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Remote Learning and the COVID-19 Pandemic: The Triumphs behind the Tribulations for College Students

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Abstract: With the unexpected onset of the global pandemic in March of 2020, professors and students alike were suddenly forced into a new mode of post-secondary teaching and learning. As researchers and practitioners scurried to resolve challenges associated with virtual learning during a pandemic, positive outcomes in terms of student well-being and academic success were neglected. In this paper, I briefly review the challenges students experienced with pandemic-driven remote learning, then engage in a more in-depth exploration of how virtual learning in fact contributed to positive academic outcomes for some students during lockdowns, as per current literature/research on the subject. These positive outcomes include safe and comfortable learning, flexible and autonomous learning, increased time, increased engagement, innovation, and knowledge retention, and increased support and communication.

Keywords: Pandemic, Remote Learning, Mental Health, Academic Engagement, Academic Performance.

Introduction

According to the American College Health Association (2021), over 70% of Canadian post-secondary students experienced “overwhelming anxiety” in 2019, among other mental health problems/illnesses. Poor student mental health can affect cognitive abilities such as concentration and problem-solving, which can inevitably weaken academic performance and success (Giusti et al., 2021). As a Canadian College English Professor, I have witnessed student mental health crises and consequential academic disparities firsthand. And as an avid researcher in student mental health, I have spent more than a decade studying the well-being of college students, acknowledging the barriers they face, and trying to discover/apply sustainable support practices that encourage academic success.

With the unexpected onset of a global pandemic in March of 2020, professors and students alike were forced to suddenly transition into a new mode of post-secondary teaching and learning. While distance/online education has been accessible in Canadian colleges and universities since the 1950s (Beninger, 2010; Liang et al., 2020), it was never a mandated/sole option for higher education learners—until COVID-19 lockdowns made it so for everyone for much of 2020. Unsurprisingly, the college and university student mental health crisis that already existed was made worse by the pandemic (Arias, 2021). As Abramson (2021) put it, “the general challenges of remote learning and the pandemic brought mental health to the forefront of the classroom experience” (p. 2).

As researchers and practitioners scurried to understand and resolve challenges associated with virtual learning during this period, student well-being and academic success were largely neglected as a result. While it is certainly critical to invest time and resources into implementing strategies that can ease existing issues with remote learning, if our long-term goal is to create better virtual learning environments in higher education (with or without a pandemic), then giving some attention to the *advantages* of remote learning for student well-being and success is warranted. Finding “the positives” that come out of stressful events has been referred to by psychologists as *benefit finding* (August & Dapkewicz, 2021; Folkman & Moskowitz, 2007). Inspired by this notion, after a brief review of the challenges students experienced with pandemic-driven remote learning, I engage in a more in-depth exploration of the literature on how virtual learning contributed positively to academic outcomes for some students during this time.

The Tribulations

Like with other population groups, student well-being was affected by pandemic-related stresses such as a fear of contracting the virus, social and physical isolation, and economic loss (Anderson, 2020; Aucejo et al., 2020; Centre for Innovation in Campus Mental Health, 2020; Dennon,

2020; Schwartz, 2020). Unlike others, however, students were faced with additional stresses related to remote schooling as their educational lives were essentially uprooted (August & Dapkewicz, 2021; Lewson, 2021). Virtual learning presented a number of challenges for students, including (but not limited to) less time/space available for learning (Betancourt, 2020), technical challenges with the technology and internet connectivity required (Gillis & Krull, 2020), limited access to school-based support systems (Murphy et al., 2020), and lack of opportunity for communication and interaction with peers (Means et al., 2020).

These challenges resulted in poor remote learning experiences for many students, which subsequently affected their overall well-being and academic engagement/performance. Active Minds (2020), a Canadian non-profit organization for youth mental health, conducted a survey on student mental health in mid-April 2020, approximately one month into the imposition of virtual learning for most students. They identified that 20% of college students' mental health had worsened, 38% had experienced trouble with focusing on academics, and a striking 91% reported feeling stressed and anxious. Looking more specifically at student success, a survey of 203 higher education students by Giusti et al. (2021) found prevalent reports of poor academic performance due to impaired concentration, anxiety, and depressive symptoms attributed to the pandemic or related lockdowns. Of note, marginalized students reported a greater increase in or exacerbation of mental health problems during this time, resulting in even worse academic outcomes (August & Dapkewicz, 2021). Following their survey of 15,000 students in 21 American higher education institutions, Blankstein et al. (2020) revealed that half of the students who identified as transgender, non-binary, or of color, or who served as caregivers to family members reported the greatest harms to their mental health during COVID-19. According to Rodriguez-Planas' (2021) examination of approximately 12,000 academic records in a New York university, "the COVID-19 pandemic negatively impacted lower-income top-performing students by reducing their GPA by 5% and credits earned by 11% relative to their higher-income peers" (p. 4).

It is important to recognize that the causes and effects of mental health concerns are difficult to isolate or organize linearly. For example, it is unclear if a student's worsened mental health and academic performance were due to their experiences with remote learning, their reactions to pandemic-related mandates/restrictions (e.g., social distancing), the medical and epidemiological situation of the pandemic itself, or all of the above. Similarly, it is difficult to determine whether negative well-being led to negative remote learning experiences or vice versa. Mental health is vulnerable to a practically infinite number of interconnected variables, both intrinsic and extrinsic. Either way, acknowledging any gaps with remote learning can help improve future practices in this mode of delivery, ideally in the absence of a pandemic or similar emergency, which could subsequently benefit student well-being overall.

The Triumphs

The benefits to learning available through online/digital technologies had already been underscored in research pre-dating COVID-19 (Lischer et al., 2021). Understandably, however, positive experiences associated with remote learning during the pandemic have not been commonly reported due to the dominance of the problems that came with the sudden, unprepared transition imposed on everyone. But that does not mean benefits did not exist for the well-being, academic engagement and performance of college students.

Looking specifically at mental health, several studies have documented improvements to overall student well-being as a result of pandemic-imposed virtual learning (Elmer et al., 2020; SCL Health, 2021; Zhou & Zhang, 2021). For example, it was found that learning remotely can lower social anxiety (SCL Health, 2021). An investigation of the changes in the social networks of Swiss university students during COVID-19 by Elmer et al. (2020) determined that remote learners experienced less anxiety over missing classes and competing with peers. Conversely, survey data collected from 62 American college students revealed that those who participated in on-campus learning one year after the outbreak of COVID-19 experienced greater levels of anxiety than their remote learner counterparts, while the latter demonstrated an overall improvement in mental health (Zhou & Zhang, 2021). Improved mental health was also noted by Giusti et al. (2021) in their survey of Italian students, where “69.5% reported slight to moderate improvements in their health, and 22.7% reported no change” (p. 7). As the report by SCL Health (2021) remarks, “maybe the stress of in-person peer interaction trumps the stress of remote isolation?”

Considering the inextricable link between mental health and student success, it is unsurprising to learn that some students experienced positive learning outcomes while engaged in pandemic-driven remote learning (Giusti et al., 2021; Zhou & Zhang, 2021). In Giusti et al.’s (2021) study, student satisfaction with distance learning had a mean score of 6.65/10 ($SD = 2.32$). They were so satisfied with virtual learning overall that 37% of those surveyed declared a preference for completing the rest of their studies entirely online through remote instruction regardless of any public health regulations (Giusti et al., 2021). Likewise, in Zhou and Zhang’s (2021) study, participants indicated positive learning experiences overall, with a mean score of around 3.98-4.19 on the 5-likert scale. While broad accounts of students’ satisfaction with pandemic-driven remote learning like these should be acknowledged, it is also important to recognize specific or key areas of virtual learning that contributed to these positive academic outcomes, for the future benefit of distance higher education. At the same time, like with the tribulations identified earlier, the mental health triumphs students have experienced with pandemic-driven remote learning so far cannot be definitively linked to specific areas of virtual learning (discussed below). The evolving medical and epidemiological situation of the

pandemic itself has much to do with the variability in students' remote learning experiences and their mental health. What students considered a triumph in the 2020 Spring/Summer semesters may be identified as a tribulation today, or vice versa.

Safe and Comfortable Learning

Remote instruction during the pandemic offered some learners a sense of safety and comfort (Dung, 2020; Liang et al., 2020; O'Sullivan & Zargaran, 2021; Stoller, 2021). Drawing from questionnaire and interview data collected from 256 students at Hong Bang International University, Dung (2020) found that 100% of the participants who reported being satisfied with remote learning cited the individual and communal health safety it provided as a reason. Looking at safety through a mental health lens, a qualitative study by Liang et al. (2020) used direct observations and informal conversations, and found that chat functions for virtual classes were an advantage, providing "...a 'safe' channel for students who are afraid to ask questions publicly in front of the whole class, or who do not want to interrupt the flow of a live class" (p. 247). As O'Sullivan and Zargaran (2021) put it, virtual connection platforms for remote learning provide "protected time" for students to safely express their voices and critiques. In another study (Suyatno et al, 2021), some students reported that the idea of in-person learning during the pandemic seemed "horrifying" and "burdening." Maintaining safe and comfortable physical learning environments can be an ongoing, comprehensive process that is difficult to attain and sustain—as I have found in my 10+ years of teaching college students. And in a pandemic, safety and comfort are all the more important. Along with minimizing viral transmission and providing safe communication venues, the virtual classroom created opportunities to decolonize the structure of traditional learning spaces. With a greater sense of welcoming and belonging in virtual learning environments, students were encouraged to engage more regularly and openly.

Flexible and Autonomous Learning

The flexibility and autonomy of pandemic-driven remote learning were cited as popular positive outcomes for many students (Abramson, 2021; Giusti et al., 2021; Liang et al., 2020; O'Sullivan & Zargaran, 2021). Asynchronous virtual delivery in particular allowed students to learn and study at their own pace, rather than at the same time and in the same place (Abramson, 2021; Giusti et al., 2021; Liang et al., 2020). Such ease in learning accessibility was identified as favourable by 100% of students in an exploration of expanded learning opportunities through virtual platforms by O'Sullivan and Zargaran (2021). Through remote learning, students were accessing and engaging in learning frequently and repeatedly (Ehlich et al., 2020; Liang et al., 2020). As demonstrated by Giusti et al. (2021), "83.3% of the sample reported benefitting from teachers uploading online lessons to the platform, which allowed the lessons to be listened to again

during exam preparation” (p. 6). The convenience of less-defined or completely undefined instructional time and space catered to the different comprehension levels of learners; enabling students to develop and progress their individual skillsets (Saikat et al., 2021). Regarding autonomy, Lischer et al. (2021) found that “increased personal responsibility and independent working” was cited by about 15% of students as an advantage of remote learning. Flexible learning encouraged students to take more ownership over their academic engagement and performance (Zhou & Zhang, 2021).

I would argue that flexible/autonomous learning *is* accessible, equitable, and inclusive learning. Learning that takes place at set times and in set locations can serve as exclusionary for many (especially marginalized) students, whether or not in the face of a pandemic. The virtual classroom naturally eliminated barriers that prevent engagement with learning. Many students in colleges and universities are adult learners, who often carry commitments that extend beyond their education. For example, students who were parents may have had to care for their children more consistently when they too were forced into virtual schooling during “stay-at-home” orders. That said, the self-directed nature of asynchronous, remote-delivered education broadly allowed students to set their educational goals and generally have more control over their academic progress.

Increased Time

While learning virtually during the pandemic, college and university students seemed to have enjoyed “additional/free time,” much of which was generated due to the elimination of travel to/from campus (Ehlich et al., 2020; Giusti et al., 2021; Stoller, 2021). For example, 95.5% of student participants surveyed by Dung (2020) disclosed saving time on travel as a benefit of remote learning. Students used the additional time in a variety of ways, such as engaging in activities of interest (Abramson, 2021), focusing on themselves and their mental health, self-care, mindfulness, and reflection (Dung, 2020; Ehlich et al., 2020). This worked to not only relieve stress and burnout for students (Ehlich et al., 2020), but also to revisit their goals and objectives: “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...I discovered my strengths” (August & Dapkewicz, 2021, p. 79). Without a physical place designated for learning, students evaded some of the challenges inherent to navigating to/from/within campus spaces. Information technologies allowed students more efficient and convenient access to their learning materials. As a result, students were granted the additional time they often yearned for prior to the pandemic. I would argue that spare or free time to take part in self-interests can reduce daily, mundane stresses, and foster opportunities for creativity and experiment—all of which can contribute to better academic outcomes.

Increased Engagement, Innovation, and Knowledge Retention

Looking more specifically at academic experiences, several college and university students participating in virtual learning due to the pandemic demonstrated increased engagement, innovation, and knowledge retention (Abramson, 2021; Giusti et al., 2021; Suyatno et al., 2021). A student interviewed by Suyatno et al. (2021) put it simply while remarking on motivation, that online learning was “a new experience that I never felt before” (p. 239). Increased engagement was often detailed as students feeling more “motivated,” “empowered,” “attentive,” and “participatory” (Abramson, 2021; Saikat et al., 2021). For example, Abramson (2021) found that without the typical distractions of the physical classroom environment, and with access to a variety of online materials and activities, students had greater motivation to learn that often translated into better academic performance. Reduced distractions also contributed to improved concentration and attention (Giusti et al., 2021; Saikat et al., 2021). Empowerment was experienced by some students as a result of the collaboration facilitated by virtual classroom features like discussion boards and virtual journal clubs (Arias, 2021; O’Sullivan & Zargaran, 2021). Interestingly, students also adopted and/or were exposed to new and creative ways of teaching and learning (Dung, 2020; Liang et al., 2020; Saikat et al., 2021; Zhou & Zhang, 2021). Dung (2020) found that 81% of student participants reported being excited about the new forms of learning they experienced. Liang et al. (2020) highlighted the unique experiences of screen sharing as a helpful tool that effectively demonstrates procedural knowledge.

With respect to knowledge retention, the ability to freely revisit course content, along with the “dual coding of both visual and verbal experiences,” enabled remote learners to enhance their retention and recall of learned information (Ehlich et al., 2020, p. 2055). Regardless of the learning space or state of public health, I would suggest that academic engagement is a challenge for many students, especially at the post-secondary level. Impaired engagement can limit students’ exposure to innovative learning techniques and opportunities for improved retention. The virtual learning environment (particularly its communication applications) successfully provoked some students to engage in critical thinking and conversation, fueling an increase in academic engagement. Reframing student engagement as an objective attainable even beyond the physical classroom is certainly warranted in light of its potential with online learning platforms.

Increased Support and Communication

Pandemic-driven remote learning reportedly encouraged simplified access to institutional communication and support networks (Dung, 2020; Liang et al., 2020; Rist et al., 2021; Stoller, 2021). According to Dung’s (2020) study, 60% of student participants found online support resources easy to access while learning at home during semester 2 of the 2019-2020

academic year. Interviews with American psychologists revealed that clients who were students were more comfortable with virtual counselling appointments, which inspired greater conversations with their counsellors (Abramson, 2021). Looking specifically at the student-teacher relationship, students reported satisfaction with the diversified channels for one-to-one communication with their professors, and with the supportive accommodations the latter often provided (Liang et al., 2020; Rist et al., 2021; Saikat et al., 2021; Stoller, 2021). I would argue that access to support and communication with institutional faculty/staff were driving factors of positive remote learning experiences for students during the pandemic. Considering the already overwhelmed status of college and university support departments, perhaps online access to counsellors or wellness resources serves as a viable post-pandemic alternative that can offer more timely support as well as some relief for support professionals. Communication with professors undoubtedly played an important role in how well students performed remotely.

Other Considerations

Students may have experienced positive outcomes resulting from pandemic-driven remote learning different from, or in addition to, those outlined above. For example, researchers have suggested that some students saved money due to remote learning, such as medical students who purchased home-based laboratory experiments that were more cost-effective and convenient than those on campus (Giusti et al., 2021; Saikat et al., 2021). Positive academic outcomes are likely dependent on the individual policies and practices of higher education institutions, among other variables. Some of these variables could include *learner needs* and *previous remote learning experience*. The virtual learning environment is believed to be less distracting than in-person for some students (i.e., those with ADHD, anxiety, or autism)—especially in context of the added challenges of the pandemic (Abramson, 2021; Liang et al., 2020). Furthermore, students with previous remote learning experiences were likely more prepared when forced into pandemic-driven remote learning. Unsurprisingly, familiarity and preparedness can result in better academic outcomes (Dung, 2020).

Conclusions

As the world begins its gradual return to pre-pandemic life, many sectors will likely retain some pandemic-driven practices, such as working from home—or in the context of higher education, learning from home. From current observations, now nearing three years from the onset of COVID-19 outbreak, many post-secondary institutions are offering both in-person and remote classes, as well as hybrid classes that combine both. I imagine faculties have recognized that although challenges exist, the benefits of virtual platforms are visible and worth maximizing. Like with the challenges of remote learning, I would argue that some of its positive

outcomes existed prior to the pandemic. It would be interesting to learn if students whose experience included only in-person learning pre-pandemic, or those that experienced both but preferred the in-person setting, now believe differently in light of these positive outcomes. Perhaps the potential for both negative and positive experiences shows that student well-being and success are not really dependent on the mode of delivery, but rather on the structure of content and style of teaching. The goal for post-secondary institutions, then, may be to reconcile tensions between in-person and remote learning and develop best practices with reciprocity in mind; drawing out and adapting between the positive outcomes in each mode. Maybe then, the triumphs could outweigh the tribulations for higher education learning at large.

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N/A

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