MOTIVES FOR COLLEGE STUDENTS' PARTICIPATION IN EPISODIC AND

ORGANIZATIONAL SERVICE ACTIVITIES DURING THE COVID-19 PANDEMIC

A Thesis

by

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Submitted to the Graduate and Professional School of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

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August 2022

Major Subject: Recreation, Park, and Tourism Sciences

ABSTRACT

Although the literature shows that organizational participation in service is developmentally beneficial for college students due to the reinforcement of positive behaviors, the literature is less clear on the differences between episodic and organizational participation, especially the motivation to participate. Additionally, there is insufficient research in the area of service participation during a pandemic. This thesis examines (a) relations between motives and volunteering (i.e., episodic and organizational) and (b) whether relations vary by individuals' adherence to COVID-19 pandemic-related protocols. Cross-sectional data were drawn from a secondary study of character development and service among college students. Analyses involved estimating regression models with interaction effects. Unexpectedly, the data showed that as motivation by values increased, participation decreased in both episodic and organizational, and as understanding and social justice motivation increased, episodic participation decreased. Since the interaction terms between these motives and pandemic protocol adherence were significant, we conclude that the COVID-19 pandemic influenced the decrease in participation related to these motives.

ACKNOWLEGEMENTS

I would like to thank my committee chair, Dr. Ettekal, and my committee members, Dr. Locke and Dr. Natarajarthinam, for their support and enthusiasm. You challenged me to be more than I thought possible.

I would also like to thank the members of my graduate lab, Daniela Berry and Rachel Weiss, without whom this would have been a much poorer manuscript. Additionally, I would like to thank the faculty and staff of my department for providing a welcoming and nurturing home to a struggling non-traditional student.

My sincerest thanks also go out to my friends, both far and near, who put up with me throughout this process, who helped me wrap my brain around concepts, and who helped me escape my brain for a time. I will never be able to thank you enough, Jennye and Doug and everyone at the Gate.

Finally, none of this would have been possible without my parents and my children. Their unwavering support, boundless love, and endless belief in me propelled me to where I am now.

NOMENCLATURE

CDC   Center for Disease Control

COVID-19   Novel Coronavirus Disease 2019

VFI   Volunteer Functions Inventory

WHO   World Health Organization

TABLE OF CONTENTS

Page

LIST OF FIGURES

Page

LIST OF TABLES

1. INTRODUCTION

Humans have a prosocial drive or urge to serve their community (Wilson, 2000). The drive to contribute to society through voluntary service is universal across the life span, but the extent to which individuals provide service varies across developmental periods (Omoto et al., 2010). College students, or individuals transitioning from late adolescence into early adulthood, have a wide range of opportunities to participate in service-related activities, and understanding what contributes to increasing their service is essential. Service, of course, positively impacts society, but research on positive youth development has found that adolescents' participation in service-related extracurricular activities also promotes their own thriving into adulthood (MacNeela & Gannon, 2014; Sherrod, 2007). Indeed, service is a primary way that college students fulfill the need to contribute to society in a helpful way. However, a challenge for practitioners, such as educators and out-of-school time youth workers, is understanding how to motivate college students to use their free time in structured, productive ways, such as by participating in service. Individuals' motivations are primary predictors of service-oriented extracurricular activity participation. That is, individuals participate in activities in which they believe they will be successful and in which they place value or have a personal interest. Therefore, demonstrating the links between college students' values and time spent participating in service is one way practitioners can support college students' successful transition into adulthood and simultaneously benefit society.

College provides a unique experience in terms of time use, in that students experience substantial changes in their available free time compared to their high school years, while at the same time, are presented an increased range of possible opportunities for spending their free time (Arnett, 2000). Thus, college students often must choose between conflicting motivations for

how they might spend their free time. Moreover, the COVID-19 pandemic has added new dimensions to college students' opportunities, motivations, and choices about time use (Morris et al., 2021). Though service to the community is necessary within the context of a global pandemic, the context itself makes service activities more difficult than usual. Several factors may have affected college students' abilities and motives to participate in service-oriented activities, such as mandated stay-at-home orders, masking, and social distancing. Although pandemic-related restrictions were applied to everyone, there was likely variability in the extent to which individuals adhered to them. Nevertheless, pandemic-related restrictions affected many aspects of life, which made the need for community service urgent.

Service is important for individual and societal thriving (Smith et al., 2016). Understanding how to motivate individuals, especially college students, to participate in service activities is one way that practitioners can support positive and healthy transitions into adulthood. The goals of this study are twofold, which are to 1. Examine the association between college students' motives to participate in service and time spent participating in service-oriented organizations and events; and 2. Test whether the association between motives and service participation varied by college students' adherence to pandemic-related restrictions (i.e., masking and social distancing).

2. PROBLEM STATEMENT

In the United States in 2017, the efforts of volunteers were worth an estimated $167 billion (Corporation for National and Community Service, 2018). Service organizations that rely on those efforts would benefit immensely by being able to assess which motives predict the behaviors of volunteers. Past research has studied the associations between motives and past volunteering rather than predict future volunteerism. However, these studies often use indicators of intent to assess future volunteerism (Eppler et al., 2011).

Though researchers have developed instruments for measuring associations of motives with volunteerism, there is a lack of specificity in the literature. Volunteerism takes too many different forms, from the variety of positions filled by volunteers to the context within which volunteerism takes place, and the literature lacks the taxonomy to accurately describe, much less predict future volunteerism. This is especially true for younger volunteers. There are developmental implications for the context in which college aged individuals volunteer.

In addition to issues related to gaps within existing research on volunteerism, the current COVID-19 pandemic has likely affected rates of volunteerism due to various safety protocols which have been put in place. Because this pandemic is recent and still ongoing, empirical data are still limited about the effects of these safety protocols on individual leisure choices, including volunteerism. Exploratory research is needed to determine what effect, if any, the pandemic and the safety protocols have had on volunteerism.

This study seeks to address the gaps in the literature regarding potential variance in the prediction of long-term organizational volunteerism versus one-time event episodic volunteerism based on motives. Additionally, this study will contribute to the growing body of research into the effects of the COVID-19 pandemic on the population.

3. THEORETICAL FOUNDATION

As John Donne, the famous English poet and cleric, wrote in 1624: "no man is an island." Several centuries later, Bronfenbrenner integrated this metaphor into his conceptual writings on children's development to emphasize the point that human lives are intertwined and nested within a larger ecological system. According to Bronfenbrenner's (1979) ecological systems theory, individuals' lives are nested within a series of interconnected contexts. The contexts of human life range from proximal settings, referred to as microsystems, to distal settings, referred to as macrosystems. Bronfenbrenner theorized that the "engines" of development were proximal processes or the exchanges between individuals and their microsystems. Microsystems are the proximal settings in which individuals directly interact, such as their families, schools, places of employment, or peer groups. Service-oriented activities are one microsystem in which college students may spend their free time.

Microsystems do not exist in isolation but instead interact with other microsystems to form what Bronfenbrenner termed the mesosystem. For example, most college students have a friendship or peer group, which forms one microsystem, and the friendship microsystem interacts with the service-oriented activity microsystem, which may enhance or hinder experiences participating in service (e.g., if friends participate in service together or if friends prevent each other from participating in service). Exo-systems are the microsystems in which individuals do not directly interact but that affect experiences through indirect interactions. For example, college students may not directly interact with their friends' places of employment, but whether their friends are required to work particular hours may impact the friendship group–service-oriented activities mesosystem.

4

Finally, the series of interconnected proximal settings (i.e., micro-, meso-, and exo-systems) is nested within the macrosystem, which includes the overarching norms, values, and beliefs that encompass the system. For example, norms about service influence college students indirectly by influencing individuals' and societal attitudes about service, opportunities available for service, and the extent of need for service. College students' participation in service-oriented activities, then, can only be understood if critical factors in the ecological system, such as conflicting motives or societal values about service, are considered.

Bronfenbrenner also acknowledged that development occurs over time and that the entire ecological system is embedded within time. Bronfenbrenner conceptualized time within ecological systems theory as the chronosystem. The chronosystem is also nested, such that time occurs across different periods. Micro-time represents specific instances in which proximal processes occur, such as the time an individual spends in a specific service-oriented activity. Meso-time is a period of time that comprises several instances of micro-time, such as the time an individual spends participating in an extracurricular organization doing multiple service activities across a specific period of time. Macro-time means the points in history in which micro- and meso-time occur and indicates the cultural and historical background of any given activity. For example, the COVID-19 pandemic is a historical moment that likely influenced people's lives all over the globe. Empirical data are still incoming to explain whether and how pandemic-related restrictions affected individuals' time use or their motives for spending their time in different ways. Thus, the links between college students' motives to participate in service and their time spent participating in service-oriented activities likely varied by the extent to which they adhered to pandemic-related restrictions.

3.1. Motivation as a Factor in the Ecological System

Although ecological systems theory is helpful to understand the role of contexts in shaping human development, as a grand theory it does not explain specific developmental phenomena, such as motivational processes. Expectancy-value theory (Wigfield et al., 2015) is helpful to consider the role of individuals' motivation in the ecological system pertaining to service. Expectancy-value theory is a systems-based theory that helps to understand the role of motivation and values in time use choices. Expectancy-value theory was originally applied to understand youth achievement motivation and, more specifically, how motivational factors affected youth decisions about academic courses and extracurricular activities (e.g., Wigfield & Eccles, 2000). The theory has since been applied to a range of phenomena pertaining to motivational factors and time use choices (e.g., Wigfield et al., 2015).

According to expectancy-value theory, motivation for a specific action or behavior is comprised of two components: the expectation of successful completion of the action (or activity) and the individual's value placed upon the action (or activity). For activities that do not require high technical skills, such as service, values tend to explain more variance in decisions to participate than expectancies (e.g., Eccles & Wigfield, 1995). Importantly, values are multi-dimensional and include four subcomponents: intrinsic value, attainment value, utility value, and perceived cost. Intrinsic value is the extent to which an individual is interested in or thinks an activity is important. Attainment value is the extent to which the activity highlights salient aspects of one's self or, in other words, if the activity were attained, the extent to which it would provide meaning or purpose for one's self. Utility value is the extent to which the activity fits or aligns with an individual's current or future goals, including career goals. Finally, perceived cost is the negative consequences that would occur, such as giving up other activities, in order to complete the activity. As expectancy-value theory explains, values are multi-dimensional and

6

affect decisions to engage in various activities. Thus, values are useful factors that can help us understand the association between college students' motivation to participate in service and their time spent participating in service-oriented activities.

4. LITERATURE REVIEW: MOTIVATION, MOTIVES, AND SERVICE

Historically, there is an assumption in the research that individuals volunteer to participate in service-oriented activities because they are altruistic. However, contemporary research on volunteerism has expanded to include additional motives for volunteering. Research has found that altruism is often expressed by participants in service-oriented activities as a rationale to establish legitimacy rather than a motive (Serow, 1991). Serow indicates that the nature of human motivations is so complex that many people are unable to fully identify their own motives for action and will often resort to portraying a socially desirable rationale. In order to address the complexity of human motives, one of two approaches are often engaged: a symbolic approach or a functional approach (Wilson, 2000).

The symbolic approach positions the individual as a rational actor reacting to a complex environment (Wilson, 2000). Using the symbolic approach, early studies have found that the association between values and volunteerism is "weak and inconsistent" (Hoge et al., 1998; Janoski & Wilson, 1995; Ladd, 1999; Smith et al., 1998; Wilson, 2000, p. 219). However, Wilson (2000), in a landmark article reviewing the literature on volunteerism, suggests that the mixed findings were because values were often defined too broadly, and volunteerism was too varied. An example of the confusion around symbolic values includes a study by Omoto and Snyder (1993), which found that religious beliefs encouraged some individuals to volunteer to help people with AIDS, whereas others' religious values forbade volunteering to help people with AIDS. When describing the variety of volunteer activities individuals undertook, Wilson (2000) described the taxonomies of volunteering as "folk categories," indicating that more research is needed to determine a reliable and precise categorization of the different types of volunteer activities (p. 233). The field is not even consistent with basic terminology, using terms

8

like "volunteering", "service learning", "service participation", "charity-based participation", and "civic participation" for the same activities. The studies using the symbolic approach suggested the need to generate a multivariate model of volunteer motive.

The functional approach posits that individuals undertake activities because of the specific functions those activities serve for the individual. The specific functions that volunteering serves for an individual can be categorized based on whether the functions are utilitarian, social, related to values, or related to cognitive operation (Katz, 1960). These different categories of motives have been used to explain a range of behaviors, including volunteer behaviors, because a central tenet of functionalist theory is that the same activity can fulfill different functions for different individuals (Katz, 1960; Clary et al., 1998). A primary purpose of research framed in functionalism is that an individual's motives are revealed by identifying the psychological functions an activity serves. Motives are the underlying force that prompt individuals to action and, thus, understanding psychological functions can help service-oriented organizations improve recruitment and retention of volunteers (Fischer & Schaffer, 1993; Midlarksy & Kahana, 1994; Wilson, 2000).

A widely used assessment for assessing the psychological functions volunteering can serve is the Volunteer Functional Inventory (VFI). A brief overview of the VFI is warranted to identify the predominant motive categories in the literature and to understand the empirical research linking motive categories to volunteerism. The VFI assesses six different functions served by volunteering: values, understanding, social, career, protective, and enhancement (Clary et al., 1998). The values function measures the extent to which individuals volunteer for altruism and humanitarian concerns, such as volunteering because of concern for others or feeling that it is important to help others. The understanding function measures volunteering for opportunities

9

for learning and practicing skills. The social function measures other-oriented functions of volunteering, such as volunteering because of socialization, social expectations, or relationships with other people (e.g., volunteering because one's friends volunteer). The career function measures volunteering for career-related benefits, such as generating new contacts or resume-building activities. The protective and enhancement functions each derive from functionalism's "concerns…involving processes associated with the functioning of the ego" (Clary et al., 1998, p. 1518). That is, the protective function measures volunteering in order to protect one's ego from negativity, such as the guilt of privilege or loneliness. The enhancement function is in opposition to the protective function and measures volunteering in order to enhance positive aspects of one's ego, such as personal satisfaction or growth. Through multiple empirical studies, Clary and colleagues (1998) validated the VFI, which supported that the six functions were distinguishable and explained unique variance in an individual's volunteering behaviors. In a measurement validation study, Allison et al. (2002) found that the VFI was a better predictor of future volunteerism than a single factor measure aligned with a symbolic approach.

4.1. Empirical Research on Motives and Volunteering

The VFI has been used in empirical research to capture the extent to which the different motives are salient for volunteers across different populations. The empirical research using the VFI has revealed mean differences across demographic groups in the extent to which the various functions explain an individual's volunteering behaviors. For example, researchers have used the VFI to demonstrate the variance in motives between volunteers of different genders (Burns et al., 2008; Pearl & Christenson, 2017), different races/ethnicities (Pearl & Christensen, 2017), and who attended different types of educational institutions (Burns et al., 2005). Additionally, researchers have at times combined functions, renamed functions, or added functions when

appropriate for their studies (Burns et al., 2005; Burns et al., 2008; Gage & Thapa, 2012; Eppler et al., 2011; Jiranek et al., 2013).

Another area of the VFI literature deals with mean-level differences in motive among college students. First, there are consistent patterns of mean-level differences across the different types of motives within college students. For example, college students reported higher values and understanding than the other types of motives (Burns et al., 2005; Burns et al., 2008; Eppler et al., 2011; Gage & Thapa, 2012; Pearl & Christensen, 2017). These mean-level differences are nearly universal whether the study is focused on service learning (Eppler et al., 2011; Pearl & Christensen, 2017), comparing the strength of motives across different types of universities (Burns et al., 2005), or when examining correlations between motives and constraints (Gage & Thapa, 2012). Second, there are mean-level differences in motives between college students and other developmental groups. For example, college students reported higher career motives in comparison to older adults (Gage & Thapa, 2012). In sum, evidence suggests there is variability on motives within college students. A next question concerns whether the variability in motives explains the extent to which college students volunteer.

As young adults in their early 20s, most college students are still developing psychologically. Therefore, it is beneficial to view their activity through a developmental lens. From a developmental standpoint, organizational participation in volunteering is better than episodic, one-off events because it allows for repetition and reinforcement (Morris & Bronfenbrenner, 2006). Thus, it is important to understand which motives predict college students' participation in different forms of volunteering. Though both organizational and episodic volunteering are strongly associated with the values, enhancement, and understanding motives, the order of the strength of associations changes when aggregated by systematic

11

reviews of the literature. In a review of 48 studies using the VFI, Chacón and colleagues (2017) found that the values function was most salient across all types of organizations and volunteer demographics. However, in a review of 33 studies focused on episodic volunteering, Dunn and his colleagues (2016) found that the enhancement motive was most salient. Though the career motive appeared least salient in both lists, this is likely because neither review was focused on college students. The career motive is particularly salient in samples of adults under the age of 40 (Chacón et al., 2017). The difference between organizational and episodic motives, then, is found mainly in the salience of the social and protective motives, according to empirical data.

In a review of the literature, Dunn and his colleagues (2016) determined that there is a difference in the motives which contribute to episodic volunteering versus organizational volunteering. Episodic volunteering may have stronger associations with *social* and *protective* motives than organizational volunteering. Studies about charity sports events especially indicated an increased association between *social* motives and predicted intentions to volunteer in the future (Filo et al., 2011; Filo et al., 2012; Mayer & McNary, 2007; Rundio et al., 2014; Snelgrove & Wood, 2010). Qualitative studies indicate that the *social* motive was frequently linked with the desire to strengthen or increase social connections, as well as feel part of a group (Filo et al., 2008; Scott & Solomon, 2003). The strong association with episodic volunteering at charity sports events and the *protective* motive is linked through qualitative data, which indicate the need to volunteer as part of the healing or grieving process (Dunn et al., 2016). These differences in the order of strength of episodic versus organizational volunteer motives shows that there may be underlying differences between the two categories of volunteering which warrant their separation in research.

4.2. Limitations of Existing Research

Another limitation of the current field of research is the lack of consistent taxonomy identified by Wilson (2000). However, very few studies seek to distinguish one form of volunteering from another. The current study examines whether service is performed with an organization or as a one-off event. The term "episodic volunteer" was coined by MacDuff (1990) to describe less regular volunteer behavior. Warner, Newland, and Green (2011) indicate a lack of empirical data in this area, and reviews of the literature indicate that studies will either focus on episodic volunteerism or not include a variable related to dosage (Chacón et al., 2017; Dunn et al., 2016).

4.3. Service in the Context of Pandemics

As Morris and Bronfenbrenner (2006) discuss in their presentation of the chronosystem, development occurs over time and within a particular time in history. Macrotime, or a specific point in historical time, is of concern in the present study because of the COVID-19 pandemic. Previous literature on motives and volunteering rarely accounts for macrotime. As a major historical event, the COVID-19 pandemic has disrupted medical systems, the global economy, as well as aspects of daily life. In particular, an individual's perceptions of health risk and the restrictions implemented by governments to mitigate the spread of COVID-19 may have affected an individual's motive to volunteer, participation in volunteer/service activities, or in the links between various motives and volunteer/service participation. There is limited research on motives and volunteer/service activities during the COVID-19 pandemic. However, there is research available on other similarly disastrous events.

Several types of crises result in massive physical and psychological damage which requires the efforts of volunteers to heal. The literature indicates that these crises come in two different forms dependent on event severity: trauma or stress (El-Galabawy et al., 2021). One

type of traumatic crisis is a natural disaster. The ecological damage and breakdown of normal

systems of operation after a massive hurricane often requires the efforts of thousands of

individuals providing service, such as Hurricane Harvey in 2017 which made landfall in the

Houston area of the Texas Gulf Coast. Volunteers were found to cite recognition of the need for

help, a desire to give back, (i.e., values function), a need to be useful (i.e., ego-protective

function), and wanting to do something to get the "city back in shape" (Miller, 2020, p. 2011).

Another type of traumatic crisis is an attack, such as was experienced on September 11, 2001.

The literature on motivations for volunteering post-9/11 agrees about one aspect: context. The

closer an individual was to the center of the attacks either geographically or via an ecological

microsystem, the more likely that individual was to feel drawn to help (Beyerlein &Sikkink,

2008; Lowe & Fothergill, 2003). On the other hand, we would classify the COVID-19 pandemic

on the whole as a stressful situation rather than a traumatic one, especially for college students,

due to the individual lack of severity. Although many people have had trauma related to their

own health issues or the death of a loved one, college students have been considerably less

affected by these traumatic events during the pandemic than older adults (Christie et al., 2021).

However, college students have been subjected to the constant stress of living during a global

pandemic, including adhering to safety protocols, which likely influenced their motivation to

volunteer in a different way than those who feel an obsession to "fix" their community after a

traumatic crisis. Though this obsession with helping often described in qualitative studies of

post-disaster volunteers is seen in other literature about volunteer motivations (see Omoto &

Snyder, 1995 for their work on "obligated" volunteers), it can be better explained by the

difference between a stressful situation, such as the COVID-19 pandemic, and a traumatic

situation, such as the attacks of September 11 (El-Gabalawy et al., 2021). Therefore, the

ongoing stress of a pandemic is likely to not follow the same motivational patterns as those of a traumatic disaster.

Instead, lessons in volunteerism during pandemics can be learned from research done during the SARS and H1N1 pandemics. SARS was first identified in the People's Republic of China in 2003 and spread to four other countries by the end of the year (World Health Organization [WHO], 2021). Six years later, in 2009, H1N1 was first identified in the U.S. and quickly spread across the world (Center for Disease Control [CDC], 2019a). There are many similarities between these two pandemics and with the current COVID-19 pandemic. That is, all three pandemics involved respiratory viruses with similar disease vectors (i.e., spread occurred through person-to-person interaction by moisture droplets in the air). Also, similar safety protocols were suggested or mandated for all three pandemics: stay-at-home orders, mask-wearing, social distancing, and self-isolation when ill (CDC, 2019b).

A brief review of the literature on previous pandemics is helpful to provide context in the current study. An important aspect of pandemic-related research is that the culture of a geographic area has a strong association with an individual's responses to governmental safety protocol suggestions and mandates. The effort to contain and control the spread of SARS and H1N1 often led to governments taking drastic and potentially unpopular measures, such as mandated quarantines and school closures. The ethical considerations of the measures taken by Singapore during the H1N1 pandemic are described by Tiong and Koh (2013), highlighting the ideals such government actions must balance: protecting the public and defending individual rights. In China, government appeals to Confucian virtues encouraged citizens to take on any hardship necessary to protect the country's health. In response, college students either masked up and left their schools in a panic or voluntarily quarantined depending on the school's exposure

15

(Ding, 2014). However, not everyone complies with government mandates and advisements, as demonstrated by a study from the Netherlands. During the H1N1 pandemic, even as citizens became better informed about the virus transmission vectors and the adverse potential health outcomes, only 10% of respondents indicated that they practiced social distancing while less than 1% bought a face mask, though both were protocols advised by their government (Bults et al., 2011).

Studies also show the consequences of compliance with safety protocols. While respondents in Canada identified the reason for their quarantine as protecting their community, they also reported boredom, isolation, frustration, annoyance, and worry (Reynolds et al., 2007). Additionally, the most challenging thing the respondents reported about being in quarantine was not being able to visit their friends and family or attend social events. For other individuals, quarantine was a source of fear, not boredom. Ding (2014) noted that due to the historical use of forced quarantine against minority groups in the U.S., there is greater mistrust of governmental mandates among those groups than in China, where there is no such history.

Studies of volunteering during pandemics mainly focus on medical volunteers. The literature that intersects volunteer and pandemic-related research is dominated by studies identifying and describing frontline volunteers, explaining how to increase volunteerism, and optimizing preparation for future pandemics. According to the literature, when medical schools, nursing schools, and other related schools closed for quarantine, their college students were encouraged to volunteer (Yuen-Tsang & Tsien-Wong, 2004). As countries began to prepare pandemic response plans after the SARS pandemic, medical students were part of several local and federal governmental plans. That is, students were asked about their willingness to volunteer in future pandemics, and programs were developed to train health care volunteers (Gebbie et al.,

16

2007; Rosychuk et al., 2008; Yonge et al., 2010; Yuen-Tsang & Tsien-Wong, 2004). Though it is important to study the potential for college students to participate in frontline volunteering, additional research is needed to examine volunteerism in general during a pandemic.

4.4. The COVID-19 Pandemic and Service

COVID-19 is a disease caused by a novel coronavirus, SARS-CoV-2 (World Health Organization [WHO], 2020), which attacks the respiratory system. It was first reported to the World Health Organization on December 31, 2019, by the People's Republic of China but has spread globally (WHO, 2020). Much like the previous pandemics discussed, COVID-19 spreads by moisture droplets expelled from the mouth, which makes it a highly transmittable disease. As such, the WHO and the many governments advised safety protocols designed to protect the population, including stay-at-home mandates, wearing masks, and social distancing. However, there was variation in individuals' perceptions and responses to the safety protocols advised by the government.

One safety protocol implemented to slow the spread of COVID-19 was stay-at-home orders. At the beginning of the pandemic, much of the U.S. shut down for mandatory stay-at-home orders. For many colleges and universities, the beginning of the pandemic marked a pivot toward virtual schooling because students were forced into home-based quarantines. Instead of a purely virtual school environment, many medical and healthcare-focused schools implemented service-learning to help students practice skills while simultaneously going to hospitals to provide service to the front lines (Chawlowska et al., 2021; Gresh et al., 2020; Grilo et al., 2020; Rupley et al., 2020). However, service-learning highlights one of the challenges of volunteering while under stay-at-home orders, such that it is difficult to build community trust and remain compliant with pandemic recommendations (Luksyte et al., 2020). Therefore, to help volunteers

comply with stay-at-home orders, service organizations pivoted to virtual volunteering, just as schools pivoted to virtual schooling. Virtual volunteering allowed for meetings, strategic planning, maintenance of stakeholder relationships, and broad volunteer pools (Lachance, 2021). Empirical studies are needed to understand how stay-at-home orders affected college students' volunteering.

Another safety protocol that became highly polarizing during the pandemic is wearing a mask to prevent the spread of the disease. Several preliminary studies have investigated factors that explain an individual's responses to mask wearing. These factors can include ideology (Capraro & Barcelo, 2020), sex (Capraro & Barcelo, 2020; Gette et al., 2021; Mahalik et al., 2021), and race (Kahn & Money, 2021). Gette and colleagues (2021) also found that social norms were a factor, especially among college students. Clearly, empirical studies support that there is variation in individuals' attitudes about wearing masks to prevent the spread of COVID-19 as well as the extent to which individuals complied with mask mandates, including among college students, however there is more research needed to see how adherence to masking protocols is related to motives.

There are also differences in individuals' responses to recommendations to social distance. For example, in a study of 67 countries, Van Bavel and colleagues (2020) found that predictors of support for public health measures were national pride, national narcissism, and political ideology; national pride explained the most variance in support for public health measures. The partisanship of the U.S. was also linked to the lack of compliance with social distancing. Preliminary empirical studies of the COVID-19 pandemic suggest that college students may be least likely to comply with social distancing recommendations among developmental groups. For example, Canning and colleagues (2020) found that whereas

individuals of all ages were equally likely to leave their house while under stay-at-home orders and even with COVID-19 symptoms, young adults ages 18-29 were likely to meet with more people outside of their immediate family than older adults.

Preliminary empirical research on the COVID-19 pandemic demonstrates that there is variability in the extent to which individuals complied with safety recommendations, including wearing masks and social distancing. However, empirical research is needed to test associations between adherence to pandemic-related protocols, motives, and participation in volunteer/service activities. Theoretically, according to Du and colleagues (2020), adherence to safety protocols should act as a constraint, preventing college students from using their leisure time to volunteer. On the one hand, the values and protective motives might encourage people to wear a mask and stay socially distant in order to protect others in their community, which could hypothetically result in decreased volunteering. However, on the other hand, the values and protective motives might also encourage college students to come out to help their community in a time of need. It is plausible that adherence to pandemic-related protocols (i.e., wearing masks, social distancing) changed (or moderated) the relation between college students' motives and volunteering. The ways in which pandemic-related protocols may have mattered (e.g., strengthened or weakened the relation between particular motives and particular forms of volunteering) is an exploratory question, given the limited research on volunteering during pandemics.

4.5. Summary and Study Goals

Service is an important way in which many college students spend their time, such as by participating in service-oriented student organizations or by volunteering at a community service event (e.g., MacNeela & Gannon, 2014; Sherrod, 2007). Motives are strong predictors of service (e.g., Fischer & Schaffer, 1993; Midlarksy & Kahana, 1994; Wilson, 2000), however, there is

little empirical research identifying which motives are important for which service opportunities and among college students. Motives are conceptualized as students' reasons for doing service and are operationalized as the six motives assessed in the VFI (Clary et al., 1998): ego-protection, values, career, understanding, enhancement, and social justice. The primary goal of this study was to test associations between the motives and service enacted in two different ways, either through service-oriented student organizations or through episodic events. Based on previous research, we expect values, enhancement, and understanding to be the strongest predictors of both organizational and event participation, but we expect the order of strength of association to be different for the two types of participation.

The COVID-19 pandemic may have hindered college students' participation in service, at least to the extent that students adhered to pandemic-related restrictions (e.g., masking, social distancing). Additionally, these data were collected at a time when the participants of the study were under indoor mask requirements from their university, but all pandemic-related safety protocols from the state were removed (see Figure 1 for timeline). Moreover, it is possible that adherence to restrictions changed the associations between motives and service during the COVID-19 pandemic. The secondary goal of this study was to test whether adherence to pandemic restrictions moderated associations between motives and service participation. As adherence increases, we expect the relation between hardship-related motives (e.g., protective, which signals processes of coping that may occur during hardship) and service to become stronger, whereas we expect the relation between virtually adaptive motives (e.g., understanding and careers, which could be satisfied virtually) and service to become weaker.

20

5. METHOD

5.1. Procedures

Data were derived from an ongoing longitudinal study of service, character development, and motivation among college students (see survey questions in Appendix B). Wave 1 was collected in March 2021, and data collection for later waves is ongoing. The purpose of the larger study was to examine college students' participation in extracurricular service-oriented activities and character development after the onset of the COVID-19 pandemic. Quantitative surveys were collected online (using Qualtrics) through emails sent to participants. The surveys had four sections (extracurricular activities, well-being, character attributes, and motivation), took approximately 20-30 minutes to complete, and all measures had established reliability and validity with other samples. All undergraduate students at the university where the study was conducted were eligible to participate. Participants were recruited through university email and word of mouth by the research team (e.g., via social media). Approval was obtained from the Institutional Review Board at the university where the study took place.

5.2. Participants

The present study uses cross-sectional quantitative data collected at Wave 1. The larger data set contains 559 total respondents, but 113 participants were dropped from the present study due to incomplete data, primarily on the Volunteer Functions Inventory (110 participants completed five or fewer of the 30 items). The sample for the present study included 446 college students. Age ranged from 18-45 years (M=21.44, SD=2.42). Additional sample demographics are presented in Table 1.

5.3. Measures

A variety of measures were used as indicators of the three focal constructs: service-oriented activity participation, motives, and adherence to pandemic-related restrictions.

5.3.1. Service-oriented activity participation

Two forms of service-oriented activity participation were assessed, namely participation in service-oriented organizations and participation in episodic service-oriented events. The indicators of service participation were derived from an inventory, which collected information about college students' participation in extracurricular activities. The inventory asked participants to report their participation in each of seven activity types: fine arts/performance arts, sports, faith-based/religious, academic, leadership, or service/volunteer organizations and other (see survey questions in Appendix B). The current study uses data from participant responses to the items about service/volunteer organizations. Empirical research distinguishes students' experiences across the different activity types (Hansen et al., 2003). Although service is possible through other activity types (e.g., faith-based/religious organizations often engage in service), the focus of this study was on understanding motives to do service as enacted through organizations which prioritize service as part of their mission and focus.

Three indicators of participation in service-oriented organizations were used. First, organizational joining (yes/no) was measured based on participants responses to "Did you participate in any service/volunteer activities (e.g., Habitat for Humanity, the 12th Can, Red Cross Club, etc.) in Fall 2020?" 53.4% of participants (n=238) reported participating in a service-oriented organization during the Fall 2020 semester. Next, immediate involvement was the product of participants' intensity of participation (i.e., amount of time per activity session; 1 = *<1 hour/week*, 4 = *4 or more hours/week*) and frequency of participation (i.e., amount of

22

activity sessions; 1 = *once a month or less*; 4 = *weekly or almost weekly*) (*range*=16, *M*=2.95, *SD*=3.40). Finally, organizational duration was based on one item, in which participants reported the number of years they participated (1 = *<1 year*, 4 = *4 or more years*)(*M*=1.92, *SD*=0.85).

One indicator of event participation was used. Students were asked to report on their participation in episodic service events (yes/no). 57.6% of participants (*n*=257) reported participating in episodic service events during the current semester (Spring 2021 through March). Episodic service events were defined as "a one- time service activity or volunteering experience in which you devoted at least 1 hour of your time without monetary compensation to serve the needs of others" (see survey questions in Appendix B). One specific service-oriented activity, in which 81.7% of the respondents reported participation, was The Big Event, an annual one-day service event during which thousands of college students participate in various service-oriented activities around the local community.

5.3.2. Motives to Participate in Service

An inventory of volunteer motives was used to assess participants' motives for volunteering. This inventory was based on the Volunteer Function Inventory originally tested and validated by Clary et al. (1998), with elements examining social justice-related motives added by Jiranek et al. (2013). These social justice elements were added to try to capture the nuance of living during a global pandemic which overlapped with massive civil rights and political activism and replaced the social subscale developed by Clary et al. (see timeline in Appendix A). The inventory asked participants to report on 30 items rated on a seven-point Likert scale (1 = *extremely unimportant*, 7 = *extremely important*). Each item on the inventory is assigned to one of six subscales (protective, values, career, understanding, enhancement, or

social justice) relating to a specific function. Each subscale contained five items and had

Cronbach alphas which ranged from .73 to .85 (see Table 2).

5.3.3. Adherence to Pandemic Restrictions

Contextual descriptor data were collected about participants' adherence to pandemic

safety protocols. Adherence was the mean of two items, which asked participants to report on

their adherence (1 = *never*, 5 = *always*) to social distancing (*M*=3.43, *SD*=1.24) and mask-

wearing (*M*=3.77, *SD*=1.32).

5.3.4. Control Variables

All models included gender as a control variable. There is extensive literature showing

that women volunteer more than men (Einolf, 2011; Wilson, 2000), especially during young

adulthood (Pearl & Christensen, 2017). Students self-reported their gender based on three

categories: female, male, and non-binary. Dummy variables were entered for male and non-

binary, using female as the reference group for each. The context of the organization in which

students participated, as well as the specific event in which students volunteer were not included

as controls due to limited variability (i.e., 88.7% of all organizational participation was campus-

based and 81.7% of the event participation was at a single event called The Big Event). Although

there was some variance among immediate involvement based on context (campus-based

M=4.27, *SD*=2.79; community-based *M*=6.81, *SD*=5.17), there were only 27 students in the

community-based sample, which does not hold statistical power for estimation. Additionally,

there was not the same level of variance in organizational duration (campus-based *M*=1.92,

SD=0.83; community-based *M*=1.96, *SD*=0.98). It was also found that there was a significant

association between organizational participation and event participation (X^2(1)=201.26, *p*<.001).

5.4. Data Analysis Plan

The present study tests questions pertaining to the association between college students'

motives to participate in service and two forms of service: 1. participation in service-oriented

organizations (as indicated by organizational joining, immediate involvement, and organizational

duration), and 2. participation in episodic service-oriented events (as indicated by event

participation). All questions were tested using linear regression models or logistic regression

models (Cohen et al., 2003) estimated in IBM SPSS Statistics (Version 28), depending on the

outcome. Linear regressions were used when outcomes were continuous and logistic regressions

were used when outcomes were dichotomous. Model fit was interpreted with the overall r^2.

Coefficients of each predictor were interpreted with statistical significance of the beta

coefficients ($p<.05$), as well as effect sizes (i.e., strength of the standardized beta coefficient) for

linear regressions. For logistic regressions, exponentiated betas were interpreted with statistical

significance of the beta coefficient as odds ratios.

A secondary question concerned whether the associations between motives and service

varied by adherence to pandemic restrictions. To test for moderation, a total of six interaction

terms were included between each of the six motives and adherence. Variables were centered

prior to computing interaction terms. Significant interaction terms were interpreted at +1 *SD*

above the *M*, at the *M*, and -1 *SD* below the *M*, using the online simple slope calculator at

quantpsy.org (Preacher et al., 2006). Non-significant interaction terms were dropped for model

parsimony.

Model 1 addressed participation in service-oriented organizations with one logistic

regression model and two linear regression models each testing one of the three indicators of

participation in service-oriented organizations: organizational joining, a dichotomous variable

(Model 1a); immediate involvement, a continuous variable (Model 1b); and organizational

duration, a continuous variable (Model 1c). Because Models 1b and 1c addressed extent of

participation among students who participated in service-oriented organizations, the models were

estimated on the sub-sample of students who reported participation in at least one service-

oriented organization (n=238). Model 2 addressed participation in episodic service-oriented

events.

6. RESULTS

Descriptive statistics for the main study variables are presented in Table 2. Correlations are presented across three categories of variables: control variables, predictors (i.e., six variables for each of six subscales of the VFI), a moderator (i.e., adherence), and the outcomes (i.e., organizational joining and event participation). All continuous variables were normally distributed with skewness and kurtosis in the acceptable ranges (± 2), except for immediate involvement, which was positively skewed because of the prevalence of nonparticipants.

6.1. Correlations Among Study Variables

There was only one control variable included, namely gender. The two gender dummy variables had significant correlations with organizational joining, but in different directions (see Table 2). That is, females were more likely than males and less likely than nonbinary individuals to join organizations. Females were more likely than non-binary individuals to participate in events.

There were several correlations among the predictors (i.e., six VFI subscales), as well as between the predictors and outcomes (i.e., organizational joining and event participation). All correlations among the VFI subscales were significant, positive, and moderate to large in size (see Table 2). The largest correlations were among values, understanding, and social justice (*rs*>.70). Although some of the correlations were relatively large, VIF and tolerance levels for all six subscales were within the acceptable range (VIF<5, tolerance<.20) (O'Brien, 2007), alleviating concerns for multi-collinearity. Contrary to expectations, students who participated in either form of service (organizations or events) had lower scores on all six motives than students who did not participate in either form.

This study included one moderator, namely adherence to pandemic-related restrictions. All correlations between the adherence and the predictors were significant, positive, and moderate in size (see Table 2). The highest correlations were between adherence and values (r=.62, p<.01) and adherence and understanding (r=.59, p<.01), with moderate to strong associations. Students who participated in either form of service (organizations or events) had lower scores on adherence than students who did not participate in either form.

6.2. Model 1: Predicting College Students' Service-Oriented Organization Participation

Model 1 addressed participation in service-oriented organizations with three regression models each testing one of the three indicators of participation in service-oriented organizations: organizational joining (Model 1a), immediate involvement (Model 1b), and organizational duration (Model 1c). Each model included the covariate (gender), the six predictors (i.e., the VFI subscales), the moderator (i.e., adherence), and interactions between adherence and each of the six predictors (for a total of six interaction terms).

Model 1a was a logistic regression testing whether motives predicted joining service-oriented organizations and whether adherence moderated the association (see Table 3). The model had good fit (R^2= .10 (Cox and Snell), .13 (Nagelkerke), $X^2(2) = 45.35, p < .001$) and explained approximately 13% of the variance in service-oriented organizational joining. One interaction term was significant, and all others were dropped for model parsimony (see Appendix E for coefficients in the full model including all interaction terms). As shown in Table 3, there were several significant predictors of organizational joining. Gender had a significant association with organizational joining, such that males were 60% less likely to join organizations than females (p=.002). Values was the only significant predictor of joining among the six motive subscales, such that for every 1 unit increase in values, the odds of organizational

28

joining decreased by 58% ($p<.001$). Adherence had a significant association with organizational

joining, such that for every 1 unit increase in adherence, the odds of organizational joining

decreased by 53% ($p<.001$). Adherence was also a significant moderator of the association

between values and organizational joining. As adherence increased, the negative relation

between values and organizational joining became stronger. At -1 SD below the M of adherence,

a one unit increase in values increased the odds of organizational joining by 157%. At the M of

adherence, a one unit increase in values increased the odds of organizational joining only slightly

(7%). At +1 SD above the M, a one unit increase in values decreased the odds of organizational

joining by 55%.

Models 1b and 1c were linear regression models testing whether motives predicted

immediate involvement and duration of involvement in service-oriented organizations and

whether adherence moderated the association. The immediate involvement and duration of

involvement models both had poor fit ($F(225)=1.16$, $p=.32$; $F(225)=.78$, $p=.64$, respectively) and

each explained a small percentage of variance (4.4% and 3.0%, respectively) involvement. Thus,

coefficients were not interpreted for these two models.

6.3. Model 2: Predicting College Students' Service-Oriented Event Participation

Model 2 tested the association between motives and participation in service-oriented

events, as well as whether the association varied by adherence to pandemic safety protocols. One

of the six interactions terms was significant, namely the interaction between understanding and

adherence; the other five interaction terms were dropped for model parsimony (see Appendix F

for full model including all of the interaction terms). The model had good fit ($R^2= .37$ (Cox-

Snell), .50 (Nagelkerke); $X^2(10)=201.60$, $p<.001$) and explained approximately 50% of the

variance in event participation. Standardized and unstandardized regression coefficients are presented in Table 4.

As shown in Table 4, there were several significant predictors of event participation. Gender had a significant association with event participation, such that males were 46% less likely to participate in service-oriented events than females. Among the six VFI subscales, three were significant predictors and in the same direction: values, understanding and social justice. For each, an increase in motives was associated with decreased odds of participating in a service-oriented event and the relation was strongest for understanding (45% decrease in odds), then values (36% decrease in odds), and social justice (27% decrease in odds). Adherence had a significant main effect on event participation, such that for every one unit increase in adherence, the odds of event participation decreased by 48%. Adherence also moderated the negative association between understanding and event participation. At -1 *SD* below the *M* of adherence, the odds of event participation increased 245%. At the *M* of adherence, the odds of event participation increased 63%. At +1 *SD* above the *M* of adherence, event participation decreased 23%.

7. DISCUSSION

Service is important because prosocial contributions by individuals result in societal thriving and are economically advantageous. Service among college students can also promote a successful transition into adulthood, in addition to the benefits to society. One of the factors that predicts whether and the extent to which college students participate in service is their motives (Wilson, 2000). For example, there is a substantial body of empirical research that assesses volunteering motives and their associations with service (e.g., Burns et al., 2005; Burns et al., 2008; Eppler et al., 2011; Gage & Thapa, 2012; Pearl & Christensen, 2017). Previous research among college students suggests that values and understanding motives are the strongest predictors of service. A limitation of previous research is that it did not differentiate in the scale of service-oriented participation. Little is known about the differences between habitual participation, such as in a service organization, and episodic participation, such as at one-off service events. As such, the primary purpose of the current study was to examine associations between college students' motives and their participation in two types of service-oriented activities: service-oriented organizations and service-oriented events. Additionally, because the study used data collected within the context of a global crisis, we sought to determine whether adherence to the COVID-19 pandemic safety protocols caused a variance in either type of service-oriented participation.

7.1. Motives for Volunteering: Organizations Versus Events

Motives, the states of mind which cause humans to perform actions, are complex and difficult to link with perfect certainty to specific actions (Serow, 1991). However, motives are important to study because they can improve recruitment for service-oriented activities. As a starting point in our discussion we first address the question of whether motives were associated

31

with service and to what extent. We turn to the question of which motives in the next section. Findings from the present study suggest that motives were significant predictors of service-oriented participation. However, motives were more important for events (explaining 50% of the variance in event participation) than organizations (explaining 13% of the variance in organizational joining). The strong size of the effect of motives for event participation was unexpected, especially because increases in significant motives were associated with decreases in participation in this study. The unexpected inverse relation between motives and service event participation may be explained by the COVID-19 pandemic, a point which we return to later.

The direction of the effect of motives on service was similar for organizational and event participation, such that increases in motives were also associated with decreases in organizational participation. However, motives were only significant predictors for one of the three indicators of organizational participation, namely joining. Therefore, this negative association between motive and joining may be indicating that college students are not motivated to join service organizations to participate in service, but for other reasons, such as social relationships or resume building. The results of the organizational participation are the opposite of what we expected, and the opposite of what the literature states is beneficial to character development. Current developmental theory states that long-term involvement with an organization is more beneficial than episodic one-off event participation. This is because the repetition allows for reinforcement of positive character development within these types of organizations (Morris & Bronfenbrenner, 2006). Additionally, according to expectancy-value theory, the familiarity brought about by such repetition of an activity should increase the expectation of successful completion of the activity, thereby increasing the motivation to pursue the activity again (Eccles & Wigfield, 1995).

32

Interestingly, the models for immediate involvement and duration of involvement had poor fit to the data, which suggests that motives might not be salient predictors of sustained service participation through organizations. The poor fit of the models assessing motives and immediate involvement or duration of organizational participation might be explained by the difference in time scales of motives and participation. Motives were assessed at one point in time and during a major historical event (i.e., the COVID-19 pandemic), whereas organizational participation was measured through history of participation, either immediately or over the last several years. Thus, motives were measured as though they are constant throughout the entirety of a person's involvement with a service-oriented organization, which is likely invalid.

Indeed, our survey asked participants to respond to statements about motivation as they were feeling at the time of the survey. However, research has shown that college students' motives change over time, generally decreasing for a given activity (Kyndt et al., 2015; Lieberman & Remedios, 2007; Pan & Gauvain, 2012). Cognitive science also supports a view that young adults have increased levels of motivational flexibility in the salience of goals, i.e. motives change more frequently and faster than organizational participation does (Crone & Dahl, 2012). Even among adults, though, it can be difficult to assess which and to what extent motives are associated with volunteering because the salience of motives changes over the course of a volunteer's career. Clary et al. (1992) describe this difference, "as time passes, a volunteer's original needs may be met, and the volunteer may feel the need to satisfy newly relevant motivations" (p. 346). For example, someone motivated by career motives to add a line to their resume will stop volunteering once they get a job, unless they have another motive which then becomes salient. The change in motive salience over time is important to understand so that

practitioners can identify evidence to support specific methods of recruiting and retaining volunteers.

7.2. Motives for Volunteering: Which Motives for Which Forms?

Values motives were strong predictors of service-oriented participation, both in the form of events and organizations. A review of past research suggests that values motives were particularly important to both episodic and organizational participation, but the associations were positive (Wilson, 2000). Contrary to many previous studies, the results of the current study showed that increases in values motives were associated with decreases in participation in either type of service activity (Chacón et al., 2017). We believe that the unusual results relate to the unusual circumstances. The COVID-19 pandemic mattered for participation, both organizational and episodic, as shown by the significance of safety protocol adherence as a main effect. As shown on the timeline (Appendix A), at the time the survey was being filled out, students had experienced a year of travel bans, mask mandates, coast to coast protests, online schooling, and constant advice from the CDC on how best to protect their community from the spread of the disease. Vaccines were not fully implemented, and at home COVID testing was expensive and limited. Therefore, it was in the community's best interest for people to stay home unless absolutely necessary. Students were in a situation where they had to choose between caring for their community by participating in service-oriented activities (in which case an increase in the values motive would result in an increase in participation) or by staying home to help stop the spread of the virus (in which case an increase in the values motive would result in a decrease in participation). This dissonance was partly anticipated, which is why our hypotheses predicted strength but not direction.

Although values was the strongest predictor of volunteerism, there were other motives that were important, at least for events. That is, the understanding and social justice motives also predicted less episodic participation. The understanding motive leads people to want to learn and understand more about the organization or population they are working with, or to just learn new skills or information in general (Clary et al., 1998). The negative association between understanding and participation could also be related to the pandemic. However, instead of being moved to care for their community by staying home as the values motivated individual is, the person who scores high on the understanding motive may instead have researched COVID-19, transmission rates, and disease vectors, leading to a decreased chance of participation in service-oriented events. However, many service-oriented organizations pivoted to virtual meetings and virtual volunteering efforts, so an individual focused on education and skill building might choose to take advantage of these new opportunities.

We did not expect a similar negative association between the social justice motive and service-oriented event participation. For a year prior to the collection of data for the current study, events calling for social justice had been happening across the country. However, this unexpected result may be due to the large proportion of individuals (81.7%) involved in one specific service-oriented event (The Big Event). This particular event seeks to show gratitude to the local community for their support of the university with which it is associated. Therefore, individuals who were motivated by social justice may have seen this particular event as not aligning with their motives.

7.3. Motives for Volunteering: The Context of the COVID-19 Pandemic

March 2020 marked the beginning of a new historical time period: the COVID-19 pandemic. As defined by the ecological systems theory, the pandemic was not just an instance of

macrotime, but also a shift in the social norms that comprise the macrosystem due to the safety protocols that were out in place by the CDC. Adherence to the safety protocols became not just a matter of medical advice, but also became an indication of political view and ethics. Due to this shift in social norms, we believed that adherence to the safety protocols would be a significant factor in this study, influencing the participation based on protective, understanding, and career motives.

We expected the COVID-19 pandemic to have a significant negative main effect on the participation of college students in service-oriented activities, both organizations and events. As a main effect, adherence was negatively associated with both organizational joining and event participation. It was not surprising to find that as students were more likely to wear a mask and social distance, they were less likely to participate in organization meetings or in-person events, especially during a time when the CDC was still recommending staying home to prevent the spread of the virus.

We also hypothesized that the relations between motives and service participation would vary by adherence to pandemic safety restrictions. However, we expected the moderating role of adherence to vary depending on the type of motive assessed. On the one hand, hardship-related motives, such as protective motives, are indicative of individuals who need to cope with a hardship, such as the loneliness and stress of social distancing during a global pandemic. Thus, we expected that the relation between protective motives and service would be stronger as adherence to pandemic safety restrictions increased as these individuals turned to service as a coping mechanism. On the other hand, some motives, such as understanding and career motives, were more easily satisfied virtually than others during a pandemic, through virtual service organization meetings and activities. Thus, we expected the relation between

36

understanding/career motives and service to become weaker as adherence to pandemic safety restrictions increased as these individuals turned toward virtual options. Our findings support the main effects of adherence to pandemic safety restrictions, such that for every 1 unit increase in adherence to pandemic safety protocols, organizational joining decreased by 53% ($p<.001$) and event participation decreased by 48% ($p<.001$). However, our findings did not support our expectations for the moderating role of adherence, which we turn to next in our discussion.

There was one significant interaction for service-oriented organizational participation. That is, the association between values and organizational joining was moderated by adherence. When an individual reported strong values motive and low adherence to safety protocols, organizational joining showed an increase in the odds of organizational joining. However, when an individual reported strong values motive and high adherence to safety protocols, there was a decrease in the odds of organizational joining. The values motive was assessed through questions designed to elicit responses which show the degree to which the survey participant cares about other people. Within the context of the pandemic, this motive can be expressed by staying home rather than attend organization meetings. In this way, the students could rationalize that they were helping others by following the CDC guidelines, as well as potentially finding other ways to volunteer, such as by making charitable donations.

There was one significant interaction for service event participation. That is, the association between the understanding motive and service event participated was moderated by adherence. As with values and organizational joining above, when understanding was low, the interaction increased the odds of service event participation and when understanding was high, the interaction decreased the odds of service event participation. The understanding motive was assessed though questions which show what the survey participant expected to get out of their

37

volunteer experience, such as gaining new experiences, knowledge, and skills. This significant

moderation interaction may lend support to our explanation, in regards to the negative

association between understanding and event participation, that individuals who are highly

motivated by understanding may have chosen to pivot to virtual volunteering rather than

participate in in-person service events.

7.4. Limitations and Future Directions

Although the current study helped to understand the role of motives and service among

college students during the COVID-19 pandemic, there are some important limitations to bear in

mind. The primary limitation of the current study is that of generalization. That is, the study took

place in the context of a specific point in history, namely during a global pandemic. Thus, the

results of this study may be context-specific, limiting our ability to generalize the findings to

other contexts or other points in history. Our findings show that the participants did not serve in

the numbers we anticipated, but are unclear as to the reasons for this. However, we believe that

the COVID-19 pandemic was involved in the decision. Indeed, the COVID-19 pandemic creates

a unique context, as the literature shows. Moreover, there may be other dynamic aspects of

college students' motives and service not captured in this study due to the ongoing nature of the

pandemic. There is little empirical literature about the pandemic from which to draw, with

continuously changing safety recommendations and cultural context, which can change

individual's decisions and motives (see the timeline in Appendix A for more details about the

pandemic as pertains to the specific geographic context within which the present study occurred).

Second, there is a limitation in the representation of contexts. One of the strengths of this

study is the inclusion of two different contexts, organizations and events. As stated in the

background for the current study, there is little agreement on how to differentiate between

different types of volunteerism, though we instinctively know that volunteering with a service-oriented organization is different than volunteering at a one-off event. We suggest that there are at least three broad categories of service context: form of service (which would include episodic and organizational), geographic context (school or community), and organizational context (service organization or social organization). While the differences between organizational and episodic volunteerism were not as significant in this study as we hypothesized, our results add to the growing literature demonstrating a distinction between these two forms of volunteerism. Originally, we wanted to also study the geographic context. However, as discussed earlier, the sample is weighted heavily towards service-oriented participation through on-campus organizations and events. Prior research has shown motives to be much more salient in other contexts, such as community-based organizations or sports charity events (Chacón et al., 2017, Dunn & Hyde, 2016). Community-based organizations showed some potential variance in motive for immediate involvement in this study, however, the lack of significant sample size representing community-based organizations makes the finding unreportable. Future research should not just agree with the existing literature, but be structured in such a way as to begin teasing out the specific differences and what the benefits of each form of context are.

Importantly, there are limitations to the study design that should be considered in the interpretation of findings. That is, the present study used cross-sectional data and, therefore, could not assess change over time. As noted earlier, there is evidence that motives change over time (Kyndt et al., 2015; Lieberman & Remedios, 2007; Pan & Gauvain, 2012) and that participation in service is dynamic across the college years (Omoto et al., 2010). Thus, longitudinal studies are needed to understand the dynamic nature of motives and service. Another limitation of cross-sectional data is the inability to draw conclusions about causation.

We can make note of associations and correlations, but without a full experimental design, including control group, intervention, and controls for potential confounding variables, causation simply cannot be concluded.

7.5. Practical Application

Due to contextual limitation, the main application for practitioners for this research falls into a narrow category: planning for future unknowns. Findings from the current study contribute to what is currently known about the volunteerism trends during drawn-out stressful situations, such as pandemics. Therefore, nonprofit organizations can use these findings to aid in planning for other stressful situations: future pandemics, economic downturns, and other community-wide crises of stress. Our research shows the complicated ways that altruism can be expressed under such conditions, and indicate that practitioners should be ready with plans for virtual volunteering options since the data show that the odds of college students who are motivated to serve decrease as their adherence to safety protocols increases. Additionally, practitioners should note that our data show that event participation was more associated with motives than organizational participation, indicating that college students may be more likely to participate in something which does not require a long commitment in times of uncertainty.

Additionally, the significance of the values motive for both organizational and episodic participation should not be overlooked because higher values ratings are associated with lower participation. We believe that the negative relationship is due to conflicting methods of expressing those values within the context of the COVID-19 pandemic, rather than evidence that stronger values lead to less service participation overall. Practitioners should keep this in mind when recruiting volunteers, however, and project a strong focus on the values they want their

organization or event to be associated with, and give potential volunteers a reason to overcome
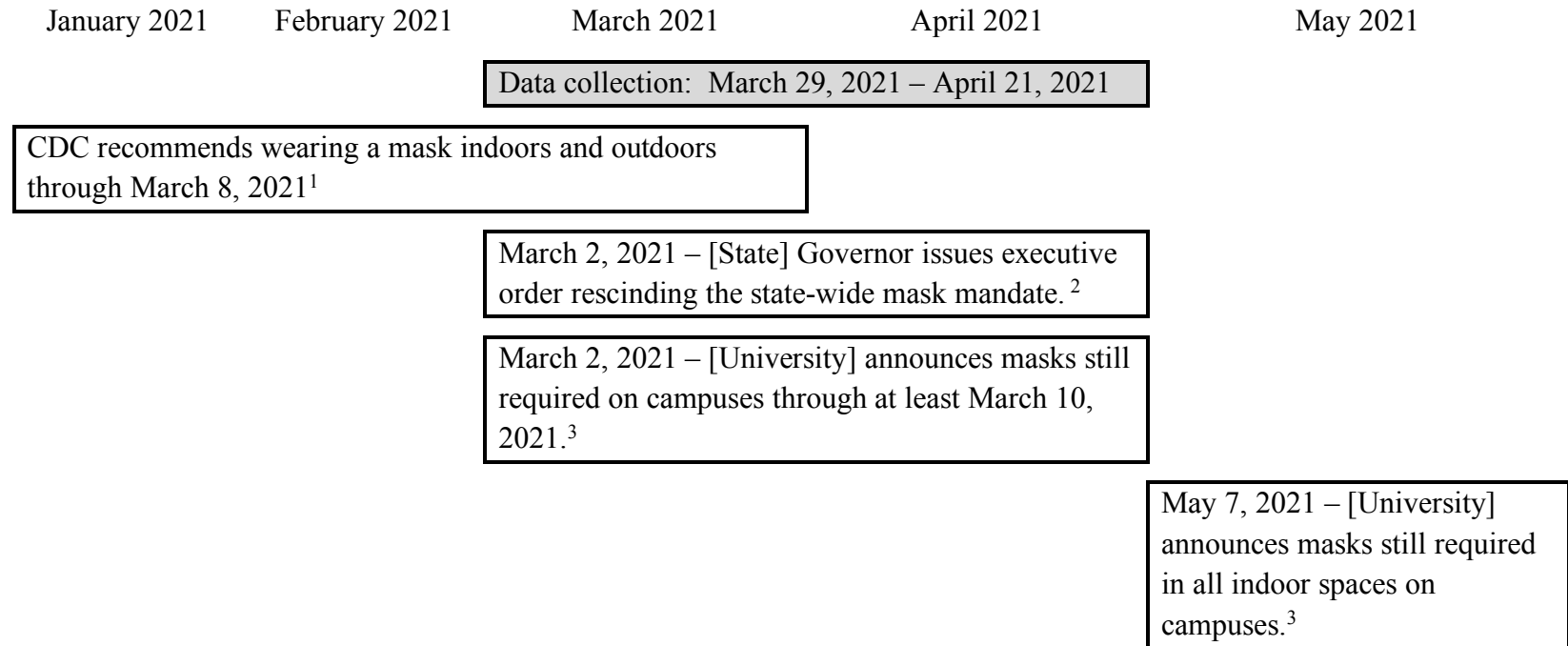
any such conflict of values.

8. CONCLUSION

Due to the importance of volunteers to the United States economy and the developmental implications of service participation by college students, this study proposed to understand the association between motives and service activity participation among college students, whether there was a difference between organizational participation or episodic participation, and if adherence to COVID-19 safety protocols moderated these associations. Though we found that both organizational and episodic service was associated with values and episodic service was associated with understanding and social justice, our data show that as motives grew stronger in college students, participation decreased for all of the significant interactions in this study. We believe that this unexpected finding is due to the context of a global pandemic. Overall, there was no substantial evidence for moderation by COVID-19 safety protocol adherence, which suggests that although we believe the pandemic context may be why the associations between motives and participation were unexpected, individual differences in adherence to safety protocols did not change the way students participated.

This study advanced research by filling a gap in the ongoing COVID-19 research and providing a better understanding of how motives can predict volunteerism in stressful situations. With the understanding provided by this study that stressful situations may cause decreased participation with increased motivation, practitioners can adapt their recruitment plans as the pandemic continues to evolve or during other similar situations.

Volunteer service is a critical element of every community, especially during stressful and traumatic situations. Though we hope the world will not face a similar global pandemic again, it would be foolish not to prepare for that possibility. Therefore, it is essential to

understand how this type of context affects the individual choices which lead to participating in service.

Figure 1 Timeline of Data Collection

January 2021	February 2021	March 2021	April 2021	May 2021

Data collection: March 29, 2021 – April 21, 2021

CDC recommends wearing a mask indoors and outdoors through March 8, 2021[1]

March 2, 2021 – [State] Governor issues executive order rescinding the state-wide mask mandate. [2]

March 2, 2021 – [University] announces masks still required on campuses through at least March 10, 2021.[3]

May 7, 2021 – [University] announces masks still required in all indoor spaces on campuses.[3]

[1] (Center for Disease Control, 2022)
[2] (Office of the Texas Governor | Greg Abbott, n.d.)
[3] (Texas A&M University, n.d.)

Table 1 Demographic Characteristics of the Participants

Sample Characteristics	n	%
Gender		
Male	165	37.0
Female	226	50.7
Nonbinary	55	12.3
Race/Ethnicity		
White, Caucasian, or European American	145	32.5
Hispanic or Latino [a]	57	12.8
Black or African American	11	2.5
Asian/Asian American	56	12.6
Other [b]	20	4.5
Hispanic or Latino Multiracial [c]	109	24.4
Multiracial [d]	48	10.8

[a] Indicates individuals who only selected "Hispanic/Latino".

[b] Survey categories "American Indian/Alaska Native", "Native Hawaiian/Pacific Islander",

and "Other" have been collapsed into one category.

[c] Indicates individuals who selected "Hispanic/Latino" and any other race/ethnicity in any

combination.

[d] Indicates individuals who selected more than one race/ethnicity except as represented by the

Hispanic or Latino Multiracial category.

Table 2 Descriptive Statistics and Correlations for Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Male[a]	-											
2. Nonbinary[a]	-.29**	-										
3. VFI - Protective	-.07	-.20**	-									
4. VFI - Values	-.05	-.37**	.41**	-								
5. VFI - Career	-.03	-.19**	.47**	.43**	-							
6. VFI - Understanding	-.06	-.34**	.48**	.80**	.56**	-						
7. VFI - Enhancement	-.07	-.21**	.68**	.59**	.62**	.60**	-					
8. VFI - Social justice	-.07	-.30**	.49**	.74**	.45**	.71**	.50**	-				
9. Adherence	-.01	-.32**	.30**	.62**	.35**	.59**	.35**	.54**	-			
10. Organizational dosage	-.08	.16**	-.03	.26**	-.17**	-.27**	-.11*	-.22**	-.25**	-		
11. Organizational participation	-.12*	.30**	-.17**	-.56**	-.29**	-.52**	-.28**	-.45**	-.48**	-.62**	-	
12. Event participation	-.08	.27**	-.14**	-.51**	-.26**	-.46**	-.21**	-.42**	-.42**	.38**	.67**	-
Frequency	37.0%	12.3%									53.4%	57.6%
M			4.01	5.15	4.35	4.90	4.26	4.64	3.60	4.63		
SD			1.20	1.37	1.31	1.37	1.26	1.35	1.15	6.93		
α			.73	.85	.79	.85	.78	.84				
Skewness ($SE = .12$)			.26	-.42	.01	-.39	.08	-.14	-.46	2.19		
Kurtosis ($SE = .23$)			-.22	-1.01	-.61	-.89	-.55	-.71	-.95	5.98		

Note. *$p < .05$. **$p < .01$. [a]Comparison group is female.

Table 3 Model 1a. Logistic Regression Analysis Summary Relating Motives to Organizational Participation

Variable	B	SE	Wald	p	Exp(B)
Intercept	0.36	0.23	2.35	.13	1.43
Male [a]	-0.93	0.31	9.18	.002	0.40
Non-binary [a]	0.39	0.68	0.33	.56	1.48
VFI - Protective	0.29	0.16	3.32	.07	1.34
VFI - Values	-0.88	0.24	13.75	<.001	0.42
VFI - Career	-0.11	0.13	0.73	.39	0.89
VFI - Understanding	-0.23	0.20	1.29	.26	0.79
VFI - Enhancement	0.07	0.17	0.16	.69	1.07
VFI - Social justice	-0.20	0.16	1.65	.20	0.82
Adherence	-0.76	0.19	15.77	<.001	0.47
VFI Values * adherence [b]	0.95	0.20	24.06	<.001	2.60

[a] Comparison group is female. [b] Nonsignificant interaction terms were dropped for model parsimony.

Table 4 Model 2. Logistic Regression Analysis Summary Relating Motives to Event Participation

Variable	B	SE	Wald	p	Exp(B)
Intercept	0.43	0.22	3.98	.05	1.54
Male [a]	-0.62	0.28	4.85	.03	0.54
Non-binary [a]	0.39	0.67	0.35	.56	1.48
VFI - Protective	0.24	0.15	2.61	.11	1.27
VFI - Values	-0.45	0.20	4.91	.03	0.64
VFI - Career	-0.16	0.12	1.72	.19	0.85
VFI - Understanding	-0.44	0.21	4.32	.04	0.65
VFI - Enhancement	0.13	0.16	0.62	.43	1.14
VFI - Social justice	-0.32	0.15	4.30	.04	0.73
Adherence	-0.65	0.19	12.42	<.001	0.52
VFI - Understanding * adherence [b]	0.93	0.18	26.20	<.001	2.53

[a] Comparison group is female. [b] Nonsignificant interaction terms were dropped for model parsimony.

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APPENDIX A

Timeline of COVID and Racial Unrest

December, 2019

- December 31, 2019 – COVID-19 first reported to the World Health Organization.[1]

January 2020

- January 20, 2020 – CDC confirms first U.S. case of COVID-19.[1]

- January 23, 2020 – [University] confirms possible case of COVID-19, a student returning from Wuhan, China. Later, this case was confirmed negative.[2]

- January 31, 2020 – U.S. Secretary of Health and Human Services declares a public health emergency, WHO declares a Public Health Emergency of International Concern.[1]

March 2020

- March 9, 2020 – All [University]-sponsored international travel between March 16 and May 1 is canceled.[3]

- March 10, 2020 – [University] classes canceled for pivot to online classes.[2]

- March 11, 2020 – WHO declares COVID-19 a pandemic.[1]

- March 12, 2020 – [University] faculty and students abroad return home as White House announces travel restrictions.[2]

- March 12, 2020 – [University] cancels all in-person classes for remainder of spring semester.[3]

- March 13, 2020 – U.S. President declares a nationwide emergency.[1]

- March 13, 2020 – [State] Governor declares state of disaster due to COVID-19.[3]

- March 13, 2020 – Breonna Taylor, a black woman, is killed in her home by police who mistakenly raided her apartment in Louisville, KY.[4]

- March 15, 2020 – U.S. states start to shut down to prevent spread.[1]

- March 15, 2020 – Jose Gomez stabbed four members of an Asian family in a Sam's Club in Odessa, TX because he thought they were Chinese and spreading the coronavirus.[5]

- March 16, 2020 – The Big Event is canceled.[2]

- March 17, 2020 – First human trial of COVID-19 vaccine begins.[1]

- March 17, 2020 – The first positive case of COVID is confirmed in [County]. [Cities] declare state of emergency.[2]

- March 17, 2020 – [University] postpones spring commencement ceremony.[2]

- March 19, 2020 – [State] Governor issues executive order closing schools, bars, and restaurants for in-person activity.[3]

- March 19, 2020 – First [University] student tests positive for coronavirus.[2]

- March 23, 2020 – [City] mayor issue shelter in place ordinance starting March 24 until April 7.[2]

- March 24, 2020 – [State] Governor issues executive order mandating all COVID-19 tests results be shared on a daily basis with the [State] Department of State Health Services.[3]

- March 26, 2020 – [State] Governor issues executive order mandating 14-day quarantine for air travelers from New York and Louisiana.[3]

- March 26, 2020 – The windows of Jade Garden restaurant in Seattle, WA are shattered, totaling $1500 in damages. Another restaurant, Minado Buffet in Yakima, WA, is similarly damaged with racist graffiti spray painted on it.[5]

- March 28, 2020 – White House extends social distancing measures until the end of April 2020.[1]

- March 29, 2020 – [State] Governor issues executive order mandating 14-day quarantine for all persons traveling to [State] from [State] by road.[3]

- March 31, 2020 – [State] Governor issues executive order instructing people to avoid congregating indoors in public except to provide or obtain essential services, which are redefined for the state of Texas to include places of worship. Additionally, schools are mandated to remain closed.[3]

April 2020

- April 3, 2020 – CDC presents new mask wearing guidelines and recommendations.[1]

- April 3, 2020 – [University] announces that all summer courses will be offered online only.[6]

- April 4, 2020 – A group of teens harass and assault a 55-year-old Asian woman, yelling racial slurs about the coronavirus.[5]

- April 10, 2020 – U.S. becomes worldwide leader for reported deaths due to COVID-19.[1]

- April 17, 2020 – [State] Governor issues an executive order allowing retail services to reopen that are not considered essential by the U.S. Department of Homeland Security but can be provided through pickup, delivery, or by mail.[3]

- April 27, 2020 – [State] Governor issues an executive order reopening in-person services and retail operations to 25% capacity (50% capacity in counties with less than five reported COVID-19 cases) beginning May 1, 2020.[3]

May 2020

- May 2, 2020 – WHO renews emergency declaration, declaring a global health crisis.[1]

- May 5, 2020 – [State] Governor issues an executive order expanding reopening to dine-in restaurants, wedding venues, salons, and pools (May 8, 2020) and then to manufacturing services and gyms (May 18, 2020) at 25% capacity (50% capacity in counties with less than five reported COVID-19 cases). Additionally, the order states that no jurisdiction may order individuals to wear face coverings. Public schools are to remain closed for the remains of the 2019-2020 school year. [3]

- May 9, 2020 – U.S. unemployment rate at 14.7%, the lowest since the Great Depression. This is affecting mostly hospitality, leisure, and healthcare industries and low income and minority workers. [1]

- May 21, 2020 – [State] Governor issues executive order terminating all travel restrictions to the state of [State]. [3]

- May 25, 2020 – George Floyd, a black man, dies while in police custody in Minneapolis, MN. The video of this act goes viral the next day. [7]

- May 26, 2020 – Protests over police use of force begin in Minneapolis, MN. [7]

- May 27, 2020 – Protests begin in cities across the U.S., connecting the Floyd death with that of Breonna Taylor in Louisville, KY and Ahmaud Arbery in Brunswick, GA. [7]

- May 28, 2020 – U.S. COVID-19 death toll surpasses 100,000. [1]

- May 28, 2020 – The National Guard is mobilized in Minnesota to quell demonstrations. [7]

- May 29, 2020 – [University] President announces postponement of summer commencement, plans for hybrid and online classes for fall semester, plans for enhanced cleaning and disinfecting. [6]

- May 29, 2020 – Derek Chauvin is arrested and charged with the murder of George Floyd. [7]

- May 30, 2020 – Minneapolis Mayor says that the peaceful protests were being used by "white supremacists, members of organized crime, out-of-state instigators, and possibly even foreign actors" to incite violence.[7]

- May 31, 2020 – The National Guard is sent out to more than two dozen states to assist police as hundreds of thousands protest around the country.[7]

June 2020

- June 1, 2020 – George Floyd's death is ruled a homicide by two different autopsies.[7]

- June 1, 2020 – President threatens to deploy the military to states where governors and mayors cannot get protests under control.[7]

- June 3, 2020 – [State] Governor issues executive order removing occupancy limit for essential services, religious services, local government operations, child care services, youth camps, and recreational sports programs for youth and adults. Restaurant capacity is increased to 75%. All other indoor services and establishments are allowed to operate at 50% capacity. Public schools are allowed to resume normal operations for the summer using guidance provided by the [State] Education Agency. [3]

- June 3, 2020 – Three more former police officers are charged in in the death of George Floyd: Thomas Lane, J. Alexander Kueng, and Tou Thao.[7]

- June 6, 2020 – Two Buffalo, NY police officers are suspended and charged with assault after being caught on video shoving a 75-year old protestor to the ground, resulting in hospitalization.[7]

- June 8, 2020 – In Seattle, WA the Capitol Hill Autonomous Zone is established protesting the murder of George Floyd and demanding the city defund the police. The zone continued peaceful protests and operations until cleared by police on July 1.[4]

- June 9, 2020 – [University] President announces mask requirement on [University] campuses.[6]

- June 20, 2020 – At a speech in Tulsa, OK President refers to the coronavirus as "Kung Flu".[5]

- June 24, 2020 – CDC starts rethinking its pandemic response to include a health equity framework in response to the Black Lives Matter protests.[1]

July 2020

- July 2, 2020 – [State] Governor issues executive order mandating mask wearing. Specific exceptions include children under 10, persons with disabilities that prevents wearing a mask, while exercising, while voting, while driving, while swimming, and while worshiping. Specifically, not excepted are persons participating in protests.[3]

- July 23, 2020 – CDC releases evidence-based resources for safe school reopening.[1]

August 2020

- August 23, 2020 – Jacob Blake, a black man, is non-fatally shot by Rusten Sheskey, a police officer in Kenosha, WI. Protests follow.[4]

- August 25, 2020 – Kyle Rittenhouse, a white minor, crosses state lines to protect property from protestors in Kenosha, WI. He kills 2 and injures another.[4]

- September 17, 2020 – [State] Governor issues executive order removing occupancy restrictions from schools and drive-in establishments. Additionally, non-essential establishments are allowed to operate at 75% capacity.[3]

- September 22, 2020 – U.S. COVID-19 death toll surpasses 200,000.[1]

December 2020

- December 11, 2020 - FDA issues an Emergency Use Authorization for the first COVID-19 vaccine (Pfizer-BioNTech) for persons aged 18 years and up.[1]

- December 14, 2020 – U.S. COVID-19 death toll surpasses 300,000.[1]

- December 18, 2020 - FDA issues COVID-19 Emergency Use Authorization for second COVID-19 vaccine (Moderna) for persona aged 18 years and up.[1]

- December 30, 2020 – First case of UK (Alpha) variant reported in U.S.[1]

January 2021

- January 18, 2021 – U.S. COVID-19 death toll surpasses 400,000.[1]

- January 22, 2021 – In Portland, OR, a man is arrested for yelling racial slurs about coronavirus and kicking an Asian woman who was with her son on a bus.[5]

- January 26, 2020 – Worldwide COVID-19 cases surpass 100 million.[1]

- January 28, 2021 – First case of South African (Beta) variant reported in the U.S.[1]

February 2021

- February 1, 2021 – At home tests put into distribution in the U.S.[1]

- February 16, 2021 – Vaccine distribution in several states, disrupted due to severe winter storms.[1]

- February 21, 2021 – U.S. COVID-19 death toll surpasses 500,000.[1]

- February 27, 2021 – FDA issues Emergency Use Authorization for Johnson and Johnson one shot COVID-19 vaccine.[1]

March 2021

- March 2, 2021 – [State] Governor issues executive order removing all COVID-19 related operating limits on businesses within the state. Additionally, the state-wide mask mandate is rescinded and no jurisdiction may order individuals to wear face-coverings. [3]

- March 2, 2021 – [University] announces masks still required on campuses through at least March 10, 2021.[6]

- March 8, 2021 – CDC announces that fully vaccinated people can gather indoors without masks.[1]

- March 13, 2021 – U.S. surpasses 100 million vaccinations administered.[1]

- March 16, 2021 – A series of mass shootings targeting spas in Atlanta, GA occurs. Eight people are killed, six of whom are Asian women.[4]

- March 19, 2021 – CDC announces kids in school can socially distance from 3 feet instead of 6 feet.[1]

- March 29 – April 21, 2021 – Wave 1 of T3 survey is collected.

April 2021

- April 2, 2021 – CDC announces fully vaccinated people can safely travel domestically without a COVID test first.[1]

- April 21, 2021 – U.S. surpasses 200 million vaccinations administered.[1]

- May 7, 2021 – [University] announces masks still required in all indoor spaces on campuses.[6]

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[1] (Center for Disease Control, 2022)
[2] (Falcon, 2020)
[3] (Office of the Texas Governor | Greg Abbott, n.d.)
[4] (2020-2022 United States racial unrest, 2022)
[5] (Xenophobia and racism related to the COVID-19 pandemic, 2022)
[6] (Texas A&M University, n.d.)
[7] (Taylor, 2021)

Survey Questions

Title of Research Study: College Students' Service-Related Behaviors and Attitudes in the Context of the COVID-19 Pandemic

Section 1: Demographic/Background Information

- What year are you (based on credits accrued)?

- What is your major(s)?

- Do you have any minors, concentrations, or certificates? Please list them all.

- Gender

- Race/ethnicity (select all that apply)

- Select which response best describes your current behaviors during the COVID-19 pandemic.

   o I social distance as recommended by public health officials.

   o I wear a mask as recommended by public health officials.

Section 2: Extracurricular Activity Participation

In this section, we are interested in learning about any of the **clubs, sports, faith-based groups, student organizations, or other extracurricular activities** that you participated in during the **FALL 2020 SEMESTER**. Have you participated in any of these types of activities?

The next activity we want to ask you about is **SERVICE/VOLUNTEER** activities. Did you participate in any service/volunteer activities (e.g., Habitat for Humanity, the 12th Can, Red Cross Club, etc.) in Fall 2020?

- Which SERVICE/VOLUNTEER activity did you participate in? If you participated in multiple SERVICE/VOLUNTEER activities, please list the one that is MOST IMPORTANT to you. Briefly describe the activity if the name is not obvious.

- Is this a [University] organization or some other community-based organization?

- How many years have you done this activity?

- How often does this activity meet?

- How long are the meetings?

Section 5: Volunteer Functions

So close! This is the next-to-last section, with several questions for you to answer about volunteering. It's only one page, so make sure you make it to the bottom!

Please indicate the extent to which you think each of the following statements is an important or unimportant reason for volunteering.

- Volunteering makes me feel needed.

- I am concerned about those less fortunate than myself.

- I can learn how to deal with a variety of people.

- By volunteering I can enable all people to be equally involved in public life.

- Volunteering makes me feel important.

- I can explore my own strengths.

- No matter how bad I've been feeling, volunteering helps me to forget about it.

- I can learn more about the cause for which I am working.

- Volunteering allows me to explore different career options.

- Volunteering lets me learn things through direct, hands on experience.

- Volunteering increases my self-esteem.

- I feel compassion toward people in need.

- Volunteering can help me to get my foot in the door at a place where I would like to work.

- Volunteering will help me to succeed in my chosen profession.

- Volunteering enables me to create equal opportunities for all people.

- Volunteering makes me feel better about myself.

- Volunteering helps me work through my own personal problems.

- Volunteering experience will look good on my résumé.

- Volunteering allows me to gain a new perspective on things.

- Volunteering allows me to even out unequal social conditions.

- I feel it is important to help others.

- Volunteering is a way to make new friends.

- By volunteering I feel less lonely.

- Doing volunteer work relieves me of some of the guilt over being more fortunate than others.

- I can make new contacts that might help my business or career.

- I am genuinely concerned about the particular group I am serving.

- Volunteering is a good escape from my own troubles.

- Volunteering lets me promote equal opportunities.

- Volunteering enables me to facilitate access to those things that everyone is equally entitled to.

- I can do something for a cause that is important to me.

Section 6: Situational Motivation

Last one! You made it to the last section, which has questions about your participation in

ONE- TIME SERVICE EVENTS. Proceed to the next page to finish up this survey.

- Have you participated in any **SERVICE EVENTS** this semester? A SERVICE EVENT is a one- time service activity or volunteering experience in which you devoted at least 1 hour of your time without monetary compensation to serve the needs of others.

- Which SERVICE EVENT did you participate in during the Fall 2020 semester? Briefly describe the event.

Volunteer Function Inventory Subscales

	n	M	SD
Protective subscale	449	4.02	1.21
No matter how bad I've been feeling, volunteering helps me to forget about it.		4.13	1.81
By volunteering I feel less lonely.		3.99	1.72
Doing volunteer work relieves me of some of the guilt over being more fortunate than others.		3.76	1.74
Volunteering helps me work through my own personal problems.		3.99	1.72
Volunteering is a good escape from my own troubles.		4.21	1.70
Values subscale	445	5.16	1.37
I am concerned about those less fortunate than myself.		5.09	1.63
I am genuinely concerned about the particular group I am serving.		4.95	1.77
I feel compassion about those in need.		5.09	1.80
I feel it is important to help others.		5.32	1.85
I can do something for a cause that is important to me.		5.36	1.60
Career subscale	448	4.36	1.32
Volunteering can help me get my foot in the door at a place to work.		4.31	1.81
I can make new contacts that might help my business or career.		4.33	1.81
Volunteering allows me to explore different career options.		4.36	1.73
Volunteering will help me to succeed in my chosen profession.		4.37	1.75
Volunteering experience will look good on my resume.		4.41	1.80
Understanding subscale	447	4.91	1.37
I can learn more about the cause for which I am working.		4.91	1.70
Volunteering allows me to gain a new perspective on things.		5.00	1.75
Volunteering lets me learn new things through direct hands on experience.		5.04	1.75
I can learn how to deal with a variety of people.		4.96	1.76
I can explore my own strengths.		4.65	1.77
Enhancement subscale	446	4.28	1.27
Volunteering makes me feel important.		4.05	1.80
Volunteering increases my self-esteem.		4.26	1.68
Volunteering makes me feel needed.		4.15	1.75
Volunteering makes me feel better about myself.		4.30	1.82
Volunteering is a way to make new friends.		4.62	1.68
Social justice subscale	443	4.65	1.36
Volunteering allows me to even out unequal social conditions.		4.60	1.68
Volunteering lets me promote equal opportunities.		4.73	1.80
Volunteering enables me to create equal opportunities for all people.		4.72	1.78
I can enable all people to be equally involved in public life.		4.51	1.70
Volunteering enables me to facilitate access.		4.71	1.74

APPENDIX D

Full Linear Regression Analysis Summary Relating Motives to Organizational Dosage

Variable	Unstandardized Coefficients		Standardized		Collinearity Statistics	
	B	*SE*	*β*	*p*	Tol.	VIF
Intercept	10.95	1.91		<.001		
Male[a]	-0.92	0.73	-.06	.21	.83	1.21
Non-binary[a]	0.56	1.11	.03	.62	.75	1.34
VFI - Protective	0.86	0.38	.15	.03	.49	2.04
VFI - Values	-0.24	0.48	-.05	.62	.24	4.18
VFI - Career	-0.50	0.34	-.09	.14	.52	1.94
VFI - Understanding	-0.69	0.47	-.14	.15	.24	4.13
VFI - Enhancement	0.09	0.41	.02	.83	.39	2.56
VFI - Social justice	-0.45	0.39	-.09	.25	.37	2.74
Adherence	-0.43	0.37	-.07	.25	.56	1.79
VFI - Protective * adherence	-0.01	0.34	.00	.98	.55	1.83
VFI - Values * adherence	-0.13	0.42	-.03	.76	.32	3.14
VFI - Career * adherence	-0.14	0.31	-.03	.66	.59	1.71
VFI - Understanding * adherence	0.43	0.44	.08	.33	.31	3.28
VFI - Enhancement * adherence	0.12	0.36	.02	.74	.44	2.27
VFI - Social justice * adherence	0.35	0.38	.06	.36	.43	2.31

[a] Control group is female.

APPENDIX E

Model 1a. Full Logistic Regression Analysis Summary Relating Motives to Organizational

Participation

Variable	B	SE	Wald	p	Exp(B)
Intercept	0.32	0.24	1.83	.18	1.37
Male [a]	-0.91	0.31	8.78	.002	0.40
Non-binary [a]	0.36	0.69	0.28	.60	1.44
VFI - Protective	0.31	0.21	2.30	.13	1.37
VFI - Values	-0.85	0.24	12.27	<.001	0.43
VFI - Career	-0.16	0.17	0.96	.33	0.85
VFI - Understanding	-0.25	0.21	1.33	.25	0.78
VFI - Enhancement	0.10	0.21	0.23	.63	1.10
VFI - Social justice	-0.26	0.19	1.91	.17	0.77
Adherence	-0.75	0.20	14.69	<.001	0.47
VFI - Protective * adherence	-0.02	0.21	0.01	.91	0.98
VFI - Values * adherence	0.83	0.27	9.68	.00	2.28
VFI - Career * adherence	0.07	0.17	0.15	.70	1.07
VFI - Understanding * adherence	0.08	0.25	0.12	.73	1.09
VFI - Enhancement * adherence	-0.06	0.19	0.08	.78	0.95
VFI - Social justice * adherence	0.12	0.20	0.33	.57	1.12

[a] Control group is female.

Model 2. Full Logistic Regression Analysis Summary Relating Motives to Event Participation

Variable	B	SE	Wald	p	Exp(B)
Intercept	0.41	0.23	3.08	.08	1.50
Male [a]	-0.63	0.29	4.84	.03	0.53
Non-binary [a]	0.31	0.68	0.21	.65	1.36
VFI - Protective	0.51	0.22	5.64	.02	1.67
VFI - Values	-0.49	0.22	4.92	.03	0.61
VFI - Career	0.03	0.16	0.03	.86	1.03
VFI - Understanding	-0.45	0.23	3.89	.05	0.64
VFI - Enhancement	-0.11	0.20	0.27	.60	0.90
VFI - Social justice	-0.47	0.19	6.07	.01	0.62
Adherence	-0.76	0.20	14.51	<.001	0.47
VFI - Protective * adherence	-0.45	0.22	4.22	.04	0.64
VFI - Values * adherence	0.47	0.24	3.69	.06	1.60
VFI - Career * adherence	-0.21	0.17	1.43	.23	0.81
VFI - Understanding * adherence	0.63	0.27	5.34	.02	1.88
VFI - Enhancement * adherence	0.43	0.19	5.10	.02	1.54
VFI - Social justice * adherence	0.17	0.21	0.68	.41	1.19

[a] Control group is female.