Research Article

Benefit Finding in the COVID-19 Pandemic: College Students' Positive Coping Strategies

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Abstract

The ability of college students to cope effectively during the COVID-19 pandemic is an ongoing concern which could have implications for a generation of students' health and well-being. Although adaptive coping styles have been explored with reference to other large-scale crises, little is known from an empirical standpoint about whether college students are engaging in such coping strategies during the pandemic. The current study focuses on meaning-focused coping, a coping style often seen in response to significant trauma or adversity, and in particular the process of benefit finding. Qualitative data were collected from a sample of 63 college students who were living under county-issued shelter-in-place orders for seven weeks during the pandemic in an academic semester. Benefit finding was a common strategy expressed by students during that time. They identified several self-related benefits including learning to be grateful, unexpected personal growth, and new clarity about the future. They also described various societal-related benefits of the pandemic, including people acting selflessly, focusing on what matters, developing creative solutions and teamwork, and also noted improvements in the natural environment. The self-related benefits had a particularly potent impact, as those who reported them were also less likely to express fear, anxiety, or stress. The results suggest that benefit finding is an important coping strategy during the pandemic; moreover, it seems helpful to continue exploring such positive models of adaptation as students navigate the pandemic over time.

Keywords: COVID-19 pandemic, benefit finding, adaptive coping, reframing, positive psychology, college students

The many repercussions resulting from the COVID-19 pandemic are hard to fully imagine at this point. In the United States, as with much of the rest of the world, the pandemic has negatively impacted almost every sector of the economy, required massive shifts in the activities and norms directing most adults' work and personal lives, and uprooted the educational lives of students everywhere. Much less, there are widespread reports of people feeling nervous, anxious, or on edge, both in the early days of the pandemic (Lee & Ward, 2020) and as the pandemic continues into the eleven-month mark in

the United States (Pattani, 2020).

Though declining mental health is a concern for all, college students may be uniquely at risk of additional negative effects of the COVID-19 pandemic. Many are likely to feel stopped in their tracks as they transition to adulthood, facing difficulties with navigating and fully engaging in online courses, and simultaneously wondering where they might find a job (Martin, 2020). Others are concerned with managing shifts in dating and romantic relationship norms due to ongoing social distancing (Kristoffersen & Pham, 2020). A

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fundamental question young adults will face is how well they will adapt to the circumstances and progress toward their goals and the next phase of their lives.

The longer-term consequences for young adults are yet to become fully apparent. There is a need to build an empirical base that will be necessary for researchers to scientifically reflect on the meaning of the pandemic and its larger psychological impact. With that aim in mind, the qualitative research described here is exploratory in nature, aimed at understanding college students' coping styles during the early stages of the COVID-19 pandemic, with a particular emphasis on benefit findingfinding, a type of meaning-focused coping rooted in theories of stress as well as positive psychology.

Coping through Crisis

There is some early evidence underscoring the extensive challenges many college students in the United States face because of the pandemic. Students from low-income backgrounds are under extraordinary stress, having few safety nets to support the newly required housing and technology needs necessitated by the shift to online learning that has occurred during the pandemic (Patel, 2020). In addition, students in general are concerned about specific financial consequences. A survey of 1,564 students at Arizona State University in late Spring, 2020, indicates that as a consequence of the pandemic, 13% have delayed graduation, 40% lost a job, internship, or a job offer, and 29% expect to earn less at age 35 (Aucejo et al., 2020). A more recent and nationally representative survey of 4,000 students in September, 2020 demonstrates that stress, anxiety, and loneliness were the top challenges students report facing as a result of the pandemic, described as a concern by 44% of students surveyed. Keeping up academically and paying for books, tuition, and other costs were the next most common concerns, with 22% and 14% of students reporting those challenges, respectively (Anderson, 2020). Clearly the pandemic creates many difficulties in the day-to-day lives of college students.

Forms of Coping

Finding ways to effectively cope with this crisis is a key concern for most. Generally speaking, coping refers to "thoughts and behaviors that people use to regulate their emotions and address underlying problems" (Folkman & Moskowitz, 2007, p. 193). According to the transactional theory of stress and coping (Lazarus & Folkman, 1984), coping occurs in response to stressors, or stimuli in one's environment that are perceived as

threatening, challenging, or harmful. When encountering a stressor, such as the general challenges brought on by the pandemic, individuals perform the task of cognitive appraisal. This involves evaluating the personal significance of the threat and then assessing what options there are for coping with it.

The specific coping strategies individuals draw upon in an effort to resolve the stressor set the stage for longer term adjustment. Broadly speaking, adaptive strategies such as relaxation, good nutrition, and regular exercise reduce stress and promote long-term wellbeing and positive affect, whereas maladaptive strategies such as drug use, alcohol use, or interpersonal withdrawal erode long-term well-being (Cole et al., 2013; Everly & Lating, 2002). In relation to the pandemic in particular, there is growing evidence about the usefulness of engaging in the more positive and adaptive strategies. A study of people in Ireland in the early stages of the pandemic demonstrates that time spent outdoors in activities such as gardening, taking walks, and exercising is associated with higher levels of positive affect (Lades et al., 2020). Similarly, a study of undergraduate students in Turkey demonstrate that those who felt a continued sense of belongingness with friends and with their university during the pandemic also felt more energetic and alive, which in turn was associated with greater psychological well-being (Arslan, 2020).

Traditionally, coping was thought to be aimed at the dual functions of regulating distress and managing problems. Emotion-focused coping describes the distress-regulating function, and includes an aim to change one's own emotional response to a situation. It involves acts such as distracting or distancing oneself from the stressor. Problem-focused coping, on the other hand, aims to alter the stressful situation itself with some kind of action (Lazarus & Folkman, 1984). In either case, coping that has been effective results in improved regulation of distress.

More recent research demonstrates that coping can extend beyond regulating distress and managing problems to include efforts at generating positive affect. In a revision to the original transactional theory of coping, Folkman (2008) suggests that when individuals use what is termed meaning-focused coping, they reappraise the meaning of a stressful event, ascribing positive meanings to it in the process. In doing so, they reshape thoughts about the stressor and its role in their life, and generate positive emotions providing needed motivation to sustain coping over the long term. The

work on meaning-focused coping is grounded in efforts by stress researchers to reevaluate earlier assumptions about the relative significance of positive as opposed to negative emotions in the stress process. It was spurred Frederickson's broaden and build theory (Frederickson, 1998; Frederickson et al., 2003), which posits that positive emotions, such as those potentially generated in meaning-focused coping, broaden the focus of our attention as well as our typical repertoire of thoughts and actions. That broadening becomes selfreinforcing, continually replenishing social. intellectual, and physical resources in an enduring way. Those resources, in turn, can be accessed to help manage stressful situations.

Meaning-focused coping is thought to be used when stressful situations are not adequately resolved via emotion or problem-focused coping. It is consequently often seen in response to significant trauma or adversity, as such stressors cannot be easily overcome with short-term problem solving or emotion regulation. It can include thoughts such as the idea that in the "big picture" a crisis or extensive challenge allowed a person to grow or change for the better. Often a complex emotion, meaning-focused coping involves both the loss of meaning in one sense, but also the acquisition of new meaning. It can co-occur with emotion-focused and problem-focused coping, and is yet another unique resource for coping (Folkman & Moskowitz, 2007).

Finding Benefits in Crises

One distinct type of meaning-focused coping, termed benefit finding, has been of particular interest to trauma researchers who have noted that people who face sizable personal crises often ultimately describe themselves in terms of positive experiences. Benefit finding refers to the act of finding positive ways that one's life has changed as a result of a traumatic or stressful event (Folkman & Moskowitz, 2007). It can be seen in reports of "growth in wisdom, patience, and competence; greater appreciation for life, greater clarity about what matters, [and] strengthened faith or spirituality" following trauma (Folkman, 2008, p. 7). Though Folkman (2008) describes five types of meaning-focused coping strategies, benefit finding is the most commonly utilized one. Other research supports the sizable impact of benefit finding. A metaanalysis (Helgeson et al., 2006) exploring the influence of traumatic stressors -- including life-threatening or chronic illness, extensive physical injury, sexual assault, war, and bereavement -- on psychological wellbeing demonstrates several key findings. Generally, benefit finding had a positive association with wellbeing. Further, benefit finding was related to reduced anxiety when the time since the trauma was shorter; on the other hand, it was related to reduced depression and greater positive affect when the time since the trauma was longer.

Benefit finding can occur with reference to the self or with reference to the world around us. Poulin et al. (2009) make this distinction in a study of the aftermath of the 9-11 terrorist attacks in the United States. In a nationwide study of 1,382 adults two months after the terrorist attacks, participants described five main types of unexpected positive consequences, or benefits that occurred as a result of the events. Some were positive changes within themselves while others were positive changes related to their social environment. Prosocial benefits, such as perceptions of increased kindness and altruism made up a large portion of the responses. Participants also identified philosophical benefits (e.g., the belief that "life is precious"), religious benefits (e.g., "more people praying"), positive political changes (e.g., "awareness of our government"), and increased national security (e.g., "heightened security at the airports") as benefits. Philosophical benefits was the only category for which participants perceived there were only positive changes within themselves and not within their broader social context. Of the five main benefits identified, only religious benefits was positively associated with well-being. Interestingly, and counter to predictions, the perception of increased prosocial benefits was associated with reduced positive affect. Though the reason for this could not be tested directly, the authors suggest it may be that those who noted increased prosocial behavior in others were distressed that they did not participate in prosocial acts to the same degree.

There is growing recognition of the importance of meaning-focused coping, and benefit finding in particular, as an adaptive strategy people can make use of during various types of crises. However, these kinds of positive psychological perspectives are rarely undertaken in academic research on COVID-19 (Burke & Arslan, 2020). Moreover, there are mixed results as to the specific consequences of benefit finding for individual functioning. In some instances, it seems to be associated with positive affect such as well-being, and in others it is associated with reductions in negative affect such as depression or anxiety. Thus, there is a need to both expand the positive psychological research on COVID-19 and to better understand the impact of benefit finding in particular. This study aims to help address those needs by focusing on the following main research questions: (1) Do college students use benefit

finding to cope during the pandemic? (2) If so, what is the impact of that coping style?

Brief Outline and Context of the Study

The study described here took place with cooperation of students at a large, public, highly diverse urban university amid the COVID-19 pandemic. At the time the data were collected, students had been operating for seven weeks via remote learning and shelter-in-place orders issued by all Northern California counties in the United States. The data were drawn from responses to a homework assignment issued by the lead author, as described further in the Method section.

Given that reactions to crisis can be conditioned by context such as the proximity and timing of the crisis with reference to other life activities (Felix et al., 2018; Gaffney, 2006) the context of the university itself and the timing of changes related to the pandemic is potentially relevant background. The university the students attend has an enrollment of 31,156 students. The average age of students at the university is 23 and the vast majority are commuter students (Common Data Set, 2019). Most students work for pay, either on- or off-campus (Office of Institutional Research, 2017a). Housing instability and food insecurity are relatively common concerns in the student population, with 12.6 percent of students at the university reporting experiencing homelessness at some time in their college careers, and just over 47 percent struggling with food insecurity (Reid, 2018).

As with most colleges in the United States, the university transitioned from in-person to fully remote learning during the pandemic. The university was temporarily closed on Monday, March 16, 2020 in order to shift to online operations, and re-opened Friday, March 20, 2020. All classes, with the exception of very few pre-approved labs and performing arts courses, continued with fully online instruction for the remainder of the semester. All other university functions also moved to remote operations, aside from a very small number of essential services such as some counseling and technology support. Though the timeline was parallel to the transitions to remote operations for many universities, it was a time of great confusion and a whirlwind of activity as students, faculty, staff, and administrators rapidly repositioned their lives in entirely different configurations. The county in which the university is located as well as all surrounding counties issued shelter-in-place orders the day before online courses formally began.

Method

Participants

A total of 63 students in two sections of a statistics for psychology course required for psychology majors composed the sample for this study. Given the pre-existing nature of the data (as described below) demographic information could not be collected directly from participants. However, a search of student records provided additional demographic detail with regard to year in school. There were 2 first-years, 13 sophomores, 40 juniors, and 8 seniors in the sample.

Measures

A homework assigned to the two sections of a statistics for psychology course for which the lead author was the instructor asked students to respond to the following prompt: "What did I learn about myself and the world around me during the COVID-19 pandemic?" The assignment was developed toward the end the semester and substituted for one originally assigned prior to the pandemic for which content could not be covered. Students were instructed to write a one-paragraph response of at least 6 sentences though many wrote 2-3 paragraphs.

Procedure

The assignment was posted on the course website that students normally access in conjunction with the university's Learning Management System (LMS). An email announcement was posted on the LMS alerting students to the changed assignment. Additionally, a recorded online lecture posted for that week on the LMS also alerted students to the changed assignment. An online submission portal was created on the course website, providing a space for students to upload their response. Students were instructed to upload their response as either a word processing document, or a .pdf, .jpeg, or .png file by a specific date and time.

Those responses, which ultimately composed the dataset in this study, were not developed as a result of a pre-planned research project and are more akin to what is often termed naturally occurring data (Golato, 2017). Thus, approval of the project and consent for participation was obtained as per the university's Institutional Review Board (IRB) requirements for secondary data analysis. An email announcement was sent by the instructor one week prior to the last day of the course to all students enrolled in both sections of the course. The email explained the potential research project and asked for consent according the guidelines for secondary data analysis, specifically, that students

who did not want their data to be included reply back to the instructor, and their responses would be removed from the dataset with no questions asked. They were further told that the information would be entirely confidential, their names would never be tied to the information provided, and that all potentially identifying information such as places of work or names of friends would be de-identified. No student indicated they would like to their data to be removed from the larger body of data. Once IRB approval was obtained, all responses were downloaded for data analysis and converted as necessary to regular text transcripts.

Analyses Strategies

As the research described here is part of a broader study on general reactions to the pandemic, open-coding was initially conducted on all transcripts to gain an understanding of the variety of responses participants had to the pandemic. Each transcript was read line-byline by two trained coders -- the instructor of the course as well as a research assistant -- and the text was demarcated into "incidences" (Glaser & Strauss, 1967) or unique chunks of data which stand out as meaningful and worthy of attention. These incidences covered a wide range of information including participants' feelings about themselves, their observations about other people they had encountered or seen on news reports during the pandemic, their concerns about family and friends, their thoughts about online learning, and behavioral changes they had made as a result of the pandemic. Each incident was given a label or "code" identifying its essential meaning.

The coding technique of constant comparative analysis (Glaser & Strauss, 1967) was utilized during open coding to compare codes to one another and develop broader categories containing subcategories and subcodes. In doing so, segments of text were classified according to how closely they resembled text segments from transcripts processed earlier. When a new segment of text resembled earlier ones, it was placed into the same category as the others and consequently labeled with the same code. Otherwise, it was placed into a different category and labeled differently.

Throughout this analysis process the various categories and subcategories were sorted and re-sorted via multiple iterations, with the aim that each category was distinct from one another and the incidences within it had the same fundamental meaning. Doing so involved close scrutiny of the data by both coders, along with many regular conversations about the

meanings of codes and categories, and recoding data as appropriate; the ultimate aim was toward a consensual interpretation of data, as with a constructivist approach to qualitative research (Guba & Lincoln, 1994; Madill et al., 2000). After several formulations, a coding scheme for all topics addressed in the transcripts was ultimately developed which contained seven major categories and an initial draft of subcategories.

One of those seven major categories was identified as "benefit finding." Though the general definition of that concept was adopted from Folkman and Moskowitz (2007) and Folkman (2008), its specific nature was left open, allowing for the possibility of unique descriptions of benefit finding as they might be expressed by college students facing the COVID-19 pandemic. As this was the central phenomena of interest, this category was then thoroughly examined for purposes of the current analyses. During this process benefit finding was identified as containing two subcategories -- benefit finding for the self and benefit finding for the world - each of which contained specific subcodes. In addition, two other major categories from the full coding scheme were identified as "negative reactions" and "positive emotional emotional reactions". The former was determined to include three subcategories, and the latter contained only one subcategory.

Given the second major research question, the strategy of analytic induction (Taylor & Bogdan, 1998) was then implemented to explore potential relationships between benefit finding and both negative and positive emotional reactions. Analytic induction is often used as a way to identify typical patterns in the data (Katz, 1983; Taylor & Bogdan, 1998); it requires first formulating tentative hypotheses about connections between concepts in the data and then studying cases in sequential order to explore their fit with the hypotheses. If one case in the data fits a tentative hypothesis, the researcher moves on to the next case to explore its fit. When a case or cases are encountered that do not fit the tentative hypothesis, the hypothesis must be slightly reformulated and tested again. This process continues until the hypothesis has been "adequately tested" (Taylor & Bogdan, 1998, p. 139) with the aim of amassing as many cases as possible that fit the pattern. An important verification strategy for analytic induction is to also search for negative cases, or cases that "disprove" an emerging hypothesis. Together, analytic induction and negative case analysis allow the researcher to repeatedly refine and qualify propositions so they apply as broadly as possible, though, as is

typically noted in qualitative studies, not necessarily universally.

Given the underlying theory that benefit finding acts as an effective coping strategy which results in improved well-being, several tentative hypotheses were thus developed, tested, and sometimes discarded using analytic induction and negative case analysis. Each time the same main question was kept in mind: to what extent is benefit finding associated with reports of either positive and/or negative emotions with reference to the pandemic? The results discuss only those propositions for which there was clear support, that is, there were clear patterns of associations between the concepts examined.

Reflexivity and Researchers' Positionality

Qualitative research by nature involves reflexivity, that is, the awareness that the researcher is "part and parcel of the setting, context, and culture" (Altheide & Johnson, 1994, p. 486) they are trying to understand and represent. Though this can be advantageous in terms of gaining entrée or access to a setting and its people, it can also impact how the data are perceived. Accordingly, qualitative researchers generally try to "account for ourselves" (Altheide & Johnson, 1994, p. 493) by making clear their positionality with reference to their research. In the present case, the lead author is an educator and researcher trained in both qualitative and quantitative analysis. Her area of specialty involves positive adult development, and she often studies characteristics of people and environments that facilitate transitions from one life circumstance to another, such as work to retirement. The second author is a college student, relatively newly trained in research with recent interest in understanding psychology from a qualitative perspective. He does not yet have a career path picked out, but is a committed and highly involved student-athlete with interest in maximizing human potential for performance. It is hoped that these differing university "insider" perspectives, from the point of view of both a long-time faculty member and an undergraduate student, have allowed us to achieve a balanced perspective on the data.

Results

Benefit finding for the Self

With regard to the first research question, participants described three main types of positive changes in themselves that resulted from their experiences in the pandemic.

Learning to be grateful. By far, the most commonly reported benefit participants expressed was that in the pandemic they had learned to be grateful for what they had in life. Some descriptions were philosophical in nature, with statements such as "I took life for granted before this pandemic because anything can happen, and I will cherish every day from now on". Others felt newly grateful for friends and family, with remarks such as,

We tend to get so caught up in our daily lives that we forget to enjoy the small things. This COVID-19 situation definitely made me realize how lucky I am to be where I am with the family that I am with.

Others felt newly appreciative of typical daily activities and interactions. One participant says:

This pandemic has taught me that I should have appreciated daily life more. For example, I never really thought about how comforting it is to sit down to study in a noisy coffee shop or go to a friend's house whenever I wanted.

Still others had recognitions about their fortunate position with reference to the outside world during the pandemic. As one said,

I have realized the privilege that I have by being able to not work and stay home for days at a time due to me living with my parents...There are way too many things that I should be grateful for, many that I am sure I do not even realize. I feel like this also makes me appreciate the world a bit more as well, out of all the possibilities to have in this world, I get to be able to have a home.

Personal growth. It was also very common for participants to describe having experienced some kind of personal growth during the pandemic. The ways in which they matured varied. Some recognized they had developed resilience in the face of new challenges, such as this participant who says, "During this pandemic I learned that I am strong, and very blessed, that it is OK to fall and pick yourself back up". Some developed more positive views of themselves. As one describes, "I would even say I matured a lot more. I learned that I am more than my depression and anxiety, that being alone might actually be beneficial rather than cause loneliness." Many similarly commented on the experience of spending extended hours by themselves during the pandemic, remarking on growing in their ability to do so comfortably: "Even though there are challenges to this pandemic there are positive aspects such as I learned that I am okay being by myself.".

There was also a sense among some of having grown in their ability to gain perspective on others. One sums up that thought:

I can definitely say about the world is that I've learned that there [are] so many people out there living lives just like me. It's easy to think about your own pain and suffering but it's more difficult to put yourself in others shoes.

Clarity about the future. A final benefit participants expressed with reference to themselves was developing new clarity about their futures. Most commonly, they attributed this to the extended alone time they had during the shelter-in-place orders. As one explains,

While quarantined in my apartment during the pandemic, I had plenty of time to explore possible career paths. I learned that I no longer want to be a double major, and would rather focus on psychology. I discovered that my strengths lie in the study of the brain rather than STEM.

Another describes a similar, yet more succinct thought: "Since being in solitary, I was able to ask myself what I really want to do in life," Yet another remarks upon feeling more settled in general about what the future holds for them, "It gives me time to think about all the things going on in my head and to not worry about my future because I know I can make it happen."

Benefit finding for the World

Also in regard to the first research question, it was common for participants to report unexpected societal benefits resulting from the pandemic.

Selflessness is widespread. Participants described widespread recognition of the great displays of selflessness people have shown during the pandemic. As one participant explains:

There are thousands of people that truly care about one another and that are taking care of other people. We have people risking their lives outside to give food to families that are going through a tough time financially.

Another explains a similar thought, and also suggests that seeing such selflessness helps this participant feel the same way.

I have also witnessed the desire that so many people have to serve and help others during this stressful time. Seeing people giving out meals, running errands and asking what they can do to help others who are struggling has been uplifting, and encourages me to think more about others and not about myself.

Still others had more philosophical thoughts on selflessness, as this participant: "I learned that when pressed by the enormity of catastrophe, people rise up and show empathy and kindness and love which I believe are at the core of our humanity."

The world has an opportunity to learn what matters. Just as participants described developing a sense of personal gratitude in which they became more appreciative of what they had in life, many also suggested that the pandemic gave people at large an opportunity to appreciate what the world has to offer them. One said it most directly, "It is a strange and difficult time that reveals what really matter to us in life." Some focused more on the specific importance of human relationships and interactions, stating:

Overall this whole situation is a learning experience, we learn how our actions affect our society and maybe we take for granted our relationships, perhaps being away from one other will remind us how much we love each other.

Others noted how the pandemic forced people to re-prioritize, and that doing so could come to good ends. As one said, "In a way, this time was gifted to us to spend more time with our families to learn to live with less. The 'gift' also came with thousands of lives lost but I think this is the lesson this generation needs."

Creative solutions and teamwork can help.

Another common societal benefit was that participants appreciated the many people in their communities who were solutions-focused, offering creative ideas and teamwork to try to resolve some of the immediate challenges of the pandemic. Some remarked upon the imaginative face masks co-workers and friends had made during the widespread shortage of masks; others noticed how scientists were quickly working as a team to collect key initial information about how the pandemic was progressing and what could be done to slow its pace. Some had more philosophical thoughts on the importance of working together, such as the following, "It just really taught me that for this virus to go away, we need to work as a team."

Improvements to the natural environment.

Participants also widely noted the natural environment had improved as a result of the pandemic; pollution and carbon dioxide levels had decreased and animals had access to habitats less crowded by people. For instance, one says, "there is positivity somewhere beneath it all. There are less people out on the road, our Mother Earth is in the process of healing and putting herself back together." Another remarks "many animals are able to enjoy their natural habitat, for example, in Italy many fish and birds have returned due to less human activity."

Several also had a sense that the natural world had reached a breaking point, and that the pandemic represented the natural consequence. As one explains, "with less pollution and clearer oceans, maybe the world just needed a break from us."

Negative Emotional Reactions

Though participants common expressed finding benefits in the pandemic, reports of negative emotions with reference to the pandemic also occurred. Those reports referenced a variety of feelings, including fear, anxiety, and stress, disliking the online learning experience that stemmed from the pandemic, and general boredom.

Fear, anxiety, and stress. Many participants reported that they felt increasing fear, anxiety, and variety of stress symptoms as a result of the pandemic. They expressed thoughts such as "I've learned a new level of anxiety during this whole thing, and honestly reach an uncertainty about the future I didn't think I would feel". Many also described their work situations as quite stressful given potential exposure to COVID-19. As one said,

It has been a very scary time. Especially working at a public place like our local coffee shop. Something I've learned about myself is that I don't like to not be in control of things and it has worsened my anxiety tremendously.

Another reports similar fears and concerns over family members who work on the front lines during the pandemic, "My mom works in healthcare and it been scary because just like all other healthcare workers she's at risk due to exposure. I have felt down lately; my mental health has taken a toll as well." Still others reported feeling emotional and physical exhaustion from the many stressors they are tolerating, making statements such as "I am being tested both emotionally and physically." Several commented that their sleep schedules had been disrupted as well.

Dislike for online learning. A widely held negative reaction to the pandemic was that participants did not like the online learning they had unexpectedly undertaken. Their reasons varied; for instance some were frustrated by their difficulty concentrating given the distractions of home life. In thinking about the future, one says:

I'm 100 percent [certain] that I won't be taking online classes because I need to be in class and be around students in order to actually perform better. Being home does not benefit me since I'm around many things that distract me and seeing

my siblings not studying or working makes me unmotivated to do any homework or classwork.

Others missed the in-person interaction of a non-virtual university, making remarks such as, "I miss my friends and I really miss going to school, the actual going to campus and experiences of the face-to- face teaching and learning." Many suggested that moving back to their childhood homes made online education particularly difficult, such as this participant:

Honestly, I actually prefer being away from home while simultaneously being enrolled in college... now that I've been at home participating in online-school, I've realized why I left all over again. I simply cannot focus or keep up with my work. Being in an environment where I can really focus on school seriously makes all of the difference.

Even those who indicated they fared relatively well in the transition to online learning remarked that it was still less than ideal, making statements such as, "I learned I am a better student within the classroom setting. I adapted well, however, I chose to be in class over online any day of the week". Though many had adjusted to the situation, only one participant remarked upon actually preferring virtual learning, saying that it allowed them to "finish lectures and assignments much faster."

Boredom. Feeling bored was also a regular feature of many participants' lives. Most reported following their counties' orders to shelter-in-place, and the resulting inevitability of boredom set in. One says, "Now my day is filled with nothing but time. There's nothing for me to do other than do my homework or play video games." Others expressed similar thoughts such as "without school I would probably go stir crazy because I only have so much going on to distract me at home.'

Positive Emotional Reactions: Hope

Most research on benefit finding is directed at exploring improvements in subjective well-being. Though in this study participates did not typically refer to a general sense of well-being, they widely shared one positive emotion, which was hope for the future. Hope is a distinct construct from subjective well-being, however the two are closely connected, with hope typically leading to higher levels of well-being in terms of life satisfaction and quality of life in general (Bailey et al., 2007).

The ways in which participants expressed a hopeful outlook varied. Often it included personal wishes such as "I am remaining hopeful right now to get through this quarantine happy and healthy." Another similarly says "I hope campus will be open soon but if it has to close to protect the students from the virus then I completely understand." Others looked forward to a brighter future when things are back to "normal", such as this participant who remarked, "I'm hopeful we will be able to resume normal life when the time is right." Others anticipated a more specific positive future for themselves in terms of their education and career plans, saying,

This is a confusing time for people, but there is also a lot to see the bright side of. I want to continue to live as well, but not with fear. My life has not been put on pause either, instead, I continue to move forward with my education, career, and self.

Another similarly remarks, "when this is all over, I hope that I am not the only one more than prepared to hit the ground running". Overall, even with the challenges they faced, it was common to maintain a positive outlook, as one person summarizes, "I hope we, as a country can get a handle on this pandemic soon, but until then I think trying to stay safe and positive is important."

Additional Patterns in the Data: Benefit finding and Fear, Anxiety, and Stress

In keeping with the second research question, a systematic search for patterns was conducted using the strategy of analytic induction, in which specific forms of benefit finding were compared with both the negative and positive emotional reactions. Given Taylor and Bogdan's (1998) considerations about adequately testing propositions, a criterion was established that if more than 5 of the 63 cases in the data did not align with a tentative proposition, that proposition was discarded as not demonstrating a clear pattern.

Four clear patterns were uncovered while utilizing this criterion. The first three patterns pertain to benefit finding with reference to the self. Specifically, those who expressed finding the benefit of learning to be grateful during the pandemic were notably less likely to describe any fear, anxiety, or stress in their responses. Similarly, those who reported obtaining the benefit of personal growth were also notably less likely to express fear, anxiety, or stress. Additionally, those who described obtaining clarity about their futures were also notably less likely to express fear, anxiety, or stress. Correspondingly, participants who reported fear, anxiety, or stress were much less likely to describe those same self-benefits.

The fourth pattern pertained to societal benefit finding. Those who described the benefit of improvements to the natural environment were also notably less likely to indicate experiencing fear, anxiety, or stress. In congruence, those who reported fear, anxiety, or stress were much less likely to describe the societal benefit of an improved environment.

Thus, the self-related benefits identified by these college students were particularly impactful, as all were associated with experiencing fewer negative emotions in terms of fear, anxiety, and stress. Only one broader benefit to the world - an improved natural environment - was associated with fewer reports of fear, anxiety, and stress. The other negative emotions -- disliking online learning and boredom -- were not associated with benefit finding. Finally, none of the self-related benefits were associated with increases in hope, nor did any of the societal benefits show such relationships.

Discussion

Overall then and in regard to the first research question, the college students in this study did extensively use benefit finding, a key strategy in meaning-focused coping, in response to their experiences with the pandemic. In doing so, they noted a variety of self-related benefits. Those included learning to be grateful and experiencing both personal growth and clarity about the future during the pandemic. The social benefits they described were also numerous, and included the notion that many people in their social worlds demonstrated selflessness, had an opportunity to learn what is truly important, and engaged in teamwork and creative problem solving. Finally, they perceived that the world had generally benefited from an improved natural environment during the pandemic.

The self-related benefits described in the present study are quite similar to those identified by Folkman (2008) who suggests that common self-benefits include personal growth, appreciation for life, and clarity about what matters. It is heartening to recognize that these same benefits appeared among college students who face potentially unique challenges in the pandemic including the additional burdens of managing remote learning, limited technology access, and housing instability. Moreover, though college students are particularly at risk for loneliness even without the pandemic (Diehl et al., 2018), many noted that the extensive amount of time they spent alone during the pandemic created the "mental space" for those benefits to emerge. The societal benefits described in the present study are parallel to two identified in earlier research. The selflessness participants noticed mirrors the prosocial benefits Poulin et al. (2009) found following

the 9-11 terrorist attacks, and the opportunity for others to learn what is important mirrors the philosophical benefits. Also in keeping with Poulin et al. (2009), the present study demonstrates it is possible to derive both personal and societal benefits in the face of a crisis.

With reference to the second research question, benefit finding appears at some level to have acted as an effective coping strategy for participants, ultimately having an impact on their state of mental health. Those who found self-benefits in the pandemic were much less likely to express fear, anxiety, and stress. Though many societal benefits were also described by participants as a result of the pandemic, only one such benefit was similarly associated with reduced fear, anxiety, and stress. Benefit finding is a very specific form of meaning-focused coping (Folkman, 2008; Folkman & Moskowitz, 2007). Yet it is similar in some respects to the notion of positive reframing or reappraisal, that is, the process of changing one's thought patterns about events that cannot be changed; in doing so, maladaptive thoughts are replaced by more helpful ones (Beck, 1979; Shanahan et al., 2020). That benefit finding was associated with better mental health outcomes in this study aligns with similar findings in the growing body of research on positive reframing in the pandemic. For instance, positive reframing was associated with reduced distress among young adults in Switzerland when national lockdown policies were in effect during the pandemic (Shanahan et al., 2020). Moreover, positive reframing was associated with greater life satisfaction in the early stages of the pandemic among people living in Germany (Zacher & Rudolph, 2020).

In this study benefit finding was not associated with an increase in the positive emotion of hope. Some research indicates that the recency of a crisis acts as a conditioning factor with regard to the impact of benefit finding. Specifically, benefit finding corresponds with a reduction in negative emotions in the short-term, but only in the long-run does it impact positive emotions (Helgeson et al., 2006). Given that data collection for the present study occurred when the pandemic was in its early stages in the United States, the association to reduced negative emotions, only, makes sense in that context.

Future Directions

Exploring the impact of benefit finding as the pandemic continues over the long haul is an important direction for future research. Its role in minimizing fear, anxiety, and stress has been described in this study, and is an important first step in coping. Additionally, the potential for benefit finding to ultimately result in positive emotions such as a sense of well-being should not be overlooked, particularly since positive emotions are associated with numerous desirable health outcomes including reduced inflammatory responses, lower risk of stroke, and reduced mortality (Folkman & Moskowitz, 2007), all heightened health concerns during the pandemic.

The study described here was conducted on a particular population of United States college students at a specific point in time. Given that the impact of the COVID-19 pandemic has varied in scope depending on the features of local populations (e.g., size, density, geographical locale, relative spread of infection), the college students in this study may have had somewhat different reactions than college students in other parts of the country or world. The extent to which their reactions are generalizable to the broader population of college students is thus grounds for future research as well.

Further, this study focused only on meaningfocused coping as a primary response to the pandemic. In doing so, it is not meant to suggest that other forms of coping, such as emotion- or problem-focused coping, did not occur in this sample; it is simply meant to explore in detail a particular type of coping that is less well-understood in general, and less explored in terms of the current pandemic. Moreover, the focus on generally positive human activities such as coping is not meant to disregard the enormity of adverse experiences associated with the pandemic. Such experiences are widespread and clearly alarming, and are beginning to be documented empirically in a number of studies (cf., Pan, 2020; Trougakos et al., 2020; Zhao et al., 2020). But, the necessity of long-term adaptation to this crisis speaks to the need to understand positive forms of adjustment as well. Other researchers have begun to undertake this challenge; a study of undergraduate students in Turkey demonstrates that those who report experiencing a strong sense of meaning in life during the pandemic are also more likely to show positive states of mental health and wellbeing (Arslan et al., 2020). As Shakespeare-Finch et al. (2020) have suggested with respect to the Australian population, psychological distress in the pandemic may ultimately be best navigated by using positive models of adaptation, such as resilience, post-traumatic growth, hope, and grief recovery.

The lack of direct demographic data is a limitation inherent to the design of this study, making comparisons between various groups impossible. Studies of other large-scale crises (Aucejo et al., 2020; Elder, 1974; Sattler et al., 2002) suggest it is plausible that the findings in this study were conditioned on factors such as financial status, access to resources, and familial or social support. Understanding the extent to which college students' coping strategies are dependent on these and similar types of inequities or circumstances should be a high priority in future research, particularly given the disparate impact of the pandemic on various marginalized populations.

Given that the pandemic will likely continue at some level into the near and midterm future, the need for effective coping strategies will be widespread. This study focused on only one type of coping, meaningfocused coping via benefit finding. However, the potential benefits of other coping strategies including those associated with emotion-focused and problemfocused coping should be explored as well. Additional fruitful studies might also include examining the cultural context of coping and potentially unique positive adaptations such as developing strengths as a collective group (McCarty & Altemose, 2010). Health advocates on college campuses would be well positioned to teach people to adopt these many potentially effective coping strategies as a way of combatting the many downsides of the pandemic.

Social science researchers are just at the beginning of understanding the impact of the COVID-19 pandemic. Clearly we have a long way to go and much territory to cover. Having a scientific understanding of reactions such as benefit finding, as was the main goal of this study, should assist those who regularly interact with college students including educators, and also those who provide supportive services to college students during a crisis such as counselors and health care professionals. In the long run, the knowledge gains should benefit college students themselves who are aiming to cope with the global pandemic.

Compliance with Ethical Standards

Ethical Standards

All study procedures involving human participants followed institutional and/or national research committee ethical standards and the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study has been reviewed and approved by a university Institutional Review Board. It is an original work, has not been submitted or published elsewhere, and complies with all ethical standards

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Notes

¹The University's Office of Institutional Research provides reports containing demographic information for undergraduates in each major at the university. Though not a direct mirror of the sample, those data may provide some useful context for the present study. With regard to age, the majority (75.5%) of psychology majors at the university are age 18-25. With regard to gender, 75.6% of psychology majors are female and 24.4% are male. In terms of ethnicity, psychology majors report their ethnicity as follows: 7.4% African-American or Black, 0.9% American Indian, 14.7% Asian, 29.4% Latinx, 1.4% Pacific Islander, 8.4% multiracial, 32.1% White/Caucasian, 3.3% foreign, and 2.4% other or declined to answer (Office of Institutional Research, 2017b).

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