Same Storm, Different Boat? College Students' Resilience During Unexpected Life Events

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ABSTRACT

Young adulthood is a critical developmental period marked by establishing identities, higher education, careers, and relationships. Unexpected life changes or sociohistorical events (e.g., COVID-19 pandemic) can alter life trajectories and exacerbate mental health challenges. Ninety-one college students (*M* age=23.1; 87% women; 77% White) completed a survey of pandemic-related scales and written narratives about their pandemic experiences; we used an explanatory mixed-method design to explore the relationship between pandemic experiences and health. Two-step cluster analysis of survey responses revealed groupings of participants and yielded three distinct experiences: (1) high level resilience ("Surfers"), (2) serious physical health concerns, but adequate mental health coping ("Swimmers"), and (3) significant mental health challenges ("Sinkers"). There were no significant group differences by demographic or contextual characteristics. A content analysis of written narratives yielded differentiating themes between groups, further corroborating quantitative results. Collectively, findings suggested positive self-rated mental and physical health may be protective against unexpected life events in young adults. Thus, identifying strategies to alleviate stressors associated with unexpected changes among college students is critical, especially for higher education administrators, educators, and mental health professionals to support young adults' resilience in higher education settings.

Introduction

Emerging adulthood is a transitionary life-stage between adolescence and young adulthood, marked by establishment of identities, pursuit of higher education, careers, and relationships (Arnett, 2000). During the developmental periods of emerging adulthood through established adulthood, younger adults typically experience many potentially stressful life transitions, such as moving out of their childhood home, attending college, or becoming financially independent (Hochberg & Konner, 2020). When unanticipated or unexpected life events occur, however, it can disrupt the timing and occurrence of these normative life transitions and alter future life trajectories; the global pandemic is a significant example of this disruption (Heanoy et al., 2021). Younger people experienced more pandemic-related life changes, stress, and social isolation than other age groups (Birditt et al., 2021), which had unprecedented adverse effects on mental health. Compared to pre-pandemic, young adults reported higher levels of depression, anxiety, and post-traumatic stress disorder during the pandemic (Fruehwirth et al., 2021; Kupcova et al., 2023). Nearly 70% of young adults experienced more mental health problems than prior to the pandemic, including an inability to enjoy adulthood (Young-Minds, 2020). The substantial non-death losses young adults experienced during the pandemic will have long-term impact; it significantly affected young adults' health and wellbeing and disrupted education and career plans.

Life course theory provides a helpful lens to further understand how young adults are influenced by unexpected life events and provides the foundation for this study. Life course theory posits that "historical forces shape the trajectories of family, education and work, and they in turn influence behavior and particular lines of development" (Elder, 1998, p.2). Early research on the pandemic demonstrated its historical force capable of affecting development (Czenczek-Lweandowska et al., 2021) and causing divergent trajectories of wellbeing (Benner & Mistry, 2020). The impact of COVID-19 on college students' academic success cannot be understated; disruptions reduced motivation,

lost routines, and in some cases caused delays in degree completion (Pandya & Lodha, 2022). These disruptions in education and employment led to uncertainty about the future and missed job/training opportunities (Blinded#1; Zhai & Du, 2020). Young adults also experienced profound changes to their social life, sense of independence and security, and mental/emotional health (Vehkalahti et al., 2021; Blinded#1). The purpose of our explanatory mixed-method study was to understand how college students experienced pandemic-related losses to better inform institutions of higher education, educators, and mental health professionals about the long-lasting effects of disrupted development in young adults. A better understanding of these effects can help inform support for current college students (who were affected by the pandemic during their secondary education) as well as better support future college students navigating unexpected life events (e.g., death, loss). In the current study, we explored the various ways in which college students navigated life though an unexpected historical force (i.e., the pandemic) to identify potential risk and protective factors for optimal adult development. First, we utilized a quantitative approach to assess the major life domains disrupted by the pandemic and how college students experienced differential impacts. Second, we integrated a qualitative approach to provide more in-depth context on how college students perceived the effects of the pandemic on their lives and determine if narrative descriptions corroborated quantitative findings.

Materials and Methods

College students across three campus locations who enrolled in an elective thanatology course during Fall 2020-Spring 2021 at a 4-year state school completed two activities: (1) online survey about life domains affected by the pandemic and (2) lossography writing assignment (Blinded#2) in which students reflected on how losses affected their lives. Participation in the study was voluntary (i.e., no extra credit or incentives were provided for participation; only data from participants who provided informed consent [95%] were included in the analysis) and responses were anonymous. Participants had several opportunities to opt-out of the study and were assured their decision would not influence their assignment or class grades. Lossography narratives were deidentified and the Institutional Review Board determined the study as exempt.

Measures

Participants provided sociodemographic information and rating of their general mental and physical health on a 5-point Likert scale ranging from poor (1) to excellent (5). They also completed several validated pandemic-related scales and provided a written reflection (i.e., lossography) about the pandemic.

  Coronavirus Adult Symptom & Psychological Experience Questionnaire. We included a subsection of the COVID-19 Adult Symptom & Psychological Experience Questionnaire (CASPE; Ladouceur, 2020) to learn about the emotional changes experienced by participants during COVID-19. For each item, respondents indicated where they fell on a 6-point Likert scale ranging from not at all (0) to extremely (5) and scores were summed. Questions from CASPE assessed emotional changes due to COVID-19 (e.g., how stressful have you found COVID-19 uncertainty to be?) and health (e.g., How worried have you been about being infected?) over the last two weeks. Cronbach's alpha (α) for this sample was 0.87, indicating strong reliability.

  Epidemic/Pandemic Impacts Inventory. Participants completed the Epidemic/Pandemic Impacts Inventory (EPII; Grasso et al., 2020), which assessed tangible impacts of the pandemic across multiple domains. The domains were: work/employment, education/training, home life, social activities, economic, emotional health and well-being, physical health problems, and positive impacts. Participants indicated if they or a person in their home were impacted; we dichotomized responses: the two "yes" responses (for individual and person in home) were collapsed to indicate someone in the household was impacted, as were the "No" and "N/A" responses. We created a sum score for each domain. Using Kuder-Richardson Formula 20, Cronbach's alpha for dichotomous variables, we found strong reliability for this sample (KR-20=0.80).

Fear of Coronavirus-19 Scale. Participants completed the Fear of Coronavirus-19 (FOC) scale, which has been used to assess fear of COVID-19 in the general population and was found to be a reliable and valid measure (α=0.82; Ahorsu et al., 2020).They indicated their level of agreement on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5) on seven statements regarding fear of COVID-19 (e.g., I cannot sleep because I'm worrying about getting coronavirus-19), and scores were summed (α=0.89).

Lossography. Participants completed this written reflection assignment (3-page minimum), which was used to uncover pandemic-related losses within/across individuals. Participants were asked to identify, describe, and reflect on their earliest and most significant losses associated with the pandemic.

Quantitative Analysis

First, we ran descriptive analyses to characterize the study sample. Then, we conducted a two-step cluster analysis, an exploratory approach to identify natural groupings within a dataset (Kent et al., 2014). Nine variables informed the cluster analysis (i.e., self-rated mental and physical health, CASPE score, FOC score, and five relevant EPII domains [emotional health/well-being, physical health, social health, home life, and work/employment]). After determining unique clusters, we conducted various bivariate analyses to test for any potential cluster differences by age, gender, race, socioeconomic status, political preference, religious preference, relationship status, community, campus, and semester of data collection.

Qualitative Analysis

We applied a qualitative analytic approach based on a phenomenological design (Neubauer et al., 2019) to better illuminate how participants perceived the effects of the pandemic on their lives. Participants' narratives were analyzed by the cluster in which they were grouped, which was first identified in the quantitative cluster analysis. We compiled deidentified lossography narratives into a single document and used a general inductive approach to analyze the data (Thomas, 2006). To establish initial themes/subthemes and codes, two researchers independently read and open-coded a representative sample of assignments and collaborated to develop the initial coding scheme iteratively. The coding scheme was discussed with the full research team to ensure comprehension of each code. The coding scheme was modified throughout the first stage of coding using Microsoft Teams, which allows for real-time editing by multiple people; new codes were discussed periodically during team meetings for agreement on finalizing a coding scheme. To reduce bias, at least two researchers independently coded each narrative with the established set of themes. Less than 10% of the data yielded discrepancies, which were discussed by the full research team until 100% inter-rater agreement was achieved. No researcher coded their own students' work.

Results

Ninety-one students participated in the study. Most were women (87%), White (76.9%), and fourth-year college students (63%), with an average age of 23.1 years (SD=6.4). Although most participants were traditional college-aged young adults, there were a few non-traditional students (range;19-55); we included all participants, regardless of age, as we were interested in the experience of navigating unexpected changes in the context of higher education and found no statistically significant differences in experiences by age. See Table 1 for more information about participant characteristics.

Table 1
Descriptive Characteristics

Variable (range)	M (SD)
Age (19-55)	23.1 (6.4)
Self-rated Mental Health (1-5)	2.68 (.92)
Self-rated Physical Health (1-5)	3.33 (.88)
Fear of COVID-19 (7-35)	15.76 (6.4)
CASPE Score (2-35)	21.14 (7.3)
	n(%)
Sex	
Female	80(87.0)
Male	11(13.0)
Race	
White	70(76.9)
Black or African American	20(22.0)
Other	1(1.1)
Year in College	
Second	3(3.3)
Third	20(21.7)
Fourth	58(63.0)
Fifth+	11(12.0)
Socioeconomic Status	
Low-Range	43(46.7)
Mid-Range	44(48.9)
High-Range	4(4.3)
Relationship Status	
Non-partnered	60(65.9)
Partnered	31(34.1)

Note: CASPE=COVID-19 Adult Symptom & Psychological Experience Questionnaire; higher scores indicate worse psychological experience. Fear of COVID; higher scores indicate more fear of COVID-19. Self-rated physical/mental health; higher scores indicate better health.

Cluster Membership

Cluster analysis yielded three distinct groups of students. Cluster quality was 0.3, which is considered fair (Kaufman & Rousseeuw, 1990) but sufficient for exploratory research. Following customary practice, we developed descriptive labels for each cluster described below. Group members in Cluster 1 (45%), or Surfers, had the highest scores on self-rated mental and physical health and lowest fears and psychological experiences (as reported via CASPE and FOC scores) associated with COVID-19; they appeared to "surf" through the pandemic most easily and were least affected. Group members in Cluster 2 (22%), or Swimmers, had the lowest scores on self-rated physical health and reported areas of their homelife, emotional health/wellbeing, and physical health being most affected by the pandemic; they experienced significant pandemic-related challenges and were not able to "surf" the waves caused by the pandemic, but were equipped enough to keep "swimming." Finally, group members in Cluster 3 (33%), or Sinkers, reported the lowest scores on self-rated mental health, the most fears, and reported social activities and work/employment being the most affected domains in their lives. Sinkers reported significant struggles that challenged their abilities to cope (i.e.,

stay afloat) during the pandemic. We will refer to all clusters by their designated cluster name hereafter. See **Table 2** for distinguishing variables between clusters. There were no significant differences between clusters on demographic or contextual characteristics, nor by data collection period or source (i.e., campus location) of data.

Table 2.
Variables that distinguish cluster membership

Variable (range)	Surfers	Swimmers	Sinkers	F-value	p-value
	n=41	n=20	n=30		
	M(SD)	M(SD)	M(SD)		
CASPE Score (2-35)	15.41 (5.78)	24.35 (4.57)	26.83 (4.49)	47.868	**<.001**
Homelife Impacts (0-6)	0.88 (0.95)	3.60 (1.47)	1.17 (1.02)	43.825	**<.001**
Fear of COVID-19 (7-35)	11.37 (3.34)	17.10 (4.69)	21.1 (6.08)	38.278	**<.001**
Self-rated Mental Health (1-5)	3.27 (0.81)	2.70 (0.57)	1.87 (0.63)	34.264	**<.001**
Emotional Health/Wellbeing (0-8)	2.37 (1.39)	4.05 (1.28)	4.0 (1.29)	17.343	**<.001**
Physical Health Impacts (0-6)	2.37 (1.22)	3.50 (1.15)	3.07 (1.28)	6.471	**.002**
Social Health Impacts (0-10)	5.17 (2.07)	4.95 (2.24)	6.53 (1.57)	5.472	**.006**
Self-rated Physical Health (1-5)	3.59 (0.84)	2.90 (1.02)	3.27 (0.74)	4.49	**.014**
Work/Employment Impacts (0-10)	3.63 (1.92)	4.10 (2.45)	4.83 (4.83)	2.986	.056

Note: CASPE=COVID-19 Adult Symptom & Psychological Experience Questionnaire; higher scores indicate worse psychological experience. Homelife impacts, Emotional health/wellbeing, physical health impacts, social health impacts and work/employment impacts; higher scores indicate more impact. Fear of COVID; higher scores indicate more fear of COVID-19. Self-rated physical/mental health; higher scores indicate better health.

Qualitative Analysis of Clusters

Overall, we found the qualitative narratives mapped on strongly to the quantitative clusters (See Table 3). We illustrate the cluster differences across five common life domains affected by the pandemic, which correspond with the five components of the EPII: (1) financial/employment, (2) social health, (3) mental, physical health/wellbeing of self and others, (4) mental health, and (5) community, societal, and global. While most participants were affected across all life domains, the ways they perceived the impact appeared to vary by cluster association and there were many nuanced differences in the students' experiences when comparing across cluster groups.

Table 3. Qualitative Themes by Cluster

Theme	Cluster		
	Surfers	Swimmers	Sinkers
Financial/Employment Changes	Sudden and unexpected job loss was most frequently reported	Substantially affected financially, but was not the most prominent concern expressed	Experienced some job loss, but not commonly reported as salient concern
Social Health Changes	Extreme upheaval in social life; difficult to manage sudden changes	Social changes most influenced feelings of loneliness and isolation	Social disruptions related most to lost education opportunities and experiences
Mental Health Changes	Some concerns about mental health expressed, but often viewed challenges as an opportunity to learn	Experienced some challenges, but primarily associated with transitions to online education	Highest prevalence of pre-existing clinical mental health issues further exacerbated by the pandemic

Physical Health/Wellbeing Changes of Self & Others	Experienced disruption in physical health routines, displayed the highest concerns for others' physical and mental health	Primarily described physical health concerns for self and occasionally, for others	Described connection between physical and mental health; expressed difficulty supporting loved ones' health
Community, Societal, and Global Changes	Thought about "bigger picture" frequently	Mentioned bigger picture concerns only occasionally	Rarely considered or mentioned these changes

Financial/Employment Changes.

Financial/employment changes encompassed any unexpected or sudden changes to an individual's financial or employment situation and were experienced across all three groups to varying degrees, including job loss, hours cut, and uncertainty about meeting basic needs. Surfers and Swimmers were most affected.

Surfers experienced job and income loss, but had a more protective past (e.g., *"By no means was I living in poverty, but this was the first time I was stressed about money.")* Previously secure jobs (e.g., bus drivers, teaching aides) ceased and job prospects for the summer were limited, seemingly contributing to anticipated financial/employment challenges. Surfers who continued to work described tradeoffs (i.e., health risks) but found it necessary because their financial struggles were dire. University/federal grants were helpful but not sufficient, thereby setting up cycles of desperation for some participants.

Swimmers had abrupt financial changes; one participant shared, "*All the sudden I went from expecting to earn a lot of money to having no income at all."* Financial support, like waivers, was helpful but insufficient. Some participants were doing reasonably well and *"didn't take much of a hit* [because they] *started getting more hours at work since people were buying everything off the shelves*." In contrast, another student who worked at a grocery chose to find other work that provided more social distance.

Sinkers did not elaborate on the effects of job loss; when financial concerns were addressed, they were closely connected to social changes. For example, one participant stated, *"Eventually, I … had to file for unemployment. This was a major stressor for me financially, but also a little socially.*"

Social Health Changes

Social health changes affected almost all college students, regardless of cluster, but each group discussed the impact differently. These included changes to routine, canceled events (e.g., weddings, graduations), and not being able to spend time with friends/family. Surfers experienced upheaval related to their social life and transition to online learning; they discussed how social interactions were *"taken away so abruptly"* with the loss of milestones (e.g., graduation, birthdays) and postponed events. These disruptions required major adjustment, especially when students had to return home after living independently, "*it felt so odd to go back to that way of living. I had to do* [everyone's] *dishes, chores, to ask when I could leave and give a time I would return."* Many found it difficult to manage the sudden loss of independence, as the changes undermined participants' sense of stability/normalcy in social, educational, and financial domains. Many surfers were able to reframe the challenges and identified the benefits of more family time.

Swimmers expressed a sense of loneliness/isolation but no support system, "*there would be days [and] weeks where I would not leave my place or physically see people.... it was my battle that I had to overcome myself."* Swimmers expressed disappointment for the disruptions and cancellations of family gathering, but acknowledged the purpose of abiding by the restrictions, "*I can't imagine the guilt I would feel if we had a gathering that led to someone getting sick."* A few Swimmers experienced the death of a loved one and described unique social changes that affected standard funeral rituals: "*it was disheartening and those close with my grandmother were unable to attend and say their final goodbyes."*

Sinkers primarily described social changes through the lens of the educational setting. The social element of education was evident, as one participant shared, *"It's not only the educational aspect of learning, but the social part. Being surrounded by peers, doing group work and collaborating in person."* The typical excitement for a semester *"filled with classes focused on what interests me and professors that inspire me"* was suddenly gone; instead, classes were *"through my computer in my bedroom."* Authentic connection with classmates and other people was lost. Some Sinkers experienced the dissolution of friendships and found it difficult to stay in touch. Sinkers struggled to adapt, *"I have felt very alone not being physically connected to other people. Using a phone was not the same for me—I wanted to be physically connected with the people I care about."* Though some Sinkers indicated they felt supported by family/friends and relied on coping strategies like mindfulness or implementing structure/routine in their day, very few narratives demonstrated resilience.

Mental Health Changes

Mental health changes constitute any stated or implied unexpected, sudden, or exacerbated change to an individual's mental health, including life changes, social isolation, anxiety, depression, and worsening diagnosed conditions. Mental health changes were noted across each group, yet the degree to which mental health was affected appeared to vary, with Sinkers impacted the most.

Although Surfers displayed many protective factors, they described a range of negative emotions including aimlessness, anxiety, depression, emptiness, exhaustion, fear, hopelessness, overwhelm, panic, powerlessness, sadness, stress, and uncertainty. Many Surfers viewed personal challenges as learning opportunities, *"On a personal level, COVID has taken a massive toll on my mental health. This is something that I am still working through and learning about so that I can help myself."* Action-oriented management of mental health challenges was most evident among this group. Surfers found ways to cope by focusing on what they had control over (e.g., eating healthier, exercising, completing coursework) and emphasized the *"critical importance of communication and letting people know that you're not OK,"* demonstrating awareness of how support systems were vital to their overall wellbeing.

The Swimmers experienced mental health challenges primarily associated with the transition to online learning and how the pandemic affected their education, *"School being online has been one of the hardest tasks I've ever had to do."* Swimmers noted how their mental health and lack of motivation, control, and focus got progressively worse as the pandemic continued as feeling stuck at home all day contributed to feeling *"utterly unmotivated, apathetic, and burnt out."* One participant explained how school used to make them excited because of their love of learning, now it made them exhausted. Similarly, a participant shared:

COVID changed me. I do not know how else to describe it. I would have no problem getting up at 6 in the morning every day before COVID or sitting down and studying/learning schoolwork. Back then, I really enjoyed school, I enjoyed learning and having the feeling of success when I did well and worked hard for it. But now I am lucky if I get out of bed by 9 [and] do an hour of schoolwork a day.

Sinkers had the highest prevalence of reported underlying and pre-existing mental health issues (e.g., anxiety, severe depression, PTSD, body dysmorphia) that were exacerbated by the pandemic. They described the ongoing nature of their mental health struggles, sense of deep grief, and use of therapy. For example, *"I have been struggling with my mental health for eight years and the pandemic created the perfect environment for them to worsen. It was the perfect storm."* Because of the acuity of their conditions and situations, school was the last thing on their minds, indicating apathy toward school and learning, *"I just don't feel like anything about school matters in the grand scheme of what has been going on in the world."* Another participant shared a common sentiment, *"The removal of in-person learning felt like an extraordinary loss that required a period of grief to truly come to terms with all that was lost."* Other potential support networks were disrupted, too: *"I'd been waiting to join a processing therapy group for a long time. The group finally got to meet twice before the pandemic hit ... Because the group was new, they didn't continue online."* The feelings of loss and mourning were sudden and then persistent; as one participant shared, *"I felt so lonely and bored... this feeling has yet to go away."*

Physical Health/Wellbeing Changes of Self & Others.

Participants reflected on their own physical health/wellbeing, including concerns about pre-existing diagnosed physical health conditions, contracting COVID-19, and restrictions that limited regular physical health activities. They also expressed concern regarding the physical health/wellbeing of others, including worry about loved ones getting sick or dying and concerns about mental health of others.

For Surfers, the pandemic ushered in disruptions to physical health routines and sleep patterns: "*I didn't go outside at all, no physical activity, wasn't sleeping enough, eating unhealthy foods, and I stopped doing as much homework. Eventually I realized that my behaviors were unhealthy and affecting me very negatively.*" Surfers were more likely than Swimmers or Sinkers to express concern for others' physical and mental health, rather than their own. Increased isolation due to physical distancing restrictions was "front-of-mind" for loved ones with existing health conditions (e.g., due to Parkinson, Alzheimer's disease) that made them particularly susceptible to COVID-19. For example, *"The last year had a big impact on [my grandma's] health. It is difficult watching someone you love who is normally so cheerful, become so hopeless."* Another Surfer shared how their grandparents had not left their house for eight months and told them, with pain and fear in their voice, "*we are not doing too good honey, we need this COVID stuff to be over"* but were resistant to visitors due to the health risks.

Few Swimmers described physical health concerns, including declining physical health, fears associated with having a pre-existing condition, the stress of having COVID-19, and the loss of sports and extracurricular outlets. Swimmers expressed concern for others and sadness about losing time with people who might not live much longer. For example, one participant shared how a loved one experienced a heart attack during the pandemic and:
We were not able to go visit him while he was in the hospital... it was weird to be stuck in a town far away from him when before we would have gotten in the car and drove there immediately to see him.

Sinkers experienced physical health changes that were closely connected to mental health outcomes. They became depressed or anxious without being able to cope; closure of gyms and disruption of routines (e.g., walking to/from campus) contributed to poorer physical health (e.g., sedentary behaviors, unavailable coping mechanisms). Restrictions made it difficult to support loved ones, whether it was holding hands or hugging during hospital visits or being with a dying relative, *"[They] passed away due to COVID-19 complications alone at the hospital with a nurse she had never met and her husband on the phone. Imagine how depressing those final hours [were], unable to have any family in the room.*

Community, Societal, and Global Changes

Participants were aware of changes within the broader community, societal, and global environment due to the pandemic, referencing churches being shut down, disruptions to store supply chains, and social justice protests. The degree to which participants discussed these issues, however, appeared to differ by cluster group.
Surfers identified and acknowledged the larger-scale disruptions the pandemic had on the community and society at large. They expressed confusion, uncertainty, and fear on a broad scale. For some, it brought greater awareness of underlying issues previously overlooked or ignored, like the stability of the economy's supply chain and the workforce section, *"This pandemic has really opened my eyes to jobs that are a critical part in society and how humans treat other humans."* Surfers reported more empathy and understanding for others, not only as it related to providing for basic needs (e.g., rent, utilities, and food) but for participating in social justice advocacy too. A student noted the pandemic granted them, *"the time needed to educate myself… the opportunity to stand up and attend various events that supports the [Black Lives Matter] movement"* and that was one of the more positive changes in their life.
Among Swimmers, very few mentioned concerns related to community, societal, and global changes, beyond a few comments that reflected on not being able to do small things like eat in a restaurant. Similarly, very few Sinkers considered community, societal, and global changes.

Discussion

Understanding the longer-term effects of unexpected life events on college students can provide insight into targeted interventions tailored to support resilience and healthy development. The pandemic provided a good opportunity to learn from and explore how unexpected events impacted college students. There is a growing literature on stress and the effects of the pandemic on higher education (Lee et al., 2021; Masalimova et al., 2022). Recent studies reported significant effects of the pandemic on mental health (Kupcova et al., 2023; Pew Research Center, 2022), particularly among young adults. However, these broad studies did not capture qualitative experiences or differentiate the nuanced experience among higher or lower-risk groups. While all participants identified challenges and hardships across similar life domains, some young adults entered the pandemic with more resources and support - others were already struggling before the sudden onset of the pandemic. We identified three distinct subgroups of college students (Surfers, Swimmers, and Sinkers), revealing diverse experiences and effects of the pandemic that align with the adage, "we are in the same storm, not the same boat" (Barr, 2020).

Recognizing variation in experiences is useful for understanding how best to identify high-risk individuals and target limited support services when coping with future unexpected changes. The pandemic was an unprecedented sociohistorical event that forced young adults to cope with unexpected life changes – we encourage higher education institutions to better understand the nuances in how college students cope with future unexpected life change, whether they are individually or globally experienced. Next, we articulate the differences between Surfers, Swimmers, and Sinkers and the implications for supporting young adults as they navigate developmental milestones amidst potential unexpected changes.

Surfers were comprised of individuals reporting high self-rated mental/physical health. Their likelihood of experiencing pandemic related impacts, having COVID-19 fears, or experiencing social and emotional changes was significantly lower than the other groups. While Surfers experienced financial, mental, and social health strains, their narratives revealed a mindset and capacity to consider the "bigger picture" when reflecting on their future. They also had the capacity to consider their concerns for loved ones. Surfers acknowledged the challenges of the pandemic but identified silver linings or reframed their difficulties into positive learning experiences.

Swimmers were significantly more likely to experience disruptions related to homelife, emotional health/wellbeing, and physical health. This group was also significantly more likely to have lower self-rated physical health than the other two groups. Swimmers' narratives, on the other hand, reflected some level of financial burden, along with mental and physical health worries, but their mental health challenges were less associated with clinical disorders (e.g., depression, anxiety), and more associated with lack of motivation with school. In addition, their physical health worries were more frequent in relation to others' health and well-being, rather than concerns for their own health.

Sinkers, who represented approximately 1/3rd of the participants, were significantly more likely to have COVID-19 fears and experience disruptions related to social and emotional changes. This group was also significantly more likely to have lower self-rated mental health. Sinkers alluded to extensive struggle and concern about their mental/social health, especially regarding their jobs/work. Sinkers were the least likely group to elaborate in depth about their struggles, reflecting a tendency to dedicate what energy they had to survival, not education.

Previous research has demonstrated the relationship between having poorer psychological wellbeing and more pandemic related stress, including more life changes, increased social isolation, and poorer relationship quality (Birditt et al., 2021). Our results reinforce this finding: individuals with higher self-rated health (Surfers) demonstrated more resilience than other individuals with lower self-rated health; these participants had the capacity to think beyond the current moment, consider bigger picture and societal implications, and exhibit concern for others' wellbeing. This demonstrated a unique cognitive protective factor in line with research on theory of mind, or mental state reasoning, which may be a particularly helpful process for individuals to make sense of unexpected life events (Dungan et al., 2016). The ability to take the perspective of someone else is modifiable and particularly useful for processing unexpected events in social contexts (Dungan et al., 2016) and may be viable point of intervention to increase resilience and wellbeing among individuals with lower self-rated health. That is, having the cognitive capacity to cope in the

presence of stress is associated with having fewer depressive symptoms, better wellbeing, and higher life satisfaction (King & dela Rosa, 2019).

Conversely, individuals with poorer self-rated health experienced a decreased sense of emotional support during the pandemic (Philpot et al., 2021). Swimmers and Sinkers had poorer self-rated health and our qualitative results corroborated these findings. While all participants identified loss of milestones and missing social events (e.g., birthday parties, weddings), college students who struggled more emphasized intense loneliness and isolation because of these missed events. It is important to note that trends for increased isolation and loneliness were on the rise pre-pandemic, especially among people with fewer supportive relationships (Achterbergh et al., 2020), so the findings of this current study highlight a renewed urgency and need to support mental health services. Self-rated mental health is a good predictor of mental health prognosis (McAlpine et al., 2018), but it remains an underutilized measure of need.

Grief and loss are often unrecognized as critical factors associated with wellbeing and are increasingly important to consider. Many participants in our study alluded to their grief/mourning over the non-death losses experienced. This has significant implications for training and education of therapists, counselors, and social workers; despite almost all therapists reporting working with clients who have grief-related challenges, training on grief is rare (Jankauskaite et al., 2021). Acknowledging grief and loss will become even more salient in the coming years as we are now in a "mental health pandemic" with nearly 70% of people globally reporting they are struggling or suffering (Clifton, 2021; Ra, 2022). Furthermore, nearly 60% of college students experience loss by the end of their academic career (Bistricean & Shea, 2021).

Our findings provide empirical evidence about how pre-existing mental health conditions were exacerbated by the pandemic. Since resources are limited, policymakers and health professionals should pay extra attention to Sinkers, individuals who were already vulnerable before the pandemic. As we move on from the pandemic, it is important to recognize that many individuals continue to suffer in the aftermath and intervention to high-risk groups is critical. It is extremely common for an individual to experience a mental health disorder at some point across the lifespan; nearly 60% of individuals have their first onset of a mental health condition before the age of 18 (Benner & Mistry, 2020) and these outcomes are exacerbated among historically marginalized groups (Reich, 2020). A recent study found the incidence of PTSD has surged on college campuses (Zhai & Du, 2024). Thus, we recommend improved mental health support and early intervention for young adults that have faced unexpected changes; while this study focused on the unexpected changes associated with the pandemic, the findings are applicable for therapists, counselors, and human services workers, as well as intervention programs and support groups designed to support individuals experiencing unexpected life changes (e.g., financial, social, health-related). Moving forward, higher education will be an important source of mental/emotional support for college students, and it will be necessary to have universal access to resources (Harris et al., 2022).

Strengths & Limitations

There are several limitations to note in the present study. Our participants were homogenous (i.e., college students) and thus, their experiences may not generalize to experiences of more diverse segments of the population. We used two-step cluster analysis, which has been found to provide similar results to other person-centered approaches like latent profile analysis, and is appropriate for small samples (Liu et al., 2022). Though our clusters demonstrated homogeneity and good separation, cluster quality was fair, which is sufficient for exploratory work (Vargha et al., 2016). A key strength of this study was our multi-method approach and integration of in-depth qualitative data to corroborate cluster analysis findings. Our robust sample for qualitative analysis provided insights about college students' experiences of unexpected changes across five distinct domains. Lastly, some quantitative measures were newly developed, without prior established validity/reliability (data available upon request for continued psychometric testing).

Conclusions

The full extent of changes and disruptions caused by the global pandemic are yet to be understood and will take many years before researchers can fully capture the longer-term effect of the pandemic on future life trajectories. We encourage further exploration, including longitudinal studies that follow the life trajectories of this cohort, which will further clarify how Surfers, Swimmers, and Sinkers adapt in coming years. Unexpected life changes are inevitable, and we postulate there are parallels to current study findings where people exhibit high level of resilience ("Surfers"), significant physical health concerns but adequate mental health coping ("Swimmers"), and significant mental health challenges ("Sinkers"); thus, it is critical we tailor support to various types of disruptions while simultaneously considering the cumulative effects of loss on one's health, wellbeing, and educational pursuits. More specially, future interventions and support should address mental health, grief, and loneliness. Further exploration of the factors that support resilience and growth in the face of unexpected life challenges will inform recovery and maintenance strategies to help individuals learn how to swim and surf.

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Declarations of Interest

The authors have no competing interests to disclose.

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