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Do Changing Times Call for Changing Definitions? Dynamic Definitions of Disengagement as a Response to Trauma from the COVID Pandemic

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ABSTRACT

Recent scholars have noted a change in the engagement of students following the COVID-19 pandemic. The purpose of this study was to describe the perceptions of higher education instructors regarding student (dis)engagement over the past three years. The 108 participants were asked questions related to signs of disengagement including: (a) turning in late work, (b) turning in incomplete work, (c) lack of and/or poor participation, (d) lack of communication with professors, and (e) dropping classes. All respondents reported student disengagement was higher during and after the pandemic relative to before. Following the return to campus, late work was often perceived to signify disengagement. The behaviors participants interpreted as "student disengagement" are consistent with common definitions of post-traumatic stress. Although more research is needed to better understand the phenomenon of student disengagement, it is likely educational practices within institutions of higher learning need to change to meet the needs of today's students.

Keywords: faculty perceptions, student success, stress, higher education, survey research, disengagement, COVID-19

Student engagement is one of the key factors that allows learning to happen regardless of teaching modality in higher education (Boulton et al., 2019). Engagement is multi-faceted and includes (a) behaviors of students and teachers, (b) psycho-social aspects, (c) social contexts, and (d) a holistic or dynamic view, which underscores the complexity of factors that interact to influence engagement (Kahu, 2013). For students attending a campus class, engagement is facilitated naturally through reciprocal

interactions in a social interchange due to the closeness of physical proximity and shared time and space. These normally spontaneous, reciprocal interactions become cumbersome in digital learning environments because of the inherited transactional distance that exists in online learning environments (Moore, 1997). For engagement to take place in online learning, instructors need to be intentional to be able to break the natural barriers imposed by time and space in online learning environments. This intentionality can be achieved when there is sufficient time, planning, and pedagogical knowledge for digital instruction. However, during the COVID-19 pandemic, the move to emergency remote learning did not allow this luxury; consequently, the learning experience was disrupted. COVID-19 also created traumatic stress which affected students' emotional state and impacted academic learning (Malesic, 2022).

In the Spring of 2020, when COVID-19 was declared a pandemic by the World Health Organization (WHO), schools and institutions of higher education experienced lockdowns. Many social and economic changes deeply affected people across the globe, changing the world with which we were familiar. The COVID-19 pandemic also impacted the health and well-being of people across the world not only physically, but also mentally, particularly the younger generation (Dhaliwal et al., 2022). Students' mental states determined how well they were able to engage with the learning opportunities afforded by the emergency learning experience during the pandemic. The effect of emergency learning in college level students has been discussed (Malesic, 2022; Pekrun et al., 2002), and studies have consistently reported that remote teaching and learning indeed affected students' emotional states (Malesic, 2022) leading to disengagement and the most widespread mental health crisis of the 21st century. With the return to face-to-face classes, college campuses continue to experience a "new normal" brought on by the aftermath of the pandemic, affecting both daily activities and productivity. This is widely known in the research literature as the great disengagement in higher education (Malesic, 2022; McMurtrie, 2022a; Teets & Wu, 2020).

Trauma and Stress

One of the serious impacts of the COVID-19 pandemic has been traumatic stress. An extremely stressful event can be referred to as a traumatic event and can cause profound stress and changes to attitudes and mindsets of the individuals experiencing it (Berntsen & Rubin, 2006; Janoff-Bulman & Lang-Gunn, 1988). As outlined in the Diagnostic and Statistical Manual (DSM) and the International Classification of Diseases (ICD), a traumatic stress is an experience that can deeply impact an individual or a group, resulting in feelings of distress, helplessness, horror, or an intense fear response. Traumatic stress encompasses both psychological and physiological responses to trauma. Trauma is an event that exceeds an individual's capacity to cope and challenges one's sense of safety and well-being. Traumas include natural disasters, accidents, violence, abuse, combat, terrorism, experiencing unfairness or witnessing distressing occurrences. In cases where an individual is repeatedly exposed to stressors, such as chronic abuse or long-term exposure to hazardous environments, traumatic stress gets prolonged (American Psychiatric Association, 2013).

Traumas impact physiological, emotional, cognitive, and social dimensions of the affected individual and can provoke responses that are different in different individuals. Individual responses depend on the individual's age, cultural background, gender identity, previous life experiences, resilience, and available support systems. Traumatic stress can disproportionately affect individuals from marginalized and vulnerable communities, considering the intersectionality of identities such as race, ethnicity, sexual orientation, and socioeconomic status. Similarly, different individuals may show different levels of resilience and adaptive coping strategies that contribute to their recovery and post-traumatic experience and growth (American Psychiatric Association, 2013). The COVID-19 pandemic has been known as a traumatic event that has caused traumatic stress and mental health issues for many individuals around the world. COVID-19 related post-traumatic stress disorders have been reported in different parts of the world, including Italy (Castelli et al., 2020; Forte, et al., 2020), China (Bo et al., 2020; Jiang et al., 2020), Lebanon (Fawaz & Samaha, 2020), and Norway (Bonsaksen et al., 2020), especially among the survivors of the disease (Craparo et al., 2022; Nagarajan, et al., 2022). Symptoms of traumatic stress disorder include anxiety, depression, and insomnia (Chamberlain et al., 2021).

The COVID-19 pandemic has also created chaos and dysfunctionality in many social, work and education environments including higher education institutions (Ghazi Saidi, et al., 2020). Dysfunctional environments have been shown to lead to trauma (Terrasi & Crain de Galarce, 2017). Furthermore, there is overwhelming evidence for long-haul COVID-19 cognitive symptoms, typically referred to as "Covid-Fog" including fatigue, short-term memory deficit, anomia (i.e., word-finding problems) and attention deficit (for a review see Ceban et al., 2022; Vanderlind et al., 2021). This is in addition to the socioeconomic impacts of the COVID-19 pandemic that have had a global impact (Ahmad et al., 2020; Buheji et al, 2020; Miyah et al., 2022).

The impacts of the COVID-19 pandemic have been discussed and documented worldwide beyond the health and wellness implications. In addition to the economic, social, physical, and mental health related challenges of COVID-19, higher institutions have also reported some educational consequences (Malesic, 2022; McMurtrie, 2022a; Teets & Wu, 2020). Within educational settings, for example, students' academic and social routines were greatly compromised even two years after the return to face-to-face instruction (McMurtrie, 2022b). Some specific issues that may have contributed to student disengagement include challenges regarding the sudden shift from in-person to remote learning and additional burden due isolation in the absence of face-to-face classes and spending time with peers and professors; unequal access to digital technology which disproportionately impacted low-income and rural students; for some students, distractions, lack of privacy, or lack of a quiet space; for others, increased responsibilities at home, such as caring for younger siblings or sick family members; increased stress, anxiety, and other mental health issues due to the pandemic; dealing with family and friends' losses and grief or life threatening sickness which are traumatic in nature as well as the uncertainties and stress associated with the pandemic, coupled with the absence of the normal rhythms and social engagement (Ghazi Saidi et al., 2020).

On the other hand, the COVID-19 pandemic coincided with the racial awakening of 2020, catalyzed by events such as the murder of George Floyd. This was a period of intense emotional distress and social turmoil, particularly for students of color. These events had a profound impact on society at large and could have impacted student engagement in higher education. These events could have been particularly traumatic for some students, due to the emotional distress and trauma associated with witnessing instances of racial violence and discrimination, causing mental health issues such as anxiety or depression all of which directly or indirectly impacted students' ability to concentrate, perform academically, and engage with their education. Additionally, some students might have experienced a shift in their priorities, with academics taking a backseat to activism, community involvement, self-care, or supporting family and friends. While this activism is important and valuable, it can also be time-consuming and emotionally draining, potentially leading to disengagement from academic responsibilities. Some students may have endured additional stress due to feeling misunderstood or unsupported which could have fostered feelings of disconnection and disengagement from the school community. All this could have been amplified as a result of the education environment moving online, limiting instructors to effectively provide the necessary support to students, potentially leading to further disengagement (Fitzgerald, et al., 2020; Tight, 2020).

College campuses continue to experience the aftermath of the pandemic through ongoing interruptions in daily activities and productivity, and they are challenged to meet their students' emerging needs (Malesic, 2022).

Student Engagement – Following COVID-19

Engagement is understood as a social phenomenon whereby a student's emotional connection to the learning setting and the people within it, leads to aspects of deeper learning and interaction with content (Kahu, 2013). Responses to the pandemic included practices such as social isolation, the wearing of face masks, and social distancing, which are antithetical to practices that build psycho-social and socio-cultural connections. Emergency remote learning also impacted engagement because it altered the psychological space that separates instructors from students, which created transactional distance (Moore, 1997) and challenged instructors to find new ways to connect. Transactional distance is a natural feature in online learning environments (Moore, 1997) even when classes and activities were well-structured. However, emergency remote learning made it even more difficult for instructors to build connections because the pandemic did not allow time for development, design, or planning of learning activity, and instructors were forced to improvise in real time (Nelson et al., 2021).

Teets and Wu (2020) define student engagement as a construct students demonstrate through the effort they put into the course, the amount of activity they use to invest in studying, their attitudes about a given course, and the social elements of collaborative learning with peers. However, with the return to face-to-face classes, institutions of higher learning found themselves in a unique circumstance where students seemed to have pulled back from some of their former behaviors that were used as evidence of engagement in prior years. McMurtrie (2022c) noted common

themes across universities from professors observing student disengagement at alarming levels and indicated these academics were shocked by the lack of student participation and they were also failing to find strategies to motivate student engagement post-pandemic. Since college student engagement has been shown to impact achievement (Kahu, 2013) and is closely tied to happiness and well-being (Boulton et al., 2019), it is important to understand the current trend for student disengagement and to work towards improving engagement and student learning outcomes.

The purpose of this study was to describe the perceptions of higher education instructors regarding student (dis)engagement over the past three years (2020-2022). Additionally, the research team wanted to begin to explore student disengagement in the current academic landscape. The World Health Organization (WHO, 2023) acknowledges the pandemic is still affecting the world. For the purposes of this study, however, researchers delineated a pre-COVID, COVID, and post-COVID timeline to compare and contrast experiences related to student disengagement prior to the pandemic, and in the current state of returning to pre-pandemic settings. This will be defined more explicitly within the following section. Results of this study may help instructors better understand the widespread phenomena of disengagement in education. As a result, instructors might be able to apply strategies to improve student motivation and participation in the learning process.

METHODS

A cross-sectional survey design was implemented for this study. All aspects of the study were approved by the institutional review board prior to beginning data collection. To solicit responses from across a variety of locations, researchers utilized a snowball recruitment strategy. Research team members shared a link to an electronic questionnaire on social media sites whose target audience was higher education instructors and included a personal appeal asking readers to share the link with other instructors. They also recruited by email. The first page of the questionnaire housed the informed consent which had to be agreed to in order to access any questions.

Participants

A total of 181 respondents filled out the survey questionnaires. To assess the utility of the survey responses for use, the researchers investigated each questionnaire for completeness. If less than 10 percent of a questionnaire was completed or if the respondent spent fewer than 60 seconds on the site, these responses were eliminated from the study. This resulted in 121 questionnaires of which 108 were completed by instructors from public universities and were thus retained for analyses (see Table 1). The respondents came from 15 states in the United States with most (80.5%) from the Midwest. The majority (86.1%) came from mid-sized universities and, regardless of mode of teaching, taught undergraduate only or both undergraduate and graduate.

Table 1: Participants by Institution Size and Mode of Teaching

		Number	Percent
Size of Institution			
	Small (<5,000)	5	4.6
	Medium (5,000-15,000)	93	86.1
	Large (>15,000)	10	9.3
	Total	108	100
Mode of Teaching			
	Face to face		
	Undergraduate only	44	40.7
	Graduate only	0	0
	Both	56	56.0
	Total	100	100
	Online		
	Undergraduate only	4	8.2
	Graduate only	28	57.1
	Both	17	34.6
	Total	49	100

Questionnaire Instrument

To develop the questionnaire, members of the research team conducted a literature review of student disengagement research, identified themes representing disengagement, and generated questions to prompt respondents to share information consistent with those themes. The research team also reviewed the questionnaire prior to dissemination to check for clarity and phrasing. Respondents provided school-related demographics (e.g., public, private, number of students), but to ensure anonymity and build trust in the survey process, no teacher-level data were collected. Additionally, participants were able to skip questions if they chose. Participants responded to questions regarding student disengagement and their adjustments as an instructor during pre-COVID, during-COVID, and post-COVID phases. The phases were defined in the questionnaire as follows: (a) pre-COVID as the time prior to March 2020; (b) during-COVID as March 2020-July 2021 when many educational facilities were forced to teach fully online; and (c) post-COVID as August 2021 to July 2022, when many students had returned to face-to-face learning.

In the first section of the questionnaire, respondents indicated if they observed in their students any of the following behavioral characteristics associated with student disengagement: (a) turning in late work, (b) turning in incomplete work, (c) lack of and/or poor participation, (d) lack of communication with professor, and (e) dropping classes. The second section of the questionnaire asked participants to rank-order these behaviors to indicate their severity as a warning sign that students were disengaged. The final section asked about modifications and additions instructors made to their courses to accommodate students during remote learning in the COVID phase, and

the extent to which they retained any of these changes in their post-COVID teaching. Open ended questions invited respondents to provide information on the adaptations they enacted in response to the pandemic as well as whether those modifications have been upheld or if the instructors had returned to teaching practices as they were prior to the pandemic. The questionnaire was created using 'logic mapping', meaning that answers to main questions populated future questions. For example, instructors were asked if they were currently teaching undergraduate courses and/or graduate courses as well as face-to-face and/or online courses. Depending on their response, they were presented with questions only about students in courses that aligned with the program level or teaching modality. Respondents were able to select both, in which case they provided separate answers throughout the questionnaire for face-to-face and for online courses. Within each of the three main sections of the questionnaire, open-ended questions were provided for participants to share additional examples or thoughts related to the questions in that section.

RESULTS

Prevalence of Disengagement Behaviors

All respondents agreed that the five behavioral characteristics in the questionnaire were evident at some point during the pandemic experience, but patterns differed (See Table 2).

Table 2: Percent of Respondent's Observations of Disengagement Behaviors

Face-to-face Courses	Stayed Constant	Pre-Covid Only	During-Covid Only	Post-COVID Only	During-and Post-COVID
Late Work	7.1	11.4	27.1	24.3	30.0
No Participation	5.5	8.2	35.6	31.5	16.4
Incomplete Work	4.5	7.6	27.3	40.9	19.7
Lack of Communication	5.7	8.6	27.1	38.6	20.0
Dropped the class	4.9	8.2	31.1	37.7	16.4
Online Courses					
Late Work	12.5	8.3	25.0	33.4	20.8
Lack of Participation	9.5	4.8	23.8	38.1	19.0
Incomplete Work	0.0	5.0	25.0	35.0	20.0
Lack of Communication	4.5	9.1	31.8	31.8	18.2

Dropped the class	12.5	18.8	31.5	25.0	6.3

Note: Numbers shown are percentages of responses within each category (row). Respondents were able to skip answers; totals may not equal 100%.

Face-to-face

Few respondents (ranging from 4.5-7.1%) indicated they believed students' disengagement behaviors were staying constant before, during, and after the COVID pandemic or were prevalent only prior to COVID (ranging from 7.6-11.4%). More respondents (ranging from 16.4-40.9%) indicated changes in disengagement behaviors during or after COVID, or both. Of the behaviors respondents identified as occurring only during COVID, *lack of participation* was indicated most frequently (35.6%), with "dropping the class" (31.1%) being identified as a close second. A little over a quarter of the respondents observed *late* (27.1%) or *incomplete* (27.3%) *work*, or *lack of communication with the professor* (27.1%) as evident only during the COVID phase. After COVID, when it was anticipated student learning would return to pre-COVID levels, more respondents identified *incomplete work* (40.9%), *lack of communication* (38.6%) and *dropping the class* (37.7%) as occurring only during that time, while *lack of participation* (31.5%) and *late work* (24.3%) were indicated less often. *Late work*, however, was the behavior identified by more respondents (30.0%) as occurring during COVID and still continuing, although the other four behaviors were still noted by a fifth or fewer of the respondents. More often (ranging from 16.4-30.0%) respondents indicated that disengagement behaviors increased during COVID and have not yet returned to pre-pandemic levels. Through the open-ended questions, participants provided additional characteristics of student disengagement in their face-to-face courses including limited interactions, higher numbers of absences from individual classes, higher rates of absenteeism over the semester, lower socialization, and assignment submissions of poor quality. Respondents also stated that students seem distracted, exhausted, and overwhelmed.

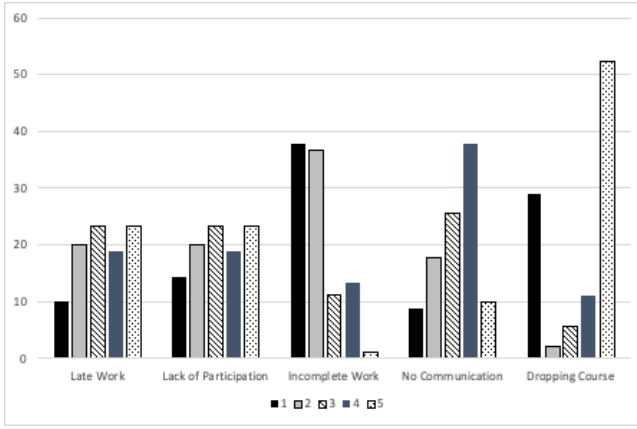
Online

Few respondents (ranging from 4.5-12.5%) teaching online courses believed students' disengagement behaviors were staying constant or were only prevalent prior to COVID (ranging from 4.8-18.8%), although *dropping the class* was noted more often prior to the pandemic (18.8%) than any of the other behaviors. More often, respondent believed behaviors were more evident only during COVID (ranging from 23.8-31.8%) or after (ranging from 25.0-38.1%). *Lack of communication* (31.8%) and *dropping the class* (31.8%) were cited by nearly a third of the respondents as occurring only during COVID while a quarter mentioned *late or incomplete work* (25.0%) or *lack of participation* (23.8%). Respondents were most likely (ranging from 25.0-38.1%) to respond that disengagement in online courses has only been an issue in the time range given for post-COVID, with *lack of participation* being cited most often (38.1%). With the exception of *dropping the class*, which respondents

observed less than pre-COVID levels, about a fifth indicated that the other four behaviors occurred during COVID and were continuing to be a problem for students. In the open-ended questions, instructors also noted other characteristics observed in their students including missing assignments and turning in poor quality work. In addition, it was reported that students worked more hours at their jobs, which seemed to be taking away from focus on their education. Several instructors who taught both undergraduate and graduate courses noted that graduate students showed better engagement in their coursework than undergraduate students.

Severity of Student Behaviors as a Warning Sign of Disengagement

Since it is possible that even a dedicated student could exhibit one or more of the behaviors occasionally (e.g., turn in late or incomplete work and not participate in class) and not necessarily be disengaged, researchers asked the respondents to rank the behaviors in terms of severity as to when those became a warning sign that a student was disengaged (See Figure 1).



Note. Values represent percentages of participants who ranked each behavior at that value with 1 = most severe warning sign to 5 = least severe warning sign.

Figure 1: Behaviors Ranked by Severity as Warning Signs of Disengagement

Of the five behaviors, respondents were least likely to believe that *dropping a course* was a warning sign of disengagement; however, respondents were polarized in their beliefs. While over 50% ranked this as the least severe warning sign of disengagement, nearly a third ranked this as the most evident. *Turning in incomplete work* was most often ranked first (37.8%) or second (36.7%) in severity as a warning sign to instructors. *Late work* and *lack of participation* were viewed similarly and hovering in the third (25.6%) or fourth place (37.8%) was *lack of communication with the professor*.

Faculty Course Adjustments to Student Disengagement

Adjustments in Response to COVID-19

Respondents reported including a variety of course adjustments in response to the COVID-19 educational challenges including implementing a flipped classroom, giving more frequent reminders, and assigning smaller but more frequent assignments, or assigning assignments to provoke interaction. Additional pedagogical technology tools that respondents adopted in a remote learning environment included integrating Google Slides, Padlet, digitized lectures, shared drives, online creation tools, motivational videos, polls, breakout activities, Kaggle and online brainstorming tools.

Adjustments That Have Been Retained, Post-COVID-19

When asked which pedagogical tools they used pre-pandemic that they reinstated post-pandemic, instructors responded that they have reinstated tools such as Google Slides, Jamboard, TED talks, polls, Padlet, Flipgrid, Zoom and breakout activities. Other respondents who adopted certain technology tools during the COVID-19 pandemic lock down indicated several that have remained as part of their current teaching tools, including Google Slides, Jamboard, TED Talks, polls, breakout activities, Padlet, Flipgrid and obviously Zoom.

DISCUSSION

The survey results show observed changes in disengagement behaviors during and after the COVID pandemic, with all of these behaviors identified at higher levels than prior to the pandemic. In face-to-face courses, more participants identified *late work* as consistently prevalent during and after the pandemic (30.0%) than any other characteristic. *Incomplete work* was more frequently observed post-COVID than at any other time, and *lack of communication* and *dropping the class* were identified more frequently post-COVID than during the pandemic, while *no participation* was identified somewhat more frequently during the pandemic. In addition, respondents describe student disengagement as behaviors that include limited interaction, higher level of absenteeism, higher absence in class, lower socialization, poor quality work, distraction, and seeming exhausted and overwhelmed. All these characteristics are consistent with COVID-related cognitive and traumatic disorder symptoms including fatigue, attention deficit, and even depression and anxiety (Ceban et al., 2022; Vanderlind et al., 2021).

In online courses, *lack of participation*, *incomplete work*, and *late work* were observed more frequently post pandemic while *dropping the class* was observed more during COVID, and *lack of communication* was observed equally as often during and post-COVID. These disengagement behaviors post-pandemic may be influenced by an increase in employment working hours, which could have led to missing class assignments and poor-quality work. This is consistent with the economic impact of COVID-19, which has forced students to change priorities and engage in paid work

for longer hours or to take double shifts to compensate for inflation and higher living costs post-pandemic (Ahmad, et al., 2020; Buheji, et al, 2020; Miyah, et al., 2022). Respondents also added a number of general characteristics and behaviors observed in the students post pandemic. These observations included: increased anxiety, increased mental health issues, long-term COVID-19 symptoms, difficulty in life-work balance, and an increased demand for teaching certification due to increased K-12 demand for teachers, which has added to the instructors' workloads.

In summary, according to the survey findings, respondents reported changes in the attitudes and mindsets of their face-to-face and online students that are consistent with post-traumatic stress symptoms (American Psychiatric Association, 2013; Berntsen & Rubin, 2006; Janoff-Bulman & Lang-Gunn, 1988), and the behaviors participants interpreted as "student disengagement" are consistent with previously proposed definitions of post-traumatic stress (Kahu, 2013; Teets & Wu, 2020). If this is the case, student disengagement can be defined as a negative change in psychosocial behaviors, attitude, and efforts related to learning, studying, and course activities.

In response to the restrictions imposed by the COVID-19 pandemic, the instructors at higher education institutions reported adjusting their teaching styles, modalities, and teaching tools. Many adjustments directly targeted student engagement. For example, some used flipped classrooms, where the teacher records lectures and students are encouraged to listen to the lecture at home and come to class prepared to do class activities. Others provided assignments that provoked interaction or gave smaller, but more frequent assignments. Other adjustments were in attempts to compensate for the attention deficit and distractions or memory problems such as providing more frequent reminders to students for due dates of assignments and tests.

Given that many courses changed modality from face-to-face to synchronous remote or online, instructors also adopted additional tools to improve teaching quality and increase students' engagement. The additional tools that were adopted used strategies to increase collaboration and interaction remotely, leading to better student engagement. However, some of these tools proved to be useful even in post-pandemic classes, both face-to-face and online, and instructors have kept using them as a part of their ongoing pedagogical tools. This benefit should receive more recognition as a positive response to the continued transformation in the blending of instructional modalities. The survey findings suggest that the most frequently cited pedagogical changes during the pandemic that carried over to the post-pandemic era included: (1) adaptations in teaching styles, (2) shifts in modality, (3) adjustments in expectations, flexibility levels, and quality of work, (4) supports for socialization and interactions, and (5) increased attention to mental health issues.

It is possible that changes instructors made to their own courses and delivery may prove helpful in improving pedagogy in the future. For instance, the adoption of new technology, tools, and collaborative learning platforms that took place out of necessity, now offer flexibility for future students and teachers. Learning about, testing, and adopting new tools takes time and effort which can make it challenging for instructors to invest in this, when they have competing priorities for their time. However, the COVID-19 pandemic lockdown periods and the social and environmental restrictions it imposed created both an urgency and a demand to

rapidly adapt and adopt unfamiliar technology, which in turn, became useful to teaching after the pandemic, and were, therefore retained. Almost all of the tools instructors retained help facilitate active and interactive learning/teaching and increase students' engagement. It is also important to note that the more flexible approaches instructors utilized included strategies such as giving broader options for due dates, accepting late work without penalties, providing accommodation for absentees, and providing opportunities for missed assignments were strategies instructors were able to implement universally which did not appear to impact the quality of the actual content being taught in their courses.

While the pandemic may have made instructors more sensitive to changing priorities, it also provided an opportunity for students to revisit their priorities and make new choices, such as selecting online education over face-to-face or taking more online courses to allow time and flexibility to work and study or work for longer hours. Similarly, some individuals realized that they needed to spend more time with family (Cornell, et al., 2022; Crandall, et al., 2022). This change in priorities may explain some of the post-pandemic changes in students' behavior such as late assignments, poor quality of work, or demanding more flexibility from instructors. Additionally, students who spent two to three years of isolation during the pandemic were not only deprived from learning some skills due to adapted, simplified, or less rigorous curriculum, but also may have developed social anxiety or depression (Crandall et al., 2022; Wang et al., 2021), the latter of which can contribute to the lack of socialization and increased mental health issues that were reflected in the behaviors that the survey respondents described as disengagement.

It is also important to recognize that while the students' disengagement behaviors identified in the study shifted during the pandemic, some of these changes may have been developing to some extent prior to the pandemic and that the pandemic simply may have accelerated this shift. Current students, who are largely Gen Z, may identify with a set of norms, standards, and expectations that interpret disengagement/engagement behaviors differently than that of their instructors, who are more likely to behave according to norms, standards, and expectations of their generations, at least to some degree. Gen Z is often described as a technology-driven generation raised by "helicopter parents", and as a result they are more individualistic than other generations, fast-paced, accustomed to readily accessible information with fast results, skill-focused, finance conscious, entrepreneurial, and engaged in hands-on experiential learning (Adobe, 2016; Pichler et al., 2021; Schwieger & Ladwig, 2018; Sladek & Grabinger, 2014). Gen Z students tend to have high expectations (Beal, 2016; EY, 2016; Merriman & Valerio, 2016), like to multitask (Beal, 2016; Merriman & Valerio, 2016) and prefer personal micro experiences (Beal, 2016; CGK Study, 2016; Merriman & Valerio, 2016; Monster, 2016; Stillman & Stillman, 2017). Years before the pandemic, it was predicted that Gen Z would change the higher education system (Rickes, 2016). This might suggest that what instructors are seeing is a student disengagement response due to an instructional mismatch that became highlighted during the pandemic. This could help partially explain why student engagement in traditionally defined ways have not returned to pre-pandemic levels.

Limitations

One limitation of this study is the small sample size and limited geographic representation; consequently, it would be difficult to generalize to all institutions of higher education. More research with a larger sample size is warranted. The survey also used instructor-report data and no direct measurement of student disengagement. Consequently, it is difficult to distinguish actual disengagement behaviors from instructors' perceptions of these behaviors. Another limitation is that the instructors themselves were part of the pandemic experience and may also be facing their own challenges to stay engaged at work. For example, the response rate could be reflective of a larger apathy and disengagement that is happening across academia. Just like the responses from this sample of instructors who reflected on the disengagement of their students, there is perhaps a simultaneous disconnect occurring with instructors and this should be studied more closely.

It is worth noting that this study did not account for any additional global or local stresses that occurred during the pandemic and preceding years. It is reasonable to expect that events such as racially-motivated violence and threats of violence, the murder of George Floyd, the subsequent spread of such images through social media outlets, and unsettling political landscapes across the country have also made an impact on students and faculty. As the current study focused on faculty perceptions, additional research investigating students' experiences and perceptions is needed. Surveying students about their perceptions of instructors' engagement in their courses could be a logical next step. Similarly, collecting data to identify differences in students based on their prior experience with online learning is recommended. Interviews or focus groups of instructors' reflections on their own responses may also reveal influences of trauma, mental health, competing priorities, and generational differences, and identify resources to enable instructors to increase their own engagement so they can more effectively engage their students. By addressing the needs of both instructors and students, academia can be responsive to changing dynamics and definitions of disengagement and support the student learning experience.

CONCLUSION

Student engagement plays a role in academic achievement and may be categorized in four main areas: (a) behaviors of students and teachers, (b) psycho-social aspects, (c) social contexts, and (d) a holistic or dynamic viewpoint, that takes into account the complexities of the interactions of the other three categories (Kahu, 2013). Student disengagement appears to have shifted during the pandemic and may be influenced by trauma, mental health challenges, competing priorities, and generational factors. Consequently, instructors are now facing new challenges in communicating with their students and engaging them in their courses. The strategies instructors used during the pandemic to adapt and adopt new instructional approaches resulted in technology and pedagogical changes designed to improve student engagement and respond to student needs. However, student engagement has not returned to pre-pandemic levels; therefore, educators will need to continue to acknowledge these students, understand

them, and adapt themselves and their instruction to meet their educational and engagement needs. This will require new definitions of student disengagement and engagement, that will reflect these changing dynamics. Future studies should focus on creating and testing expanded definitions, understanding student engagement responses, and impact of various pedagogical techniques and technologies to positively impact engagement and related learning outcomes.

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