. https://doi.org/10.1080/01609513.2016.1272032

Fiske, A. P. (2002). Using individualism and collectivism to compare cultures - A critique of the validity and measurement of the constructs: Comment on Oyserman et al. (2002). *Psychological Bulletin, 128*(1), 78-88. https://doi.org/10.1037/0033-2909.128.1.78

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*(3), 219–239. https://doi.org/10.2307/2136617

Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology, 55,* 745–774. https://doi.org/10.1146/annurev.psych.55.090902.141456

Gallup. (2020). *Understanding How Gallup Uses the Cantril Scale.* https://news.gallup.com/poll/122453/understanding-gallup-uses-cantril-scale.aspx

Griner, D., & Smith, T. (2006). Culturally adapted mental health intervention: A meta-analytic review. *Psychotherapy Theory Research & Practice, 43*(4), 531-48. https://doi.org/10.1037/0033-3204.43.4.531

Hahn, Z. L. (2011). *Coping with acculturative stress and depression among international students: A cultural perspective. (Doctoral Dissertation).* The University of Pennsylvania. https://repository.upenn.edu/dissertations/AAI3447492/

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

Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs, 85*(1), 4–40. https://doi.org/10.1080/03637751.2017.1352100

Hechanova-Alampay, R., Beehr, T. A., Christiansen, N. D., & Van Horn, R. K. (2002). Adjustment and Strain among Domestic and International Student Sojourners: A Longitudinal Study. *School Psychology International, 23*, 458-474. https://doi.org/10.1177/0143034302234007

Heppner, P. (2008). Expanding the Conceptualization and Measurement of Applied Problem Solving and Coping: From Stages to Dimensions to the Almost Forgotten Cultural Context. *The American psychologist*, *63*, 805-16. https://doi.org/10.1037/0003-066X.63.8.805

Heppner, P. P., Heppner, M. J., Lee, D. G., Wang, Y. W., Park, H. J., & Wang, L. F. (2006). Development and validation of a collectivistic coping styles inventory. *Journal of Counseling Psychology, 53,* 107–125. https://doi.org/10.1037/0022-0167.53.1.107

Heppner, P. P., Tian, L., Zhao, R., Wang, K. T., Bi, Y., Hou, Z. J., He, Y. H., Chiao, H., & Hsieh, C. (2016). A Chinese Relational Coping Inventory: Initial evidence and implications. *International Perspectives in Psychology: Research, Practice, Consultation*, *5*, 110-127. https://doi.org/10.1037/ipp0000052

Heppner, P. P., Wei, M., Neville, H. A., & Kanagui-Munoz, M. (2014). A cultural and contextual model of coping and health. In F. T. L. Leong (Ed.), *The APA handbook of multicultural psychology: Theory and research.* American Psychological Association. https://doi.org/10.1037/14187-005

Higgins, J. E., & Endler, N. S. (1995). Coping, life stress, and psychological and somatic distress. *European Journal of Personality, 9*, 253-270. https://doi.org/10.1002/per.2410090403

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing Conservation of Resources theory. *Applied Psychology: An International Review, 50*(3), 337–370. https://doi.org/10.1111/1464-0597.00062

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Sage Publications.

Hofstede, G. (1983). National Cultures Revisited. *Behavior Science Research*, *18*(4), 285–305. https://doi.org/10.1177/106939718301800403

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Sage Publications.

Hofstede Insights. (2020). *Country Comparison*. https://www.hofstede-insights.com/country-comparison/

Holahan, C. J., Moos, R. H., Holahan, C. K., Brennan, P. L., & Schutte, K. K. (2005). Stress Generation, Avoidance Coping, and Depressive Symptoms: A 10-Year Model. *Journal of Consulting and Clinical Psychology, 73*(4), 658-666. https://doi.org/10.1037/0022-006x.73.4.658

Hui, C. H., & Yee, C. (1994). The shortened Individualism - Collectivism Scale: Its relationship to demographic and work-related variables. *Journal of Research in Personality, 28*(4), 409–424. https://doi.org/10.1006/jrpe.1994.1029

IBM Corp. (2019). *IBM SPSS Statistics for Windows*, *Version 26.0.* Armonk, NY: IBM Corp

Imran, S., MacBeth, A., Quayle, E., & Chan, S. W. Y. (2020). Adaptation of the Coping Inventory for Stressful Situations (Short Form) for Pakistani Adolescents. *Journal of Psychology and Psychotherapy, 10,* 375. doi:10.35248/2161-0487.20.10.375

Iwamoto, D. K., Liao, L., & Liu, W. M. (2010). Masculine norms, avoidant coping, Asian values, and depression among Asian American men. *Psychology of Men & Masculinity, 11*(1), 15–24. https://doi.org/10.1037/a0017874

Joinson, A. (1999). Social desirability, anonymity, and internet-based questionnaires. *Behavior Research Methods, Instruments, & Computers 31*, 433–438. https://doi.org/10.3758/BF03200723

Komarraju, M. & Cokley, K. (2008). Horizontal and Vertical Dimensions of Individualism-Collectivism: A Comparison of African Americans and European Americans. *Cultural diversity & ethnic minority psychology, 14*(4), 336-43. https://doi.org/10.1037/1099-9809.14.4.336

Kosic, A. (2004), Acculturation strategies, coping process and acculturative stress. *Scandinavian Journal of Psychology*, *45,* 269-278. https://doi.org/10.1111/j.1467-9450.2004.00405.x

Kuo, B. C. H. (2011). Culture's consequences on coping: Theories, evidence, and dimensionalities. *Journal of Cross-Cultural Psychology*, *42,* 1082–1102. https://doi.org/10.1177/0022022110381126

Kuo, B. C. H. (2013). Collectivism and coping: Current theories, evidence, and measurements of collective coping. *International Journal of Psychology*, *48*(3), 374–388. https://doi.org/10.1080/00207594.2011.640681

Kuo, B. C. H., & Gingrich, L. (2004). Correlates of self-construals among Asian and Caucasian undergraduates in Canada: Cultural patterns and implications for counseling. *Guidance and Counseling*, *20,* 78–88.

Lam, A. G., & Zane, N. W. S. (2004). Ethnic Differences in Coping with Interpersonal Stressors: A Test of Self-Construals as Cultural Mediators. *Journal of Cross-Cultural Psychology, 35*(4), 446–459. https://doi.org/10.1177/0022022104266108

Lazarus, R. S. (1974). Psychological Stress and Coping in Adaptation and Illness. *The International Journal of Psychiatry in Medicine, 5*(4), 321–333. https://doi.org/10.2190/T43T-84P3-QDUR-7RTP

Lazarus, R.S. (1993). Coping theory and research: past, present, and future. *Psychosomatic medicine*, *55,* 234-247. https://doi.org/10.1097/00006842-199305000-00002

Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal and coping*. Springer Publishing.

Lee, E. H. (2012). Review of the psychometric evidence of the perceived stress scale. *Asian Nursing Research, 6,* 121–127. https://doi.org/10.1016/j.anr.2012.08.004

Lee, H., & Mason, D. (2014). Cultural and Gender Differences in Coping Strategies Between Caucasian American and Korean American Older People. *Journal of Cross-Cultural Gerontology, 29*(4), 429–446. https://doi.org/10.1007/s10823-014-9241-x

Lee, R. M., & Liu, H. T. T. (2001). Coping with intergenerational family conflict: Comparison of Asian American, Hispanic, and European American college students. *Journal of Counseling Psychology, 48*(4), 410–419. https://doi.org/10.1037/0022-0167.48.4.410

Leong, F. T. L., & Wong, P. T. P. (2003). Optimal functioning from cross cultural perspectives. In B. Walsh (Ed.), *Counseling psychology and optimal human functioning* (pp.123-150). Lawrence Erlbaum Associates.

Leong, F. T. L., & Chou, E. L. (2002). Counseling international students. In P. B. Pedersen, J. G. Draguns, W. J. Lonner, & J. E. Trimble (Eds.), *Counseling across cultures* (5th ed., pp. 185-207). Sage Publications.

Levin, K. A., & Currie, C. (2014). Reliability and validity of adapted version of the Cantril Ladder for use with adolescent sample. *Social Indicators Research*, *119,* 1047-63. https://doi.org/10.1007/s11205-013-0507-4

Li, Y., Lindsey, B. J., Yin, X., & Chen, W. (2012). A Comparison of American and Chinese Student's Perceived Stress, Coping Styles and Health Promotion Practices. *Journal of Students Affairs Research and Practice, 49,* 211-227. https://doi.org/10.1515/jsarp-2012-6298

Marsella, A. J., & Dash-Scheuer, A. (1987). Coping, culture, and healthy human development. In P. R. Dasen, J. W. Berry, & N. Sartorius (Eds.), *Health and cross-cultural psychology.* Sage Publications.

Matheson, K., & Anisman, H. (2003). Systems of Coping Associated with Dysphoria, Anxiety and Depressive Illness: A Multivariate Profile Perspective. *Stress: The International Journal on the Biology of Stress, 6*(3), 223–234. https://doi.org/10.1080/10253890310001594487

Matsumoto, D., & Yoo, S. H. (2006). Toward a New Generation of Cross-Cultural Research. *Perspectives on Psychological Science*, *1*(3), 234–250. https://doi.org/10.1111/j.1745-6916.2006.00014.x

Matsumoto, D., Kouznetsova, N., Ray, R., Ratzlaff, C., Biehl, M., Raroque, J. (1999). Psychological Culture, Physical Health, and Subjective Well-being. *Journal of Gender, Culture, and Health, 4,* 1–18. https://doi.org/10.1023/A:1023222308314

Matsumoto, D., Weissman, M. D., Preston, K., Brown, B. R., & Kupperbusch, C. (1997). Context-Specific Measurement of Individualism-Collectivism on the Individual Level: The Individualism-Collectivism Interpersonal Assessment Inventory. *Journal of Cross-Cultural Psychology*, *28*(6), 743–767. https://doi.org/10.1177/0022022197286006

Matsumoto, D., Yoo, S. H., Nakagawa, S., & Multinational Study of Cultural Display Rules. (2008). Culture, emotion regulation, and adjustment. *Journal of Personality and Social Psychology, 94*(6), 925–937. https://doi.org/10.1037/0022-3514.94.6.925

Mattlin, J. A., Wethington, E., & Kessler, R. C. (1990). Situational determinants of coping and coping effectiveness. *Journal of Health and Social Behavior, 31*(1), 103–122. https://doi.org/10.2307/2137048

Mayordomo-Rodríguez, T., Melendez, J. & Viguer, P., & Sales-Galán, A. (2015). Coping Strategies as Predictors of Well-Being in Youth Adult. *Social Indicators Research, 122*, 479-489. https://doi.org/10.1007/s11205-014-0689-4

McSweeney, B. (2002). Hofstede's Model of National Cultural Differences and their Consequences: A Triumph of Faith - a Failure of Analysis. *Human Relations, 55*(1), 89-118. https://doi.org/10.1177/0018726702551004

McCarty, C. A., Weisz, J. R., Wanitromanee, K., Eastman, K. L., Suwanlert, S., Chaiyasit, W., & Brotman Band, E. (1999). Culture, coping, and context: Primary and secondary control among Thai and American youth. *Journal of Child Psychology and Psychiatry, 40*, 809–818. https://doi.org/10.1111/1469-7610.00496

Mena, F. J., Padilla, A. M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Sciences, 9*(2), 207–225. https://doi.org/10.1177/07399863870092006

Mensah, Y., & Chen, H. Y. (2013). Global Clustering of Countries by Culture – An Extension of the GLOBE Study. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.2189904

Mesidor, J. K., & Sly, K. F. (2016). Factors that contribute to the adjustment of international students. *Journal of International Students*, *6*(1).

Moore, J. L. & Constantine, M. G. (2005). Development and initial validation of the Collectivistic Coping Styles Measure with African, Asian, and Latin American international students. *Journal of Mental Health Counseling, 27*(4), 329–347. https://doi.org/10.17744/mehc.27.4.frcqxuy1we5nwpqe

Nakano, K. (1991), Coping strategies and psychological symptoms in a Japanese sample. *Journal of Clinical Psychology, 47,* 346-350. https://doi.org/10.1002/1097-4679(199105)47:3<346::AID-JCLP2270470304>3.0.CO;2-H

O' Connor, D. B., & Shimizu, M. (2002). Sense of personal control, stress and coping style: A cross-cultural study. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *18*(4), 173-183. https://doi.org/10.1002/smi.939

Ohbuchi, K. I., & Atsumi, E. (2010). Avoidance Brings Japanese Employees What They Care About in Conflict Management: Its Functionality and "Good Member" Image. *Negotiation and Conflict Management Research, 3,* 117-129. https://doi.org/10.1111/j.1750-4716.2010.00052.x

Okabayashi, H., Sugisawa, H., Takanashi, K., Nakatani, Y., Sugihara, Y., & Hougham, G. W. (2008). A longitudinal study of coping and burnout among Japanese family caregivers of frail elders. *Aging & mental health*, *12*(4), 434–443. https://doi.org/10.1080/13607860802224318

Okamoto, K., & Teo, S. (2011). Japanese expatriates and their coping strategies in overseas Japanese companies. *Proceedings of the Australian and New Zealand Academy of Management*, 1-14. https://researchbank.rmit.edu.au/view/rmit:35451

Olivas, M., & Li, C. S. (2006). Understanding Stressors of International Students in Higher Education: What College Counselors and Personnel Need to Know. *Journal of Instructional Psychology, 33*, 217-222.

Oliveira, C. R., & Gomes, N. (2019). Indicadores de Integração de Imigrantes: Relatório Estatístico Anual 2019. *Coleção Imigração em Números do Observatório das Migrações.* ACM. https://www.om.acm.gov.pt/documents/58428/383402/Indicadores+de+Integração+de+Imigr antes.+Relatório+Estat%C3%ADstico+Anual+2019/98bf34e6-f53f-41b9-add6-cdb4fc343b34

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*(1), 3–72. https://doi.org/10.1037/0033-2909.128.1.3

Oyserman, D., & Lee, S. W.-S. (2007). Priming "culture": Culture as situated cognition. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 255–279). The Guilford Press.

Parker, J. D. A., & Endler, N. S. (1992). Coping with coping assessment: a critical review. *European Journal of Personality, 6,* 321–344. https://doi.org/10.1002/per.2410060502

Parker, J. D. A., & Endler, N. S. (1996). Coping and defense: A historical overview. In M. Zeidner & N. S. Endler (Eds.), *Handbook of coping: Theory, research, applications* (pp. 3–23). John Wiley & Sons.

Penley, J. A., Tomaka, J. & Wiebe, J. S. (2002). The Association of Coping to Physical and Psychological Health Outcomes: A Meta-Analytic Review. *Journal of Behavioral Medicine, 25,* 551–603. https://doi.org/10.1023/A:1020641400589

Perera, M. J., & Chang, E. C. (2015). Depressive symptoms in South Asian, East Asian, and European Americans: Evidence for ethnic differences in coping with academic versus interpersonal stress? *Asian American Journal of Psychology, 6*(4), 350–358. https://doi.org/10.1037/aap0000030

Price, P. C., Jhangiani, R. S., Chiang, I. A., Leighton, D. C., & Cuttler, C. (2020). *Research Methods in Psychology.* Pressbooks. https://opentext.wsu.edu/carriecuttler/

Power, M., Bullinger, M., Harper, A., & The World Health Organization Quality of Life Group. (1999). The World Health Organization WHOQOL-100: Tests of the universality of quality of life in 15 different cultural groups worldwide. *Health Psychology, 18*(5), 495–505. https://doi.org/10.1037/0278-6133.18.5.495

Rajab, A., Rahman, H., Panatik, S., Mansor, N. (2014). Acculturative stress among international students. *Journal of Economics, Business and Management, 2*(277), 80. doi:10.7763/JOEBM.2014.V2.136

Renzhi, H., Shuqiao, Y., Abela, J., Leibovitch, F., & Mingfan, L. (2013). Key Dimensions and Validity of the Chinese Version of the Individualism - Collectivism Scale. *Chinese Studies, 02,* 1-7. https://doi.org/10.4236/chnstd.2013.21001

Roberti, J. W., Harrington, L. N., & Storch, E. A. (2006). Further psychometric support for the 10−item version of the perceived stress scale. *Journal of College Counseling*, *9,* 135–147. https://doi.org/10.1002/j.2161-1882.2006.tb00100.x

Seiffge-Krenke, I. (2000). Causal links between stressful events, coping style, and adolescent symptomatology. *Journal of Adolescence, 23,* 675-691. https://doi.org/10.1006/jado.2000.0352

Seiffge-Krenke, I., & Shulman, S. (1990). Coping Style in Adolescence: A Cross-Cultural Study. *Journal of Cross-Cultural Psychology*, *21*(3), 351–377. https://doi.org/10.1177/0022022190213006

Seiffge-Krenke I. (1993). Coping behavior in normal and clinical samples: more similarities than differences? *Journal of Adolescence, 16*(3), 285-303. https://doi.org/10.1006/jado.1993.1026

Selmer, J. (1999). Effects of Coping Strategies on Sociocultural and Psychological Adjustment of Western Expatriate Managers in the PRC. *Journal of World Business, 34*(1), 41–51. https://doi.org/10.1016/S1090-9516(99)00006-1

Seo, H. (2012). *The role of self-compassion and emotional approach coping in the relationship between maladaptive perfectionism and psychological distress among East Asian international students*. (Doctoral Dissertation). The University of Minnesota. http://hdl.handle.net/11299/135573

Shek, D. T. L., & Cheung, C. K. (1990). Locus of coping in a sample of Chinese working parents: Reliance on self or seeking help from others. *Social Behavior and Personality: An International Journal*, *18(2)*, 327-346. https://doi.org/10.2224/sbp.1990.18.2.327

Sherry, M., Thomas, P., & Chui, W. H. (2010). International Students: A Vulnerable Student Population. *The International Journal of Higher Education, 60*, 33-46. https://doi.org/10.1007/s10734-009-9284-z

Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and Vertical Dimensions of Individualism and Collectivism: A Theoretical and Measurement Refinement. *Cross-Cultural Research*, *29*(3), 240–275. https://doi.org/10.1177/106939719502900302

Skromanis, S., Cooling, N., Rodgers, B., Purton, T., Fan, F., Bridgman, H., Harris, K., Presser, J., & Mond, J. (2018). Health and Well-Being of International University Students, and Comparison with Domestic Students, in Tasmania, Australia. *International Journal of Environmental Research and Public Health. 15*(6), 1147. https://doi.org/10.3390/ijerph15061147

Smith, M. M., Saklofske, D. H., Keefer, K. V., & Tremblay, P.F. (2016). Coping Strategies and Psychological Outcomes: The Moderating Effects of Personal Resiliency. *The Journal of Psychology, 150*(3), 318-332. https://doi.org/10.1080/00223980.2015.1036828

Soh S. & Leong F. (2002). Validity of vertical and horizontal individualism and collectivism in Singapore. *Journal of Cross-Cultural Psychology*, *33*, 3−15. https://doi.org/10.1177/0022022102033001001

Somerfield, M. R., & McCrae, R. R. (2000). Stress and coping research: Methodological challenges, theoretical advances, and clinical applications. *American Psychologist, 55*(6), 620–625. https://doi.org/10.1037/0003-066X.55.6.620

Stahl, G. K., & Caligiuri, P. (2005). The Effectiveness of Expatriate Coping Strategies: The Moderating Role of Cultural Distance, Position Level, and Time on the International Assignment. *Journal of Applied Psychology, 90*(4), 603–615. https://doi.org/10.1037/0021-9010.90.4.603

Völlink, T., Bolman, C. A. W., Eppingbroek, A., & Dehue, F. (2013). Emotion-Focused Coping Worsens Depressive Feelings and Health Complaints in Cyberbullied Children. *Journal of Criminology, 2013*, 1–10. https://doi.org/10.1155/2013/416976

Tang, W., Cui, Y. & Babenko, O. (2014). Internal consistency: Do we really know what it is and how to assess it? *Journal of Psychology and Behavioral Science, 2*(2): 205–220.

Taras, V., Sarala, R., Muchinsky, P., Kemmelmeier, M., Singelis, T. M., Avsec, A., Coon, H. M., Dinnel, D. L., Gardner, W., Grace, S., Hardin, E. E., Hsu, S., Johnson, J., Karakitapoğlu Aygün, Z., Kashima, E. S., Kolstad, A., Milfont, T. L., Oetzel, J.,

42

Okazaki, S., Probst, T. M., Sato, T., Shafiro, M., Schwartz, S. J., & Sinclair, H. C. (2014). Opposite Ends of the Same Stick? Multi-Method Test of the Dimensionality of Individualism and Collectivism. *Journal of Cross-Cultural Psychology, 45*(2), 213-245. https://doi.org/10.1177/0022022113509132

Taras, V., Steel, P. & Kirkman, B. L. (2016). Does Country Equate with Culture? Beyond Geography in the Search for Cultural Boundaries. *Management International Review, 56*(4), 455- 472. http://dx.doi.org/10.1007/s11575-016-0283-x

Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology, 87*, 354–362. https://doi.org/10.1037/0022-3514.87.3.354

Terry, D. J. (1994). Determinants of coping: The role of stable and situational factors. *Journal of Personality and Social Psychology, 66*(5), 895–910. https://doi.org/10.1037/0022-3514.66.5.895

Triandis, H. C. (1995). *New directions in social psychology: Individualism and collectivism*. Westview Press.

Triandis H. C. (2001). Individualism and collectivism: Past, present, and future. In Matsumoto D. (Ed.), *Handbook of culture and psychology* (pp. 35–50). Oxford University Press.

Triandis, H. C., Bontempo, R., Betancourt, H., Bond, M. (1986). The measurement of the etic aspects of individualism and collectivism across cultures. *Australian Journal of Psychology, 38*(3), 257–267. https://doi.org/10.1080/00049538608259013

Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology, 74,* 118–128. https://doi.org/10.1037/0022-3514.74.1.118

Uehara, E. S., Takeuchi, D. T., & Smukler, M. (1994). Effects of combining disparate groups in the analysis of ethnic differences: Variations among Asian American mental health service consumers in level of community functioning. *American Journal of Community Psychology, 22*(1), 83–99. https://doi.org/10.1007/BF02506818

Veenhoven, R. (2012). Does Happiness Differ Across Cultures? In H. Selin, & G. Davey (Eds.). *Happiness Across Cultures - Views of happiness and quality of life in non-western cultures*. Springer Science + Business Media. https://doi.org/10.1007/978-94-007-2700-7_30

Wadsworth, M. E. (2015), Development of Maladaptive Coping: A Functional Adaptation to Chronic, Uncontrollable Stress. *Child Development Perspectives, 9,* 96-100. https://doi.org/10.1111/cdep.12112

Wang, T. Y., Bernardo, A. B. I., & Yeung, S. S. (2017). Hope and coping in collectivist societies: Contributions to life satisfaction among Chinese university students. In M. C. Gastardo-Conaco, M. E. J. Macapagal, & Y, Muramoto (Eds.), *Asian psychology and Asian societies in the midst of change* (pp. 59-80). Psychological Association of the Philippines.

Wester, S. R., Kuo, B. C. H., & Vogel, D. L. (2006). Multicultural coping: Chinese Canadian adolescents, male gender role conflict, and psychological distress. *Psychology of Men & Masculinity, 7*(2), 83–100. https://doi.org/10.1037/1524-9220.7.2.83

WHOQOL Group. (1996). What Quality of life? World Health Organization Quality of Life Assessment. *World Health Forum, 17*(4), 354-6.

WHOQOL Group. (1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine*, *28*(3), 551-8. https://doi.org/10.1017/S0033291798006667

World Health Organization. (1998). *Programme on mental health: WHOQOL user manual, 2012 revision.* World Health Organization.

Wong, P. T. P., Wong, L. C. J., & Scott, C. (2006). Beyond stress and coping: The positive psychology of transformation. In P. T. P. Wong & L. C. J. Wong (Eds.), International and Cultural Psychology Series. Handbook of multicultural perspectives on stress and coping (pp. 1–26). Spring Publications. https://doi.org/10.1007/0-387-26238-5_1

Yeh, C. J., Arora, A. K., & Wu, K. A. (2006). A new theoretical model of collectivistic coping. In P. T. P. Wong & L. C. J. Wong (Eds.), *International and Cultural Psychology Series. Handbook of multicultural perspectives on stress and coping* (pp. 55–72). Spring Publications.

Yeh, C., & Inose, M. (2002). Difficulties and coping strategies of Chinese, Japanese, and Korean immigrant students. *Adolescence, 37*(145), 69-82.

Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's Five Dimensions of Cultural Values at the Individual Level: Development and Validation of CVSCALE. *Journal of International Consumer Marketing, 23,* 193-210. doi:10.1080/08961530.2011.578059

Yoshihama, M. (2002). Battered Women's Coping Strategies and Psychological Distress: Differences by Immigration Status. *American Journal of Community Psychology, 30,* 429–452. https://doi.org/10.1023/A:1015393204820

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INFORMED CONSENT

The present study is a part of Master's Thesis within the School of Social Sciences at ISCTE – University Institute of Lisbon. The purpose of this study is to investigate how individuals cope with stress and how this affects their well-being.

This study is supervised by Prof. Dr. Cristina Camilo (Cristina_Camilo@iscte-iul.pt), and conducted by Master's student Klara Vojtova (kvaal@iscte-iul.pt), whom you may contact if you have any questions, comments or wish to be informed about the results of the study.

Your participation will consist of completing **one questionnaire with 72 multiple choice questions**, which should take approximately 15 minutes to complete. This study follows the guidelines of the ISCTE-IUL Ethical Committee, and there are **no known risks** to your participation.

Your participation in this study is **voluntary**. You can choose to withdraw from the study at any time or to withdraw your data from the pool of the study. Your participation is **anonymous and confidential**. The data obtained are intended for statistical treatment and no response will be analysed or reported individually. You will not be identified at any point in the study.

By clicking below, I declare that I understood the objectives of the study and of my participation. **I am of 18 years of age or older. I declare to voluntarily participate.**

On a scale from 1-9 (1= Never or definitely no and 9 = Always or definitely yes), please express how well the following statements decribe you.

1= Never or definitely no and 9 = Always or definitely yes.

1. I rather depend on myself than others.   1 2 3 4 5 6 7 8 9

2. Competition is the law of nature.   1 2 3 4 5 6 7 8 9

3. To me, pleasure is spending time with others.   1 2 3 4 5 6 7 8 9

4. Parents and children must stay together as much as possible.   1 2 3 4 5 6 7 8 9

5. My personal identity, independent of others, is very important to me.   1 2 3 4 5 6 7 8 9

6. When another person does better than I do, I get tense and anxious.   1 2 3 4 5 6 7 8 9

7. It is important that I do my job better than others.   1 2 3 4 5 6 7 8 9

8. The well-being of my colleagues (classmates) is important to me.   1 2 3 4 5 6 7 8 9

9. If a colleague (classmate) gets a prize, I would feel proud.   1 2 3 4 5 6 7 8 9

10. I rely on myself most of the time; I rarely rely on others.   1 2 3 4 5 6 7 8 9

11. It is my duty to take care of my family, even when I have to make sacrifices.   1 2 3 4 5 6 7 8 9

12. Family members should stick together, no matter what sacrifices are required.   1 2 3 4 5 6 7 8 9

13. I feel good when I cooperate with others.   1 2 3 4 5 6 7 8 9

14. I often do "my own thing".   1 2 3 4 5 6 7 8 9

15. Winning is everything.   1 2 3 4 5 6 7 8 9

16. It is important to me that I respect the decisions made by my groups.   1 2 3 4 5 6 7 8 9

The following are ways people react to various difficult, stressful, or upsetting situations. Please circle a number from 1 to 5 for each item. Indicate how much you engage in these types of activities when you encounter a difficult, stressful, or upsetting situation.

1= Not at all to 5= Very much

17. Take some time off and get away from the situation   1 2 3 4 5

18. Focus on the problem and see how I can solve it   1 2 3 4 5

19. Blame myself for having gotten into this situation   1 2 3 4 5

20. Treat myself to a favourite food or snack   1 2 3 4 5

21. Feel anxious about not being able to cope   1 2 3 4 5

22. Think about how I solved similar problems   1 2 3 4 5

23. Visit a friend   1 2 3 4 5

24. Determine a course of action and follow it   1 2 3 4 5

25. Buy myself something   1 2 3 4 5

26. Blame myself for being too emotional about the situation   1 2 3 4 5

27. Work to understand the situation   1 2 3 4 5

28. Become very upset   1 2 3 4 5

29. Take corrective action immediately   1 2 3 4 5

30. Blame myself for not knowing what to do   1 2 3 4 5

31. Spend time with a special person   1 2 3 4 5

32. Think about the event and learn from my mistakes   1 2 3 4 5

33. Wish that I could change what had happened or how I felt   1 2 3 4 5

34. Go out for a snack or meal   1 2 3 4 5

35. Analyse my problem before reacting   1 2 3 4 5

36. Focus on my general inadequacies   1 2 3 4 5

37. Phone a friend   1 2 3 4 5

On a scale from 0-4 (0 = Never to 4 = Very Often), please please indicate how often you felt or thought a certain way in the past month.

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

38. In the last month, how often have you been upset because of something that happened unexpectedly?　　0　1　2　3　4

39. In the last month, how often have you felt that you were unable to control the important things in your life?　　0　1　2　3　4

40. In the last month, how often have you felt nervous and "stressed"?　　0　1　2　3　4

41. In the last month, how often have you felt confident about your ability to handle your personal problems?　　0　1　2　3　4

42. In the last month, how often have you felt that things were going your way?　　0　1　2　3　4

43. In the last month, how often have you found that you could not cope with all the things that you had to do?　　0　1　2　3　4

44. In the last month, how often have you been able to control irritations in your life?　　0　1　2　3　4

45. In the last month, how often have you felt that you were on top of things?

46. In the last month, how often have you been angered because of things that were outside of your control?　　0　1　2　3　4

47. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?　　0　1　2　3　4

The following questions ask how you feel about your quality of life, health, or other areas of your life. Please choose the answer that appears most appropriate. If you are unsure about which response to give to a question, the first response you think of is often the best one. We ask that you think about your life in the last two weeks.

1 = Very Poor 2 = Poor 3 = Neither Poor nor Good 4 = Good 5 = Very Good

48. How would you rate your quality of life?　　1　2　3　4　5

1 = Very Dissatisfied 2 = Dissatisfied 3 = Neither Satisfied nor Dissatisfied 4 = Satisfied 5 = Very Satisfied

49. How satisfied are you with your health?　　1　2　3　4　5

The following questions ask about how much you have experienced certain things in the last two weeks.

1 = Not at All 2 = A Little 3 = A Moderate Amount 4 = Very Much 5 = An Extreme Amount

50. To what extent do you feel that physical pain prevents you from doing what you need to do? 1 2 3 4 5

51. How much do you need any medical treatment to function in your daily life? 1 2 3 4 5

52. How much do you enjoy life? 1 2 3 4 5

53. To what extent do you feel your life to be meaningful? 1 2 3 4 5

54. How well are you able to concentrate? 1 2 3 4 5

55. How safe do you feel in your daily life? 1 2 3 4 5

56. How healthy is your physical environment? 1 2 3 4 5

The following questions ask about how completely you experience or were able to do certain things in the last two weeks.

1 = Not at All 2 = A Little 3 = Moderately 4 = Mostly 5 = Completely

57. Do you have enough energy for everyday life? 1 2 3 4 5

58. Are you able to accept your physical appearance? 1 2 3 4 5

59. Do you have enough money to meet your needs? 1 2 3 4 5

60. How available to you is the information that you need in your day-to-day life? 1 2 3 4 5

61. To what extent do you have the opportunity for leisure activities? 1 2 3 4 5

62. How well are you able to get around?

1 2 3 4 5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life in the last two weeks.

1 = Very Dissatisfied 2 = Dissatisfied 3 = Neither Satisfied nor Dissatisfied
4 = Satisfied 5 = Very Satisfied

63. How satisfied are you with your sleep?   1 2 3 4 5

64. How satisfied are you with your ability to perform your daily living activities?   1 2 3 4 5

65. How satisfied are you with your capacity for work?   1 2 3 4 5

66. How satisfied are you with yourself?   1 2 3 4 5

67. How satisfied are you with your personal relationships?   1 2 3 4 5

68. How satisfied are you with the support you get from your friends?   1 2 3 4 5

69. How satisfied are you with the conditions of your living place?   1 2 3 4 5

70. How satisfied are you with your access to health services?   1 2 3 4 5

71. How satisfied are you with your transport?   1 2 3 4 5

The following question refers to how often you have felt or experienced certain things in the last two weeks.

1 = Never 2 = Seldom 3 = Quite Often 4 = Very Often 5 = Always

72. How often do you have negative feelings such as blue mood, despair, anxiety, depression?   1 2 3 4 5

Assume that this ladder is a way of picturing your life. The top of the ladder represents the best possible life for you, the bottom of the ladder represents the worst possible life for you. Please indicate where on the ladder you personally stand by circling the number.

10= Completely satisfied 0= Completely dissatisfied

| 10 |
| 9 |
| 8 |
| 7 |
| 6 |
| 5 |
| 4 |
| 3 |
| 2 |
| 1 |
| 0 |

Sociodemographic Data

Please fill in the sociodemographic information below. Your data remains anonymous.

What is your gender? Male / Female / Prefer not to say

What is your age? _____

What university degree are you currently pursuing? _____

What is your nationality? _____

What is your country of origin? _____

What is the nationality of your parents? _____

What is the country of origin of your parents? _____

How long have you been living in Portugal? _____

Have you lived outside of your home country before, and if so, for how long?
_____

How well can you speak Portuguese on a scale from 0-9?

0 = Not at all, 9 = Fluently

    1 2 3 4 5 6 7 8 9

How well can you understand Portuguese on a scale from 0-9?

0 = Not at all, 9 = Fluently

    1 2 3 4 5 6 7 8 9

Appendix B

Sociodemographic Variables of the Sample

	N	*% total*	*M*	*SD*
Gender	-	-	-	-
Female	74	67.28	-	-
Male	34	30.91	-	-
Prefer not to say	2	1.81	-	-
Age	-	-	26.85	3.10
Time in Portugal (months)	-	-	21.55	17.16
Time Abroad (months)	-	-	27.00	35.11
Portuguese Speaking	-	-	4.26	2.79
Portuguese Understanding	-	-	5.44	2.61
European	77	70.00	-	-
North European	58	52.73	-	-
Czech	15	-	-	-
German	13	-	-	-
British	11	-	-	-
Other North European	19	-	-	-
South European	19	17.27	-	-
Italian	10	-	-	-
Spanish	3	-	-	-
Slovene	3	-	-	-
Other South European	3	-	-	-
Non-European	33	30.00	-	-
Asian	11	10.00		
Indonesian	2	-		
Indian	2	-		
Other Asian	7	-		
South American	10	9.09	-	-
Brazilian	8	-	-	-
Chilean	1	-	-	-
Argentinian	1	-	-	-
African	6	5.45	-	-
South African	1	-	-	-
Cape Verdean	1	-	-	-
Other African	4	-	-	-
North American	4	3.64		
Australian	2	1.82		
Total	110	100.00	-	-