

Stress and Coping Strategies: A Cross-Cultural Study

By

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ABSTRACT

This research study aims at examining the cross-cultural differences or similarities in the stress coping process between countries, with focus on, United States and Nigeria. More specifically, the study examines whether culture influences the relationship between perceived control and coping strategies. Participation in this survey will be restricted to people with either Nigerian or United States nationality who have also lived in their country of nationality for a minimum of 18 years. Participants will be required to respond to items from the Locus of Control scale, brief-COPE scale, the Mini-Makers Scale and the Values Survey Module. The outcome of this study could be useful for increasing the understanding of the impact of cultural environment on coping strategies. Organizations with diverse employees enlightened with how to help employees with coping.

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CHAPTER 1: INTRODUCTION

Many studies focusing on how people cope with stressful situations have emerged in recent years. The topic of coping has even garnered national and international media attention, including Oprah Daily (Moreno, 2022), Forbes Magazine (Berger, 2022), The Royal Gazette (London, 2022), and Al Jazeera (Beaumont, 2022) to name a few. Since stress is a constant occurrence in everyday life (Lim et al., 2010), successful coping is critical to managing stress. The process of coping involves engaging in a cognitive and/or behavioral effort to regulate both external and internal causes of stress (Moos & Schaefer, 1993).

Coping strategies are tactics that people employ when they are faced with challenging or stressful situations (Sica et al., 1997). These strategies are behavioral and/or cognitive attempts to deal with certain situational demands that are deemed to be exhausting or beyond one's ability to adjust (Lazarus & Folkman, 1984).

Coping strategies are typically divided into two types: those targeted at the demands themselves which describes problem-focused strategies and those targeted at the emotional reactions that frequently accompany those demands which describes emotion-focused strategies. Often, these researchers believe that people with high sense of control are more likely to adopt the active, problem-focused coping strategies whereas those with sense of control are more likely to use more passive or avoidant emotion-focused coping strategies (Coyne et al., 1981; Stone & Neale, 1984). Similarly, researchers argue that problem-focused coping is more likely when situational demands seem like it can be controlled,

and emotion-focused coping is more likely when situational demands seem uncontrollable (Folkman et al., 1986; Forsythe & Compas, 1987; Thoits, 1991).

One significant limitation in previous research is that much of our knowledge on coping is based on studies utilizing participants in Western Europe and the United States. The major stress and coping theories that have been developed (e.g., Carpenter, 1992; Goldberger & Breznitz, 1982; Lazarus & Folkman, 1984 etc.) likely have a Western bias because they have been empirically tested on populations primarily from Europe and North America (Sinha et al., 2000). As a result, these theories may be culturally contingent. To establish comprehensive theoretical approaches, their universality must be tested within a relevant cross-cultural context.

Psychologists have only recently begun to acknowledge the effects of cultural differences on human behavior (Chang et al., 2007). According to Sinha et al (2000), to properly comprehend stress coping mechanisms, we must evaluate the impact of personal-social characteristics, cognitive evaluations, and most significant to this research, cultural contexts or situations. As a result, the purpose of this study is to examine the cross-cultural differences or similarities in the stress coping process between the United States and Nigeria. More specifically, the purpose of the present study is to examine whether culture influences the relationship between control and coping strategies. This research will be useful in determining the impact of cultural environment on coping strategies.

Below is the conceptual model that will be discussed and tested in this study.

Figure 1

Model showing the relationship among values, control, and coping.



This model will be compared between the United States and Nigeria.

Coping Strategies

Coping is a key component to managing stress. Based on the transactional theory of stress and coping developed by Lazarus and Folkman's (1984), coping refers to a person's constantly changing cognitive and behavioral efforts used to manage specific the external and internal demands of a stressful situation. In their view, personal situation contextually influence coping (Folkman et al., 1986).

Coping is often viewed as a multifaceted process that incorporates both cognitive (e.g., acceptance and positive reappraisal, etc.) and behavioral (e.g., yoga, relaxation, etc.) attempts to manage stressors (Ptacek et al., 2002). According to Lazarus and Folkman (1984), people constantly evaluate the stimuli in their environment and implement coping mechanisms to manage the stimuli when they are assessed as stressors.

Numerous studies exploring various coping methods have been conducted. As a result, theorists have identified a number of coping strategies people use, including social support seeking, responsibility acceptance, distancing, avoidance, and finding comfort in religious beliefs, confrontive coping (Billings & Moos, 1981; Fox, Blanton & Morris, 1999; Lazarus & Folkman, 1984). More commonly, researchers classify these coping strategies as approach-oriented

versus avoidance-oriented or emotion-focused versus problem-focused (Baker & Berenbaum, 2007; Lazarus, 1993) Both classifications will be discussed in turn.

Problem-focused vs. Emotion-focused Strategies. Two types of coping strategies are proposed by Lazarus & Folkman (1984): problem-focused strategies, which directly target stressors and modify the situation that creates a threat or challenge. Emotion-focused strategies on the other hand, which manage emotional responses to stressors. Problem-focused coping entails seeking to reduce or eliminate the stressors (i.e., reduce or eliminate the problem) and often includes producing problem-solving possibilities, contrasting the advantages and drawbacks of differing options, and engaging in problem-solving activities (D’Zurilla & Chang, 1995; Nezu & Nezu, 1991). For example, if one is feeling stressed at work, they can decide to find stronger work-life balance or resign and get a new job. Emotion-focused coping involves controlling or managing one’s own emotional response to stressors by focusing selectively on positive parts of oneself and the situation (Baker & Berenbaum, 2007; Lazarus & Folkman, 1984). This coping strategy does not address the problem at hand; instead, it focuses on dealing with the feelings and perceptions associated with the stressful situation. A person may react to stressful work-life by seeking emotional support from their coworkers or practicing mindfulness.

The coping strategies one uses have differential effects on a variety of outcomes. Several researchers have found that emotion-focused coping negatively affects mental health. Solomon, Avitzur, and Mikulincer (1990) conducted a study and found that emotion-focused coping was related to the occurrence of

mental symptoms among troops who had been participating in a war. Similarly, Roy-Byrne et al., (1992) discovered that emotion-focused coping was associated with higher subjective distress in patients with panic disorder and major depressive disorder. In contrast, a study by Pourmohamadreza-Tajrishi et al, (2015) showed that training programs on problem-focused coping strategy promotes mental health and decreases the general symptom index (GSI) and psychological symptoms (depression, obsession-compulsion, psychosis, aggression etc.) in women who have children with down syndrome.

Active-cognitive vs. Active-behavioral vs. Avoidance Strategies. As an alternative to the two-factor coping model, Billings & Moos (1981) identified three stress coping strategies: active-cognitive, active-behavioral, and avoidance. According to Billings & Moos (1981), active-cognitive coping entails modifying one's assessment of stressors through internal processes, for example, trying to look at the positive side of things, accepting the situations, or finding inner strength in religious beliefs. Active-behavioral coping entails efforts to change the stressor itself by engaging in external behaviors; examples could include exercising, talking or seeking professional help or problem-solving. Avoidance coping entails refusing to face the stressor. These strategies may include ignoring the problem, resorting to illegal drugs, or keeping the worries to oneself rather than discussing them with others.

Several researchers suggest that active behavioral and active cognitive coping strategies, as opposed to passive strategies, such as avoidance, may be more helpful at relieving distress. For example, in a study of young adolescents

coping with family divorce, females who reported using avoidance coping methods had higher physical and psychological issues than girls or boys who did not report using such strategies (Armistead et al., 1990). The research conducted by Aspinwall and Taylor (1992) showed that students that used avoidant coping were less likely to be successful in adjusting to college, whereas those who used active coping had higher chances of being successful adjusting to college. Stewart et al. (1997) discovered that people who employed active coping methods had lower rates of depression and anxiety, whereas people who used avoidant coping had higher rates.

Approach-oriented coping and Avoidance-oriented Strategies.

Approach-oriented coping refers to cognitive efforts aimed at solving the problem, understanding the cause, and accepting it (e.g., problem solving or information seeking) Roth & Cohen (1986), whereas avoidance-oriented coping refers to any behavioral, cognitive, or emotional activity used to distract oneself from the stressor (e.g., denial, withdrawal) (Roth & Cohen 1986).

Individuals who adopt avoidance-oriented coping deny or dismiss the life-altering event they are experiencing. These coping styles may be useful in some sense as they can reduce stress and prevent anxiety from becoming overwhelming (Lazarus & DeLongis, 1983; Roth & Cohen, 1986). Approach-oriented coping on the other hand involves making a concerted attempt to effectively regulate one's emotions or modify their situation. Studies have shown that individuals who always use the approach coping response rather than avoidance usually adapt

better to stressors and may experience less psychological symptoms (i.e., depression and anxiety) (Litman, 2006; Holahan & Moos, 1987).

Predictors for Coping Strategies

Locus of Control. Lazarus and Folkman's transactional theory of stress and coping has been influential in stress and coping research (Biggs et al., 2017). They defined coping as the shifting thoughts and actions that an individual employs to manage the external and/or internal demands of a stressful person-environment transaction (Lazarus & Folkman, 1984).

Before coping reactions are implemented in a specific stressful situation, it is assumed that people cognitively examines what is at stake (primary appraisal) first and then determine what the available options to dealing with the issue (secondary appraisal of control over the stressor). Thus, under this perspective, invoking a specific coping strategy is a response to cognitive assessments of a risky environment rather than a fundamental reaction meant to lessen the negative impacts of stress.

Different coping techniques to can be employed by individuals when dealing with different causes of stress due to potentially differing appraisals. The success of a certain style of coping may be determined by whether the stressor is controllable or uncontrollable (Littrell & Beck, 2001). According to Forsythe and Compas (1987), active or problem-focused coping may be beneficial for controllable stressors, however active coping mechanisms may be less successful for uncontrollable stressors. Problem-focused coping is thought to be appropriate

in situations with the possibility of personal control and emotion-focused coping, on the other hand, is considered appropriate in situations where individuals have little control over the outcome or its recurrence.

Anshel and Kaissidis (1997) conducted a study to examine how cognitive evaluations of stressful situations and coping styles affected coping responses among basketball players. Their findings revealed that when individuals felt a high level of control over a stressful situation, they were more likely to employ active and problem-focused coping strategies. Conversely, when they perceived a low level of control, they tended to rely more on emotional-focused coping strategies. Haney and Long (1996) also highlighted the significance of athletes' sense of control and self-efficacy as key factors influencing their use of engagement coping techniques.

Individual differences (Personality). When it comes to predicting coping strategies, personality has received a lot of attention. It has been demonstrated that it can predict the strategy of stress coping used by individuals (Bryant et al., 2016; Segerstrom & Smith, 2019). Personality has been defined as “the intraindividual consistencies and interindividual uniqueness in propensities to behave in identifiable ways considering situational demands” (Tett & Burnett, 2003, p. 502) Meléndez, Satorres, and Delhom (2020) discovered that problem-focused coping methods are predicted by conscientiousness, openness to experience, and agreeableness, whereas emotion-focused techniques are predicted by neuroticism in their study. Others (Fickova, 2009; Leandro & Castilo, 2010; Marnie Barow, 2008; O'Brien & DeLongis, 1996; Watson & Hubbard, 1996) have found that

emotion-focused strategies are predicted by agreeableness and conscientiousness (Meléndez et al., 2020).

People with high levels of neuroticism are more impulsive, more prone to stress, and have negative emotions (Lahey, 2009). Studies have shown that they use fewer problem-focused techniques and more emotion-focused tactics, including avoidance (Connor-Smith & Flachsbart, 2007; O'Brien & DeLongis, 1996). Individuals with extraversion are forceful, affectionate, and sociable, and they tend to experience positive emotions (Grodin & White, 2015). They appear to utilize problem-focused and emotion-focused techniques that are regarded as constructive, such as support and positive thinking (Connor-Smith & Flachsbart, 2007; Hooker et al., 1994; O'Brien & DeLongis, 1996). Some evidence suggests that those who are open to experiences use adaptive coping techniques, such as the use of humor to alleviate stress (McCrae & Costa, 1986). The data in the literature, on the other hand, appear to be scarce and conflicting (Hooker et al., 1994; O'Brien & DeLongis, 1996). Findings have been similar for agreeableness and conscientiousness. It appears that people with higher levels of agreeableness and conscientiousness utilize problem-oriented adaptive methods more than those with lower levels of these personality traits (Connor-Smith & Flachsbart, 2007; McCrae & Costa, 1986; O'Brien & DeLongis, 1996).

Numerous investigations have identified that traits such as openness to experience, conscientiousness, agreeableness, and extraversion are indicative of problem-solving coping strategies. On the other hand, neuroticism tends to predict more passive and avoidance coping behaviors, which are associated with

emotion-focused strategies. Moreover, conscientiousness and agreeableness have been found to have a negative correlation with the use of emotion-focused strategies (Carver & Connor-Smith, 2010; McCrae & Costa, 1986). According to Straud, McNaughton-Cassill and Fuhrman (2015), Conscientiousness, openness, and extraversion are factors that positively influence proactive coping, while conscientiousness and openness are positive predictors for preventive coping. Conversely, neuroticism is a negative predictor for preventive coping. Thus, the research clearly shows that personality impacts coping strategies.

Age. Age has been extensively researched and found to be predictive of coping techniques. Folkman et al., (1987) discovered that compared to older adults, younger adults employ more active interpersonal problem-focused coping, such as seeking social support, confrontation, planful problem-solving. In contrast, older individuals utilize more passive intrapersonal emotion-focused coping than younger adults (e.g., distancing, acceptance of responsibility, positive reappraisal). Chen, Peng, Xu, and O'Brein (2018) studied 190 community-dwelling adults ranging in age from 18 to 89 years and discovered that older persons were less likely to utilize problem-focused coping than younger adults. According to Landolt, Vollrath, and Ribi (2002), emotion-focused tactics (e.g., wishful thinking) become more prevalent as people get older.

Research on the relationship between age and coping strategies seem to have some disparities. Lachapelle & Hadjistavropoulos (2005), in contrast to popular belief, found that older adults utilized fewer emotion-focused coping strategies than younger adults. Richaud & Sacchi, (2005) discovered that the

middle-aged people used a variety of coping strategies to manage their problems, whereas younger people ignored or attempted to dodge problems. Aldwin et al., (1996) studied age differences in stress and coping methods in three age groups of men: middle-aged, young-old, and old-old. In terms of reported stress and coping strategies, there were no significant age variations among these three groups.

Gender. Research findings on the relationship between gender and coping strategies have been somewhat inconsistent. In their study, Stanescu and Romer (2013) revealed that emotional regulation and social support are related with girls more than boys. Girls express and communicate their vulnerability, whereas boys either deny their vulnerability or successfully convert it into aggressiveness. Girls regulate their emotions by crying and sharing their feelings with others (emotion-focused strategy), whereas boys seek information to address the problem (problem-focused strategy). Further, women have been found to employ more emotion-focused strategies than men (Vitulic & Prosen, 2015). Women are more likely to utilize coping strategies geared at adjusting their emotional responses to a stressful circumstance, whereas men are more likely to use problem-focused or instrumental means of dealing with stressful experiences (Endler & Parker, 1990; Matud, 2004; Ptacek et al., 1994).

Carpenter (2013) investigated gender disparities in coping techniques among 180 Irish persons. Female respondents reported higher degrees of emotional coping than male respondents. Dakhli et al. (2013) investigated the role of gender in coping techniques. The authors discovered that males and females employ distinct coping mechanisms. Gentry et al. (2007) investigated gender

differences in stress and coping strategies among adults in Hawaii by carrying out a cross-sectional survey with 1518 individuals. The findings revealed that women were more likely to employ adaptive coping techniques, whilst men were more likely to employ dysfunctional and avoidance coping strategies.

Matud (2004) investigated gender differences in stress and coping methods in a sample of 2816 persons, 1566 women and 1250 men ranging in age from 18 to 65 years and found that women scored much higher than males on emotional and avoidance coping. Tamres et al. (2002) found that gender disparities in relative coping strategies are more consistent with our intuitions about how men and women cope with distress. Upon reviewing the literature, it seems that females are more likely to employ emotion-focused coping strategies and males are more likely to adopt problem-focused coping strategies.

Culture

Lazarus & Folkman, (1984), have posited that culture plays a pivotal role on how people cope. People use unique coping strategies based on the knowledge of which coping strategies are appropriate and appreciated in their cultural setting (Lam and Zane, 2004). Collectivism and individualism are the two most utilized ideas in cross-cultural studies of stress and coping at the moment. Collectivistic cultures are characterized by saving face, emotional control, and group cohesion (Wei, Ku, Russell, Mallinckrodt, and Liao, 2010). According to (Frías, et al., 2014), in certain social contexts such as families, tribes, workplaces, and religious groups, collective interests and priorities hold greater importance than individual concerns. These societies are often referred to as collectivist

cultures. Conversely, individualistic cultures are characterized by self-reliance, actions driven by personal goals and interests, and a greater emphasis on independence (Frías et al., 2014). In societies that follow an individualistic approach and prioritize individual rights, which is often the case in various European and North American countries, individuals tend to exert control and adapt their surroundings to fulfill their personal desires (Suh 2000; Triandis, 2001; Triandis and Suh 2002; Kuo, 2011). On the other hand, in collectivistic societies where interdependence is emphasized, such as in Eastern Asian cultures, people are more inclined to conform to social norms and restrain themselves accordingly (Hofstede, 2001; Shulruf et al., 2007).

Cultural distinctions influence coping mechanisms among Asian Americans and Caucasians. Asian Americans are more inclined to utilize cognitive and avoidance-focused coping strategies, which involve modifying thoughts or behaviors in response to stressors. In contrast, Caucasians are more prone to employ behavioral and approach-focused coping mechanisms, which involve confronting and modifying external stressors directly. These coping patterns arise from the cultural values and norms prevalent in their respective societies. (Chun et al., 2007). Because of the influence of Eastern, collectivistic culture, Asians tend to use avoidance-type coping methods (Lee & Mason, 2014).

Disengagement and meditation/exercise (Lei & Pellitteri, 2017), religious coping (Chai et al., 2011), constraint (Vaughn & Roesch, 2003), and substance use are examples of avoidance style coping techniques (Taylor et al., 2004). In this light, they are less likely to employ reactive coping techniques (Wei et al.,

2010) and social support (Chang, 2015; Taylor et al., 2004). Individualistic cultural norms also impact Caucasians. The likelihood of engaging in problem-focused coping is higher among them (Wei et al., 2010) The likelihood of engaging in problem-focused coping is higher among them (Taylor et al., 2004), The likelihood of engaging in problem-focused coping is higher among them (Parveen et al., 2013).

Present study

Although the coping models discussed above do share certain similarities and overlap in the classification of particular coping reactions, they are conceptually separate (Ebata & Moos, 1994). For instance, the problem vs emotion focused model groups coping strategies according to their assumed purpose (Ebata & Moos, 1994). The employment of problem-focused methods is viewed as an effort to reduce stress. Emotion-focused coping mechanisms are considered to be efforts to control or regulate emotional states that may be present alongside or as a result of a stressor. Whereas the approach-avoidant coping strategies categorizes coping responses based on their focus on whether responses are aimed away from or towards the stressor. Approach-oriented strategies involve cognitive efforts to comprehend or alter one's thoughts regarding the stressor, along with behavioral efforts to directly address and resolve the stressor or its consequences. (Roth & Cohen, 1986) On the contrary, avoidance strategies encompass cognitive attempts to disregard, deny, or minimize the significance of the stressor (Roth & Cohen, 1986). Similarly, the active-cognitive, active-behavioral, and the avoidance strategies focus on the direction of responses to

stress. Much of the literature seems to adopt the problem-focused versus emotion-focused coping model (e.g., Bond & Bunce, 2000; Chen et al., 2018b; Green et al., 2010; Herman & Tetrick, 2009).

While many individual difference variables (e.g., perceived control) impact coping, one understudied variable is culture. There is an absence of information about the coping strategies employed by people of African roots. The largest volume of our knowledge on this subject has been based on studies carried out by Europeans. The major theories on this topic have also been empirically tested on populations primarily from Europe and North America (Sinha et al., 2000). There is a need to carry out studies on people with other background before we can generalize the results of previous research that have been conducted on stress and coping strategies. Therefore, for the present study, I will adopt the problem-focused versus emotion-focused coping model to examine the potential cultural variation in the relationship between perceptions of control over stressor and coping strategies adopted by two different cultural groups, Nigeria and the United States.

Further, since there have been little to no study on other cultural variables and stress coping strategies, this study aims to provide more information on the relationship between power distance, masculinity, uncertainty avoidance, long term orientation, and indulgence and problem-focused and emotion-focused coping strategies.

Culture refers to the "the collective mental programming that separates members of a group of people from another" (Hofstede, 2011). Culture is the

shared collection of beliefs, values, customs, attitudes, rituals, languages, and so on that characterize people of a specific racial or ethnic group and their relationships with others. "A culture brings individuals who share common experiences, beliefs, and values together" (Sillars and Gronbeck, 2001, p. 201). Culture is also frequently thought of as a way of seeing the world, centered on a shared set of social beliefs and values. Brislin (1990) defined culture as "widely shared standards, values, category creation and use, assumptions about life, and goal-directed behaviors that become automatically or subconsciously accepted as proper and correct by persons who identify as members of a community" (p. 11). In the present study, I focus on the Nigerian and United States cultures.

Cultural Models of Coping

A thorough analysis of the existing cultural theories of coping is necessary to ground the current study within broad conceptual frameworks. In this study, five such theoretical models were identified. These five models are briefly described in the section that follows.

The resource-congruence model of coping. The concept holds that effective coping depends on creating "congruence," which happens when a person's coping resources and coping strategies meet the demands of the stressor (Wong et al., 2006). According to Wong et al. (2006), the concept asserts that sufficient resources and effective usage of these resources are necessary for effective coping. A lack of resources and/or severe departures from congruence, however, would lead to inadequate coping and increase the risk of stress-related issues.

Congruence is defined as the use of coping responses that are in line with one's unconscious cultural beliefs, practices, and values (Wong et al., 2006).

Wong (1993) previously demonstrated that culture can influence one's primary and secondary appraisal of the stressor and then, the choice of preferred coping techniques. Coping behaviors are classified into three types in this model: creative, reactive, and protective. Wong (1993) believed that creative coping was inextricably tied to individuals' intellectual, spiritual, existential, relational, physical, material, cultural, and environmental resources, all of which were embedded in cultural conditionings. The Resource-Congruence model also suggests that culture has an impact on the stress-coping process by defining what constitutes stress, influencing how people react to stress, dictating the types and range of resources that can be used, supplying cultural knowledge for culturally appropriate coping responses in response to a given stressor, and dictating how coping outcomes manifest (Wong & Ujimoto, 1998).

The Multiaxial Model of Coping. This model was derived from Hobfoll's Conservation of Resources Stress Theory (Hobfoll, 2001; Hobfoll & Wells, 1998). The model emphasizes the "communal" features of stress management as shown by individuals' needs to maintain collective existence in a nation or tribe. (Hobfoll & Wells, 1998) characterized cultures as "creating a setting in which stress and coping reactions are established and delimited within culturally patterned social roles, structures, and expected lifespan changes" (p. 28). To that end, the model emphasizes the necessity of understanding persons as "individual-nested in family-nested in tribe" during the coping process (Hobfoll, 2001).

Individuals' relationships to their families, religion institutions, job organizations, charitable institutions, neighborhoods, and ethnic groupings are all part of the social and cultural settings of coping.

In contrast to most other models, which are based on individualistic cultural assumptions, Hobfoll, Dunahoo, Monnier, Hulsizer, and Johnson, (1998) developed the Strategic Approach to Coping Scale to reflect coping along three axes: active-passive, prosocial-antisocial, and direct-indirect. These axes represent dimensions of general coping strategies that allow a broader application across individualist and collectivist cultures (Geller et al., 2009; S. Hobfoll et al., 2003). To summarize, the Multiaxial Model proposes that culture can influence stress and coping through the following factors:

- objective factors based on accurate interpretations by individuals.
- objective factors based on norms and rules shared in the family.
- objective factors based on culturally shared biases within a culture.
- illusions based on individual, familial, and cultural biases.
- illusions based on personal biases.

Transactional Model of Cultural Stress and Coping. Chun et al. (2006), in contrast to the two models that came before, proposed a dynamic, transactionally oriented framework to explain culture's relationship with stress-coping. This model focuses on the significance of "resources" in defining stress and coping within a cultural context. This coping model postulates that culture affects five sequentially structured yet interactive systems or panels, encompassing the entire stress coping process (Chun et al. 2006). The idea places

a strong emphasis on collectivism and individualism as the fundamental cultural and psychological traits that structure various cross-cultural coping mechanisms. According to Chun et al. (2006), the "transactions" between culture, setting, and stress-coping yield unique outcomes within and across five separate domains/panels: (a) Environmental system (e.g., family and job resources, social climate), (b) Personal system (e.g., personality traits, cognitive abilities), (c) Transitional conditions or stresses (e.g., life events), (d) Cognitive evaluation and coping skills, and (d) Health and well-being.

Sociocultural Model of Stress, Coping, and Adaptation. A sociocultural model of coping that emphasizes the social context of the stress and coping processes was developed by Aldwin (2007) who asserted that a person's social environment is deeply ingrained in their cultural background. According to this theory, coping is influenced by how people perceive their stress, their coping mechanisms, their social and cultural resources, and the responses of others around them. People's experiences with cultural expectations and resources affect how they evaluate the demands of a stressor and the resources they have to meet those demands, which in turn affects how they perceive their level of stress. Individuals' social networks and coping mechanisms help to moderate the effects of coping, which have an impact on the environment as well as the person who is trying to cope. These effects include cultural, social, situational, psychological, and physical effects.

Cultural Values Taxonomy. The current study will be based on this model. Some researchers have defined culture to include a value system and

explained that values are among the cultural building blocks (Hofstede, 1984). Geert Hofstede's (1984) cultural values give a framework for explaining how these values relate to behavior. Hofstede (1997) identified six dimensions that characterize disparities among national cultures. They include power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity, long/short term orientation, and indulgence/restraint.

Power distance index. This dimension addresses the fact that not all individuals in society are equal. The degree to which less powerful members of organizations and institutions accept and expect unequal power allocation is known as the "power distance index." (Hofstede, 2011). In this dimension, inequality is perceived by followers, or the lowest layers. A higher index implies that the society's hierarchy is clearly formed and executed, without dispute or justification. While the United States scored a 40% on this dimension, Nigeria's high score of 80% suggests that people acknowledge hierarchy's superiority. In Nigeria, everyone seems to know where they fit on the social ladder. Children, for instance, are expected to obey their parents at all times, hence it is considered disrespectful to criticize a parent or other authority figure. Similarly, managers and superiors see themselves as unequal at work, and superiors who are entitled to higher benefits. (Hofstede, 2011). On the other side, a smaller power distance shows that people are challenging authority and making an effort to spread power. While Nigerian culture supports a social hierarchy with inherent indefensible inequities, Americans are prone to believe that all citizens, regardless of differences, are entitled to equality. (Szivak et al., 2018; Mordi, 2017).

Individualism versus collectivism. This dimension investigates how well people in a society are incorporated into groups (Hofstede, 2011). It has to do with whether or not people talk about themselves in terms of "I" or "We." Individualistic cultures usually only bind people to their own families through flimsy connections. Collectivism values in-group relationships that include extended families and other individuals. These in-groups are undeniably committed to one another and support one another in situations where there is disagreement with other in-groups (Hofstede, 2011).

Nigeria is classified as a collectivistic country in which people are loyal to one another and tend to form groups (Hofstede et al., 2005). Nigerians exhibit a strong sense of belonging to their community (Mordi, 2017). In contrast, the United States is considered to be an individualistic society in which people primarily look after themselves, are concerned with their own well-being, and are self-reliant (Szivak et al., n.d.). Individualism-driven cultures prioritize personal choice above group decision-making.

Uncertainty avoidance. A society's tolerance for ambiguity is described by the uncertainty avoidance index (Hofstede, 2011). Uncertainty avoidance refers to how people accept or deal with the knowledge that something unknown, or out of the ordinary, has occurred. Societies with high scores on this index have strict moral and legal codes, and they frequently adhere to the idea that there is a single, all-encompassing truth that governs everything and that everyone is aware of. This indicator's lower level implies a higher level of tolerance for opposing conceptions or ideas. Furthermore, there are fewer regulations in society,

uncertainty is more prevalent, and the environment is more open in cultures with lower levels of uncertainty avoidance.

Nigeria has an average score of 55% on Uncertainty Avoidance, indicating no obvious preference (Hofstede, 2011). Similarly, the United States also ranks below average on the Uncertainty Avoidance dimension, with a score of 46.

Masculinity vs. femininity. According to Hofstede (2011), the social inclination for achievement, rivalry, and financial benefits for success is known as masculinity. A tendency for collaboration, modesty, helping the weak, and overall quality of life is indicated by its opposite (p. 138). Masculinity depicts a civilization in which social gender roles are clearly different, whereas femininity reflects a society in which these duties overlap. Men and women are both expected to be modest, tender, and concerned with the quality of life. Societies with high masculinity is usually ego-oriented, they live in order to work, have larger gender wage gap, etc.

Nigeria scored 60 in the masculinity vs. femininity scale, indicating that it is a masculine society (Hofstede, 2011). Nigerians tend to base an individual's success on his or her worldly possessions (Mordi, 2017). Similarly, the United States has a high masculinity score of 62. Thus, Nigeria and the United States are nearly identical in their level of masculinity.

Long-term vs. short-term orientation. This dimension involves connecting the past with present and future actions/challenges (Hofstede, 2011). Short-term orientation, which yields a lower score on this indicator, indicates that people value consistency over tradition. On the other hand, societies that place a

long-term focus place a premium on contextual, pragmatic problem-solving and adaptation. Long-term oriented countries continue to develop to a level of affluence while short-term oriented poor countries often have little to no economic progress.

Nigerian culture, with a low long-term orientation score of 13, might be categorized as short-term oriented. Children are brought up in a society that prioritizes the short term, teaching them to understand the needs and consequences of their actions now and to respond accordingly. (Hofstede, 2011). Similarly, the United States also scores low on this dimension (26), indicating that Americans desire to preserve time-honored traditions and customs while viewing societal change with skepticism. Again, Nigeria and the United States are similar in this regard.

Indulgence vs. restraint. This dimension refers to the degree of freedom that citizens have in fulfilling their human desires as a result of societal norms. Hofstede (2011) suggests that indulgent cultures value the “relatively unrestricted fulfilment of basic and natural human wants related to having pleasure and enjoying life.” (p. 15) And restraint, on the other hand, is characterized as “a society that controls and regulates fulfillment of demands through strict social rules” (p. 15).

Nigerian culture is reported to be one of indulgence, with a score of 84. Nigerians have a greater desire for rapid pleasure and less control over their impulses than Americans (Mordi, 2017). They have a positive mindset and an inclination to be optimistic. Furthermore, they place a larger value on leisure time,

act as they please, and spend money as they please. Similarly, the United States scores a 68 society in this dimension (Hofstede, 2011). The United States too values indulgence but not to the same degree as Nigerians.

Hypotheses

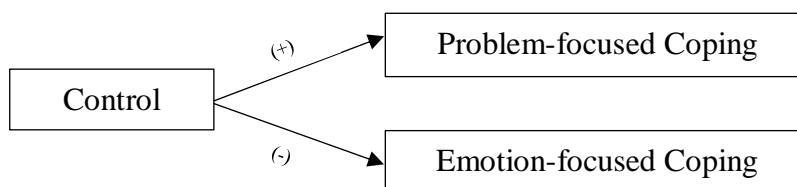
Problem-focused coping is regarded to be effective in situations where the individual has some control over the outcome or its recurrence, whereas emotion-focused coping is thought to be good in situations where the individual has little control over the outcome or its recurrence (Kim & Duda, 2003). In their study, Anshel and Kaissidis (1997) discovered that strong perceived controllability over a stressful situation related to the use of active/problem-focused forms of coping, whereas poor perceived control was associated with a greater use of emotional-focused coping methods. Therefore, I first hypothesize the following:

Hypothesis 1a: Control is positively correlated with Problem-focused coping strategies.

Hypothesis 1b: Control is negatively correlated with Emotion focused coping strategies.

Figure 2

Model showing the relationship between control and coping strategies.



Through its norms, a culture can influence how people cope (S Glazer, 2006; Taylor et al., 2004). For example, it could be acceptable and even

encouraged in religious cultures to cope through praying. Similar to this, it has also been proposed that culture may have an impact on how tough a situation is seen to be, which may then have an impact on how one would cope with the situation (S Glazer, 2006). Specifically, in cultures in which life is relatively more predictable, an unfamiliar life situation (such as moving to a new country) may be more difficult, thereby leading to certain coping strategies.

Tweed et al. (2004), propose that externally targeted control, which resembles problem-focused coping, can disrupt relationships as it may lead to resentment among those who prefer the existing state or resist any attempts to change it. Consequently, individuals in environments that prioritize intergroup harmony, like collectivist cultures, may be less inclined to use problem-focused coping strategies when dealing with stressors. Moreover, people from high-power distance cultures might report fewer attempts to change the situation through problem-focused coping while coping with stress because such cultures, by definition (Hofstede, 1980), encourage a willingness to accept certain situations, especially those characterized by high-power distance. Based on this information, I hypothesize that:

Hypothesis 2a: Individualism is positively correlated with problem-focused coping.

Hypothesis 2b: High power distance is positively correlated with emotion-focused coping.

There is no preexisting knowledge on the relationship between the remaining four (4) Hofstede (2011) cultural dimensions and coping, therefore

exploratory research will be carried out to examine uncertainty avoidance, masculinity, long term orientation, and indulgence in relations to problem-focused and emotion-focused coping.

Research Question 2c: Is uncertainty avoidance positively correlated with emotion-focused coping?

Research Question 2d: Is masculinity is positively correlated with problem-focused coping?

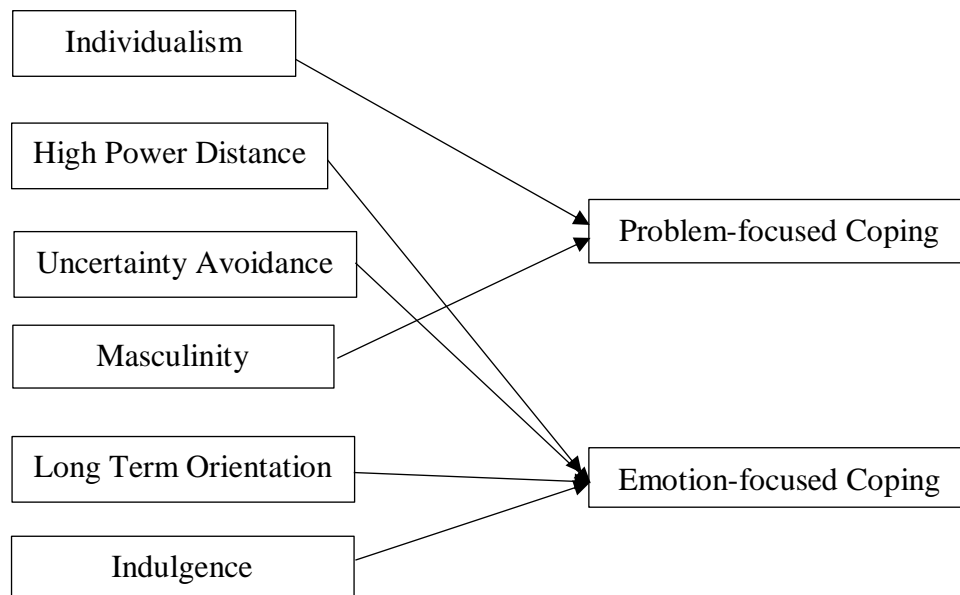
Research Question 2e: Is long term orientation is positively correlated with emotion-focused coping?

Research Question 2f: Is indulgence is positively correlated with emotion-focused coping?

Below is the hypothesized model:

Figure 3

Model showing the relationship between cultural dimensions and coping strategies.

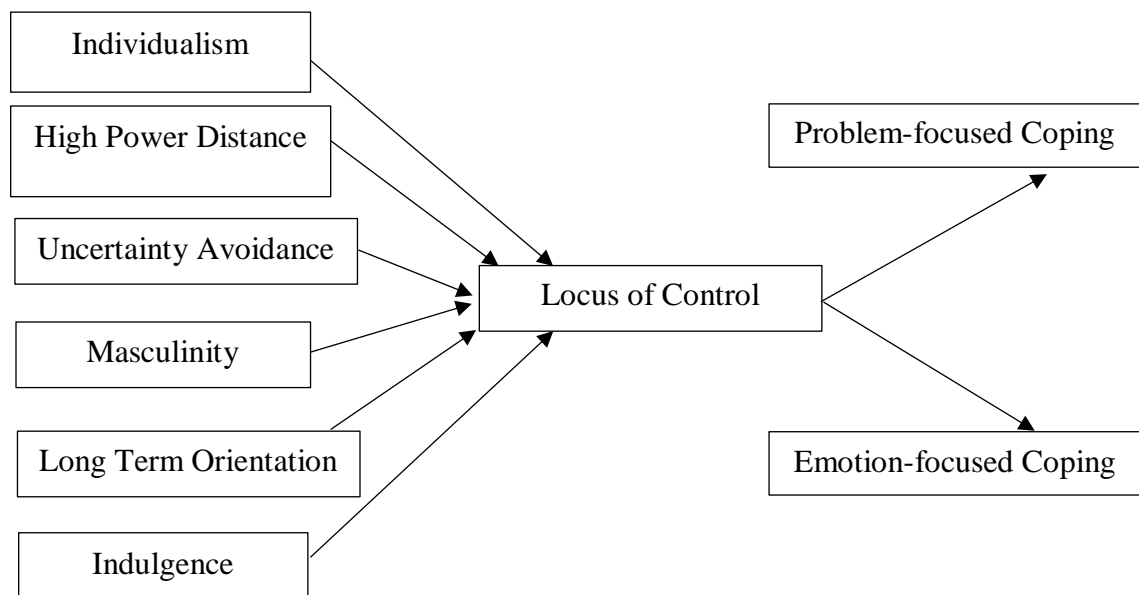


The third hypothesis tests the mediating effect of control in the relationship between cultural values and coping strategies.

Hypothesis 3: Control mediates each of the relationships between Values and Coping.

Figure 4

Model showing the mediating effect of control in the relationship between cultural values and coping strategies.



Based on the disparities highlighted by Hofstede between the Nigerian and American cultures, I believe that the stress coping mechanisms adopted by citizens in each country will differ. That is, the relationship between each coping strategy and control will depend on culture. Cultures that adhere to masculine norms, such as, self-reliance and controlling emotions, may manage their negative affect by using avoidant coping strategies (e.g., Chan, 1995; Dyson & Renk,

2006). In cultures with high-power distance, there is a tendency to foster acceptance of specific circumstances, especially those involving high-power dynamics. Consequently, individuals from such cultures might exhibit fewer efforts to change the situation when dealing with stressful situations. (Tweed et al., 2004b). Further, individual identity is crucial in individualist society. People are encouraged to express and affect their inner emotions or sentiments (Tsai et al., 2007). In contrast, emotion in West African countries, is considered less important to attend to in everyday life (Dzokoto, 2010). Wakil (2015) investigated coping strategies employed by Nigerian police officers and showed that police officers in Nigeria would not seek professional assistance from relevant health professionals to cope with stress. Therefore, my final research question is:

Research Question 4: Do the relationships differ between Nigeria and United States?

Figure 5

Model showing the mediating effect of control in the relationship between cultural values and coping strategies for Nigerians.

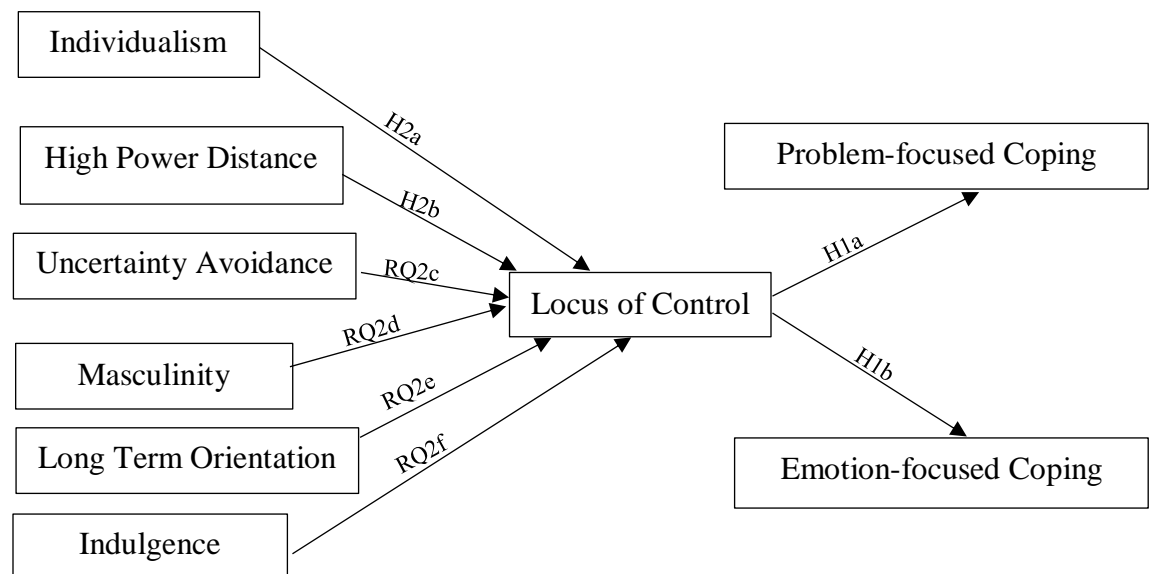
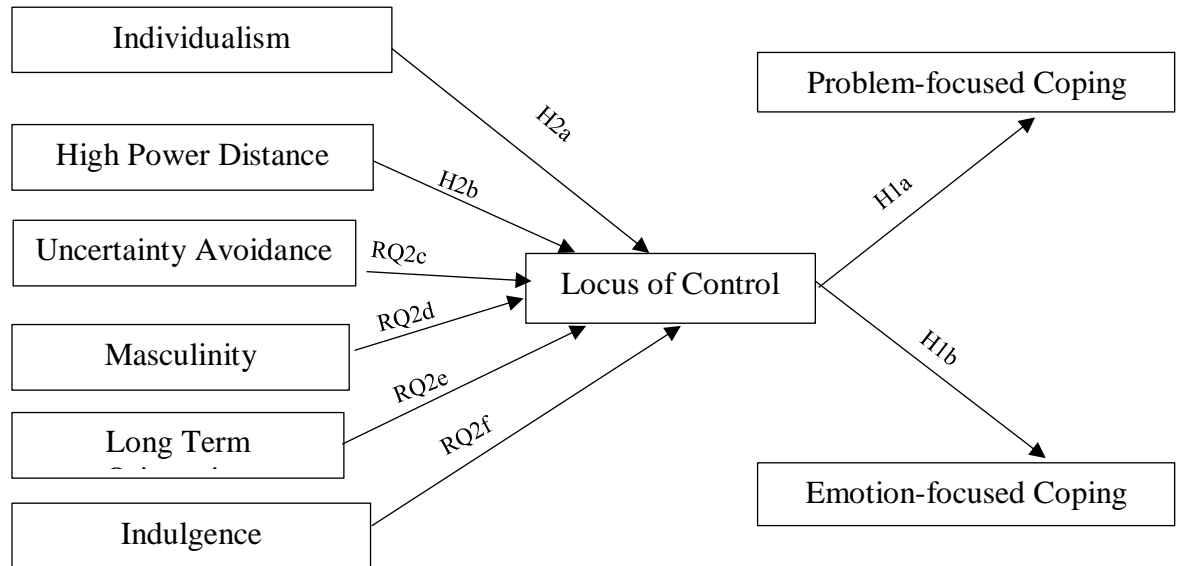


Figure 6

Model showing the mediating effect of control in the relationship between cultural values and coping strategies for Americans.



CHAPTER II: METHOD

Participants

Participation in this survey was restricted to people with either Nigerian or United States nationality. An a priori power analysis was carried out using G*power 3.1 with an effect size of 0.15, $\alpha = 0.05$, power = 0.95, and number of predictors = 9. The number of suggested participants was 166, therefore I proposed using 200 people, with 100 people each from Nigeria and United States. This way, I would still have sufficient power should any respondent's data be unusable and removed. Participants were required to have lived a minimum of 18 years in these countries to be able to participate in the study. The final usable sample size was 138 participants. The sample included 55.7% ($n = 77$) participants of United States of America nationality and 44.3% ($n = 61$) of Nigerian nationality. About 58.4% ($n = 73$) of the participants identified as women, 36.8% ($n = 46$) identified as men, 3.2% ($n = 4$) were non-binary, and 1.6% ($n = 2$) identified as other. All participants included in the data analysis had lived in their country of nationality for a minimum of 18 years. Among participants who have lived outside their country of origin, the longest duration of living abroad was 7 years. Further, 45.3% of respondents resided in Tennessee, USA and 35.5% lived in Lagos, Nigeria.

The United State participants were recruited through SONA/undergraduate classes in a large southeastern university and from Reddit. Nigerian Participants were recruited through the university's international student

office, my personal network, and social media, including Facebook, WhatsApp, Instagram, and Twitter.

Participants were recruited with the following message: “Hello! I am conducting a survey on “Stress and Coping Strategies.” I would appreciate if you can take some minutes of your time to answer some questions. It should take about 15-20 minutes. Your responses are anonymous, and you can skip any question(s) you are not comfortable with. After completion, kindly share the link to others. Thank you! <Link inserted here>

Demographic questions

In addition to general demographic questions, a few questions were added to the survey to get a better understanding of the participants. One of these questions was “How long have you lived in your country of origin?” I recruited participants who have lived a minimum of 18 years in their country of origin as I believe that at this age, individuals would have the cultural values of their country in-depth in them. Therefore, this question required participants to answer 18 and above to be able to continue with the survey.

Another question was “How long have you lived outside your country of origin?” The survey used social media and the Middle Tennessee State University international student body as sources of participants recruitment, therefore, it was taken into consideration that some of the participants may be residing outside their country of origin. It was believed that some participants who have lived in their country of origin for 18 years and above but later relocated may have had some adjustments in their cultural values and hence affect their coping style. This

demographic question was hence added to see if the longevity of living outside one's country of origin also plays a role in participants' choice of coping strategies.

A third question was "In which state have you resided the longest?" Using the SONA system in Middle Tennessee State University and my personal network from Lagos as additional sources of participants recruitment, it was foreseen that a larger number of participants in this survey will be recruited from Tennessee, USA and Lagos, Nigeria. This means that the survey would be representative of these states rather than the countries. Including this demographic question in the survey provided the avenue to measure the variety in participants state residence.

Measures

Locus of Control

Control, in this study was measured using the Rotter's (1966) Locus of Control Scale (LCS) which is a 29-item questionnaire designed to measure an individual's perceived level of internal versus external control of reinforcement. The internal and external locus of control basically focuses on the degree to which an individual believes that events happening in their lives are the result of their own actions or external factors (See Appendix A). Individuals with high external locus of control believe that events in their lives are the result of outside forces (e.g., other people, chance, fate, etc.), while people with high internal locus of control believe that events in their lives are the result of their own actions, efforts, and abilities. The Locus of Control Scale (LCS) is a forced choice questionnaire that requires respondents to select the response choice from pairs of statements

that they agree with the most. An example item is “(a) Many of the unhappy things in people's lives are partly due to bad luck (b) People's misfortunes result from the mistakes they make.” The test also contains six filler items used to make ambiguous the purpose of the test. A score of one point is awarded for the following questions: 2a, 3b, 4b, 5b, 6a, 7a, 9a, 10b, 11b, 12b, 13b, 15b, 16a, 17a, 18a, 20a, 21a, 22b, 23a, 25a, 26b, 28b, 29a. A high score on this test represents external locus of control while a low score represents internal locus of control. Test-retest reliability of the Locus of Control scale was .61 (Lange & Tiggemann, 1998). The internal consistency reliability of the LCS was $\alpha = 0.604$.

Coping

This study measured coping by adopting the Brief-COPE scale developed by Carver (1997). The Brief-COPE is an abbreviated version of the COPE Inventory previously developed by Carver, Scheier, and Weintraub (1989) (See Appendix A). The Brief-COPE scale is designed to measure a person's primary coping style by providing scores on the following three overarching coping styles: Problem-Focused Coping, Emotion-Focused Coping, and Avoidant Coping. The Brief-COPE which modeled the original COPE scale was theoretically derived based on several coping models. The scale was initially divided into two subscales, providing scores for avoidant and approach coping after a study with heart failure patients was carried out by Eisenberg, Shen, Schwarz, and Mallon (2012). Further analysis conducted by Dias, Cruz, and Fonseca (2012) indicated three factors: problem-focused, emotion-focused, and avoidant coping. The internal consistency indicated by the Cronbach's alpha values in a study among

women with breast cancer (Yussoff, 2009) ranged from 0.25 to 1.00. In the current study, the internal consistency reliability for the problem-focused coping subscale was $\alpha = 0.751$. The internal consistency reliability for the emotion-focused coping subscale was $\alpha = 0.565$.

The Brief-COPE scale contains 28 statements about coping behaviors. Participants respond to the Brief-COPE by indicating the degree to which they engage in each behavior using a 4-point scale with response anchors ranging from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*). Further, the Brief-COPE consists of three subscales represented by different items. High scores on items representing each of these subscales indicate that the participant employed that particular coping style more. Some example items are, "I've been taking action to try to make the situation better," (Problem-focused coping) "I've been getting emotional support from others," (Emotion-focused coping) and "I've been saying to myself 'this isn't real.'" (Avoidant coping).

Culture

To measure culture, this study used the Values Survey Module (VSM) 2013 developed by Hofstede and Minkov (2013). The VSM 2013 is the version of VSM that includes all six dimensions of culture identified by Hofstede and Minkov (2010) (See Appendix A). The VSM (2013) is a 30-item questionnaire used to compare culturally influenced values and sentiments of respondents from two or more countries, which in this case would be Nigeria and the United States of America. The scale includes 30 items in total, with four items measuring each of the six dimensions of culture. The six dimensions include power distance,

individualism vs. collectivism, masculinity vs. femininity, uncertainty avoidance, long- vs. short-term orientation, and indulgence vs. restraint. The remaining six items ask about the demographics of the respondents, which is the age, gender, education level, job, present nationality and nationality at birth for each respondent.

Overall scores for each subscale are calculated by finding the means of the items that measured each value after reversing the scores on necessary item. The formula prescribed by Hofstede (2013) involved calculating indices for the six cultural dimensions:

$$\text{Power Distance Index (PDI)} = 35(m07 - m02) + 25(m20 - m23) + C(pd)$$

$$\text{Individualism Index (IDV)} = 35(m04 - m01) + 35(m09 - m06) + C(ic)$$

$$\text{Masculinity Index (MAS)} = 35(m05 - m03) + 35(m08 - m10) + C(mf)$$

$$\text{Uncertainty Avoidance Index (UAI)} = 40(m18 - m15) + 25(m21 - m24) + C(ua)$$

$$\text{Long Term Orientation Index (LTO)} = 40(m13 - m14) + 25(m19 - m22) + C(ls)$$

$$\text{Indulgence versus Restraint Index (IND)} = 35(m12 - m11) + 40(m17 - m16) + C(ir).$$

According to Hofstede and Minkov (2013), the parameter C in the individual formulas is a constant (positive or negative) which depends on the nature of the sample and is chosen by the researcher to shift the scores to values between 0 and 100. This does not affect the comparison between countries. The m value stands for mean of the item. For example, m24 stands for the mean score of item 24. However, I decided to calculate the means rather than indices for the purpose of interpretation. Some example items are “How important would it be to

you to be consulted by your boss in decisions involving your work” (Power Distance), “Are you a happy person” (Indulgence), “Do other people or circumstances ever prevent you from doing what you really want to” (Indulgence). The internal consistency reliability for power distance was $\alpha = 0.55$. The internal consistency reliability for individualism was $\alpha = 0.29$. The internal consistency reliability for masculinity was $\alpha = 0.70$. The internal consistency reliability for uncertainty avoidance was $\alpha = 0.15$. The internal consistency reliability for long-term orientation was $\alpha = 0.16$. The internal consistency reliability for indulgence versus restraint was $\alpha = 0.11$.

Personality

As mentioned earlier, proactive coping is positively predicted by conscientiousness, openness, and extraversion, whereas preventive coping is positively predicted by conscientiousness and openness and negatively predicted by neuroticism (Straud et al., 2015), showing that personality impacts coping strategies. As a result, a measure of the big 5 personality is added as a control variable in this study.

To measure personality, the study adopts the shorter version of Goldberg’s (1992) 100 Big five markers, which was developed by (Saucier, 1994) and labeled the “Mini-Makers” (See Appendix A). Saucier (1994) condensed Goldberg’s 100 unipolar items into 40-item adjective checklist which was found to be a robust representation of the Big Five. The 40 items are divided into five, that is, eight items measuring each of the five dimensions of personality: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Respondents will

be asked to rate how accurately each of the 40 traits describe them on a scale of one to nine. Some examples of these items include bashful, talkative, cold, cooperative, organized, inefficient, envious, relaxed, complex, uncreative, etc. There were 16 reverse scored items (e.g., inefficient and disorganized under the conscientious dimension). All items are summed up for each of the big five traits. A high score on each dimension will represent the respondent having that trait. The internal consistency reliability for extraversion was $\alpha = 0.77$, The internal consistency reliability for conscientiousness was $\alpha = 0.749$, The internal consistency reliability for openness was $\alpha = 0.73$, The internal consistency reliability for agreeableness was $\alpha = 0.73$, The internal consistency reliability for neuroticism was $\alpha = 0.74$.

Procedure

The locus of control, personality, coping, and values scale were combined and entered into Qualtrics, and the link was shared on several social media platforms, including WhatsApp, Facebook, Instagram, Twitter, and Reddit as well as the SONA system for access by the Middle Tennessee State University undergraduate students. A link was also provided to the international student office, which was then forwarded to the Nigerian students in the university. The survey commenced with a consent form, ensuring that participants willingly agreed to participate before proceeding further. Subsequently, participants completed the Locus of Control scale, brief-COPE scale, and the Values Survey Module. Lastly, they responded to demographic questions, encompassing age, gender, educational level, employment status, and nationality. The survey

concluded by thanking the participants for their time and effort. Respondents had the flexibility to take the survey at their convenience using their mobile phones or laptops. Additionally, the researcher's contact information was provided, allowing participants to reach out if they had any questions or concerns.

CHAPTER III: RESULTS

At the end of data collection, 204 participants had responded to the survey. However, 66 participants were removed from the data as 13 participants did not consent to the survey, 18 participants did not meet the requirements of the survey which were to have either a Nigerian or United States American nationality and be 18 and above, and 35 participants did not complete an acceptable portion of the survey. For a participant to be considered to have completed an acceptable portion of the survey, they must respond to either the locus of control, coping style or values measures included in the survey. Participants were removed if they did not complete any of these measures. Therefore, the final sample consisted of only 138 respondents which is less than 200 that was initially proposed.

Analyses were completed using Jamovi. The mean and standard deviation was calculated for each of the scales (see Appendix B, Table 1). Hypotheses 1 and 2 and research question 2 were all tested using the Pearson product-moment correlation (see Appendix B, Table 1). Because these hypotheses and research questions focused only on the overall relationships, these relationships were tested using the overall combined data (i.e., not comparing the American and Nigerian responses). Hypothesis 1a stated control is positively correlated with problem-focused coping strategies. There was not a significant relationship between control and problem-focused coping strategies, $r(135) = -.09, p = .32$. Therefore, hypothesis 1a was not supported. Hypothesis 1b stated control is negatively correlated with emotion focused coping strategies. There was not a significant relationship between control and emotion-focused coping strategies, $r(135) = .05$,

$p = .55$. Therefore, hypothesis 1b was not supported. Hypothesis 2a stated individualism is positively correlated with problem-focused coping. There was not a significant relationship between individualism and problem-focused coping strategies, $r(123) < .01, p = .73$. Therefore, hypothesis 2a was not supported. Hypothesis 2b stated high power distance is positively correlated with emotion-focused coping strategies. There was not a significant relationship between high power distance and emotion-focused coping strategies, $r(123) = .00, p = .58$. Therefore, hypothesis 2b was not supported. Research question 2c asked whether uncertainty avoidance is positively correlated with emotion-focused coping. There was not a significant relationship between uncertainty avoidance and emotion-focused coping strategies, $r(123) = .11, p = .22$. Therefore, the answer to research question 2c is the evidence does not suggest that there is a relationship between uncertainty avoidance and emotion-focused coping. Research Question 2d asked whether masculinity is positively correlated with problem-focused coping. There was not a significant relationship between masculinity and problem-focused coping strategies, $r(123) = .08, p = .37$. Therefore, the answer to research question 2d is the evidence does not suggest that there is a relationship between masculinity and problem-focused coping. Research Question 2e asked whether long term orientation is positively correlated with emotion-focused coping. There was not a significant relationship between long term orientation and emotion-focused coping strategies, $r(123) = -.13, p = .15$. Therefore, the answer to research question 2e is the evidence does not suggest that there is a relationship between long term orientation and emotion-focused coping. Research Question 2f asked

whether indulgence is positively correlated with emotion-focused coping”. There was not a significant relationship between indulgence and emotion-focused coping strategies, $r(123) = -.16, p = .50$. Therefore, the answer to research question 2f is the evidence does not suggest that there is a relationship between indulgence and emotion-focused coping.

Recall that hypothesis 3 stated “control mediates each of the relationships between values and coping”. Structural equation modeling (SEM) using the SEMlj module in Jamovi (2023) was used to investigate the mediating role of control in the relationship between each value and coping style, with personality as a control variable. The absolute model fit was evaluated using the following goodness of fit indices and suggested acceptable fit values (Hu & Bentler, 1999): Chi-square (χ^2), Comparative Fit Index (CFI) and Tucker-Lewis index (TLI) of .90 and higher, root mean square error of approximation (RMSEA) values below .08, and standardized root mean square residual (SRMR) values below .10. Total effect, direct effect, and indirect relationships were estimated using maximum likelihood parameter estimation method.

The CFI value of the hypothesized model was .94 and SRMR is .03 indicating good fit, however, the TLI value is .39; and the RMSEA is .10, suggesting that there may be room for improvement in the model. While the model shows some discrepancies, the significant improvement of the chi-square values for the user model over baseline model $\chi^2 = 20.4 (df = 9, p = 0.02)$ and the good fit indicated by the CFI and SRMR values support the mediation model

involving control and values as predictors of coping style (See Appendix B, Table 2).

The overall model predicted 15.6% of variance in problem-focused coping and 8.5% of the variance in emotion-focused coping (See Appendix B, Table 5). The overall model with the calculated path estimates, their standard errors, and their p-values are displayed in Table 6. As can be seen from the data, the only significant paths were problem-focused coping and long-term orientation ($B = 0.21, SE = .10, p = .03$) and control and uncertainty avoidance ($B = 1.55, SE = .56, p = .01$). All the other paths were not significant. Further, none of the indirect effects were statistically significant (See Appendix B, Table 7). Therefore, hypothesis 3 was not supported.

Research question 4 asked whether the relationships differ between Nigeria and United States. To examine the similarities or differences between the relationships for the two countries, the Pearson correlations were compared. I used a critical value of .25 as the magnitude value for comparison, as this represents the smallest a correlation can be and still be significant with a sample size of 61 and an α level of .05. As can be seen in tables 2 & 3, the relationships were largely similar. The relationship between indulgence and locus of control for the United States $r(75) = -.04$ and for Nigeria $r(58) = -.30$, indulgence and problem focused coping for the United States $r(75) = .04$ and for Nigeria $r(58) = .38$, conscientiousness and extraversion for the United States $r(75) = .39$ and for Nigeria $r(58) = .14$, and conscientiousness and neurotic for the United States $r(75) = .48$ and for Nigeria $r(58) = .23$ appeared to be different. To test whether the

mediation relationships differed, the same structural equation model used to test hypothesis 3 was used. However, the data were split into the Nigerian sample and the United States sample (See Appendix B, Table 8). As can be seen from the data, none of the indirect effects were statistically significant, therefore, research question 4 was not supported.

CHAPTER IV: DISCUSSION

This study sought to examine the cross-cultural differences or similarities in the stress coping process between the United States and Nigeria by examining the relationships among control, coping strategies, and values for both countries. The results showed that hypotheses 1a, 1b, were not supported meaning that individuals' locus of control may not necessarily impact their choice of coping strategy. These results do not align with previous research suggesting that problem-focused coping is regarded to be effective in situations where individuals perceive they have some control over the outcome or its recurrence, whereas emotion-focused coping is thought to be good in situations where individuals perceive they have little control over the outcome or its recurrence (Kim & Duda, 2003). However, the authors point to the fact that the relationship between control and coping strategies is complex and influenced by various factors and highlight the need for further investigation.

Research question 2 aimed to explore the correlation between values and coping strategies. The results do not answer this research question. There was no significant relationship between values and problem-focused coping strategies, as well as values and emotion-focused coping strategies. These findings suggest that cultural values alone may not be meaningful predictors of coping strategies. These findings are different from previous research that found that people in situations that place more emphasis on intergroup harmony (i.e., collectivist cultures) may be less likely to report problem-focused coping strategies when dealing with stressors (Tweed et al. 2004), and people from high-power distance cultures may

report fewer attempts to change the situation (i.e., problem-focused coping) when coping with stress (Hofstede, 1980). Other factors, such as personal experiences, learning histories, and individual differences, are likely to play a significant role in shaping coping behaviors.

Hypothesis 3 proposed that control would mediate the relationship between values and coping strategies while controlling for personality differences. However, the results did not provide support for this hypothesis. These findings indicate that control does not appear to play a mediating role in the relationship between values and coping strategies. This contradicts with previous research that have found that control can act as a mediator in the relationship between values and coping strategies (Aldwin, 2007; Chun et al., 2006). It is possible that other mechanisms or variables not considered in this study may be involved in this relationship.

Finally, hypothesis 4 proposed that the relationships would differ between Nigerians and Americans. However, the results did not provide support for this hypothesis. These findings indicate that the relationship between values, control, and coping strategies does not appear to vary significantly between the two countries. This would suggest that the two countries may be quite similar in the relationships between these variables, even if there are differences in the relative standing on the variables themselves. Overall, the coping process does not seem to be influenced by the variables studied and does not seem to depend on the country one is from.

Strengths of this Study

This study had several strengths in its design. The study used multiple recruitment methods to reach a diverse pool of participants such as university classes, international student offices, personal networks, and social media platforms. This increased the likelihood of capturing a representative sample from both Nigeria and the United States. Indeed, there were 55.7% ($n= 77$) participants of United States of America nationality and 44.3% ($n= 61$) of Nigerian nationality.

Additionally, participation in the survey was voluntary, responses were kept anonymous, and participants had the option to skip questions they were uncomfortable with. These ethical considerations promote participant comfort and protect their privacy, enhancing the overall integrity of the study. Another strength of this study was that by setting the minimum age requirement for participation at 18 and above, the study ensured that participants had a certain level of life experience and maturity. This criterion increases the likelihood of obtaining meaningful responses related to stress and coping strategies, as older individuals may have developed more established coping mechanisms over time (Moos et al., 1993).

Last, this study incorporated demographic questions that provided additional insights into the participants' backgrounds. By asking about the length of time lived in the country of origin and outside the country, as well as the state of longest residence, the study consisted of individuals who had lived a long time in their country of origin and their culture had a meaningful impact on their self.

Limitations of this Study

One of the potential limitations that may have impacted the study's results is the relatively small number of participants included in the analysis. According to an *a priori* power analysis, the number of suggested participants was 166, however, the study only included 138 participants. The insufficient sample size could have led to reduced statistical power, making it more challenging to detect significant relationships or differences. With fewer participants, the study may lack the necessary statistical power to identify subtle effects or differences between variables accurately. However, given the relative magnitude of the relationships observed (i.e., near zero), power is unlikely to be a significant problem. Future efforts should be made to increase the number of participants to enhance the statistical power and improve the precision of the estimates.

Another limitation of this study is the use of the Values Survey Module (VSM) developed by Hofstede and Miov (2013). The VSM is not meant to be used for this kind of research. It is not designed for one to calculate an individual value score for each person. Instead, it is meant to calculate a value score for a whole country. Therefore, future research should utilize a more appropriate measure for capturing individual values.

The final limitation of this study is the reliance on self-report measures to assess values, control, and coping style. Self-report measures are susceptible to various biases, including social desirability bias, response bias, and memory recall bias (Wilson et al., 2012). These biases may introduce measurement error and affect the accuracy and reliability of the collected data. Future studies could

benefit from incorporating objective measures or employing multiple data collection methods to enhance the validity of the findings.

Implications of this Study

These findings have implications for individuals, practitioners, and researchers in fields such as psychology, counseling, and healthcare. These results suggest that the coping process may be more universal and less dependent on cultural or contextual factors. Practitioners working in diverse settings should be cautious about assuming significant cultural variations in coping strategies and may need to adopt a more individualized approach when supporting individuals in their coping efforts. This highlights the importance of considering individual differences and other factors when designing interventions or providing support. Second, the generalizability of coping theories and models becomes a topic of discussion. If the coping process is relatively consistent across different countries and cultural contexts, it raises questions about the extent to which existing theories and models can be applied universally. Researchers need to critically evaluate the cross-cultural applicability of coping theories and consider other contextual factors beyond cultural values that may influence the effectiveness of specific coping strategies. Indeed, researchers may need to shift their focus to other factors or variables that could potentially influence the coping process as the findings suggest that the variables examined in the study are not significant predictors of coping, and there may be other unexplored factors that play a more substantial role. Researchers can explore alternative variables or factors to gain a better understanding of the coping process.

Future Research Directions

Future research should prioritize addressing the limitation of a small sample size by employing various strategies to increase participant recruitment, such as expanding the recruitment efforts to reach a broader population or extending the data collection period to ensure an adequate number of participants. A larger sample size would allow for more robust analyses and enhance the ability to detect small significant relationships or differences between variables.

Future research should consider using alternative measurement tools of cultural value assessments that can be used to assess individual-level values as opposed to the Values Survey Module (VSM) developed by Hofstede and Minkov (2013). Researchers could examine instruments that have been validated and widely used in the field of psychology, such as the Schwartz's Value Survey (SVS) developed by Schwartz (1992). This scale allows for the assessment of individual value orientations and provide a more nuanced understanding of how values influence behavior and decision-making.

Finally, researchers who are interested in the relationship between control and coping strategies could experimentally manipulate this in the lab. They could induce a stressful situation and design a task that imposes the use of a specific control mechanism to see how that affects coping. They could also adopt longitudinal studies to examine how the relationship unfolds over time.

Conclusion

In conclusion, this study's findings do not support the hypothesized relationships between control, coping strategies, and values. The results suggest

no significant relationships between these variables meaning that coping process may be relatively consistent across different countries or cultural contexts. Further research should be carried out to explore additional variables that may provide more comprehensive understanding of the relationships between control, coping strategies, and values.

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APPENDICES

Appendix A

Measures

Locus of Control Scale

For each question select the statement that you agree with the most

- 1a. Children get into trouble because their parents punish them too much.
- b. The trouble with most children nowadays is that their parents are too easy with them.
- 2a. Many of the unhappy things in people's lives are partly due to bad luck.
- b. People's misfortunes result from the mistakes they make.
- 3a. One of the major reasons why we have wars is because people don't take enough interest in politics.
- b. There will always be wars, no matter how hard people try to prevent them.
- 4a. In the long run people get the respect they deserve in this world
- b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- 5a. The idea that teachers are unfair to students is nonsense.
- b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
- 6a. Without the right breaks one cannot be an effective leader.
- b. Capable people who fail to become leaders have not taken advantage of their opportunities.
- 7a. No matter how hard you try some people just don't like you.

b. People who can't get others to like them don't understand how to get along with others.

8a. Heredity plays the major role in determining one's personality.

b. It is one's experiences in life which determine what they're like.

9a. I have often found that what is going to happen will happen.

b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10a. In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.

b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.

b. Getting a good job depends mainly on being in the right place at the right time.

12a. The average citizen can have an influence in government decisions.

b. This world is run by the few people in power, and there is not much the little guy can do about it.

13a. When I make plans, I am almost certain that I can make them work.

b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14a. There are certain people who are just no good.

16a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

b. Getting people to do the right thing depends upon ability. Luck has little or nothing to do with it.

17a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.

b. By taking an active part in political and social affairs the people can control world events.

18a. Most people don't realize the extent to which their lives are controlled by accidental happenings.

b. There really is no such thing as "luck."

19a. One should always be willing to admit mistakes.

b. It is usually best to cover up one's mistakes.

20a. It is hard to know whether or not a person really likes you.

b. How many friends you have depends upon how nice a person you are.

21a. In the long run the bad things that happen to us are balanced by the good ones.

b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22a. With enough effort we can wipe out political corruption.

b. It is difficult for people to have much control over the things politicians do in office.

23a. Sometimes I can't understand how teachers arrive at the grades they give.

b. There is a direct connection between how hard I study and the grades I get.

24a. A good leader expects people to decide for themselves what they should do.

b. A good leader makes it clear to everybody what their jobs are.

25a. Many times, I feel that I have little influence over the things that happen to me.

b. It is impossible for me to believe that chance or luck plays an important role in my life.

26a. People are lonely because they don't try to be friendly.

b. There's not much use in trying too hard to please people, if they like you, they like you.

27a. There is too much emphasis on athletics in high school.

b. Team sports are an excellent way to build character.

28a. What happens to me is my own doing.

b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29a. Most of the time I can't understand why politicians behave the way they do.

b. In the long run the people are responsible for bad government on a national as well as on a local level.

Brief-COPE

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real".
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies,
watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.

22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

Values Survey Module (VSM)

Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across): 1 = of utmost importance 2 = very important 3 = of moderate importance 4 = of little importance 5 = of very little or no importance

1. Have sufficient time for your personal or home life.
2. Have a boss (direct superior) you can respect.
3. Get recognition for good performance.
4. Have security of employment.
5. Have pleasant people to work with.
6. Do work that is interesting.
7. Be consulted by your boss in decisions involving your work.
8. Live in a desirable area.
9. Have a job respected by your family and friends.
10. Have chances for promotion.

In your private life, how important is each of the following to you: (please circle one answer in each line across):

11. Keeping time free for fun
12. Moderation: having few desires
13. Doing a service to a friend
14. Thrift (not spending more than needed)

15. How often do you feel nervous or tense?
16. Are you a happy person? 1. always 2. usually 3. sometimes 4. seldom 5. Never
17. Do other people or circumstances ever prevent you from doing what you really want to? 1. yes, always 2. yes, usually 3. sometimes 4. no, seldom 5. no, never.
18. All in all, how would you describe your state of health these days? 1. very good 2. good 3. fair 4. poor 5. very poor
19. How proud are you to be a citizen of your country? 1. very proud 2. fairly proud 3. somewhat proud 4. not very proud 5. not proud at all
20. How often, in your experience, are subordinates afraid to contradict their boss (or students their teacher?) 1. never 2. seldom 3. sometimes 4. usually 5. always
- To what extent do you agree or disagree with each of the following statements?
(Please circle one answer in each line across): 1 = strongly agree 2 = agree 3 = undecided 4 = disagree 5 = strongly disagree
21. One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work.
22. Persistent efforts are the surest way to results.
23. An organization structure in which certain subordinates have two bosses should be avoided at all costs.
24. A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best.

Some information about yourself (for statistical purposes):

25. Are you: 1. male 2. female 3. Non-binary 4. Prefer not to say 5. Other

26. How old are you? 1. Under 20 2. 20-24 3. 25-29 4. 30-34 5. 35-39

6. 40-49 7. 50-59 8. 60 or over

27. What is your employment status

- Employed for wages - Self-employed – Student – Retired

– Unemployed

28. What is your nationality? - Nigerian - American

29. What was your nationality at birth (if different)?

30. How long have you lived in your country of origin?

31. How long have you lived outside your country of origin?

32. In what state have you resided the longest?

The 40-Item Mini-Maker Set

How Accurately Can You Describe Yourself

Please use this list of common human traits to describe yourself as accurately as possible.

Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and of roughly your same age. Before each trait, please write a number indicating how accurately that trait describes you, using the following rating scale:

	Inaccurate					Accurate			
Extremely	Very	Moderately	Slightly		Slightly	Moderately	Very	Extremely	
1	2	3	4	5	6	7	8	9	

1. Bashful
2. Bold
3. Careless
4. Cold
5. Complex
6. Cooperative
7. Creative
8. Deep
9. Disorganized
10. Efficient
11. Energetic
12. Envious
13. Extraverted
14. Fretful

15. Harsh
16. Imaginative
17. Inefficient
18. Intellectual
19. Jealous
20. Kind
21. Moody
22. Organized
23. Philosophical
24. Practical
25. Quiet
26. Relaxed
27. Rude
28. Shy
29. Sloppy
30. Sympathetic
31. Systematic
32. Talkative
33. Temperamental
34. Touchy
35. Uncreative
36. Unenvious
37. Unintellectual
38. Unsympathetic
39. Warm
40. Withdrawn

Appendix B

Data Analyses

Table 1

Correlation Matrix for Combined Countries

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Locus of control	12.5	3.39	—													
2 Problem focused	2.89	0.54	-.09	—												
3 Emotion focused	2.52	0.43	.05	.37	—											
4 Power distance	3.07	0.40	-.01	-.06	.04	—										
5 Individualism	3.18	0.41	.05	.03	-.14	.08	—									
6 Masculinity	2.93	0.37	.04	.08	-.02	.08	-.17	—								
7 Uncertainty avoidance	2.70	0.53	.26	-.17	.11	.07	.03	-.07	—							
8 Long term orientation	3.13	0.48	-.01	.14	-.13	.06	.27	-.06	-.08	—						
9 Indulgence	3.34	0.48	-.14	.18	-.06	.16	.07	-.02	-.07	-.10	—					
10 Extraversion	5.09	1.30	-.07	.17	-.02	-.06	-.11	-.03	-.14	-.09	.20	—				
11 Agreeable	6.80	1.05	-.05	.26	.04	.05	.06	.12	-.18	-.08	.37	.21	—			
12 Neurotic	4.27	1.27	.31	-.16	.18	-.08	-.06	.04	.31	-.12	-.15	.00	-.24	—		
13 Openness	6.64	1.15	-.01	.34	.01	-.11	.14	-.07	-.15	-.04	.25	.19	.40	-.01	—	
14 Conscientiousness	6.55	1.03	-.16	.21	-.08	-.01	-.18	.02	-.27	-.06	.07	.30	.23	-.38	.27	—

Note: Significant p-values are bolded

Table 2*Correlation Matrix for Nigerians*

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Locus of control	12.5	3.57	—													
2 Problem focused	2.99	0.53	-.20	—												
3 Emotion focused	2.47	0.40	.10	.30	—											
4 Power distance	3.06	0.43	.03	.07	.20	—										
5 Individualism	3.15	0.35	.22	.13	-.08	.01	—									
6 Masculinity	2.95	0.41	-.06	.13	-.12	-.04	-.21	—								
7 Uncertainty avoidance	2.61	0.45	.20	-.21	.05	-.06	.03	-.07	—							
8 Long term orientation	3.20	0.49	-.06	.02	-.11	.16	.23	.09	-.13	—						
9 Indulgence	3.38	0.48	-.30	.38	.00	.03	.10	-.24	-.15	-.05	—					
10 Extraversion	5.11	0.92	-.22	.16	-.10	.01	-.10	.05	.00	-.08	.20	—				
11 Agreeable	6.96	1.06	-.16	.38	.00	.04	.15	.11	-.27	.08	.27	.20	—			
12 Neurotic	3.82	1.14	.22	-.12	.20	-.09	.03	.05	.13	-.06	-.21	-.07	-.31	—		
13 Openness	6.98	1.06	-.01	.40	.04	-.17	.18	-.04	-.03	-.26	.25	.29	.43	-.04	—	
14 Conscientiousness	6.86	0.93	-.12	.23	-.02	.00	-.31	.04	-.21	-.13	.03	.14	.34	-.48	.21	—

Note: Significant p-values are bolded

Table 3*Correlation Matrix for United States Americans*

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Locus of control	12.5	3.26	—													
2 Problem focused	2.80	0.54	.01	—												
3 Emotion focused	2.56	0.46	.02	.47	—											
4 Power distance	3.09	0.38	-.03	-.15	-.07	—										
5 Individualism	3.20	0.44	-.04	-.01	-.19	.12	—									
6 Masculinity	2.92	0.39	.13	.03	.07	.18	-.15	—								
7 Uncertainty avoidance	2.77	0.57	.31	-.11	.10	.14	.02	-.06	—							
8 Long term orientation	3.08	0.48	.01	.20	-.12	.00	.31	-.18	-.04	—						
9 Indulgence	3.31	0.47	-.04	.04	-.08	.26	.06	.15	-.02	-.15	—					
10 Extraversion	5.08	1.53	.00	.18	.01	-.09	-.11	-.07	-.18	-.10	.21	—				
11 Agreeable	6.68	1.05	.05	.15	.09	.07	.03	.12	-.11	-.21	.42	.22	—			
12 Neurotic	4.61	1.27	.40	-.10	.14	-.11	-.14	.07	.34	-.10	-.09	.04	-.14	—		
13 Openness	6.38	1.16	.00	.25	.04	-.06	.16	-.12	-.17	.03	.24	.15	.34	.16	—	
14 Conscientiousness	6.31	1.04	-.19	.14	-.09	.01	-.10	-.01	-.25	-.09	.06	.39	.11	-.23	.22	—

Note: Significant p-values are bolded

Table 4

Fit indices for control mediating the relationship between values and coping.

	Model
User model χ^2	20.4
Baseline model χ^2	279.1
SRMR	0.028
RMSEA	0.096
Comparative Fit Index (CFI)	0.94
Tucker-Lewis Index (TLI)	0.389

Table 5

R² for control mediating the relationship between values and coping.

Variable	R²
Problem focused coping	0.156
Emotion focused coping	0.085
Control	0.084

Table 6*Direct effects between values, coping and control.*

Dep	Pred	Estimate	SE	p
Problem focused coping	Control	0.00	.01	.73
Problem focused coping	P.D	-0.16	.12	.16
Problem focused coping	IDV	0.03	.12	.78
Problem focused coping	MAS	0.11	.13	.39
Problem focused coping	UA	-0.03	.09	.71
Problem focused coping	LTO	0.21	.10	.03
Problem focused coping	IVR	0.15	.10	.14
Problem focused coping	Agreeableness	0.09	.05	.04
Problem focused coping	Neurotism	0.00	.04	.91
Problem focused coping	Conscientiousness	0.08	.04	.08
Emotion focused coping	Control	0.00	.01	.88
Emotion focused coping	P.D	0.08	.09	.37
Emotion focused coping	IDV	-0.15	.10	.13
Emotion focused coping	MAS	-0.09	.11	.39
Emotion focused coping	UA	0.04	.08	.62
Emotion focused coping	LTO	-0.07	.08	.39
Emotion focused coping	IVR	-0.08	.08	.33
Emotion focused coping	Agreeableness	0.06	.04	.14
Emotion focused coping	Neurotism	0.05	.03	.10
Emotion focused coping	Conscientiousness	-0.02	.04	.48
Control	P.D	-0.13	.75	.87
Control	IDV	0.59	.76	.44
Control	MAS	0.67	.82	.41
Control	UA	1.55	.56	.01
Control	LTO	-0.07	.63	.92
Control	IVR	-0.88	.63	.16

Note: significant p-values are bolded

Table 7*Indirect effects of values on coping through control.*

Description	Estimate	SE	p
Power distance ⇒ Control ⇒ Problem focused coping	0.00	.00	.88
Power distance ⇒ Control ⇒ Emotion focused coping	0.00	.00	.91
Individualism. ⇒ Control ⇒ Problem focused coping	0.00	.01	.76
Individualism. ⇒ Control ⇒ Emotion focused coping	0.00	.01	.88
Masculinity ⇒ Control ⇒ Problem focused coping	0.00	.01	.75
Masculinity ⇒ Control ⇒ Emotion focused coping	0.00	.01	.88
Uncertainty Avoid ⇒ Control ⇒ Problem focused coping	-0.01	.02	.74
Uncertainty Avoid ⇒ Control ⇒ Emotion focused coping	0.00	.02	.88
LTO ⇒ Control ⇒ Problem focused coping	0.00	.00	.92
LTO ⇒ Control ⇒ Emotion focused coping	0.00	.00	.93
Indulgence ⇒ Control ⇒ Problem focused coping	0.00	.01	.74
Indulgence ⇒ Control ⇒ Emotion focused coping	0.00	.01	.88

Table 8*Indirect effects of values on coping through control by country.*

Description	Estimate	SE	p
(Power distance \Rightarrow Control \Rightarrow Problem focused coping) ₁	0.00	.02	.85
(Power distance \Rightarrow Control \Rightarrow Problem focused coping) ₂	-0.01	.02	.81
(Power distance \Rightarrow Control \Rightarrow Emotion focused coping) ₁	0.01	.02	.55
(Power distance \Rightarrow Control \Rightarrow Emotion focused coping) ₂	0.00	.01	.81
(Individualism \Rightarrow Control \Rightarrow Problem focused coping) ₁	0.00	.01	.89
(Individualism \Rightarrow Control \Rightarrow Problem focused coping) ₂	-0.06	.06	.33
(Individualism \Rightarrow Control \Rightarrow Emotion focused coping) ₁	0.00	.01	.85
(Individualism \Rightarrow Control \Rightarrow Emotion focused coping) ₂	0.04	.05	.47
(Masculinity \Rightarrow Control \Rightarrow Problem focused coping) ₁	0.01	.03	.85
(Masculinity \Rightarrow Control \Rightarrow Problem focused coping) ₂	0.00	.03	.88
(Masculinity \Rightarrow Control \Rightarrow Emotion focused coping) ₁	-0.02	.03	.46
(Masculinity \Rightarrow Control \Rightarrow Emotion focused coping) ₂	0.00	.02	.88
(Uncertainty Avoidance \Rightarrow Control \Rightarrow Problem focused coping) ₁	0.01	.04	.84
(Uncertainty Avoidance \Rightarrow Control \Rightarrow Problem focused coping) ₂	-0.02	.03	.53
(Uncertainty Avoidance \Rightarrow Control \Rightarrow Emotion focused coping) ₁	-0.03	.03	.42
(Uncertainty Avoidance \Rightarrow Control \Rightarrow Emotion focused coping) ₂	0.01	.02	.59
(Long Term Orientation \Rightarrow Control \Rightarrow Problem focused coping) ₁	0.00	.01	.86
(Long Term Orientation \Rightarrow Control \Rightarrow Problem focused coping) ₂	0.01	.02	.56
(Long Term Orientation \Rightarrow Control \Rightarrow Emotion focused coping) ₁	-0.01	.01	.71
(Long Term Orientation \Rightarrow Control \Rightarrow Emotion focused coping) ₂	-0.01	.02	.61
(Indulgence \Rightarrow Control \Rightarrow Problem focused coping) ₁	0.00	.00	.90
(Indulgence \Rightarrow Control \Rightarrow Problem focused coping) ₂	0.05	.05	.30
(Indulgence \Rightarrow Control \Rightarrow Emotion focused coping) ₁	0.00	.01	.87
(Indulgence \Rightarrow Control \Rightarrow Emotion focused coping) ₂	-0.03	.04	.47

Note. Description subscripts refer to groups, with 1= group American, 2= group Nigerian

Appendix C

IRB Approval

Monday, July 17, 2023 at 14:21:11 Central Daylight Time

Subject: [EXTERNAL] IRB-FY2023-43 - Modification: Modification Decision Letter
Date: Sunday, April 9, 2023 at 8:37:29 PM Central Daylight Time
From: do-not-reply@cayuse.com
To: Alexander T. Jackson, Michael Hein, Oluwatomisin Phillips, Patrick McCarthy
Attachments: ATTO0001.png



Office of Research Compliance
2269 Middle Tennessee Blvd.
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Box 124
Murfreesboro, TN 37132
www.mtsu.edu/irb

Date: April 9, 2023
PI: Oluwatomisin Phillips
Department: Middle Tennessee State University, Psychology
Re: Modification - IRB-FY2023-43
Stress and Coping Strategies: A Cross-Cultural Study

The Middle Tennessee State University Institutional Review Board has rendered the decision below for Stress and Coping Strategies: A Cross-Cultural Study.

Decision: Approved
Findings: This modification to collect names in a separate list and destroy them after credit has been granted is being approved.
Research Notes:

Sincerely,

Middle Tennessee State University Institutional Review Board