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SOCIAL CONNECTION DURING COVID-19: THE EXPERIENCES OF FIRST- AND CONTINUING-GENERATION UNIVERSITY STUDENTS

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Abstract: The COVID-19 pandemic and associated mitigation efforts (e.g., remote instruction) have significantly altered the higher education landscape. Since the onset of the pandemic, undergraduate enrollment has declined, particularly at public four-year universities and among first-generation students. Consequently, it is essential for researchers, administrators, counselors, faculty, and other higher education stakeholders to understand the impact of the pandemic on students (particularly first-generation students in the public university sector), as well as what resources are needed to address this impact. We explored social support, interpersonal connection, and relationship loss among university students during the first 12 months of the COVID-19 pandemic, and whether those experiences differed as a function of generation status. Data were collected as part of the COVID-19 University Research on Education and Sustainability (CURES) Project, a multi-site study of adjustment and resilience among college students during the COVID-19 pandemic. Undergraduate students (N = 395) completed the Three-Item Loneliness Scale and the NIH Adult Social Relationships Scale and reported whether they had experienced the ending of any close relationship(s) during the pandemic. Only half of students reported access to emotional and instrumental social supports; two-thirds reported feeling isolated, disconnected, and left out; and about half reported having lost a close relationship. Firstand continuing-generation students did not differ on these variables. Access to a supportive social network and involvement in enduring, intimate relationships are both strongly related to optimal health and well-being; thus, our results are concerning. There may be creative ways, however, for institutional stakeholders to build feelings of community and social connection among their student population.

Keywords: COVID-19, student outcomes, social connection, relationships, pandemic

Introduction

The first COVID-19 death in California – the site of the current study and the U.S. state with the greatest number of college students (2.71 million; Hanson, 2021) – occurred on March 4, 2020. One week later, the California State University (CSU) Office of the Chancellor issued a statement directing the leadership of its 23 campuses to shift "the delivery of as much of the curriculum as possible to non-face-to-face modalities" (Press Release, 2020). Within a period of days, libraries, health centers, student unions, and dorms were closed; face-to-face instruction was suspended and classes were moved online; and nearly half a million students found themselves abruptly navigating the transition to remote instruction, physical isolation from classmates and teachers, and other new ways of learning and living. The CSU system was not alone. By the end of March 2020, more than 1,100 U.S. colleges and universities had canceled in-person classes and shifted to remote instruction

(Hess, 2020); throughout the remaining months of the Spring 2020 academic term, this number would grow to more than 1,300 and affect roughly 15 million students across all 50 states (Smalley, 2021).

How have these mitigation efforts, and the pandemic itself, impacted students' outcomes and experiences? Much of the initial pandemic-related research focused on student health outcomes and experiences (e.g., Kowalsky *et al.*, 2021; Madrigal & Blevins, 2021; Tasso *et al.*, 2021). This early research suggests that college students have experienced an array of negative health-related outcomes. For example, Madrigal and Blevins (2021) asked a sample of U.S. students a series of open-ended questions about how they had been impacted by COVID-19; almost two-thirds (65%) spontaneously mentioned experiencing negative emotions (e.g., sadness, anxiety, fear) and mental health deterioration (including thoughts of self-harm). Similar results were reported by Tasso *et al.* (2021). Lifestyle changes, including changes in sleep patterns, increases in sedentary behavior, and reductions in healthy eating and physical exercise, also have been observed among college student samples (e.g., Kowalsky *et al.*, 2021).

The present descriptive study focused on another important domain of function – social connection – that might also have been disrupted by the pandemic and its mitigation efforts. Relationship theorists posit that humans are a fundamentally social species, essentially "designed" over evolutionary time and through natural selection processes to form social connections and to maintain close and enduring relationships with other people (Baumeister & Leary, 1995; Brewer, 2004; Caporael & Brewer, 1995; Cosmides & Tooby, 1997; Leary & Cox, 2008). As a result of our species' highly social nature, the presence or absence of social connection is presumed to have a significant and ongoing impact on outcomes related to health and wellbeing (Baumeister *et al.*, 2007). Indeed, researchers have consistently found a strong association between social connection – access to social support, feelings of belongingness and connectivity, and involvement in close personal relationships – and both mortality (death) and morbidity (disease) rates (for reviews, see Berscheid & Regan, 2005; Regan, 2011). In sum, social connection plays a significant role in human health and welfare.

Thus, the primary goal of the current investigation was to explore social connection - social support access, feelings of interpersonal connection, and close relationship loss - among California State university students during the first 12 months of the COVID-19 pandemic. The data utilized in this study were collected during the final three months of the Spring 2021 semester as part of the COVID-19 University Research on Education and Sustainability (CURES) Project. The CURES Project is a multi-site study of adjustment and resilience among first- (and continuing-) generation college students during the COVID-19 pandemic; it was developed in response to calls for collaborative research on the socioemotional and educational impact of COVID-19 on students, particularly those from under-represented groups (see, for example, O'Connor *et al.*, 2020). Thus, the secondary goal of the current investigation was to examine whether social connection experiences differed as a function of generation status among our sample of participants.

Due to the exploratory and descriptive nature of our study, we had no specific hypotheses. However, the two research questions of interest were: (1) RQ1: During the first year of the COVID-19 pandemic, what were students' experiences with respect to social support access, feelings of social connection, and close relationship loss? (2) RQ2: What, if any, differences in these social connection experiences were there between first- and continuing-generation students?

Method

Participants

Participants were 395 undergraduate students (280 women, 115 men) enrolled at a California State University (CSU) institution during the Spring 2020 – Spring 2021 campus closure. The CSU system is the largest four-year public university system in the United States; the specific institution is distinguished by its urban setting, surrounding population density, and federal status as a Hispanic-Serving Institution (HSI) and Asian American, Native American, Pacific Islander-Serving Institution (AANAPISI).

Participants were, on average, 20.6 years old (SD = 3.6 years) and represented all four undergraduate classes (43.0% first year, 14.7% second year, 25.3% third year, and 17.0% fourth year). Three-fourths of participants (74.7%) reported being the first person in their immediate family to earn a college or university degree. Participants reported belonging to the following ethnic groups: Latinx/Hispanic (76.5%), Asian/Pacific Islander (12.9%), Black/African American (4.6%), White (4.1%), Middle Eastern (0.5%), and Mixed (1.5%). Most participants identified as heterosexual (83.5%), with an additional 8.4% identifying as bisexual, 3.5% identifying as homosexual, 1.5% identifying as pansexual, and 3.1% identifying as unsure or other.

The majority of participants had been born in the United States (87.6%); 27.4% indicated that their mother or first parent, and 21.6% indicated that their father or second parent, was U.S. born. The extent of formal education achieved by participants' parent(s) varied, with 67.1% of mothers/first parents and 73.2% of fathers/second parents having a high school or less than high school education.

Almost half (48.6%) of participants reported working in a paid position. On average, they reported working 25.3 (SD = 10.6) hours per week and living in households comprised of 4.4 adults (including themselves, SD = 1.6) and 0.8 (SD = 1.0, range = 0 to 5) children under the age of 18. Their annual household income varied, with about half (49.4%) reporting an income less than \$30,000 per year.

Procedure

Potential participants were recruited from undergraduate classes taught remotely during the Spring 2021 semester. During class, the researchers introduced their study and then gave students a link to an online consent form that described the study goals and participant rights. Upon providing consent, participants received a link to an online (Qualtrics) questionnaire. Participants were able to skip any items that they did not wish to answer; in addition, they were able to advance to the next page of the questionnaire without submitting any responses (or after submitting their responses). Per IRB requirements, electronic copies of the consent form were not linked to questionnaire responses and are stored on a separate, password-protected, cloud-based server to which only the researchers have access.

Measures

Participants completed the Three-Item Loneliness Scale (Hughes et al., 2004), modified to focus on the pandemic. Specifically, participants were asked to report the extent to which they feel isolated

from others, lacking in companionship, and left out; response options were "hardly ever," "some of the time," and "often."

Participants also received a list of eight (four instrumental and four emotional) types of social support adapted from the NIH Adult Social Relationships Scales (Cyranowski *et al.*, 2013). They indicated which types they believed would be readily available (i.e., all or most of the time) to them if needed (e.g., someone to take them to the doctor if they became ill, someone to love and to make them feel wanted).

Finally, participants reported whether they had experienced the ending of any close (i.e., intimate, enduring) relationship(s) during the pandemic. Those who responded affirmatively were asked to indicate the nature of that relationship (e.g., best friendship, familial, romantic; if multiple relationships had ended, participants were asked to select the closest one and indicate its nature).

Results

Prior to analysis, all variables were examined for missing data and accuracy of data entry. Seven (7) participants provided responses to fewer than five questions and were removed from the data set. Non-parametric analyses (z tests for proportions) were conducted to test for group differences.

As illustrated in Table 1, many students reported experiencing an absence of social and emotional connection at least some of the time during the pandemic, including feeling isolated from others (67.8%), lacking in companionship (61.0%), and left out (59.7%). In addition, fewer than 60% reported consistent access to a variety of social supports. Almost half (44.8%) of our participants reported having experienced the ending of a close relationship. The most commonly experienced relationship losses were best or close friendships (69.5%), followed by committed romantic (e.g., marital, dating) relationships (25.4%), and then close family (e.g., parent, sibling) relationships (5.1%).

A series of z-tests for proportions revealed that first- and continuing-generation students did not differ on these variables, with one exception: Fewer first-generation (53.6%) than continuing-generation (65.0%) students reported having someone to help with daily chores if they became sick, z = 1.99, p < .05.

Table 1: Social Support and Connection During the Pandemic (Total Sample)

Variable	Number	%
Absence of Social/Emotional Connection (often or some of the time)		
Feel isolated from others	268	67.8
Feel lack of companionship	241	61.0
Feel left out	236	59.7
Access to Instrumental Social Support (all or most of the time)		
Someone to take you to the doctor	233	59.0
Someone to prepare your meals	233	59.0

Someone to help with daily	223	56.5	
chores			
Someone to help if you are confined to bed	201	50.9	
Access to Emotional Social Support (all or most of the times)			
Someone to have a good time with	224	56.7	
Someone to love and make you feel wanted	221	55.9	
Someone to turn to for advice about a personal problem	212	53.7	
Someone who understands your problem	193	48.9	
Ended a Close Relationship	177	44.8	
If Yes, Type	No.	%	
Best/close friendship	123	69.5	
Romantic	45	25.4	
Close family	9	5.1	

Discussion

Our results revealed that disruptions in social connection and intimate relationships were commonly experienced by undergraduate students during the first 12 months of the COVID-19 pandemic. Moreover, generational status was largely unrelated to these experiences. Both first-generation and continuing-generation students indicated having limited access to a variety of emotional (e.g., someone to turn to for advice about a personal problem) and instrumental (e.g., someone to take them to the doctor or prepare their meals if they became sick) supports. Many also were experiencing a lack of intimate connection; about two-thirds reported feeling left out, isolated, and lacking in companionship. College students in other studies have reported similar social experiences, including feelings of loneliness and isolation (Tasso *et al.*, 2021), reduced social contact (Madrigal & Blevins, 2021), and decreased satisfaction with existing family and friend relationships (Lukács, 2021). Although pandemic-related close relationship loss has not been the subject of much investigation to date, our results revealed that this type of interpersonal disconnection was also quite prevalent among our participants. Almost half reported the dissolution or loss of a best friendship, long-term committed romantic partnership, or close family relationship.

Access to a supportive social network and involvement in enduring, intimate, close relationships are both strongly related to optimal health and well-being (for reviews, see Berscheid & Regan, 2005; Regan, 2011). Consequently, the mounting evidence about the ways in which the COVID-19 pandemic has disrupted and negatively impacted students' social connections is concerning. However, there may be creative ways for institutions to address some of the social and interpersonal challenges that students reported. To alleviate feelings of loneliness and social disconnection, campus organizations might establish virtual group spaces for peer support and community-building. In addition, students might benefit from targeted interventions that have been developed to combat the

pandemic's impact on psychosocial adjustment. For example, Van Orden *et al.* (2021) discuss how to create individual "connection plans" to reduce feelings of isolation and disconnectedness. These plans present social isolation as a health matter that can be effectively managed and teach simple cognitive-behavioral techniques for modifying maladaptive thoughts and beliefs, bodily sensations, and behaviors (e.g., cognitive restructuring, perspective-taking, muscle relaxation, guided imagery, reminiscence activities, music/art/nature watching). Although Van Orden *et al.*'s (2021) strategy was developed for use with homebound seniors, it readily lends itself to use with college students and other vulnerable populations.

Conclusions and Limitations

Our results suggest that the COVID-19 pandemic (e.g., physical isolation, campus closures) has created a variety of psychosocial challenges for college students. A large proportion of students in our study reported limited access to social support during the first year of the pandemic coupled with feelings of social isolation and loneliness; many also had endured the loss of an intimate, long-term partnership (e.g., friendship, marriage or other committed romantic relationship, family relationship).

Our descriptive study is subject to several limitations. One concerns the composition of the participant sample, which was primarily female, ethnic minority, and first-generation. Additionally, our participants are enrolled at a large, urban, public state university. The experiences of this group of students may not generalize to students with different sociodemographic characteristics who are enrolled at different (e.g., private, small, residential) institutions. Moreover, our data were collected at one point and thus cannot address questions concerning change in experiences over time or causal associations among variables.

Despite these issues and limitations, we strongly believe that the identification of pandemic-related challenges represents an essential first step toward the development of methods for enhancing students' adjustment and success and provides an important opportunity for administrators and other campus stakeholders (e.g., faculty, staff, students and their family members).

Directions for Future Research

The current COVID-19 pandemic will undoubtedly continue to impact the lives of students (indeed, all people) for decades to come. We encourage future research that will allow us to identify how students' social connection experiences and outcomes change over time, as well as patterns of resilience and adjustment that students may exhibit in response to these changes. For example, it is possible that feelings of loneliness and social disconnection subside as students become more accustomed to post-pandemic life. We also encourage research on the association between students' social (dis)connection experiences and other significant domains of function, such as mental health. For example, do students who experienced relationship loss early in the pandemic exhibit poorer mental health than those who did not? Do students with reliable access to emotional and instrumental social support report greater adjustment and resilience in the face of the pandemic's challenges? Prospective, longitudinal studies are needed to answer these questions.

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Declaration of Interest Statement

The authors declare that they have no conflicts of interest.

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