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# Impacts of Personal Cultural Orientations on College Students' Psychological Health and Preventive Behaviors During the COVID-19 Period

Honors Thesis

Submitted

In Partial Fulfillment

of the

Requirements of HON 420

By

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# Impacts of Personal Cultural Orientations on College Students' Psychological Health and Preventive Behaviors During the COVID-19 Period

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### Abstract

The COVID-19 pandemic has brought dramatic life changes to individuals across the world. Personal cultural orientations of these individuals alter the way individuals respond to the pandemic and their mental wellness. This research investigates how personal cultural orientations impact college students' mental health primarily anxiety, prevention behaviors and intentions to reduce the spread of COVID-19, and active coping strategies during the COVID-19 pandemic. Participants (n=155) completed measures of independence, ambiguity intolerance, masculinity, gender equality, mental health, prevention behaviors to reduce the spread of COVID-19, and active coping strategies to protect themselves during the pandemic. Results revealed that people with higher levels of independence more actively engaged in active coping strategies. People with higher levels of ambiguity intolerance related to more mental problems, more actively engaged in coping strategies and prevention behaviors. People with higher levels of masculinity related to more mental problems, less actively engaged in coping strategies and prevention behaviors. Lastly, people with higher levels of gender equality related to fewer mental problems, more actively engaged in coping strategies and prevention behaviors. These findings highlight the importance of the interplay between personal cultural orientations and both prevention behaviors and engagement in active coping strategies during times of crisis. Additional findings also show that females tend to have more anxiety than males and engage

more in prevention behaviors and coping strategies during the COVID-19 pandemic. In addition, people with higher household incomes (>\$60,000) tend to have more mental stress than people with lower household incomes (<\$20,000).

### Keywords:

Personal cultural orientations, COVID-19, mental health, coping strategies, prevention behaviors

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### **1. Introduction**

The outbreak of the COVID-19 pandemic in January 2020 brought a life-changing crisis to all human beings across the world in ways significantly affecting people's physical and mental health (Lancaster, Arango, 2021). As of December 2022, more than 650 million cases of COVID-19 and 6.6 million fatalities have been reported worldwide with the United States, India, France, Germany, Brazil, and South Korea reporting the largest number of cases (WHO, 2022). The degree of mental stress and adversity individuals experienced due to the COVID-19 varies with the conditions of the external environment factors of economics, social and cultural factors. The disruptions caused by COVID-19 are especially traumatic for those who are in vulnerable situations such as college students living on campus (Lancaster, Arango, 2021). Many college students were required to leave their dormitories and be separated from their social groups while being expected to continue their academic work as usual (Copeland et al, 2021).

We focus our study on this vulnerable group to examine how individuals respond to such a pandemic period behaviorally and psychologically. We try to understand how people's traits such as personal cultural orientations would influence their psychological health and shape their coping behaviors during the period of pandemic.

Some research has been conducted to understand how countries with diverse cultural orientations differ in their behavioral responses during COVID-19. For example, the interaction between the formal (institutional mechanisms) and the informal (cultural underpinnings) elements was studied for how such relationships guided the decision-making process (Nair, 2022). However, even though implementing similar regulation policies, countries with different cultures demonstrated different behavioral responses and policy results, as seen in India's lockdown versus

China's lockdown policy (Ding et al, 2021). While most research about how cultural orientations affect behavior patterns had been focused on national culture, few research examined personal cultural orientations and their relationships with people's behavioral and psychological activities. Individuals from the same country may not share similar cultural characteristics (Sharma, 2009). Therefore, personal cultural orientations are both conceptually and empirically different than natural cultural dimensions. While national cultural dimensions are the values held by a majority of the population, personal cultural orientations are based on individuals' social upbringing so that individuals may demonstrate diverse cultural traits. Studies demonstrate that personal cultures shape individuals' behaviors and ultimately predict individuals' well-being during COVID-19 (Nair, 2022). Thus this research tries to bridge the gap by examining the relationships among personal cultural orientations (i.e., independence, ambiguity intolerance, masculinity, and gender equality), people's mental health (i.e., anxiety), active coping strategies, and corresponding preventive behaviors.

We asked the following research questions: How do personal cultural orientations influence college students' mental well-being during the pandemic? How do personal cultural orientations affect students' coping strategies in terms of tackling the pandemic problem? We propose that students with different cultural orientations would demonstrate different behavioral patterns and mental resilience in the face of the pandemic challenge.

#### 2. Literature Review and Hypothesis Development

Hofstede's scale lacks sufficient construct validity and reliability when applied on an individual level. The correlations among the items used to measure the national culture dimensions in Hofstede's study are positive and highly significant at the aggregated national level but are

mostly low and insignificant at the individual level (Brewer, Venaik, 2012). Therefore, by adapting Sharma's multi-dimensional scale, we can measure the individual differences in personal cultural orientations in consumer behavior, or in this case, students' behavior. We adopted Sharma's concept of personal cultural orientations and the related multi-dimensional scale. The construct validity and reliability have been empirically proved and are ready for use in culture research at the individual level.

Specifically, this research focused on four dimensions of personal cultural orientations that Sharma identified: Independence, Ambiguity Intolerance, Masculinity, and Gender Equality. Independence is defined as a personal cultural orientation associated with acting independently, having a strong self-concept, a sense of freedom, autonomy, and personal achievement. Ambiguity intolerance is the degree to which people can tolerate uncertain situations and ambiguity. Masculinity represents the expression of assertiveness, self-confidence, aggression, and ambition whereas gender equality is the extent to which people perceive men and women as equal in terms of social roles, capabilities, rights, and responsibilities.

Nair (2022) argues that if culture has "the potency to supplement or replace policy, it merits attention to understand the cultural dimensions shaping and guiding behavior, which can augment policy-level interventions to manage the ongoing pandemic" (Nair, 2022). Specifically, we try to understand how personal cultural orientations influence people's behavior and psychology. The Hospital Anxiety and Depression Scale developed by Zigmond and Snaith (1983) was used to measure students' two aspects of mental wellness: anxiety and depression. A brief COPE questionnaire developed by Carver (1997) was used to study people's coping strategies in the pandemic such as seeking emotional or instrumental support. The World Health Organization

COVID-19 Survey Tool and Guidance was used to measure prevention measures taken by individuals during the pandemic to decrease the risks of getting exposed to COVID-19.

#### Independence

The ties between individuals are loose in which everyone is expected to look after him/herself only in individualistic cultures (Hofstede, 2001, p. 225). Individualism is associated with independence whereas collectivism is associated with interdependence. Individualists prefer to act independently rather than as members of groups (Oyserman et al., 2002a). Independent individuals put more emphasis on personal goals, attitudes, needs, and rights and emphasize costbenefit analysis of relationships (Markus and Kitayama 1991) than group goals. Research demonstrates that social isolation is linked with adverse health consequences including depression (Novotney, No.5, 2019). Loneliness can have a negative impact on an individual's physical, mental, and cognitive health (Philosophical Transactions of the Royal Society, 2015). Yet highly independent people are self-reliant, strong-willed, and able to conquer such negative impacts in face of the obstacles. Thus they tend to adapt quickly and function normally during the COVID-19 period despite not being able to interact with others. Meanwhile, we can also anticipate that highly independent people are problem-solvers who would positively and actively seek possible solutions. We thus propose:

**H**<sub>1</sub>: People with higher levels of independence will relate to fewer mental problems, and more actively engage in coping strategies and prevention behaviors than people with lower levels of independence.

#### Ambiguity Intolerance

Intolerance for ambiguity is the degree to which individuals feel uncomfortable when confronted with ambiguity (de Mooij and Hofstede 2002). Intolerance for ambiguity is directly linked to distress, therefore, representing a risk factor for mental health (Petrocchi, S., Iannello, P., Ongaro, G. et al., 2022). People with high levels of ambiguity intolerance will have more mental problems because they can only function well with structure and order. As their normal structured daily lives have been disrupted by COVID-19, it causes people with high levels of ambiguity intolerance want to go back to their structured lives, they would actively prevent and cope with COVID-19 and follow the regulations in the hope of returning to their normal lives as soon as possible. We thus propose:

**H<sub>2</sub>:** People with higher levels of ambiguity intolerance will relate to more mental problems, and more actively engage in coping strategies and prevention behaviors than people with lower levels of ambiguity intolerance.

#### Masculinity

Masculinity is "the extent to which the dominant values in society are 'masculine', that is, assertiveness, the acquisition of money and things, and not caring for others, the quality of life, or people" (Hofstede 2001; p. 297). Masculine societies in comparison to feminine societies are more aggressive and competitive. In addition, masculinity represents a preference for achievement, assertiveness, and material success that associates with the dominance of self-ego. People with higher levels of masculinity are more materialistic. They have higher selfconfidence and believe themselves less vulnerable. Believing themselves vulnerable during the pandemic could hurt their pride. This leads them to more mental problems as they try to maintain this reputation throughout COVID-19. People with high levels of masculinity less actively engage in coping strategies and prevention behaviors because they find themselves less vulnerable and do not see the point of them having to cope as they believe they are stronger. We thus propose:

**H<sub>3</sub>:** People with higher levels of masculinity will relate to more mental problems, and less actively engage in coping strategies and prevention behaviors than people with lower levels of masculinity.

### Gender Equality

Gender equality is the extent to which people perceive men and women as equal in terms of responsibilities, social roles, and capabilities (Schwartz and Rubel Lifschitz 2009). People with high levels of gender equality will have fewer mental problems and more actively engage in coping strategies and prevention behaviors against COVID-19 because people with high levels of gender equality do not inherently believe and acknowledge gender differences and accept the difference of vulnerability between males and females. Therefore, males do not have to try to protect their reputation as being strong and not needing to engage in prevention behaviors to protect themselves from COVID, and females do not have to believe that whatever they do has no meaning as they already are the vulnerable population. Starting on the same line enables men and women to equally engage in coping strategies and prevention behaviors. We thus propose:

**H**<sub>4</sub>: People with higher levels of gender equality will relate to fewer mental problems, and more actively engage in coping strategies and prevention behaviors than people with lower levels of gender equality.

#### 3. Methodology

#### 3.1 Methodology and Results

This research takes a quantitative research approach. As the pandemic was deemed a critical life event that had major impacts on college students' lives, undergraduates from Eastern Kentucky University were surveyed to examine how their personal cultural orientations affect their mental health and prevention behaviors and coping strategies during the pandemic. After the initial IRB approval, a survey was created based on four well-established scales of personal cultural orientations (Sharma, 2010), Hospital Anxiety and Depression Scale (Zigmond, Snaith, 1983), Survey Tool and Guidance COVID-19 (WHO, 2023) and Brief COPE (Carver, 1997) to test how personal cultural orientations influence students' psychological and behavioral activities. Data were collected anonymously from October to December 2022. The survey was distributed to students of different majors at Eastern Kentucky University using an online survey administration tool (www.qualtrics.com). Participants agreed to participate in this study after reading a consent form. All constructs were measured using a 5-point Likert-type multi-item scale. Checking questions were used throughout the survey to determine the reliability of student responses. Students who did not answer checking questions correctly were removed from the final data. The first round of data collection had 194 responses. Data cleaning led to 155 final responses which were used for the data analysis. Respondents consisted of females (56.1%) and males (41.3%). The two main college departments represented were the College of Business and the College of Science, Technology, Engineering, and Mathematics. The main ethnicity of the sample was Caucasians. SPSS was used for the ANOVA analysis to test our hypotheses. To compare means between people with high levels of independence, ambiguity intolerance, masculinity, and gender

equality with people with low levels, ANOVA testing was performed with mental health, coping strategies, and prevention behaviors as the dependent variables.

#### 3.2 Measurement Instruments

Personal cultural orientations of independence, ambiguity intolerance, masculinity, and gender equality were assessed using Sharma's scale of personal cultural orientations. This scale conceptualizes cultural orientations on the individual level instead of a national level which relates to our sample of study of college students who share different orientations despite being from the same geographic area. Anxiety and depressive symptoms were assessed using the Hospital Anxiety and Depression Scale. This 14-item self-report questionnaire measures the intensity of both anxiety and depressive symptom. For this study, we focused on measuring the Anxiety part of the scale. Coping strategies were assessed using the Brief-Cope. This self-report scale measures 14 coping strategies, which are divided into adaptive strategies (active coping, planning, instrumental support, use of emotional support, venting, positive reframing, humor, acceptance, and religion) and maladaptive strategies. We focused on the strategies of active coping, planning, and using instrumental support for our study as these three strategies focus on problem-based coping. Finally, the World Health Organization Survey Tool and Guidance for COVID-19 was used to create questions that examined different types of prevention behaviors during the pandemic that included washing hands, social distancing, mask-wearing, and reducing in-person gatherings.

#### 4. Results

4.1 Profile of the respondents (n=155)

### Table 1.

#### Profile of the Respondents

Gender	Male	41.3%
	Female	56.1%
	Nin-Binary	2.6%
College Department	Business	36.8%
	Education	9.0%
	Health Sciences	7.7%
	Justice, Safety, & Military Service	1.3%
	Letters, Arts, & Social Sciences	11.6%
	Science, Technology, Engineering, & Mathematics	31.6%
	Undeclared/Others	1.9%
Household Income	Less than \$20,000	22.6%
	\$20,000 - \$39,999	9.7%
	\$40,000 - \$59,999	12.9%
	\$60,000 - \$79,999	15.5%
	\$80,000 - \$99,999	11.0%
	\$100,000 - \$119,000	14.2%
	\$120,000 - \$139,999	5.2%
	\$140,000 or more	9.0%

Among the 155 respondents, 41.3 % were male and 56.1% were female. The majority of the respondents were Business majors (36.8%) or Science, Technology, Engineering, & Mathematics majors (31.6%). Other college departments represented include the College of Education (9.0%), College of Health Sciences (7.7%), College of Justice, Safety, & Military Sciences (1.3%), College of Letters, Arts, & Social Sciences (11.6%), and Undeclared/Others (1.9%). The ethnicities of the respondents represented were Caucasian/White 82.6%. African American 4.5%, Asian/Pacific Islander 4.5%, Hispanic 4.5%, American Indian/Alaska Native 0.6%, and Others 3.2%. For this research, low-income households include households that earn less than \$20,000 (22.6%) annually and high-income households include households that earn more than \$60,000 annually (39.4%).

#### 4.2 Correlation Matrix

### Table 2.

### **Correlation Matrix**

Correla	tion Matrix												
Variabl	es	М	SD	1	2	3	4	5	6	7	8	9	10
1.	Independence	4.06	0.59	1									
2.	Ambiguity Intolerance	4.07	0.75	.195*	1								
3.	Masculinity	2.88	0.77	.072	095	1							
4.	Gender Equality	4.63	0.57	.361**	.401**	250**	1						
5.	Problem Based Coping	3.46	0.99	.138	306**	360**	.314**	1					
6.	Prevention Behavior	3.80	1.14	.098	.304**	376**	.336**	.674**	1				
7.	Anxiety	2.86	0.76	037	.407**	247**	.193*	.383**	.251**	1			
8.	Gender	1.58	0.50	.047	.433**	255**	.355**	.241**	.314**	.325**	1		
9.	College Department	1.46	0.50	124	019	240*	175	043	.068	.038	051	1	
10.	Household Income	1.71	0.46	.000	.019	022	.012	.042	.000	.192*	.078	.226*	1
*. Corn	elation is significant at the	0.05 leve	el.										

\*\*. Correlation is significant at the 0.01 level.

A Pearson correlation coefficient was computed to assess the linear relationships between personal cultural orientations and mental health, coping strategies, prevention behaviors, and different demographics. Results show that independence is highly correlated with ambiguity intolerance and gender equality. Ambiguity intolerance is highly correlated with independence, gender equality, problem-based coping, prevention behavior, anxiety, and gender. Masculinity is highly correlated with gender equality, problem-based coping, prevention behavior, anxiety, gender, and college department. Lastly, gender equality is highly correlated with independence, ambiguity intolerance, masculinity, problem-based coping, prevention behavior, anxiety, and gender.

#### 4.3 ANOVA Results

#### Table 3.

### **ANOVA** Results

Independence	HADS- Anxiety	0.968
_	Prevention Behavior	0.142
	Problem Based Coping Strategies	0.050*
Ambiguity Intolerance	HADS- Anxiety	< 0.001*
	Prevention Behavior	0.002*
	Problem Based Coping Strategies	0.002*
Masculinity	HADS- Anxiety	0.003*
	Prevention Behavior	< 0.001*
	Problem Based Coping Strategies	<0.001*
Gender Equality	HADS- Anxiety	0.007*
	Prevention Behavior	<0.001*
	Problem Based Coping Strategies	< 0.001*

In this study, we used ANOVA testing to test our hypotheses. The results showed that  $H_1$  is partially supported and  $H_2$ ,  $H_3$ , and  $H_4$  were supported. The results showed that people with a higher level of independence more actively engage in prevention behaviors (p=0.05). Higher levels of independence do not result in lower anxiety levels because people with higher levels of independence prefer to carry all the burden by themselves and therefore not share their stress with others. In addition, we hypothesize that people with higher levels of independence do not necessarily engage in more prevention behaviors because prevention behaviors in this case do not have to deal with one's independence levels but rather more so if that individual is willing to engage in prevention or not based on their motivations. People with higher levels of ambiguity intolerance have more mental problems (p<0.001) and engage more in coping strategies (p=0.002), and prevention behaviors (p=0.003), and less actively engage in coping strategies (p<0.001) and prevention behaviors (p<0.001) than people with lower levels of masculinity. People with higher levels of

gender equality will relate to fewer mental problems (0.007), and more actively engage in coping strategies (p<0.001) and prevention behaviors (p<0.001) than people with lower levels of gender equality.

#### Table 4.

**Additional Findings** 

Additional Findings	Dependent Variable	P value
Gender	Anxiety	<0.001*
1= Male (n=64)	Problem Based Coping	0.003*
2= Female (n=87)	Prevention Behavior	<0.001*
Major	Anxiety	0.696
1=Business (n=57)	Problem Based Coping	0.664
2= Technology/Science (n=49)	Prevention Behavior	0.490
Household Income	Anxiety	0.036*
1=<\$20,000 (n=35)	Problem Based Coping	0.645
2=>\$60,000 (n=85)	Prevention Behavior	0.996

In addition to our main findings, we conducted some additional findings based on our demographic results and found out that differences in gender results have different implications on mental health and coping strategies, and prevention behaviors during the COVID-19 pandemic. Results demonstrated that females tend to have higher anxiety levels and engage more in problem-based coping and prevention behaviors than males. Students from different college departments, specifically the College of Business and College of Technology and Science did not have different anxiety levels and engaged differently in their problem-based coping strategies and prevention behaviors. Finally, students who have a higher household income (categorized by an annual household income of more than \$60,000) are shown to have higher levels of anxiety than students with a lower household income (categorized by an annual household income of less than \$20,000).

#### **5. Discussion and Implications**

#### 5.1 Practical Implications

College students vary in their cultural orientations and showed different intentions to engage in coping strategies and prevention behaviors to reduce the spread of COVID-19. It is widely acknowledged that the COVID-19 pandemic had very deleterious effects on college student's mental health. Students' mental health was more severely impacted during lockdown periods, compared with unlock periods. After students entered their second year of the pandemic (2021), students anxiety and depression symptoms were more severe than the first year (2020). This can be explained through loneliness and feelings of social isolation as a result of the lockdown and social distancing. Social distancing was identified as a considerable stressor for students: COVID-19 specific concerns, social isolation, lack of interaction and emotional support as well as physical isolation have been linked to negative mental health trajectories. As our results showed that college students with higher levels of independence engaged in more coping strategies than students with lower levels of independence, college students who had higher levels of independence were able to function independently without the need for reliance support and was easier for them to plan for the long run during the pandemic. Thus, when institutions are creating or implementing policies, they should take into consideration people groups that may have low levels of independence and high levels of interdependence. For example, college institutions could create virtual connect groups for students so that they could find a community despite being in situations in which they are disconnected from the others such as during times of lockdown, quarantine, and online learning.

Distance learning imposed during lockdowns caused students to confront many challenges, both technical and human. The pandemic exposed students to new and stressful situations in which they did not have control over. Psychological stress can arise when individuals' environmental demands strain or exceed their adaptive capacity. Poor mental health can be affected by fast social change, social exclusion, unhealthy lifestyles, and physical illness. This supports our results in college students having higher levels of ambiguity intolerance having more mental problems than students with lower levels of ambiguity intolerance. In order to return to their normal lives as soon as possible, students actively participated in coping strategies and prevention behaviors. In addition, as students with higher levels of ambiguity intolerance more actively engaged in coping strategies and prevention behaviors than people with lower levels of ambiguity intolerance, it provides an insightful direction to institutions in how to handle emergency crises such as COVID-19 in the future. As college students are a vulnerable population, many are high in ambiguity intolerance. Therefore, when faced with an emergency crisis such as COVID-19, many do not know what to do. In this case, institutions can provide informational sessions and workshops to help guide students through, by explaining the current situation and remedies to make the situation better and guidelines for what they should do to ensure that they are keeping themselves and other people safe.

As illustrated by both our main findings and additional findings, there is a major difference between mental health (anxiety), problem-based coping, and prevention behaviors when it comes to gender. Although our results demonstrate that females tend to have higher levels of anxiety, it is important to take into account the fact that some men find it difficult to voice such anxieties as it would mean showing "unmanly" weakness and experiencing pressure from friends to appear tough and fearless. Therefore, the reported results may not be exact representations of the mental health condition of the male population. Thus, when institutions such as colleges are creating policies for situations such as COVID-19 in the future, they should take into account the different responses due to gender differences.

Men, because of gender socialization that often endorses avoiding so-called "feminine" symptoms, may be hesitant to report the emotional symptoms included in the diagnostic questionnaires (Berger et al., 2012). This could lead to a situation in which men's mental health impairment is overlooked and underdiagnosed. Masculine norms expect men to be tough and self-reliant; this means that men with COVID-19 symptoms are more likely to avoid or delay seeking medical advice. Men may perceive healthcare spaces to be "feminized" and often have lower levels of health literacy. There is evidence that fewer men are choosing to wear face masks and coverings, as well as that men may engage less in personal hygiene practices such as handwashing. Men are adhering to social distancing less strictly than women. Given that masculine expectations often require men to be invulnerable, they may feel like they must see themselves as "strong enough" to not have to worry about it. Men engage less than women in personal hygiene practices such as handwashing, which has been emphasized as vital to helping reduce the spread of coronavirus. This lower engagement may be in part because hygiene- and cleanliness-related behaviors are to some extent associated femininity. Men are also adhering to social distancing less actively than women. This could be a particular issue for younger male populations, who might be used to spending large amounts of time with their friends in public spaces, feel they are less at risk of the virus due to their age, find it hard to resist peer pressure to ignore social distancing guidelines for fear of being judged as "unmanly." Some men may find it difficult to voice such anxieties for fear that this would mean showing "unmanly" weakness and may experience pressure from friends to appear tough and fearless. Bereavement is also

influenced by gender norms. Many men may struggle to understand, confront, and express the difficult emotions they feel when a loved one passes away. Some people who have had COVID-19 report the experience to have been highly traumatic, with recovery sometimes being a lengthy, ongoing physical process that also has significant psychological and emotional impacts (Serafini, 2020). This may be highly difficult for some men to come to terms with if they are used to seeing themselves and their bodies as invulnerable and machine-like (Ruxton, Burrell, 2020). Hence, our study supports the existing literature by highlighting how students with higher levels of masculinity are less likely to demonstrate more mental problems. Furthermore, they are less likely to engage in coping strategies and prevention behaviors than students with lower levels of masculinity. In addition, students with higher levels of gender equality have fewer mental problems and are more likely to engage in both coping strategies and prevention behaviors.

As women have been shown to demonstrate higher levels of anxiety, online social/support groups can be created by institutions during a time when it is not viable to physically meet. By meeting people of similar age in the same geographic area, they will be able to share their stress and relieve their mental hardships to a certain extent. For men, considering that many do not want to report mental health issues or are vulnerable to protect their reputation, institutions can help create 'chatting' platforms that connect male college students with counseling experts and other classmates/professors. Through the form of just simply chatting, they may be able to share their worries or anxieties in the form of a conversation instead of going to a 'counseling session' in which they may be judged by their peers.

#### 5.2 Limitations and Future Research Directions

While this study tries to fill the gap in understanding how personal cultural orientations affect personal behavior and psychology during the COVID-19 pandemic, one possible limitation of the research is its limited generalization. The present results need to be interpreted with caution as the sample was college students from Eastern Kentucky and relevantly a small sample size of 155. Our results, therefore, need to be replicated with a more representative population. In addition, there may be memory loss in recalling behavioral patterns or actions during the COVID-19 pandemic as students may have different feelings now compared to when they were in the middle of the crisis. Extending this investigation to more diverse populations of both age and ethnicity could contribute further to the understanding of how the pandemic impacted the general population.

# Appendix A. Questionnaire

## PERSONAL CULTURAL ORIENTATIONS

Please indicate to what extent you agree with the following statements.

## (Independence)

	Strongly						Strongly	
	Disagree						Agree	
I would rather depend on myself than others.	0	0	0	0	0	0	0	
My personal identity, independent of others, is	0	0	0	0	0	0	0	
important to me.								
I rely on myself most of the time, rarely on others.	0	0	0	0	0	0	0	
It is important that I do my job better than others.	0	0	0	0	0	0	0	
I enjoy being unique and different from others in	0	0	0	0	0	0	0	
many respects.								

Please indicate to what extent you agree with the following statements.

## (Ambiguity Intolerance)

	Strongly	Strongly					
	Disagree						Agree
I find it difficult to function without clear directions	0	0	0	0	0	0	0
and instructions.							
I prefer specific instructions to broad guidelines.	0	0	0	0	0	0	0

I tend to get anxious easily when I don't know an	0	0	0	0	0	0	0
outcome.							
I feel stressful when I cannot predict consequences.	0	0	0	0	0	0	0
I feel safe when I am in my familiar surroundings.	0	0	0	0	0	0	0

Please indicate to what extent you agree with the following statements.

# (Masculinity)

	Strongly	Strongly					
	Disagree						Agree
Women are generally more caring than men.	0	0	0	0	0	0	0
Men are generally physically stronger than women.	0	0	0	0	0	0	0
Men are generally more ambitious than women.	0	0	0	0	0	0	0
Women are generally more modest than men.	0	0	0	0	0	0	0
Men are generally more logical than women.	0	0	0	0	0	0	0

Please indicate to what extent you agree with the following statements

# (Gender Equality)

	Strongly	Strongly					
	Disagree						Agree
It is ok for men to be emotional sometimes.	0	0	0	0	0	0	0
Men do not have to be the solo bread winner in a	0	0	0	0	0	0	0
family.							

Men can be as caring as women.	0	0	0	0	0	0	0
Women can be as ambitious as men.	0	0	0	0	0	0	0
Men and women can be equally aggressive.	0	0	0	0	0	0	0

## **PREVENTION BEHAVIOR**

Please recall your overall behavioral pattern during the COVID 19 pandemic in 2020 and 2021, then indicate to what extent you agree with the following statements.

	Strongly			Neutral			Strongly
	Disagree						Agree
I preferred to wear a mask during the COVID 19	0	0	0	0	0	0	0
pandemic in 2020 and 2021.							
I preferred to maintain social distancing during	0	0	0	0	0	0	0
the COVID 19 pandemic in 2020 and 2021.							
Please select "Neutral" for this question.	0	0	0	0	0	0	0
I washed my hands more frequently during the	0	0	0	0	0	0	0
COVID 19 pandemic in 2020 and 2021 than pre-							
COVID 19.							
I reduced my in-person social activities (e.g.	0	0	0	0	0	0	0
eating out, group partying, visiting friends etc.)							
during the COVID 19 pandemic in 2020 and							
2021.							

## MENTAL HEALTH

Please recall your overall behavioral pattern during the COVID 19 pandemic in 2020 and 2021, then indicate to what extent you agree with the following statements.

## (Hospital Anxiety and Depression Scale -- HADS)

	Not at			Sometimes			Most of the
	all						time
I felt tense or "wound up" during the COVID	0	0	0	0	0	0	0
19 pandemic in 2020 and 2021.							
I enjoyed the things I used to enjoy during the	0	0	0	0	0	0	0
COVID 19 pandemic in 2020 and 2021.							
I got a sort of frightened feeling as if something	0	0	0	0	0	0	0
awful was about to happen during the COVID							
19 pandemic in 2020 and 2021.							
I could laugh and see the funny side of things	0	0	0	0	0	0	0
during the COVID 19 pandemic in 2020 and							
2021.							
Worrying thoughts went through my mind	0	0	0	0	0	0	0
during the COVID 19 pandemic in 2020 and							
2021.							
Please select "sometimes" for this question.	0	0	0	0	0	0	0
I felt cheerful during the COVID 19 pandemic	0	0	0	0	0	0	0
in 2020 and 2021.							

I could sit at ease and feel relaxed during the	0	0	0	0	0	0	0
COVID 19 pandemic in 2020 and 2021.							
I felt as if I was slowed down during the	0	0	0	0	0	0	0
COVID 19 pandemic in 2020 and 2021.							
I got a sort of frightened feeling like	0	0	0	0	0	0	0
'butterflies' in the stomach during the COVID							
19 pandemic in 2020 and 2021.							
I had lost interest in my appearance during the	0	0	0	0	0	0	0
COVID 19 pandemic in 2020 and 2021.							
I felt restless as I had to be on the move during	0	0	0	0	0	0	0
the COVID 19 pandemic in 2020 and 2021.							
I looked forward with enjoyment to things	0	0	0	0	0	0	0
during the COVID 19 pandemic in 2020 and							
2021.							
I got sudden feelings of panic during the	0	0	0	0	0	0	0
COVID 19 pandemic in 2020 and 2021.							
I could enjoy a good book or radio or TV during	0	0	0	0	0	0	0
the COVID 19 pandemic in 2020 and 2021.							

### **BREIF COPING STRATEGIES**

Please recall your overall behavioral pattern during the COVID 19 pandemic in 2020 and 2021, then indicate to what extent you agree with the following statements.

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# (Active Coping)

	Strongly						Strongly	
	Disagree					Agree		
I had been concentrating my efforts on protecting	0	0	0	0	0	0	0	
myself from contracting virus during the COVID 19								
pandemic in 2020 and 2021.								
I had been taking actions to protect myself from	0	0	0	0	0	0	0	
contracting virus during the COVID 19 pandemic in								
2020 and 2021.								

Please recall your overall behavioral pattern during the COVID 19 pandemic in 2020 and 2021, then indicate to what extent you agree with the following statements.

# (Planning)

	Strongly						Strongly	
	Disagree	Agree						
I had been trying to come up with a strategy about	0	0	0	0	0	0	0	
how to protect myself from contracting virus during								
the COVID 19 pandemic in 2020 and 2021.								

Please recall your overall behavioral pattern during the COVID 19 pandemic in 2020 and 2021, then indicate to what extent you agree with the following statements.

### (Using Instrumental Support)

	Strongly						Strongly	
	Disagree						Agree	
I had been trying to get advice or help from other	0	0	0	0	0	0	0	
people about how to protect myself from contracting								
virus during the COVID 19 pandemic in 2020 and								
2021.								
I had been getting help and advice from other people	0	0	0	0	0	0	0	
about how to protect myself from contracting virus								
during the COVID 19 pandemic in 2020 and 2021.								

What is your gender?

 $\circ$  Male

 $\circ$  Female

 $\circ$  Others

Which college of the University are you currently attending for your degree?

- College of Business
- College of Education
- College of Health Sciences
- College of Justice, Safety, & Military Science
- College of Letters, Arts, & Social Sciences
- College of Science, Technology, Engineering, & Mathematics
- $\circ$  Others

What was your household income before taxes last year?

- Under \$20,000
- o \$20,000-\$39,999
- o \$40,000-\$59,999
- o \$60,000-\$79,999
- o \$100,000-\$119,999
- o \$120,000-\$139,999
- o \$140,000 or more

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